INTERNATIONAL CIVIL AVIATION ORGANIZATION

**REPORT OF THE FIFTEENTH MEETING OF THE
FANS INTEROPERABILITY TEAM-ASIA
(FIT-ASIA/15)**

BANGKOK, THAILAND, 24 – 27 JUNE 2025

The views expressed in this Report should be taken as those of
the Meeting and not the Organization

Approved by the Meeting
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CONTENTS

APPENDICES

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INTRODUCTION

Meeting

1.1   The Fifteenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/15) was held at the Kotaite Wing of the ICAO Asia and Pacific Regional Office in Bangkok, Thailand, from 24 to 27 June 2025. A Performance-Based Communication and Surveillance (PBCS) Seminar was conducted in conjunction with the FIT-Asia/15 on 26 June 2025.

Attendance

2.1   A total of 50 participants from 13 States, one international organization, and two industry partners, including China, India, Indonesia, Japan, Lao PDR, Malaysia, New Zealand, Philippines, Singapore, Sri Lanka, Thailand, United States, Viet Nam, Boeing, Inmarsat and ICAO were participated in the FIT-Asia/15 meeting. The list of participants is provided at **Appendix A** to the Report.

Officers and Regional Office

3.1   Mr. Hong Yang, Engineer, China Regional Monitoring Agency, chaired the meeting.

3.2   Mr. Hiroyuki Takata, Regional Officer ATM and Mr. Mior Adli Bin Mior Sallehhuddin, Regional Officer ATM, ICAO Asia/Pacific Regional Office, were Secretaries of the Meeting. They were assisted by Mr. Ying Weng Kit, ATM Officer, Mr. Tak Chuen Chui, AIM/ATM Officer and Dr. Trish Prakayphet Chalayonnawin, Programme Analysis Associate ATM.

Opening of the Meeting

4.1   Mr. Hong Yang welcomed participants to the Meeting.

4.2   On behalf of Mr. Tao Ma, Regional Director, ICAO Asia and Pacific Office, Mr. Hiroyuki Takata welcomed all participants.

Documentation and Working Language

5.1   The working language of the meeting and all documentation was English. There were 17 Working Papers (WP), three Information Papers (IP), seven presentations and one flimsy considered by the Meeting.

5.2   A list of papers is included at **Appendix B** to the report.

DISCLAIMER: The presentation of material in this report does not imply the expression of any opinion whatsoever on the part of ICAO, APANPIRG or the RASMAG of APANPIRG concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Draft Conclusions, Conclusions, Draft Decisions and Decisions of FIT-Asia – Definition

6.1   FIT-Asia records its actions in the form of Draft Conclusions, Draft Decisions and Decisions within the following definitions:

a)   **Draft Conclusions** deal with matters that, according to APANPIRG terms of reference, require the attention of States, or action by the ICAO in accordance with established procedures;

b)   **Conclusions** deal with matters of a technical nature relating to regional guidance material for publication on the ICAO Asia/Pacific Regional Office website;

c)   **Draft Decisions** deal with the matters of concern only to APANPIRG and its contributory bodies; and

d)   **Decisions** of FIT-Asia that relate solely to matters dealing with the internal working arrangements of FIT-Asia.

List of Draft Conclusions/Decisions and Conclusions/Decisions

7.1   List of Draft Conclusions/Draft Decisions

Nil

7.2   List of Conclusions/Decisions

Nil

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REPORT ON AGENDA ITEMS

Agenda Item 1: Adoption of Agenda

Adoption of Agenda

1.1 The FIT-Asia/15 agenda (WP/01) was adopted by the Meeting.

Agenda Item 2: Central Reporting Agency Reports

FANS Interoperability Team (FIT) Central Reporting Agency (CRA) Problem Report Briefing (WP/02)

2.1 The FIT-Asia CRA provided information describing the investigation and resolution of submitted Air Traffic Services (ATS) data link problem reports relevant to the FIT-Asia States. ATS data link stakeholders could submit Problem Reports (PRs) for investigation through the FANS-CRA website (http://www.fans-cra.com/). The Meeting was also informed that the website was used by multiple organizations, namely FIT-Asia, the Informal South Pacific ATS Coordinating Group (ISPACG) FIT, the Informal Pacific Air Traffic Control (ATC) Coordinating Group (IPACG) FIT, and the North Atlantic (NAT) Technology and Interoperability Group (TIG).

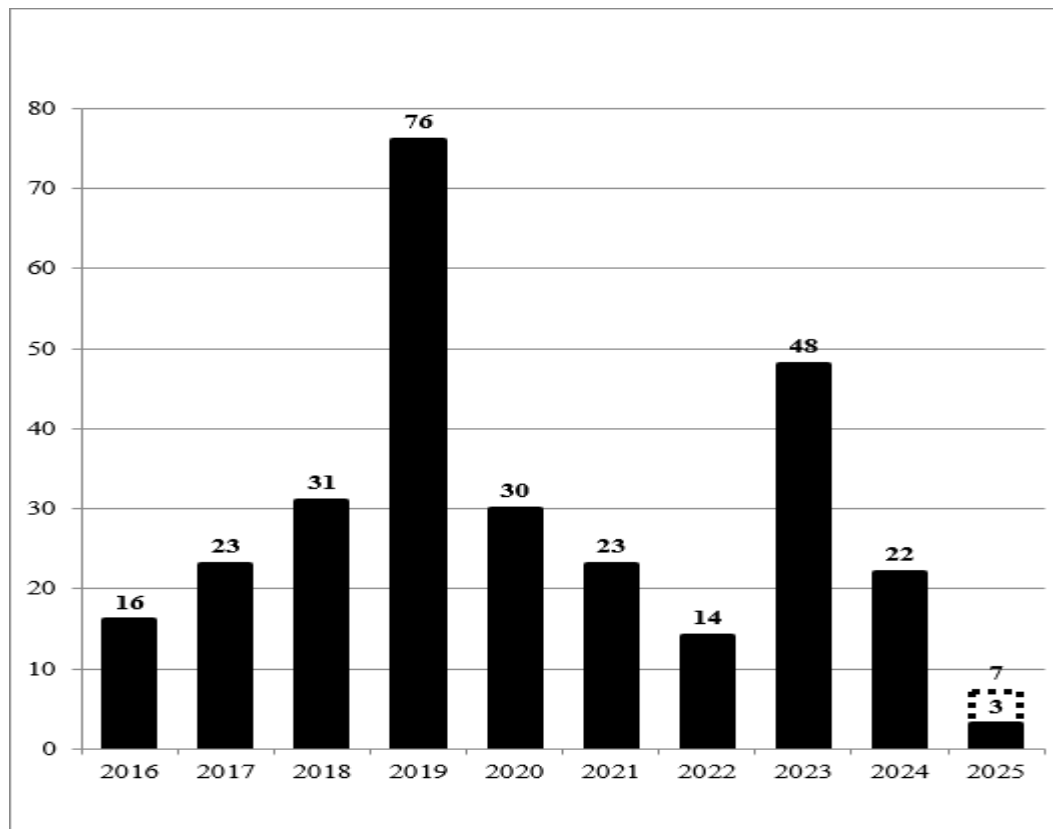2.2 **Figure 1** illustrated the number of PRs submitted by the FIT-Asia States per calendar year since 2016.

Figure 1: FIT-Asia PRs per Year

2.3   The FIT-Asia CRA updated the status or progress of the following old PRs that had occurred in the FIT-Asia States.

a)   3611-MM: Closed / Air – Technical; and

b)   3613-MM, 3619-MM, 3636-NW, 3645-NW and 3650-NW: Closed as Duplicate / Air – Technical.

2.4   The Meeting was informed that Boeing was implementing the ACARS RAT1 function that was expected to mitigate this issue in 787 CMF BPv7 software.

2.5   The FIT-Asia CRA investigated the following significant new PRs that occurred in the FIT-Asia States.

a)   3724-RA: Closed / Multiple;

b)   3745-RA: Open; and

c)   3764-RA: Closed as Duplicate.

2.6   The FIT-Asia CRA was aware of the following significant new PRs that occurred in other areas around the world, but which was relevant to FIT-Asia States.

a)   3723-MM: Closed / Multiple; and

b)   3801-RA: Active.

2.7   The FIT-Asia CRA also provided information on less significant new PRs relevant to FIT-Asia States.

2.8   CRA Boeing clarified that the significant decrease in PRs (from 56 PRs in 2024 to six PRs as of June 2025) was due to the following reasons:

a)   CRA Boeing and Singapore had agreed on a revised threshold, under which duplicate PRs would no longer be included in the statistics; and

b)   Some PRs had been submitted directly to Boeing Services instead of through the CRA website, and these PRs were not reflected in the statistics.

2.9   The Meeting noted that CRA Boeing would not be able to conduct analyses for PRs received from States without a formal service agreement. However, it was also noted that PRs related to Boeing aircraft could be sent directly by the aircraft operators to Boeing Services for analysis.

2.10   In response to an inquiry, New Zealand clarified that all CRAs had access to the usage data available on the FANS-CRA website and used it to conduct the analysis accordingly.

Agenda Item 3: PBCS Developments and Implementation

Regional PBCS Implementation Update (WP/03)

3.1   ICAO Secretariat provided an update on the status of Performance-Based Communications and Surveillance (PBCS) implementation among Asia/Pacific Administrations, as reported using the 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 Regional Airspace Safety Monitoring Advisory Group (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*
>
>*Conclusion RASMAG/27-2: Updated Reporting of PBCS Implementation Status and Performance Monitoring Data*

3.2   The Meeting was reminded that States were expected to submit the completed survey report form to the ICAO Asia/Pacific Regional Office by no later than 28 February each year, even if there had been no changes to the reported status from previous years.

3.3   The survey form could be found at the ICAO Asia/Pacific Regional Office eDocuments webpage (https://www.icao.int/APAC/Pages/eDocs.aspx).

3.4   The Meeting was informed that the following 14 Asia/Pacific Administrations had submitted completed survey form for the 2025 update.

>Bangladesh, Bhutan, China, Fiji, India, Japan, Malaysia, Nepal, New Zealand, Philippines, Singapore, Sri Lanka, United States and Viet Nam.

3.5   **FIT-Asia/15 WP/03 Attachment B** summarized the current implementation of performance-based separations as reported in survey responses since 2017.

3.6   The Meeting encouraged States that had not yet submitted the survey to do so promptly. ICAO Secretariat would consolidate the survey report forms received into a working paper for presentation at the Thirtieth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/30).

3.7   ICAO Secretariat recalled the provision of ICAO Annex 11 regarding the requirement for performance monitoring, specifically where RCP/RSP specifications were applied:

>*3.3.5.2 Where RCP/RSP specifications are applied, programmes shall be instituted for monitoring the performance of the infrastructure and the participating aircraft against the appropriate RCP and/or RSP specifications, to ensure that operations in the applicable airspace continue to meet safety objectives. The scope of monitoring programmes shall be adequate to evaluate communication and/or surveillance performance, as applicable.*

3.8   The Meeting noted that ICAO Asia/Pacific Regional Office would continue to monitor regional implementation, and raise APANPIRG Air Navigation Deficiencies or take other action as necessary in cases where States did not comply with relevant ICAO provisions.

3.9	In response to an inquiry, ICAO Secretariat clarified that the procedures for the amendment of Regional Supplementary Procedures were provided in the ICAO Doc 7030 – *Regional Supplementary Procedures*, and PBCS proposal for amendment (PfA) Doc 7030 template was available on the ICAO Asia/Pacific Regional Office eDocuments webpage under "Data-Link" category.

<u>Competent Airspace Safety Monitoring Organizations List (WP/04)</u>

3.10	ICAO Secretariat presented the RASMAG *List of Competent Airspace Safety Monitoring Organizations*, which was last updated at the Twenty-Ninth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/29, Bangkok, Thailand, from 19 to 22 August 2024). The Meeting was invited to review and update the list as necessary.

3.11	The updated list, as provided at the Meeting, was appended in **Appendix C** to the Report.

<u>Development of the ADS-C Performance Analyzer to Support State-Level PBCS Monitoring (Flimsy/1)</u>

3.12	This paper presented the development of the Automatic Dependent Surveillance-Contract (ADS-C) Performance Analyzer by China Regional Monitoring Agency (RMA). According to China, this tool demonstrated compliance with ICAO Doc 9869 requirements for State-level oversight of ADS-C message performance within PBCS implementation, which enable multi-dimensional filtering, statistical analysis, and geographic visualization of ADS-C data to identify performance issues, trends, and compliance gaps.

3.13	The tool's multi-layered filtering and visualization capabilities would enable the operational and safety teams identify root causes of ADS-C performance issues, such as isolating messages by aircraft or operator and analysing geographic patterns. This would enable the State to effectively detect, analyse, and address delays or failures, supporting compliance with ICAO guidance. While offering significant oversight capabilities, the tool currently relies on manual Comma Separated Values (CSV) file format data import, and had limitations in data source flexibility.

Agenda Item 4: Review of ADS-C/CPDLC Operations and Performance

<u>Data Link Performance Report for China (WP/05)</u>

4.1	Data link performance data for the Lanzhou and Urumqi FIRs for the period from January to December 2024 was presented by China. CPDLC and ADS-C system performance was measured against the RCP240 and RSP180 specifications.

4.2	While the overall 95% requirements for RSP180 and RCP240 requirements were met (**Table 1**, **Table 2** and **Table 3**), the 99.9% requirements were not, especially for RCP240 within the Lanzhou FIR.

Table 1: Lanzhou FIR ADS-C Performance per Media Type

FIR	ZLLL						
Criteria	**RSP180**						
Period	**Jan-June 2024**			**July-December 2024**			
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95%** **% <=** **90sec**	**99.84%** **% <=** **180sec**	**Message Counts**	**95%** **% <=** **90sec**	**99.84%** **% <=** **180sec**	
By Media Type							
VHF	190957	99.26	99.68	190684	99.27	99.69	
SATCOM	140368	96.75	99.33	121580	96.87	99.41	
HF	12	25	50	12	25	33.33	
ALL	331337	98.1	99.5	312276	98.3	99.5	

Table 2: Lanzhou FIR CPDLC Performance per Media Type (January – June 2024)

FIR	ZLLL				
Criteria	**RCP240**				
Period	**Jan-Jun 2024**				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95% benchmark** **ACP** **% <=** **180sec**	**ACTP** **% <=** **120sec**	**99.84% benchmark** **ACP** **% <=** **210sec**	**ACTP** **% <=** **150sec**
By Media Type					
SAT	1548	98.51	99.54	98.9	99.67
VHF	515	99.02	100	99.22	100
SV	54	94.44	98.14	94.44	98.14
VS	45	91.11	100	93.33	100
HS	2	100	100	100	100
ALL	2164	98.38	99.12	98.75	99.63

Table 3: Lanzhou FIR CPDLC Performance per Media Type (July – December 2024)

FIR	ZLLL				
Criteria	**RCP240**				
Period	**Jul-Dec 2024**				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95% benchmark** **ACP** **% <=** **180sec**	**ACTP** **% <=** **120sec**	**99.84% benchmark** **ACP** **% <=** **210sec**	**ACTP** **% <=** **150sec**
By Media Type					
SAT	1592	98.55	99.05	98.99	99.56
VHF	647	98.76	99.22	98.91	99.22
SV	103	96.11	100	96.11	100

FIR	ZLLL				
Criteria	**RCP240**				
Period	**Jul-Dec 2024**				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95% benchmark**		**99.84% benchmark**	
		ACP	**ACTP**	**ACP**	**ACTP**
		% < =	**% <=**	**% < =**	**% <=**
		180sec	**120sec**	**210sec**	**150sec**
By Media Type					
VS	41	95.12	97.56	95.12	100
HS	6	83.33	33.33	83.33	33.33
ALL	2389	98.40	98.15	98.74	98.95

4.3   **Table 4, Table 5** and **Table 6** illustrated the overall 95% requirement for RSP180, which was met within the Urumqi FIR; however, the RCP240 requirement was not achieved due to the limited number of messages.

Table 4: Urumqi FIR ADS-C Performance per Media Type

FIR	ZWWW					
Criteria	**RSP180**					
Period	**Jan-June 2024**			**July-December 2024**		
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95%**	**99.84%**	**Message Counts**	**95%**	**99.84%**
		% < =	**% <=**		**% < =**	**% <=**
		90sec	**180sec**		**90sec**	**180sec**
By Media Type						
VHF	124896	99.36	99.7	98761	99.32	99.69
SATCOM	85380	97.02	99.37	56689	96.86	99.36
HF	7	42.85	42.85	12	16.66	66.66
ALL	210283	98.4	99.5	155462	98.4	99.5

Table 5: Urumqi FIR CPDLC Performance per Media Type (January – June 2024)

FIR	ZWWW					
Criteria	**RCP240**					
Period	Jan - Jun 2024					
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	**Message Counts**	**95% benchmark**		**99.84% Benchmark**		**95.00%**
		ACP	**ACTP**	**ACP**	**ACTP**	**PORT**
		% < =	**% <=**	**% < =**	**% <=**	**% <=**
		180sec	**120sec**	**210sec**	**150sec**	**60sec**
By Media Type						
SAT	31	87.09	87.09	87.09	87.09	100
VHF	2	100	100	100	100	100
ALL	33	87.87	87.87	87.87	87.87	100

Table 6: Urumqi FIR CPDLC Performance per Media Type (July – December 2024)

FIR	ZWWW				
Criteria	RCP240				
Period	Jul - Dec 2024				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% benchmark		99.84% Benchmark		95.00%
		ACP	ACTP	ACP	ACTP	PORT
		% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	% <= 60sec
By Media Type						
SAT	23	100	100	100	100	91.3
VHF	6	100	100	100	100	100
HS	4	100	0	100	0	100
SV	1	100	100	100	100	100
ALL	34	100	88.23	100	88.23	94.11

4.4 The Meeting was informed that China would follow up on the issue of IG1 and IGW1, which provided services to both FIRs, from the monitoring perspective. China also informed that B77W, B77L, and B774 would be given extra attention due to their recent low performance.

4.5 The Meeting was reminded that the revised colour key code for "yellow – acceptable performance" had been discussed at FIT-Asia/14, and that RASMAG/29 agreed to the following Conclusion:

> ***Conclusion RASMAG/29-1: Revised colour key codes for Asia/Pacific PBCS reporting templates***
>
> *That, the following PBCS reporting templates and example were revised to correctly reflect the criteria colour key code for yellow acceptable performance and be uploaded to the Asia/Pacific Regional Office to replace the existing ones.*
>
> *1. Data Link Performance Report Template – ANSP to FIT (**Appendix C to the Report**);*
>
> *2. EXAMPLE - Data Link Performance Report Template – ANSP to FIT (Appendix D to the Report); and*
>
> *3. Aggregated Regional Data Link Performance Report Template - FIT to RASMAG (**Appendix E to the Report**).*
>
> *The above files to be uploaded on the ICAO Asia/Pacific Regional Office eDocuments webpage.*

4.6 **Figure 2** provides the revised colour key codes under the above Conclusion.

Figure 2: Revised Colour Key Code for Yellow Acceptable Performance

4.7   States were urged to use the latest template to ensure accurate data collection and analysis; therefore, all future submissions should align with the updated format.

<u>Data Link Performance Report for India (WP/06)</u>

4.8   India presented the data link performance data for 2024 for the Chennai, Kolkata and Mumbai FIRs, and information on actions taken to identify and rectify the causes of performance issues.

4.9   **Tables 7**, **8** and **9** illustrated the overall ADS-C performance per media type down links sent within the Chennai FIR, Kolkata FIR and Mumbai FIR, respectively during 2024. The ADS-C performance by SATCOM and VHF were able to meet the 95% criterion but failed 99.9% criterion, for all three FIRs. The list of stations that failed to meet the criteria was also provided.

Table 7: Chennai FIR ADS-C Performance per Media Type

FIR	Chennai FIR					
Criteria	RSP180					
Period	Jan-Jun 2024			Jul-Dec 2024		
Colour Key: Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% %<= 90sec	99.90% %<= 180sec	Message Counts	95% %<= 90sec	99.90% % <=180sec
By Media Type						
SATCOM	171257	96.85%	98.76%	172690	96.34%	98.50%
VHF	115961	98.59%	99.29%	110579	97.79%	98.76%
HF	206	15.66%	29.73%	259	16.88%	32.43%
ALL	287424	97.49%	98.92%	283528	96.83%	98.54%

Table 8: Kolkata FIR ADS-C Performance per Media Type

FIR	Kolkata FIR					
Criteria	RSP180					
Period	Jan-Jun 2024			Jul-Dec 2024		
Colour Key: Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% %<= 90sec	99.90% %<= 180sec	Message Counts	95% %<= 90sec	99.90% %<= 180sec
By Media Type						
SATCOM	263163	97.36%	98.92%	133100	96.64%	98.47%
VHF	294042	98.61%	99.01%	158124	98.44%	98.87%
HF	179	32.96%	53.45%	153	26.80%	51.20%
ALL	557384	98.00%	98.96%	291377	97.58%	98.66%

Table 9: Mumbai FIR ADS-C Performance per Media Type

FIR	Mumbai FIR					
Criteria	RSP180					
Period	Jan-Jun 2024			Jul-Dec 2024		
Colour Key ■ Meets Criteria □ 99.0%-99.84% □ Under Criteria	Message Counts	95% % < = 90sec	99.90% % <= 180sec	Message Counts	95% % < = 90sec	99.90% % <= 180sec
By Media Type						
SATCOM	535654	97.56%	99.36%	558253	97.32%	99.21%
VHF	238127	97.52%	98.65%	223911	96.16%	97.76%
HF	451	25.57%	43.90%	835	26.35%	47.19%
ALL	774232	97.51%	99.11%	782999	96.91%	98.74%

4.10   The Meeting was informed that the limited VHF coverage over the oceanic area within Indian FIRs could affect the transition duration between VHF and SATCOM, and the assessment for ADS-C performance on HF was not statistically significant due to the low amount of data available for analysis.

4.11   **Tables 10** and **11** summarized overall CPDLC performance per media type for messages sent within the Chennai FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 10: Chennai FIR CPDLC Performance per Media Type (January – June 2024)

FIR	Chennai FIR					
Criteria	RCP240					
Period	Jan-Jun 2024					
Colour Key ■ Meets Criteria □ 99.0%-99.84% □ Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < = 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media Type						
SATCOM	67955	99.65%	99.72%	99.77%	99.79%	98.54%
VHF	77940	99.87%	99.87%	99.84%	99.93%	98.74%
HF						
ALL	145895	99.80%	99.80%	99.81%	99.62%	98.64%

Table 11: Chennai FIR CPDLC Performance per Media Type (July – December 2024)

FIR	Chennai FIR				
Criteria	RCP240				
Period	Jul-Dec 2024				
Colour Key Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < =180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media Type						
SATCOM	77725	99.60%	99.73%	99.73%	99.79%	98.67%
VHF	71389	99.67%	99.78%	99.75%	99.86%	98.71%
HF						
ALL	149114	99.63%	99.76%	99.74%	99.82%	98.69%

4.12   **Tables 12** and **13** summarized overall CPDLC performance per media type for messages sent within the Kolkata FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 12: Kolkata FIR CPDLC Performance per Media Type (January – June 2024)

FIR	Kolkata FIR				
Criteria	RCP240				
Period	Jan-Jun 2024				
Colour Key Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < = 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media Type						
SATCOM	13251	98.52%	98.83%	98.90%	99.12%	97.59%
VHF	4301	99.40%	99.79%	99.43%	99.89%	98.96%
SV	178	96.40%	98.53%	98.05%	100.00%	92.42%
VS	228	89.91%	88.82%	91.84%	91.10%	93.95%
HF						
ALL	17958	98.60%	98.92%	98.91%	99.21%	97.81%

Table 13: Kolkata FIR CPDLC Performance per Media Type (July – December 2024)

FIR	Kolkata FIR					
Criteria	RCP240					
Period	Jul-Dec 2024					
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < =180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media Type						
SATCOM	16580	98.76%	98.95%	99.01%	99.17%	98.11%
VHF	3387	99.50%	99.70%	99.63%	99.73%	98.60%
HF						
SV	161	93.56%	92.07%	94.83%	95.14%	93.17%
VS	197	91.92%	91.59%	92.06%	92.27%	90.71%
ALL	20325	98.77%	98.94%	99.01%	99.16%	98.08%

4.13   **Tables 14** and **15** summarized overall CPDLC performance per media type for messages sent within the Mumbai FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 14: Mumbai FIR CPDLC Performance per Media Type (January – June 2024)

FIR	Mumbai FIR					
Criteria	RCP240					
Period	Jan-Jun 2024					
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < = 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60sec
By Media Type						
SATCOM	109945	98.54%	99.24%	99.10%	99.67%	95.90%
VHF	32254	99.20%	99.64%	99.42%	99.76%	96.81%
SV	1666	95.32%	97.66%	96.64%	99.14%	88.12%
VS	3410	94.60%	96.33%	96.30%	98.30%	90.53%
HF						
ALL	147275	98.55%	99.24%	99.07%	99.65%	95.90%

Table 15: Mumbai FIR CPDLC Performance per Media Type (July – December 2024)

FIR	Mumbai FIR					
Criteria	RCP240					
Period	Jul-Dec 2024					
Colour Key: Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% < =180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media Type						
SATCOM	133832	98.41%	99.16%	99.04%	99.62%	95.90%
VHF	31950	99.05%	99.60%	99.38%	99.77%	96.51%
HF						
SV	1761	94.04%	96.08%	96.08%	97.28%	88.48%
VS	3612	95.04%	95.79%	96.32%	97.90%	89.89%
ALL	171155	98.41%	99.14%	99.01%	99.59%	95.82%

4.14　　　　The Meeting was informed that India had initiated trials on PBCS and performance-based separations. India proposed conducting a side-meeting with CRA Boeing on CRA formal service agreement in support of PBCS implementation. However, final decisions would be taken by competent authority of the ANSP, considering terms and conditions provided by Boeing.

4.15　　　　Given that India had submitted the data link performance report for all the three FIRs, including Mumbai FIR, and completed annual *Survey of the Status of Current and Planned Implementation of Performance-Based Horizontal Separation Minima* form for 2025, the Meeting agreed to the proposal to remove India from the APANPIRG ATM and Airspace Deficiencies list in the Data Link field, which would be proposed to RASMAG for further consideration.

Data Link Performance Report for Ujung Pandang FIR (WP/07)

4.16　　　　Indonesia presented the data link performance data for 1 January to 31 December 2024 for the Ujung Pandang FIR, and information on actions taken to identify and rectify the causes of performance issues.

4.17　　　　In summary, ADS-C performance by SATCOM and VHF were able to meet the 95% criterion but failed 99.9% criterion for both January – June and July – December periods, as shown in **Table 16**. Conversely, ADS-C performance via HF did not meet either the 95% or 99.9% criteria. When broken down by RGS/GES, five stations (AYQ1, DVO1, IG1, KDI1, and MNL) failed to meet the 95% and/or 99.9% criteria in one or both semesters of 2024.

Table 16: Ujung Pandang FIR ADS-C Performance per Media Type

Criteria		RSP180					
Period		Jan-June 2024			July-Des 2024		
Colour Key Meets Criteria 99.0%-99.89% Under Criteria		Message Counts	95% % <=90sec	99,90% % <=180sec	Message Counts	95% % <=90sec	99,90% % <=180sec
FIR		By Media Type					
WAAF	SATCOM	49049	99,10%	99,81%	57648	99,40%	99,84%
	HF	107	40,55%	58,02%	138	35,95%	60,00%
	VHF	192796	98,93%	99,42%	219583	98,93%	99,41%
	ALL	241952	98,96%	99,48%	277369	99,01%	99,48%

4.18   The Meeting was informed that ANSP had monitored RGS/GES performance from the beginning until the latest 2024 period. Based on the monitoring activities, no improvement in performance was recorded. The SSP was expected to identify the root causes of poor ADS-C performance attributed to RGS/GES, particularly for AYQ1 and IG1, which had shown no reported improvement since the previous year.

4.19   **Tables 17** and **18** summarized overall CPDLC performance per Media Type for messages sent within the Ujung Pandang FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 17: Ujung Pandang FIR CPDLC Performance per Media Type (January – June 2024)

FIR	WAAF				
Criteria	RCP240				
Period	Jan - June 2024				
Colour Key Meets Criteria 99.0%-99.89% Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP % < = 180sec	ACTP % <= 120sec	ACP % < = 210sec	ACTP % <= 150sec	PORT
By Media Type						
SATCOM	10.504	99,44%	99,91%	99,65%	99,94%	97,20%
SV	382	98,22%	99,55%	98,30%	99,62%	94,50%
VHF	31.808	99,36%	99,78%	99,51%	99,83%	97,59%
ALL	42694	99,37%	99,80%	99,53%	99,85%	97,47%

Table 18: Ujung Pandang FIR CPDLC Performance per Media Type (July – December 2024)

FIR	WAAF					
Criteria	**RCP240**					
Period	**Jul - Dec 2024**					
Colour Key ■ Meets Criteria ■ 99.0%-99.89% ■ Under Criteria	**Message Counts**	**95% Benchmark**		**99.9% Benchmark**		**95%**
		ACP **% <= 180sec**	**ACTP** **% <= 120sec**	**ACP** **% <= 210sec**	**ACTP** **% <= 150sec**	**PORT**
By Media Type						
SATCOM	10609	99,28%	99,83%	99,40%	99,89%	97,05%
SV	496	98,49%	100,00%	98,94%	100,00%	94,35%
VHF	35487	99,34%	99,72%	99,45%	99,76%	97,74%
ALL	46592	99,31%	99,75%	99,43%	99,79%	97,55%

4.20   Indonesia informed the Meeting that the ACP for messages sent via Satellite and VHF meet the 95% criterion but marginally fall below the 99.9% criterion. As for CPDLC differentiated by RGS and GES, a total of six stations had failed to meet 99.9% criteria in 2024: January – June 2024 (IG1, PNK1, SRG, ZAM); and July – December 2024 (APK1, DVO, IG1, SRG, ZAM).

4.21   The CPDLC differentiations from both of RGS/GES stations were caused by the delay related to specific VHF station, it happened when the delayed CPDLC messages were observed via a specific VHF ground station. The CSP was expected to identify the causes of the RGS/GES delays.

4.22   The Meeting was informed that Indonesia had identified the differentiations based on observation during the period 2024. The result also showed that the ACP that did not meet the criteria was caused by the low percentages of Pilot Operational Response Time (PORT). Therefore, ANSP would notify the airline operators to review procedures to reduce the PORT issues.

Data Link Performance Report for Malaysia (WP/08)

4.23   Malaysia presented the data link performance report for the Kuala Lumpur FIR for January to December 2024.

4.24   **Table 19** provided the overall ADS-C performance per media type for the Kuala Lumpur FIR, in 2024. SATCOM and VHF were able to meet the 95% criterion but failed 99.9% criterion for both January – June and July – December periods. During the first half of 2024, only IGW1 failed to meet all criteria. In the second half of 2024, APK, IG1, and IGW1 failed all criteria, while BTJ1 failed the 99.9% criteria. According to CSP reports, there had been no issues reported with the ground stations. The primary cause of latency in SAT media ground stations was typically related to VDL/SAT or SAT/SAT transitions. Additionally, transition delays near the FIR boundary, where multiple contracts with different FIRs were involved, could also impact performance.

Table 19: Kuala Lumpur FIR ADS-C Performance per Media Type

FIR	WMFC					
Criteria	RSP180					
Period	January-June 2024			July-December 2024		
Colour Key						
🟩 Meet Criteria	Message Counts	95% %<=90sec	99.90% %<=180sec	Message Counts	95% %<=90sec	99.90% %<=180sec
🟨 99.0% - 99.89%						
🟥 Under Criteria						
By Media Type						
SATCOM	188,003	98.05%	99.37%	139,855	98.15%	99.35%
VHF	147477	99.44%	99.84%	113782	99.45%	99.82%
HF	42	55.56%	77.98%	53	46.23%	70.17%
ALL	335,522	98.65%	99.57%	253,690	98.72%	99.55%

4.25   **Tables 20** and **21** summarized overall CPDLC performance per Media Type for messages sent within the Kuala Lumpur FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 20: Kuala Lumpur FIR CPDLC Performance per Media Type (January – June 2024)

FIR	WMFC					
Criteria	RCP240					
Period	January-June 2024					
Colour Key		95% Benchmark		99.9% Benchmark		95%
🟩 Meets Criteria	Message Counts	ACP %<=180sec	ACTP %<=120sec	ACP %<=210sec	ACTP %<=150sec	PORT %<60sec
🟨 99.0% - 99.89%						
🟥 Under Criteria						
By Media Type						
SATCOM	2,182	99.08%	98.79%	99.48%	99.11%	98.08%
VHF	3,357	99.60%	99.47%	99.67%	99.62%	99.00%
HF	294	86.96%	88.10%	91.04%	93.62%	81.29%
ALL	5,833	98.75%	98.63%	99.14%	99.11%	97.75%

Table 21: Kuala Lumpur FIR CPDLC Performance per Media Type (July – December 2024)

FIR	WMFC					
Criteria	RCP240					
Period	July-December 2024					
Colour Key		95% Benchmark		99.90% Benchmark		95%
🟩 Meets Criteria	Message Counts	ACP %<=180sec	ACTP %<=120sec	ACP %<=210sec	ACTP %<=150sec	PORT %<60sec
🟨 99.0% - 99.89%						
🟥 Under Criteria						
By Media Type		**By Media Type**				
SATCOM	2,305	99.13%	99.23%	99.48%	99.59%	98.20%
VHF	3,080	99.49%	99.38%	99.55%	99.59%	98.69%
HF	198	85.19%	86.57%	91.01%	91.41%	77.27%
ALL	5,583	98.82%	98.85%	99.21%	99.28%	97.73%

4.26   The Meeting was informed that Malaysia had not implemented 50 NM and 30 NM longitudinal separations (RCP240 and RSP180) in the Kuala Lumpur FIR. Currently, PBCS performance data was used to help operators address performance issues in preparation for its implementation. In the meantime, non-PBCS equipped aircraft in the Kuala Lumpur FIR would continue to be provided with 50 NM longitudinal separation using distance-based separation, with procedural position reports (ICAO Doc 4444 paragraph 5.4.2.6.3).

4.27   The Meeting also noted that Malaysia was planning to finalize the formal service agreement with APANPIRG-recognized CRA, in preparation for permanent implementation of performance-based separation in the Kuala Lumpur FIR, planned in 2026.

Data Link Performance Report for Philippines (WP/09)

4.28   The Philippines presented the data link performance data for the year 2024 for the Manila FIR, and information on actions taken to identify and rectify the causes of performance issues.

4.29   In summary, ADS-C performance by SATCOM and VHF were able to meet the 95% criterion but failed 99.9% criterion for both January – June and July – December periods, as shown in **Table 22**.

Table 22: Manila FIR ADS-C Performance per Media Type

FIR	RPHI					
Criteria	RSP180					
Period	Jan-Jun 2024			Jul-Dec 2024		
Colour Key: Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% % <= 90sec	99.90% % <= 180sec	Message Counts	95% % <= 90sec	99.90% % <= 180sec
By Media Type						
SATCOM	146194	97.79%	99.74%	155605	97.80%	99.64%
VHF	480776	98.49%	99.34%	525264	98.38%	99.24%
HF	110	50.91%	62.93%	124	46.37%	64.96%
ALL	627,080	98.38%	99.39%	680993	98.28%	99.29%

4.30   **Tables 23** and **24** summarized overall CPDLC performance per Media Type for messages sent within the Manila FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 23: Manila FIR CPDLC Performance per Media Type (January – June 2024)

FIR	RPHI				
Criteria	RCP240				
Period	Jan-Jun 2024				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%< 60secs
By Media Type						
SATCOM	10210	99.13%	99.84%	99.42%	99.85%	91.57%
VHF	10742	98.24%	98.68%	98.46%	98.79%	95.18%
VS	162	96.53%	97.82%	96.72%	97.94%	81.69%
HV	272	83.30%	76.47%	86.40%	85.13%	78.68%
ALL	23358	98.30%	98.69%	98.56%	98.87%	94.50%

Table 24: Manila FIR CPDLC Performance per Media Type (July – December 2024)

FIR	RPHI				
Criteria	RCP240				
Period	Jul-Dec 2024				
Colour Key — Meets Criteria / 99.0%-99.84% / Under Criteria	Message Counts	95% Benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% <=180sec	% <= 120sec	% < = 210sec	% <= 150sec	%< 60secs
By Media Type						
SATCOM	20791	99.42%	99.95%	99.56%	99.97%	94.62%
VHF	19526	98.28%	98.49%	98.49%	98.63%	95.51%
VS	312	98.03%	99.76%	98.69%	99.81%	79.33%
HV	440	84.55%	75.68%	87.39%	82.33%	77.27%
ALL	44358	98.44%	98.63%	98.65%	98.81%	95.25%

4.31   The Philippines informed the Meeting that the cause of the underperformance of the RGS maybe affected by the planned and unplanned degradation of the ground stations. SITA sends timely advisories through email. Outages of RGS in the Philippines, especially MNL, MNL2, MNL8, DVO1, and SFS1, were reported had an accumulated timeout for hours. However, the caused of poor performance of SYX, which failed all criteria and had the poorest performance among all stations other than HF based stations was yet to be determined.

4.32   It was also noted that the connection with SITA experienced interruptions in April, May, August, November and December 2024. The Philippines would ensure that the PMNL routers to SITA were well maintained, that the link to SITA servers were continuously monitored, and any failed connections with the third-party communication link provider would be reported immediately to SITA.

4.33   ICAO Secretariat recalled that the current version of ICAO Doc 9869 specified only DM0 WILCO to be used for PORT data analysis. The next version of ICAO Doc 9869 was expected to include additional downlink messages (DMs) responses for PORT data analysis.

4.34   The Meeting noted that, as ICAO Doc 9869 was a guidance document, some ANSPs opted to include other DMs (DM1 UNABLE, DM 2 STANDBY, DM 3 ROGER, DM 4 AFFIRM, DM 5 NEGATIVE) for PORT data analysis.

4.35   India highlighted concerns regarding the addition of DMs to be measured in the next version of the ICAO Doc 9869, noting that this would require updating software for data analysis, which could be costly for ANSPs.

<u>Data Link Performance Report for Sri Lanka (WP/10)</u>

4.36   Sri Lanka presented the data link performance report for the Colombo FIR for May to December 2024.

4.37   The Meeting was informed that data for the months of January to April 2024 was unavailable due to a system upgrade.

4.38   **Table 25** provides the overall ADS-C performance per media type for the Colombo FIR, in 2024. SATCOM and VHF were able to meet the 95% criterion but failed 99.9% criterion, except during the May – June 2024 period.

Table 25: Colombo FIR ADS-C Performance per Media Type

FIR	VCCF					
Criteria	RSP180					
Period	May-June 2024			July-December 2024		
Colour Key ■ Meets Criteria ■ 99.0%-99.89% ■ Under Criteria	Message Counts	95% % <= 90sec	99.90% % <= 180sec	Message Counts	95% % <= 90sec	99.90% % <= 180sec
By Media Type						
SATCOM	79822	98.50%	99.82%	318548	98.22%	99.59%
VHF	22782	99.85%	99.93%	84348	99.69%	99.86%
HF	-	-	-	-	-	-
ALL	102604	98.83%	99.84%	402896	98.53%	99.65%

4.39   **Tables 26** and **27** summarized overall CPDLC performance per Media Type for messages sent within the Colombo FIR during 2024, where performance did not meet the RCP240 performance criteria.

Table 26: Colombo FIR CPDLC Performance per Media Type (May – June 2024)

FIR	VCCF					
Criteria	RCP240					
Period	May - Jun 2024					
Colour Key: Meets Criteria (green), 99.0%-99.89% (yellow), Under Criteria (red)	Message Counts	95% benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60sec
By Media Type						
SATCOM	5590	97.70%	99.41%	98.65%	99.71%	97.96%
VHF	88	95.45%	96.59%	96.59%	98.85%	96.59%
HF	-	-	-	-	-	-
ALL	5678	97.68%	99.36%	98.66%	99.70%	97.94%

Table 27: Colombo FIR CPDLC Performance per Media Type (July – December 2024)

FIR	VCCF					
Criteria	RCP240					
Period	Jul - Dec 2024					
Colour Key: Meets Criteria (green), 99.0%-99.89% (yellow), Under Criteria (red)	Message Counts	95% benchmark		99.9% Benchmark		95%
		ACP	ACTP	ACP	ACTP	PORT
		% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60sec
By Media Type						
SATCOM	19809	96.85%	99.22%	99.01%	99.47%	96.36%
VHF	528	96.59%	99.62%	99.21%	99.81%	97.61%
HF	-	-	-	-	-	
ALL	20337	96.84%	99.22%	99.01%	99.48%	96.38%

4.40   Sri Lanka informed the Meeting that for CPDLC performance differentiated by RGS/GES, all stations met the 95% criterion, except IGW1 during the first half of the reporting period. However, several stations failed 99.9% criterion. Instances of poor RGS/GES performance were reported to the service provider, and Sri Lanka would continue to monitor RGS/GES performance closely.

4.41   The Meeting was informed that Sri Lanka had planned to discuss matters related to the formal service agreement with CRA Boeing.

<u>Data Link Performance Report and Actions for Discussion from Singapore (WP/11)</u>

4.42   Singapore presented the data link performance data for the year 2024 for the Singapore FIR, and information on actions taken to identify and rectify the causes of performance issues.

4.43   **Table 28** summarized overall ADS-C performance per media type for down links sent within the Singapore FIR during 2024, where performance did not meet the RSP180 performance criteria. The ADS-C performance by SATCOM and VHF met the 95% criteria, while HF did not meet the criteria. As HF did not meet the performance required by PBCS, Singapore had reminded airline operators to use SATCOM and VHF in Singapore FIR.

Table 28: Singapore FIR ADS-C Performance per Media Type

FIR	WSJC					
Criteria	**RSP180**					
Period	**Jan-Jun 2024**			**Jul-Dec 2024**		
Color Key Meets Criteria 99.0% - 99.89% Under Criteria	**Message Counts**	**95%** **% < =** **90sec**	**99.90%** **% <=** **180sec**	**Message Counts**	**95%** **% < =** **90sec**	**99.90%** **% <=** **180sec**
By Media Type						
SATCOM	139795	95.23%	99.18%	144765	95.91%	99.26%
VHF	670717	99.60%	99.89%	650629	99.61%	99.87%
HF	142	46.01%	72.25%	185	47.30%	73.33%
ALL	810654	98.84%	99.76%	795579	98.92%	99.75%

4.44   Singapore informed the Meeting that five RGS/GES stations failed to meet the 95% and 99.9% ADS-C criteria. HF station H06 did not meet PBCS performance requirements. SATCOM delays were likely due to limited VHF coverage over the South China Sea and transition issues. CRA Boeing noted that analysing performance by media type alone, such as SATCOM, might not be effective.

4.45   It was reported that six aircraft operator/types failed to meet the 95% and 99% RSP180 criteria during the first half of 2024, and eight failed during the second half. Singapore presented its analysis at the meeting. In one case, CAAS was informed that three airframes lacked PBCS approval, and the airline was reminded to file the appropriate indicators. In one case, CAAS was initially informed by the monitoring agency during the submission of poor performance of three airframes that they were not approved for PBCS operations, and the airline would be reminded not to file the PBCS indicators. Singapore verbally updated the Meeting that after the submission of the working paper, further clarifications had been received from the monitoring agency that the three airframes were actually approved for PBCS operations. Singapore also stated that it would continue to monitor the performance of these aircraft operators.

4.46   The CPDLC performance by SATCOM and VHF were able to meet the 95% criterion but failed marginally for 99.9% criterion as shown in **Table 29** and **Table 30**.

Table 29: Singapore FIR CPDLC Performance per Media Type (May – June 2024)

FIR	WSJC				
Criteria	**RCP240**				
Period	**Jan-Jun 2024**				
Color Key Meets Criteria 99.0% - 99.89% Under Criteria	**Message Counts**	95% Benchmark		99.9% Benchmark	
		ACP **% < =** **180sec**	**ACTP** **% <=** **120sec**	**ACP** **% < =** **210sec**	**ACTP** **% <=** **150sec**
By Media Type					
SATCOM	12962	98.96%	98.90%	99.41%	99.31%
VHF	27470	99.56%	99.76%	99.64%	99.80%
HF	18				
ALL	45233	99.28%	99.42%	99.51%	99.60%

Table 30: Singapore FIR CPDLC Performance per Media Type (July – December 2024)

FIR	WSJC				
Criteria	**RCP240**				
Period	**Jul-Dec 2024**				
Color Key	**Message Counts**	95% Benchmark		99.9% Benchmark	
Meets Criteria		**ACP**	**ACTP**	**ACP**	**ACTP**
99.0% - 99.89%		**% < =180sec**	**% <= 120sec**	**% <= 210sec**	**% <= 150sec**
Under Criteria					
By Media Type					
SATCOM	17432	99.16%	99.06%	99.54%	99.43%
VHF	29236	99.67%	99.77%	99.71%	99.82%
HF	35				
ALL	51007	99.43%	99.47%	99.61%	99.65%

4.47　　　　It was mentioned that CPDLC performance via SATCOM and VHF met the 95% criterion but marginally failed the 99.9% criterion. HF message counts were 18 in first half of 2024 and 35 in second half of 2024; as HF did not meet PBCS requirements, Singapore reminded operators to use SATCOM and VHF in the WSJC FIR. For RGS/GES, IGW1 failed the 95% ACP criterion and IG1 failed the 95% ACTP criterion, with several stations also not meeting the 99.9% target. Singapore stated it would continue monitoring RGS/GES performance. CRA Boeing reiterated that analysing issues solely by communication media type, such as SATCOM, might not be effective.

4.48　　　　The Meeting was informed that one aircraft operator/type failed the 95% and 99.9% RCP240 criteria in both halves of 2024. For RMY/B762, large PORT was observed throughout the year, but no PBCS indicators were filed, so no investigation was conducted.

4.49　　　　Singapore experienced three separate data link outages. In one instance, CPDLC service was temporarily suspended due to a malformed message containing unreadable characters, which caused the ATC Gateway to stop all outgoing messages. Service resumed after an ATC Gateway switchover.

4.50　　　　It was noted that some airlines continued to file RCP and RSP indicators despite lacking PBCS approval, with such cases typically identified only during post-monitoring of poor performance. Non-compliance was reported to monitoring agencies, who reminded the aircraft operators not to file as PBCS approved. However, this process did not guarantee continued compliance, as such information was not always available to ANSPs.

4.51　　　　The Meeting noted the potential benefit of sharing a consolidated list of non-PBCS-approved airframes with ANSPs to support more reliable application of performance-based separation minima.

4.52　　　　ICAO explained there was no list non-PBCS approved aircraft akin to non-RVSM approved aircraft data due to the different ICAO requirement for PBCS versus RVSM. Such a list of non-PBCS approval aircraft discovered as a result of monitoring programmes could be compiled for RASMAG considerations and Singapore further clarified that such a list would be use as awareness for ANSPs utilizing PBCS airspace and not to change any current process.

Asia/Pacific Region Combined PBCS Monitoring Report (WP/12)

4.53   Indonesia and Malaysia presented the aggregated data link performance monitoring report for the Asia/Pacific Region, prepared with support from Japan. **Table 31**Table listed the FIRs for which data link performance reports were provided and included in the regional report.

Table 31: 2024 Data Performance – Reporting FIRs

Reporting FIRs		
State	**FIR**	**Location Indicator**
United States	Oakland Oceanic	KZAK
	Anchorage Oceanic	PAZA
Fiji	Nadi*[1]	NFFF
French Polynesia	Tahiti	NTTT
New Zealand	Auckland Oceanic	NZZO
Australia	Brisbane	YBBB
	Melbourne	YMMM
Vietnam	Ho-Chi-Minh	VVTS
China	Urumqi	ZWWW
	Lanzhou	ZLLL
India	Chennai	VOMF
	Kolkata	VECF
	Mumbai	VABF
Japan	Fukuoka	RJJJ
Malaysia	Kuala Lumpur	WMFC
Sri Lanka	Colombo*[2]	VCCF
Indonesia	Ujung Pandang	WAAF
Philippines	Manila	RPHI
Singapore	Singapore	WSJC

*1 = Nadi: January-June 2024 data only, *2 = Colombo: May-December 2024 data only

4.54   The Meeting was reminded that the performance criteria and the colour codes used by FIT-Asia (shown in **Table** and **Table 33**), which was agreed by the FIT-Asia/14.

Table 32: Performance Criteria

CRITERIA		
	95%	**99.90%**
ASP	% < = 90sec	% <= 180sec
ACP	% <= 180sec	% <= 210sec
ACTP	% <= 120sec	% <= 150sec
PORT	% < 60sec	

Table 33: Colour Codes

COLOUR KEY
Meet Criteria
99.0% - 99.89%
Under Criteria
No Data

4.55　　　　**Table** showed the RSP aggregated data of all media types in 2024. The 95% criteria were met in all FIRs. There was no FIR that met 99.9% criteria, but all other FIRs except Chennai and Kolkata cleared 99.0%.

Table 34: RSP Aggregated Data (All Media Types)

REQUIRED SURVEILLANCE PERFORMANCE						
Region	Asia-Pacific Region					
Performance Criteria	RSP180					
Time Period	2024 January-June			2024 July-December		
Colour Key: Meets Criteria / 99.0-99.89% / Under Criteria	No. Messages	Criteria		No. Messages	Criteria	
		95%	99.90%		95%	99.90%
Aggregate All RGS		% < = 90sec	% <= 180sec		% < = 90sec	% <= 180sec
KZAK	5971271	98.69%	99.61%	6372030	98.77%	99.63%
NFFF	323568	99.12%	99.64%			
NTTT	113440	99.59%	99.83%	98835	99.40%	99.67%
NZZO	491645	98.93%	99.73%	461189	98.45%	99.51%
YBBB	1450812	99.49%	99.83%	1397596	99.37%	99.77%
YMMM	1120452	99.48%	99.82%	1120452	99.48%	99.82%
VVTS	271764	98.74%	99.72%	289712	98.88%	99.72%
ZWWW	210283	98.40%	99.50%	155462	98.40%	99.50%
ZLLL	331337	98.20%	99.50%	312276	98.30%	99.50%
VOMF	287424	97.49%	98.92%	283528	96.83%	98.54%
VECF	557384	98.00%	98.96%	291377	97.58%	98.66%
VABF	774232	97.51%	99.11%	782999	96.91%	98.74%
RJJJ	3091247	98.41%	99.59%	3659783	98.45%	99.58%
WMFC	335522	98.65%	99.57%	253690	98.72%	99.55%
RPHI	627,080	98.38%	99.39%	680993	98.28%	99.29%
WSJC	810654	98.84%	99.76%	795579	98.92%	99.75%
VCCF	102604	98.83%	99.84%	402896	98.53%	99.65%
PAZA	1911481	98.74%	99.62%	2253510	98.87%	99.66%
WAAF	241952	98.96%	99.48%	277369	99.01%	99.48%

4.56　　　　The Meeting was informed that **Figure 3** illustrated the RSP message counts for each FIR in 2024, showing an increase in most FIRs from the first half to the second half of the year.
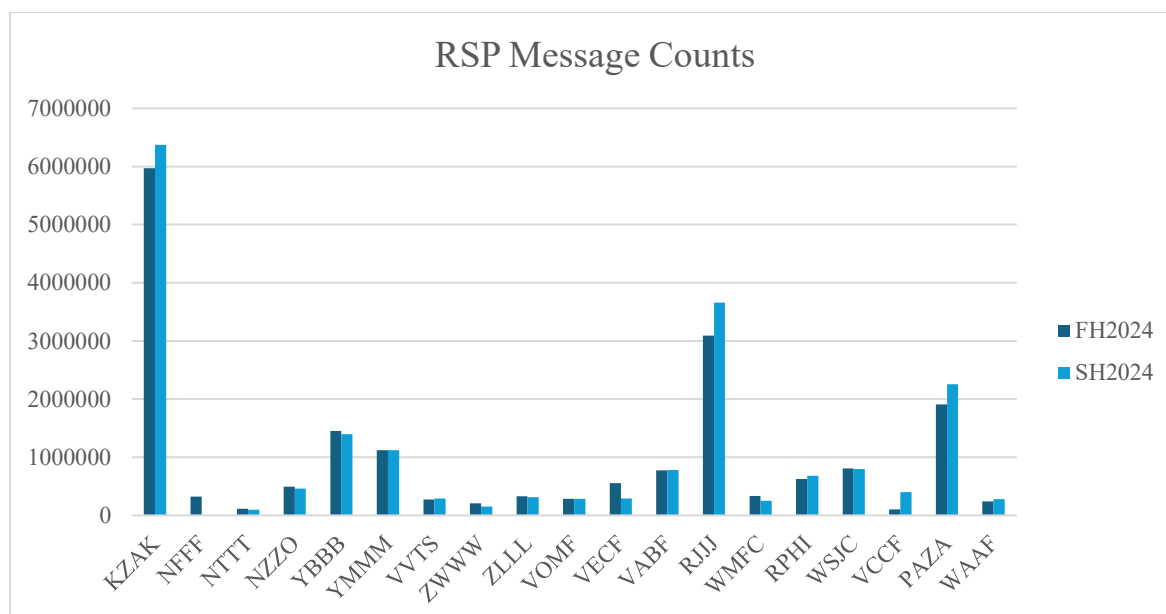
Figure 3: RSP Message Counts of Each FIR in 2024

4.57   The Meeting was informed that Asia/Pacific Region RSP message counts reached their lowest point in the second half of 2020 before beginning a recovery trend. From 2019 to 2024, the 95% and 99.90% performance criteria were consistently met, with 95% threshold achievement generally between 98% and 99%, and 99.90% performance remaining above 99.5%, despite minor fluctuations. (**Figure**)
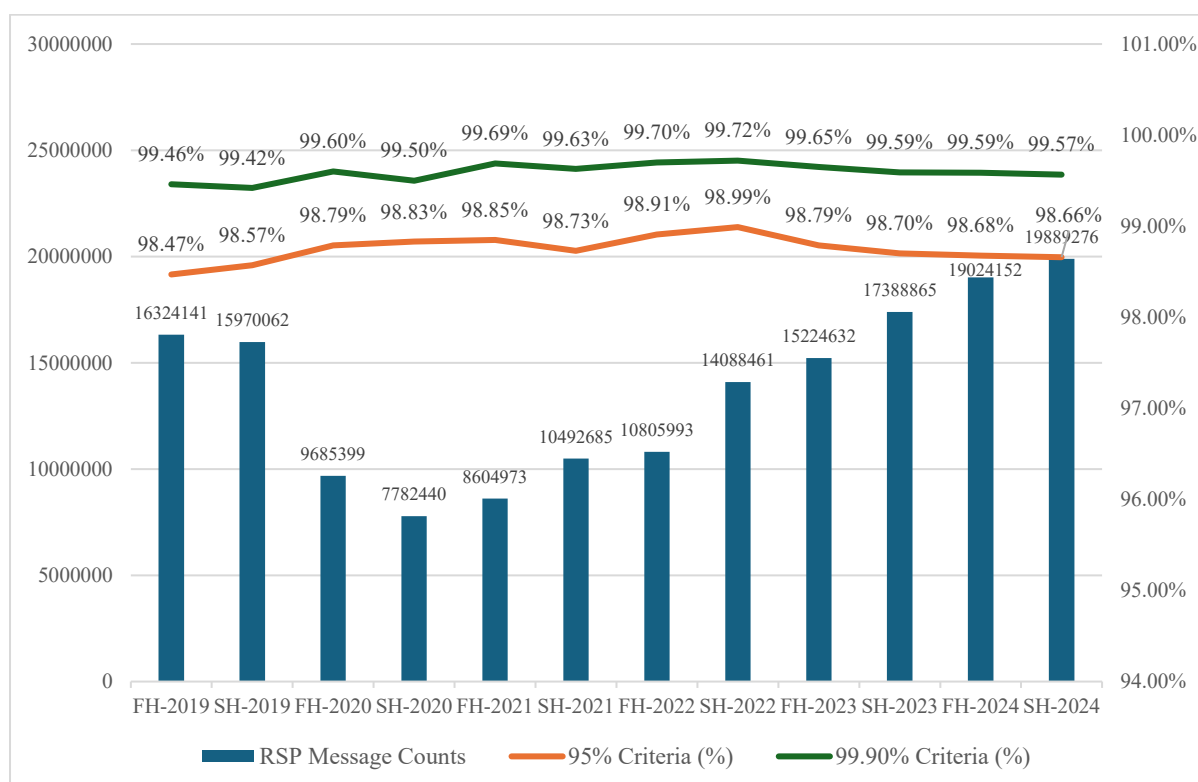
Figure 4: Number of RSP Message Counts and Percentage of Meeting 95% and 99.90% Criteria

4.58   RCP240 performance in the Asia/Pacific Region was generally robust in 2024, with most FIRs meeting or exceeding the 95% criteria for ACP and ACTP. However, performance against the 99.9% criteria showed greater variability, with several FIRs, including Kolkata, Kuala Lumpur, and Manila, underperforming in at least one half of the year. (**Table 35**)

Table 35: RCP Aggregated Data (All Media Types)

	REQUIRED COMMUNICATIONS PERFORMANCE								
Region	Asia-Pacific Region								
Performance Criteria	RCP240								
Time Period	2024 January-June					2024 July - December			
Colour Key / Meets Criteria / 99.0%-99.89% / Under Criteria / **Aggregate All RGS**	No. Messages	ACP Criteria		ACTP Criteria		No. Messages	ACP Criteria		ACTP Criteria	
		95%	99.90%	95%	99.90%		95%	99.90%	95%	99.90%
		% <= 180sec	% <= 210sec	% <= 120sec	% <= 150sec		% <= 180sec	% <= 210sec	% < = 120sec	% <=150sec
KZAK	356648	99.37%	99.53%	99.60%	99.70%	392772	99.31%	99.46%	99.55%	99.65%
NFFF	10980	99.49%	99.74%	99.74%	99.80%					
NTTT	3902	99.67%	99.85%	99.77%	99.87%	3110	99.71%	99.74%	99.71%	99.81%
NZZO	92307	99.23%	99.50%	99.47%	99.68%	84705	98.96%	99.25%	99.30%	99.48%
YBBB	43673	99.54%	99.54%	99.67%	99.68%	42531	99.54%	99.57%	99.71%	99.73%
YMMM	46001	99.63%	99.63%	99.76%	99.75%	49595	99.72%	99.74%	99.81%	99.83%
VVTS	76964	98.36%	99.66%	98.89%	99.82%	76981	98.35%	99.61%	98.88%	99.80%
ZWWW	33	87.87%	87.87%	87.87%	87.87%	34	100.00%	100.00%	100.00%	100.00%
ZLLL	2164	98.38%	99.12%	98.75%	99.63%	2389	98.40%	98.15%	98.74%	98.95%
VOMF	145895	99.80%	99.80%	99.81%	99.62%	149114	99.63%	99.76%	99.74%	99.82%
VECF	17958	98.60%	98.92%	98.91%	99.21%	20325	98.77%	98.94%	99.01%	99.16%
VABF	147275	98.55%	99.24%	99.07%	99.65%	171155	98.41%	99.14%	99.01%	99.59%
RJJJ	67522	99.68%	99.70%	99.79%	99.80%	78527	99.61%	99.61%	99.76%	99.74%
WMFC	5833	98.75%	98.63%	99.14%	99.11%	5583	98.82%	98.85%	99.21%	99.28%
RPHI	23358	98.30%	98.69%	98.56%	98.87%	44358	98.44%	98.63%	98.65%	98.81%
WJSC	45233	99.28%	99.42%	99.51%	99.60%	51007	99.43%	99.47%	99.61%	99.65%
VCCF	5678	97.68%	99.51%	98.66%	99.70%	20337	96.84%	99.22%	99.01%	99.72%
PAZA	119296	99.39%	99.45%	99.59%	99.64%	138314	99.08%	99.53%	99.36%	99.67%
WAAF	42694	99.37%	99.80%	99.53%	99.85%	46592	99.31%	99.75%	99.43%	99.79%

4.59   **Figure 5** illustrated that RCP message counts in most FIRs increased from the first to the second half of 2024. Manila and Colombo FIR showed significant increased, while other FIRs recorded increased of less than 20% or experienced a decline.
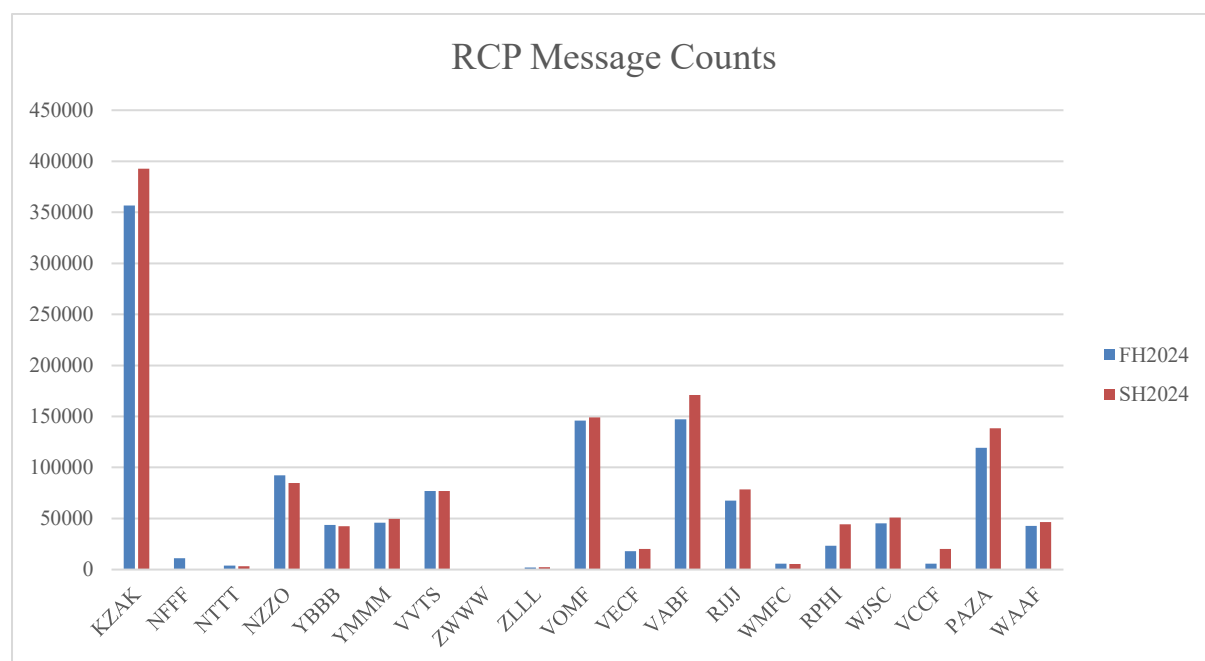
Figure 5: RCP Message Counts of Each FIR in 2024

4.60   **Figures 6** and **7** indicated that ACP and ACTP RCP message counts reached their lowest point in the second half of 2020, followed by a recovery trend, peaking in the second half of 2024. Message counts exceeded 1.4 million, surpassing pre-COVID-19 levels recorded in 2019.
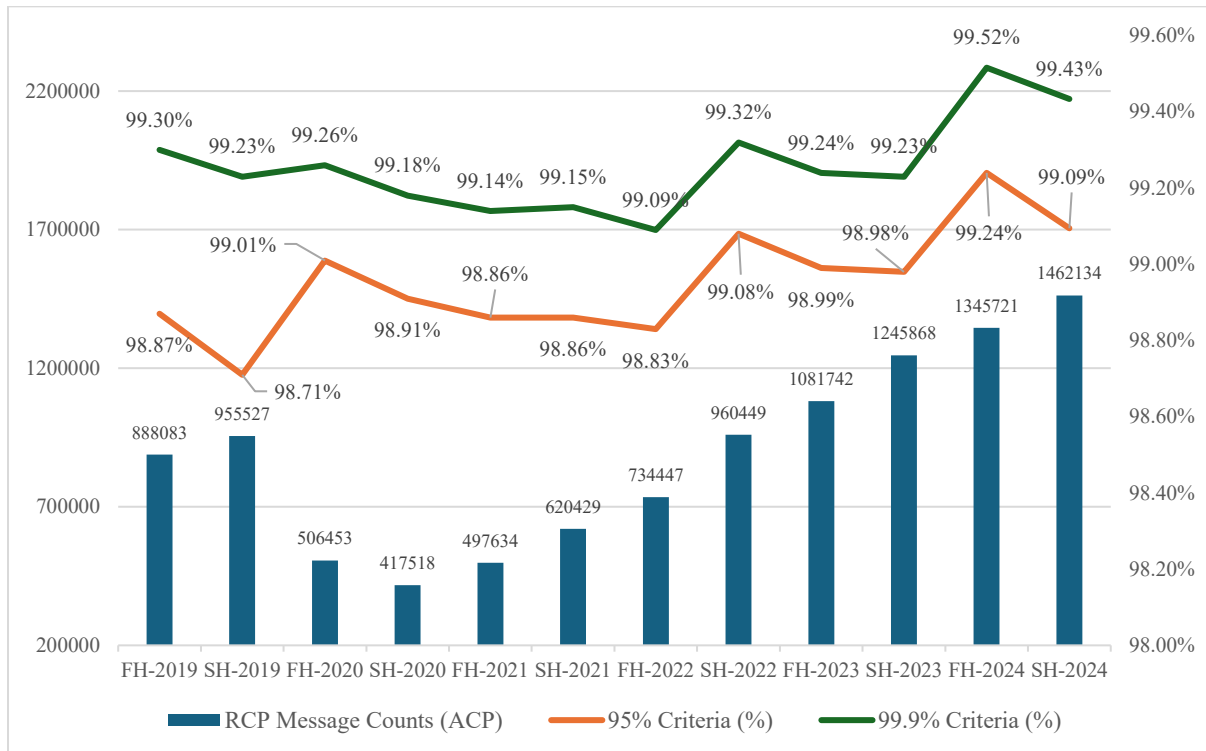
Figure 6: Number of RCP Message Counts, and Percentage Meeting 95% and 99.90% Criteria (ACP)
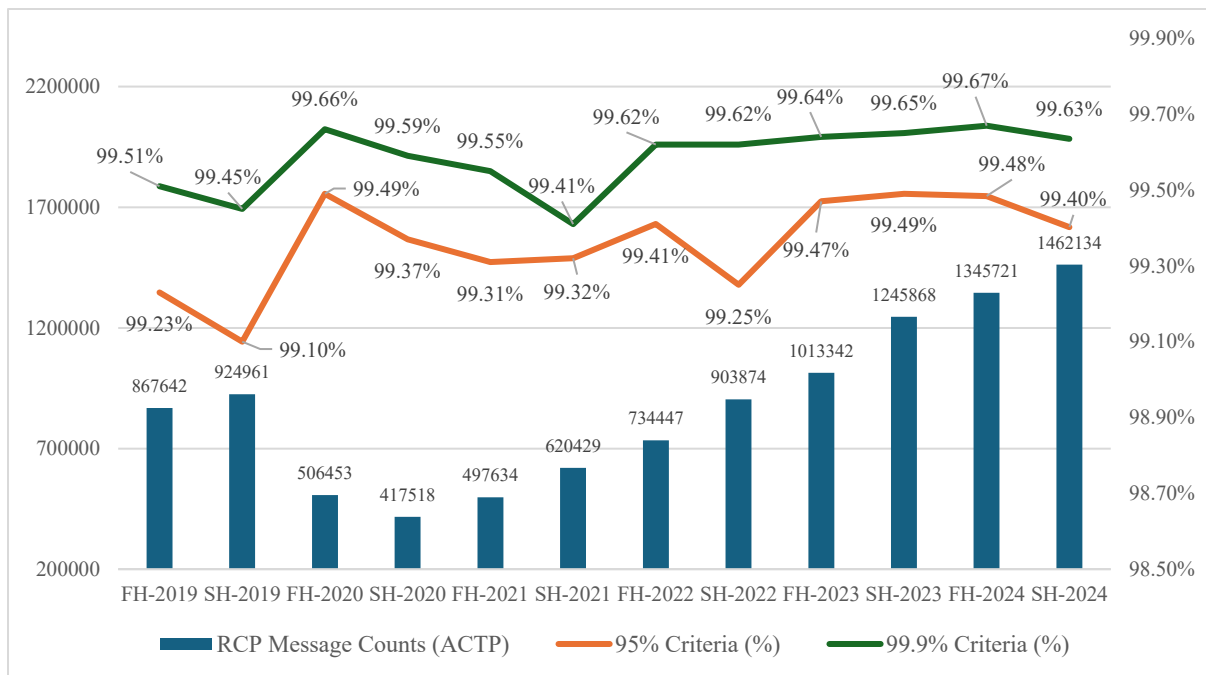
Figure 7: Number of RCP Message Counts, and Percentage Meeting 95% and 99.90% Criteria (ACTP)

4.61 The percentages meeting the 95% and 99.90% criteria for both ACP and ACTP gradually increased from 2019 to 2024. After a decline in data counts in 2020, a consistent upward trend was observed through to 2024.

4.62 **Table 36** illustrated that certain combinations of aircraft operators and aircraft types, each with over 1,000 message counts in either half of 2024, did not achieve PORT compliance.

Table 36: Combinations of Aircraft Operators and Types Confirmed Non-Compliance of PORT

Criteria		RCP240										
Period		Jan - Jun 2024					Jul - Dec 2024					
Colour Key (Meets Criteria / 99.0%-99.89% / Under Criteria)		Message Counts	95% benchmark		99.9% Benchmark		95%	Message Counts	95% benchmark		99.9% Benchmark		95%
			ACP	ACTP	ACP	ACTP	PORT		ACP	ACTP	ACP	ACTP	PORT
			% <=180sec	% <=120sec	% <=210sec	% <=150sec	%<60secs		% <=180sec	% <=120sec	% <=210sec	% <=150sec	%<60secs
FIR	By Aircraft Operator / Type (only message counts >100 recorded)												
KZAK	UAL/B738	6779	96.80%	97.43%	97.83%	98.97%	94.73%	7841	95.92%	96.88%	97.35%	98.55%	93.19%
KZAK	MIL/C17	2693	98.14%	99.70%	98.55%	99.85%	94.69%	2536	97.99%	99.53%	98.34%	99.72%	94.79%
KZAK	MIL/K35R	1456	97.46%	99.79%	98.15%	99.93%	90.18%	1676	97.37%	99.76%	98.15%	99.82%	91.29%
VVTS	AAR	1135	98.29%	99.74%	98.68%	100.00%	94.27%	838	98.10%	99.27%	99.50%	99.61%	93.80%
VVTS	CAL	2905	97.90%	99.40%	98.66%	99.54%	94.87%	2818	98.10%	99.10%	98.69%	99.44%	95.88%
VVTS	JAL	1522	98.14%	99.93%	98.90%	100.00%	95.20%	1377	97.97%	99.98%	98.68%	100.00%	93.92%
VVTS	KAL	3776	97.56%	99.13%	98.39%	99.62%	94.15%	3057	97.87%	99.54%	98.69%	99.73%	94.80%
VVTS	SJX	1525	98.37%	99.10%	98.76%	99.52%	95.68%	1411	97.43%	98.70%	98.37%	99.15%	94.47%
VABF	ALK/A21N	789	96.61%	99.11%	97.31%	99.41%	90.75%	1068	97.33%	98.83%	98.33%	99.23%	92.42%
VABF	ALK/A332	1347	98.22%	99.38%	99.10%	99.87%	94.28%	692	97.69%	98.96%	98.63%	99.74%	93.50%
VABF	ETD/A320	3140	97.44%	99.25%	98.22%	99.48%	91.24%	2633	95.71%	98.82%	97.85%	99.42%	88.49%
VABF	ETD/A321	4613	97.31%	99.45%	98.19%	99.71%	90.53%	5720	95.89%	98.74%	97.47%	99.44%	90.02%
VABF	KAC/A20N	1092	97.07%	99.11%	98.24%	99.97%	91.85%	1293	96.44%	97.76%	97.64%	98.70%	92.34%
VABF	MAU/A332							1300	98.86%	99.67%	99.31%	99.98%	94.31%
VABF	QTR/A332	900	98.01%	99.80%	98.40%	99.84%	90.22%	2009	98.06%	99.50%	98.82%	99.82%	91.29%
VABF	QTR/A333	2025	97.71%	99.58%	98.42%	99.74%	91.56%	2489	98.03%	99.46%	98.58%	99.65%	91.92%
VABF	QTR/B77W	9722	97.73%	97.92%	98.64%	98.94%	96.55%	11176	96.69%	97.19%	98.09%	98.35%	95.63%
VABF	SVA/A333	3057	97.17%	99.54%	97.96%	99.80%	88.06%	2969	97.00%	99.81%	97.91%	99.96%	86.09%
VABF	THY/A333	878	97.45%	99.48%	98.34%	99.85%	91.12%	1485	97.64%	99.09%	98.52%	99.39%	92.19%
VABF	VTI/A21N	1595	97.66%	100.00%	97.93%	100.00%	92.66%	1332	98.02%	99.81%	98.71%	99.87%	92.12%
RPHI	CAL/A359	830	94.10%	92.77%	94.54%	93.77%	92.53%	1300	93.24%	91.02%	93.64%	91.74%	91.62%
RPHI	CSN/B789	1737	95.75%	95.68%	96.06%	96.35%	93.96%	2365	96.14%	94.93%	96.44%	95.60%	94.29%
RPHI	SIA/A359	1384	94.67%	95.05%	95.16%	95.58%	92.73%	2721	95.69%	95.14%	95.96%	95.80%	93.38%
RPHI	SIA/B78X	1076	96.68%	95.57%	96.96%	96.33%	95.07%	2031	96.28%	96.12%	96.61%	96.73%	93.75%
WAAF	CPA/B77W	1759	98.64%	99.86%	99.39%	99.94%	92.33%	2375	98.78%	99.86%	99.24%	99.90%	94.40%
PAZA	CKS/B744	3154	97.94%	97.75%	98.57%	98.60%	96.07%	3931	96.51%	98.37%	97.69%	98.98%	94.38%
PAZA	CPA/B748	2571	98.02%	98.33%	99.07%	98.95%	95.76%	3061	94.51%	98.14%	96.21%	98.56%	91.44%
PAZA	DAL/A339	2220	98.47%	99.23%	99.05%	99.50%	95.90%	1774	98.76%	99.66%	99.27%	99.89%	94.59%
PAZA	CPA/B77W	1426	98.88%	99.09%	99.37%	99.37%	96.91%	2122	98.30%	98.87%	98.73%	99.48%	94.67%

4.63 At FIT-Asia/14, the A359 operated by Singapore Airlines was identified with poor PORT performance in the Manila FIR during 2023, and the issue persisted through 2024. The B77W and A333 operated by Cathay Pacific showed poor PORT performance across multiple FIRs, including VABF, RPHI, WAAF, and VOMM. The B77L operated by FedEx Express also demonstrated poor PORT performance in VABF and WAAF. VABF recorded the highest number of poor PORT occurrences, followed by RPHI. It was noted that ACTP and PORT values were approximations, as referenced in ICAO Doc 9869.

4.64 The Meeting was informed that the details, including PBCS data provided by States/Administrations, could be found in **FIT-Asia/15 WP/12 Attachments A** to **E**.

4.65 States/Administrations were invited to double-check the data before submission each year to avoid format errors and consistency issues.

4.66   The Meeting commended Indonesia and Malaysia for its contribution in consolidating and presenting region combined PBCS monitoring report. The Meeting also appreciated Japan for their support.

Agenda Item 5: Data Link Developments and Guidance Material

Extension of the Network Outage Reporting and Impact Assessment (NORIA) Handbook for Global Applicability (WP/13)

5.1   Singapore presented information on the on-going discussion at Communications Panel - Operational Data Link Working Group (OPDLWG) on the extension of draft Network Outage Reporting and Impact Assessment (NORIA) handbook being developed by the North Atlantic Technology and Interoperability Group (NAT TIG) for global applicability.

5.2   The NORIA Handbook would provide a standard framework for Communication Service Providers (CSPs) and Satellite Service Providers (SSPs) for reporting network degradation, outages and scheduled maintenance to Air Navigation Service Providers (ANSPs). This would include a standard reporting e-mail template and common taxonomy, which would facilitate common understanding between CSPs, SSPs and Air Traffic Service Providers (ATSPs) and would enable ATSP to analyse the operational effect of network outages on air traffic control.

5.3   The Meeting was informed that the current draft NORIA handbook contained only information on coverage in the North Atlantic Region. Discussions had been initiated at the OPDLWG on whether the handbook should be extended to include information on coverage of the other regions for global applicability. The OPDLWG Members were tasked to reach out to the various forums to assess interest and the potential value of extending the handbook for global applicability.

5.4   It was noted that, in October 2024, the EUROCONTROL joint Datalink Performance Monitoring and Support Groups (DPMG/DSG) had supported extending the NORIA handbook for applicability for continental Europe.

5.5   The Meeting emphasized the importance of regularly updating the information contained in the handbook to prevent the dissemination of outdated or false data, which could lead to incorrect impact assessments. The OPDLWG members presented at the Meeting confirmed that, if the handbook was to be adopted as a global handbook, the OPDLWG would be responsible for ensuring the information was kept current and accurate.

5.6   Japan highlighted that sharing of information on satellite outage would be very useful for situational awareness to ANSPs. The Secretariat informed the Meeting that Procedures for GNSS and Data Link Disruption Ad Hoc Group had been established at ATM/SG/12 and introduced the tasks assigned to the group.

5.7   Although some States had expressed concerns, the Meeting understood that nothing had changed except for the implementation of standardized reporting and the inclusion of additional parties in notifications regarding availability or impact. It was also suggested that no disadvantage would be incurred by adopting the process.

5.8   The FIT-Asia meeting supported extending the NORIA handbook for global applicability, and Singapore would inform the OPDLWG accordingly.

Landing Information Delivery Operation in China (IP/02)

5.9   This paper presented information of China's Landing Information Delivery (LID) system, an innovative approach to digitally providing essential landing-related data (e.g. runway assignments) to flights 50 minutes before their estimated landing time. By employing air-ground data link technology based on the ARINC623 protocol, the LID system aimed to enhance the accuracy and efficiency of landing information exchange, which traditionally relied on VHF voice communication. Since 2019, China had successfully validated All-Phase Datalink ATC Services based on compatible FANS 1/A and ACARS ATS protocols in Zhengzhou, Guangzhou, Haikou, Shanghai and other regions. The LID system integrates seamlessly with existing air traffic control automation platforms and was designed to support the evolving needs of aviation.

Agenda Item 6: Data Link-related ANS Deficiencies

Air Navigation Deficiencies Relating to Data Link Performance Monitoring and Analysis (WP/14)

6.1   The Meeting was reminded of relevant Conclusions from APANPIRG and RASMAG regarding the requirements for States providing data link services to register on the FIT-Asia website (https://www.fans-cra.com/), reporting problems related to ADS-C and CPDLC to the respective CRA, and submitting PBCS performance monitoring data to FIT.

6.2   Currently, not all FIT-Asia Administrations had formal service agreements with APANPIRG-recognized CRAs. **Table 37** illustrated the existing formal CRA service agreements.

Table 37: Current Formal CRA Service Agreements

	APANPIRG-recognized CRA	**Scope of Application**	**Formal Service Agreement**
IPACG and ISPACG (United States)	CRA Boeing	IPACG States, ISPACG States, NAT States	Yes
Japan	CRA Japan	Japan	Yes
SEASMA (Singapore)	CRA Boeing	Singapore, Philippines, Viet Nam	Yes

6.3   The Secretariat presented the relevant excerpt of the APANPIRG ATM and Airspace Safety Deficiencies List (see **FIT-Asia/15 WP/14 Attachment A**), for review by the Meeting.

6.4   The Meeting was informed that APANPIRG/35 agreed to the following updates to the APANPIRG ATM and Airspace Deficiencies in the Data Link field:

   a)   Maldives – withdrawn. ICAO confirmed that Maldives had disabled the ADS-C function from its ATM system due to application issues, and CPDLC / HF is used beyond VHF coverage.

   b)   India – remain. Performance monitoring and analysis not reported for Mumbai FIR.

6.5   In reference to the discussion under WP/06, the Meeting agreed to propose the removal of India from the APANPIRG ATM and Airspace Deficiencies in the Data Link field, for further consideration by RASMAG.

6.6   The APANPIRG ATM and Airspace Deficiencies in the Data Link field, as agreed by the Meeting, was provided at **Appendix D** to the Report.

Agenda Item 7: Any Other Business

<u>Progress on Issues Related to the Central Reporting Agency (CRA) (WP/15)</u>

7.1   The Meeting noted the key roles and responsibilities of the CRA as outlined in ICAO Doc 9869, which include managing and analyzing PRs, coordinating with relevant stakeholders, and supporting both regional and global monitoring activities. The CRA was also tasked with identifying performance deficiencies, issuing recommendations, and maintaining a centralized database to ensure continued compliance with performance-based separation minima and the effectiveness of data link operations.

7.2   It was recalled that APANPIRG/34 had urged States to establish formal service agreements with APANPIRG-recognised CRAs, in accordance with ICAO Annexes 6 and 11. During FIT-Asia/14, discussions were held on the possibility of expanding the existing CRA service contract used in the IPACG, ISPACG, and NAT regions to include FIT-Asia States lacking formal CRA agreements. However, this initiative could not proceed due to unforeseen administrative changes, despite prior coordination, thereby impacting other States that had anticipated inclusion under the expanded arrangement.

7.3   In light of this, the Meeting acknowledged the need for affected States to engage directly with APANPIRG-recognised CRAs to fulfil performance monitoring requirements. Boeing, as FIT-Asia CRA, was encouraged to remain flexible and provide support throughout this coordination process.

<u>FIT Points of Contact (WP/16)</u>

7.4   The Meeting was requested to include relevant FIT Points of Contact (POCs) under the SAF (Airspace Safety Monitoring and FIT) category, for coordination and/or clarification of air navigation and airspace safety issues.

<u>USOAP Update (IP/03)</u>

7.5   The Meeting noted an update from the Secretariat on the 2024 edition of the Universal Safety Oversight Audit Programme (USOAP) Protocol Questions (PQs), which assess States' implementation of the eight critical elements (CEs) of safety oversight. The latest edition introduced updates across nine audit areas including legislation, organization, licensing, operations, airworthiness, investigation, air navigation services (ANS), aerodromes, and the State Safety Programme (SSP).

7.6   For a PQ to be rated "satisfactory," States were required to demonstrate full implementation by providing appropriate evidence. If documentation was incomplete or lacking, a "not satisfactory" rating was applied, and the State was expected to submit a corrective action plan (CAP) along with supporting material to address the identified deficiencies. These PQs formed the basis for evaluating a State's effective implementation (EI) of ICAO SARPs, PANS, and related guidance.

7.7   The 2024 edition of the USOAP PQs also incorporated recommendations aimed at enhancing alignment between the USOAP and other oversight activities, including integration with the SSP assessment process. In the ANS audit area, 122 PQs from 2020 were revised. The 2024 edition contained a total of 128 PQs, including 11 new questions, 108 revised questions and five that were removed.

Side Meeting with CRA Boeing

7.8   Several FIT-Asia member States that had not yet established a formal service agreement with the CRA took the opportunity to hold side meetings with Boeing to discuss potential formal service agreement.

PBCS Seminar

Standards and Recommended Practices (SARPs) and Guidance Materials related to PBCS (SP/01)

7.9   The Meeting reviewed updates on ICAO SARPs and guidance materials related to PBCS. Key ICAO documents such as Annexes 6 and 11, and PANS-ATM (Doc 4444), along with Doc 9869, provided the regulatory and operational foundation for global PBCS implementation. These documents supported the consistent application of RCP and RSP specifications, initially focused on ADS-C, CPDLC, and SATVOICE, with potential expansion to technologies like ADS-B. The Fourteenth Air Navigation Conference (AN-Conf/14) further emphasized performance-driven enhancements, sustainability, and long-term alignment with ICAO's net-zero carbon goals.

7.10   The Meeting noted ongoing efforts in the Asia/Pacific region to implement tactical ATC separation supported by surveillance and datalink capabilities, in alignment with ***AN-Conf/14 Recommendation 3.1/1: Project 30/10 – Optimized implementation of longitudinal separation minima***, which promotes the application of performance-based separation to enhance regional airspace efficiency, capacity and safety.

7.11   In response to increasing GNSS and data link disruptions, the Air Traffic Management Sub-Group (ATM/SG) of APANPIRG established an ad-hoc group to collect disruption data and develop procedures, including reporting mechanisms for airspace users and coordination among stakeholders.

7.12   Additionally, the NOPAC Redesign Project, a collaborative effort by JCAB, FAA, and IATA, was highlighted for its operational success. The project introduced ATS routes with 23 NM lateral separation and compressed airspace to accommodate more user prefer routes (UPRs), achieving over 95% compliance with RCP 240, RSP 180, and RNP 4 standards across NOPAC traffic.

ADS-C Comprehensive Monitoring (SP/02)

7.13   The Meeting was informed of China's ongoing efforts to enhance PBCS monitoring through a comprehensive ADS-C-based performance framework. In alignment with Annex 11 and other ICAO provisions, China aimed to ensure that communication and surveillance systems met RCP240 and RSP180 criteria.

7.14   The monitoring framework emphasized the importance of analyzing performance across the full communication path, including ATS units, ground systems, aircraft systems, and applications. Various causes of communication breakdowns were identified, including protocol issues, outdated equipment, and logic errors. A detailed case study using EUA1 illustrated how batch data analysis and geolocation-based visualization were employed to isolate and assess data link performance deficiencies. The process included filtering data by satellite and message delay, performing comparative analyses, and color-coded performance mapping.

7.15 China also highlighted its proactive engagement with major operators through regular meetings to share monitoring results, raise awareness of performance issues, and understand operational challenges. These efforts demonstrated a commitment to continuous improvement of PBCS monitoring and to ensuring operational safety through timely identification and resolution of performance gaps.

Overview of datalink communication and CRA scheme in Fukuoka FIR (SP/03)

7.16 The Meeting was presented with an overview of Japan's Central Reporting Agency (CRA) operations within the Fukuoka FIR. CRA Japan, supported by JCAB's Air Navigation Services Department, oversaw the performance of data link operations in compliance with the PBCS Manual. It was noted that Fukuoka ACC managed ATC system operations, while NPAC monitored communication performance. Coordination with system developers such as SDECC and TMC ensured integrated support. The CRA processed PRs and liaised with CSPs and aircraft manufacturers as needed, within the framework of the PBCS Charter.

7.17 Several case studies were shared, including one involving observed poor PBCS performance in Inmarsat-equipped B789 aircraft within specific latitudinal ranges. The investigation revealed not only substandard RSP values but also a monitoring error, where data had been incorrectly collected north of 80 degrees north, an area not subject to PBCS separation due to satellite limitations. These findings highlighted the importance of accurate data interpretation and alignment with the applicable criteria for performance-based separation.

7.18 Additionally, the Meeting was informed that Japan had formally launched domestic CPDLC operations in March 2023. During implementation, issues were identified with CPDLC message failures, specifically frequency transfer messages to arriving aircraft, due to unavailable ground stations. All of the failures were coded as "231", indicating no communicable station. Analysis revealed a lack of VHF coverage, and the provider responded by installing additional ground stations to address the issue.

PBCS Monitoring for Application of Performance-Based Separation Minima (SP/04)

7.19 The Meeting reviewed the post-implementation PBCS monitoring framework, which involved monthly compilation of rolling three-month performance data, verification of PBCS filings by non-performing aircraft, and coordination among monitoring agencies to notify operators for corrective action. Where needed, PRs were submitted to the CRA for further analysis. The process aimed to detect and address communication deficiencies, though challenges remained in ensuring non-compliant aircraft did not continue to file PBCS indicators.

7.20 Key challenges in applying performance-based separation minima were highlighted. Poor aircraft performance or data link outages immediately impacted the ability to apply reduced separation, often requiring the use of alternative separation methods and resulting in decreased airspace capacity. Issues such as delayed detection, CSP notification lags, and limited outage visibility at the controller level contributed to operational difficulties. Various causes for data link failures were identified, including SATCOM outages, equipment issues, and GNSS-related time synchronization problems.

7.21 Singapore presented its ongoing exploration of live PBCS monitoring to improve real-time detection of data link performance issues. The system integrated flight plan and ACARS message data and displayed alerts on the Interactive Auxiliary Display System at controller positions since December 2024. This tool provided enhanced situational awareness and was designed with configurable parameters to flag flights with filed PBCS indicators that failed to meet performance thresholds. The initiative aimed to complement post-monitoring efforts by supporting more immediate operational decision-making.

CP-OPDLWG Update

7.22　　　The Meeting was informed of updated information related to the scope, functions, and composition of the OPDLWG, including the group's mandate as defined in its associated Job Card and the identification of new tasks under its work programme. This information also included the planned revision of the GOLD Manual, reflecting the group's continued role in supporting global harmonization of datalink operations and ensuring alignment with evolving operational requirements and technological advancements.

Post Implementation Monitoring (SP/05)

7.23　　　The Meeting was informed of New Zealand's approach to post-implementation monitoring of FANS 1/A performance in the Auckland Oceanic FIR to support the application of performance-based separation minima. In accordance with ICAO Annex 11, Annex 6, PANS-ATM and Doc 9869, New Zealand conducted regular performance evaluations of CPDLC and ADS-C against RCP 240 and RSP 180 specifications. These evaluations ensured continued operational safety and compliance. Monitoring involved monthly extraction, filtering, and analysis of data using web-based tools to generate performance reports, identify non-compliance and investigate anomalies.

7.24　　　Airways New Zealand implemented a structured process to filter and assess data, focusing on factors such as SATCOM transition delays, HF usage, and near-boundary operation effects. Analysis included plotting delayed reports and investigating individual aircraft or fleet-level performance. Non-compliant aircraft were reported to the Civil Aviation Authority (CAA) and the Regional Monitoring Agency (RMA), with further reporting through the CRA website. Regular reports outlined aircraft failing to meet 95% and 99.9% thresholds and provided updates on previously identified cases.

7.25　　　A case study involving dual Iridium and Inmarsat SATCOM systems on UAL B772 aircraft was presented. The investigation revealed that both SDUs were active simultaneously, causing duplicate and delayed messages. A FANS 1/A problem report was submitted and, following CRA analysis and Boeing's advice, the operator corrected the SDU configuration. No further issues were reported, and the aircraft returned to compliant performance levels. The case underscored the importance of detailed monitoring and collaborative resolution in maintaining PBCS compliance.

FIT-Asia 15 Seminar (SP/06)

7.26　　　The Meeting was presented with an overview by CRA Boeing on PBCS compliance and operational challenges. The presentation outlined how RCP and RSP specifications provided a framework for managing end-to-end communication and surveillance performance in support of ICAO's performance-based separation minima. Boeing demonstrated compliance procedures for aircraft systems, including integrated lab testing, documentation of transaction times, and inclusion of compliance statements in aircraft records. A list of Boeing avionics was shared, identifying both compliant and non-compliant systems, with legacy equipment such as 747-400 Legacy FMC and 777 AIMS-1 noted as non-compliant.

7.27　　　Operational challenges included avionics behaviour during VHF-SATCOM link transitions, performance degradation at the edge of VHF coverage, and inconsistencies in compliance monitoring across ANSPs. Many non-compliance reports contained limited data, making analysis difficult. Additionally, some operators lacked internal processes for managing compliance, and procedural lapses—such as late responses to uplinks—contributed to deviations even with compliant equipment. Boeing recommended enhanced data sharing among ANSPs to improve monitoring quality and consistency.

7.28   Two case studies highlighted the complexity of resolving data link performance issues. In the first, repeated SATCOM transitions in a B777 fleet led to performance degradation; the issue was resolved through collaboration with the operator and updates to SATCOM ORT files. In the second, a B764 encountered CPDLC down link errors caused by a mismatch in ground system timing and delayed uplink delivery. These cases demonstrated that resolution often required coordination among multiple stakeholders, including ANSPs, service providers, manufacturers, and operators.

Satellite Safety Data Link Services (SP/07)

7.29   The Meeting was presented with an overview of Viasat's satellite safety services and developments supporting global data link operations. Viasat, in partnership with Inmarsat, highlighted enhancements to its L-band satellite network, including the deployment of I-6 F1 over the Indian Ocean and upcoming I-8 satellites, which aim to improve network resilience and extend service life beyond 2040. Coverage improvements and network path identifiers were detailed, along with Viasat's support for FANS 1/A services in oceanic and remote airspace, meeting RCP 240 and RSP 180 requirements.

7.30   The Meeting noted that the SB-S Iris service, built on Swift Broadband-Safety, provided ATN/OSI capabilities for domestic airspace and supported next-generation 4D trajectory-based operations. Iris enabled more efficient air traffic management by relieving VHF congestion and increasing data link capacity. Operational results from 2024–2025 demonstrated strong CPDLC and ADS-C latency performance. Viasat also shared progress on the Iris Global initiative, aimed at expanding Iris-based services and enabling APAC cooperation through regional TBO trials and prototype development.

7.31   Additional updates included ongoing improvements in SATVOICE VoIP connectivity, support for secure controller-pilot voice communication, and the development of a global ATN/OSI and ATN/IPS gateway for seamless aircraft transitions. Viasat emphasized its roadmap to support future ICAO data link standards and shared its commitment to enhancing air-ground communications, situational awareness, and environmental performance through connected flight deck solutions and expanded ATS B2 capabilities.

Concluding the Seminar

7.32   In concluding the seminar, the Meeting expressed its appreciation to the presenting States and industry partners. Noting that similar content had been presented over several years through seminars and related events, the Meeting recognized the need to plan future sessions based on a clearer understanding of the participants' interests and expectations regarding the topics and types of lectures they wish to receive.

Agenda Item 8: FIT-Asia Task List

FIT-Asia Terms of Reference and Task List (WP/17)

8.1   The FIT Asia Terms of Reference (TOR, **FIT-Asia/15 WP/17 Attachment A**) and Task List were provided for review and update by the Meeting.

8.2   The FIT-Asia Task List as updated by the Meeting was provided at **Appendix E** to the Report.

Agenda Item 9: Date and Venue of the Next Meeting

9.1   The next meeting of FIT-Asia was tentatively planned to be held in Bangkok, Thailand, in June 2026, a few weeks before the normal schedule for RASMAG/31.

        Closing of the Meeting

9.2   In closing the Meeting, the Chairperson thanked and congratulated the efforts made by the participants for their contributions to the Meeting.

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List of Participants

		STATE/NAME	TITLE/ORGANIZATION
1.		**CHINA (4)**	
	1.	Mr. Pengyu Wang	Assistant CNS Division Air Traffic Management Bureau Civil Aviation Administration of China **CHINA**
	2.	Mr. Yongyue Chen	Engineer Aviation Data Communication Corporation Air Traffic Management Bureau Civil Aviation Administration of China **CHINA**
	3.	Mr. Yang Hong	Engineer Aviation Data Communication Corporation Air Traffic Management Bureau Civil Aviation Administration of China **CHINA**
	4.	Mr. Zhe Zhang	Associate Professor Civil Aviation University of China **CHINA**

		STATE/NAME	TITLE/ORGANIZATION
2.		**INDIA (4)**	
	5.	Mr. Asit Kumar Sinha	Jt.GM (ATM) Corporate Headquarter Airports Authority of India **INDIA**
	6.	Mr. Brajesh Kumar Agrawal	Jt.GM (ATM) Mumbai Airports Authority of India **INDIA**
	7.	Mr. Binit Kumar Toppo	DGM(ATM), Jt.GM (ATM) Kolkata Airports Authority of India **INDIA**
	8.	Mr. Kukkala Harshavardhan Rao	Manager (ATM) Chennai Airport Airports Authority of India **INDIA**
3.		**INDONESIA (4)**	
	9.	Mr. Wahyu Heri Wibawa	Manager ATFM & ATS System AirNav Indonesia **INDONESIA**

		STATE/NAME	TITLE/ORGANIZATION
	10.	Mr. Geraldi Genta Ramadhani Priyanto	Telecommunication Technician AirNav Indonesia **INDONESIA**
	11.	Mr. Arief Rachman	Technician AirNav Indonesia **INDONESIA**
	12.	Mrs. Wahyu Annisa Dewi	Staff of Information Technology Division AirNav Indonesia **INDONESIA**
4.		**JAPAN (3)**	
	13.	Mr. Motochika Ichikawa	Special Assistant to the Director, Air Navigation Services Planning Division Japan Civil Aviation Bureau **JAPAN**
	14.	Mr. Masahiro Saito	Chief, CNS Planning Office Japan Civil Aviation Bureau **JAPAN**
	15.	Mr. Nobumichi Akagi	Project Manager Japan Radio Air Navigation Systems Association (JRANSA) **JAPAN**

		STATE/NAME	TITLE/ORGANIZATION
5.		**LAO PDR (2)**	
	16.	Mr. Soudalath Khamsitthisack	Officer Department of Civil Aviation of Lao PDR **LAO PDR**
	17.	Ms. Sengmany Phengsomphan	Officer Department of Civil Aviation of Lao PDR **LAO PDR**
6.		**MALAYSIA (2)**	
	18.	Mr. Nik Izat Amir Bin Kemaruzaman	Senior Assistant Director Air Navigation Services Technical Division Civil Aviation Authority of Malaysia **MALAYSIA**
	19.	Mr. Ahmad Kusairi Bin Abdul Wahab	Senior Assistant Director Air Navigation Services Technical Division Civil Aviation Authority of Malaysia **MALAYSIA**
7.		**NEW ZEALAND (2)**	
	20.	Mr. Paul Radford (Online)	Oceanic Systems Development Specialist Airways New Zealand **NEW ZEALAND**

		STATE/NAME	TITLE/ORGANIZATION
	21.	Mr. Richard Woodtli	Oceanic ANS Requirements Specialist Airways New Zealand **NEW ZEALAND**
8.		**PHILIPPINES (3)**	
	22.	Mr. Alvin P. Brosas	Senior Aviation Services Safety Inspector Aerodrome and Air Navigation Safety Oversight Office Civil Aviation Authority of the Philippines **PHILIPPINES**
	23.	Mr. Eric M. Valmores	CNS Systems Officer IV, Manila CNS-ATM Facility Air Navigation Service Civil Aviation Authority of the Philippines **PHILIPPINES**
	24.	Mr. Kevin S. Wing Siong	CNSS Systems Officer II, Manila CNS-ATM Facility Air Navigation Service Civil Aviation Authority of the Philippines **PHILIPPINES**
9.		**SINGAPORE (4)**	
	25.	Mr. Lam Seng Lim	Safety Manager Civil Aviation Authority of Singapore **SINGAPORE**

		STATE/NAME	TITLE/ORGANIZATION
	26.	Mr. Kwek Chin Lin	ATC Specialist 8 (TMA) Civil Aviation Authority of Singapore **SINGAPORE**
	27.	Mr. Aloysius Ang	Head (Ops Tech Planning) Civil Aviation Authority of Singapore **SINGAPORE**
	28.	Ms. Erin Siah	Executive Engineer (ATM Engineering Operations) Civil Aviation Authority of Singapore **SINGAPORE**
10.		**SRI LANKA (2)**	
	29.	Mr. Indika Bandupriya	Senior Manager (Air Traffic Control) Airport & Aviation Services Sri Lanka (PVT) Ltd **SRI LANKA**
	30.	Mr. Prasanna Wijeratne	Electronics Engineer Airport & Aviation Services Sri Lanka (PVT) Ltd **SRI LANKA**
11.		**THAILAND (7)**	
	31.	Mr. Pawin Techawiboonwong	Senior Flight Operations Standards Officer 8 The Civil Aviation Authority of Thailand **THAILAND**

		STATE/NAME	TITLE/ORGANIZATION
	32.	Mr. Varayu Vanasuva	Senior Airworthiness Standards Senior Officer 7 The Civil Aviation Authority of Thailand **THAILAND**
	33.	Mr. Attanop Sangkachart	Airworthiness Standards Officer 5 The Civil Aviation Authority of Thailand **THAILAND**
	34.	Mr. Parinya Ruangsiripaisan	Engineering Manager (Business) Aeronautical Radio of Thailand Ltd. **THAILAND**
	35.	Mr. Dolsarit Somseang	Executive Systems Engineer (Safety Management System) Aeronautical Radio of Thailand Ltd. **THAILAND**
	36.	Mr. Rittee Saengmay	Chief Aircraft Engineer, Avionic Engineer Group, Technical Department Thai Airways International Public Company Limited **THAILAND**
	37.	Capt. Naroupon Chandrakulsiri	Team Lead of Quality Assurance Department Operations Department Thai Airways International Public Company Limited **THAILAND**

		STATE/NAME	TITLE/ORGANIZATION
12.		**UNITED STATES (2)**	
	38.	Mr. Shayne Campbell	Senior Air Traffic Representative, Asia Pacific Federal Aviation Administration **SINGAPORE**
	39.	Mr. Micah Lyman	Foreign Affairs Specialist Federal Aviation Administration Air Traffic Safety Oversight International Integration Staff **UNITED STATES**
13.		**VIET NAM (2)**	
	40.	Mr. Trinh Dinh Loc	CNS System engineer Vietnam Air Traffic Management **VIET NAM**
	41.	Mr. Cuong Nguyen Viet	CNS Group Leader Vietnam Air Traffic Management **VIET NAM**
14.		**BOEING (2)**	
	42.	Mr. Rami Ayari	Design Engineer Boeing Commercial Airplanes **UNITED STATES**

		STATE/NAME	TITLE/ORGANIZATION
	43.	Mr. Genzel Dizon	Electronics System Design and Analysis Engineer Boeing Company **UNITED STATES**
15.		**INMARSAT (2)**	
	44.	Ms. Lisa Bee	Director, Air Traffic Services Inmarsat Aviation **UNITED STATES**
	45.	Ms. Siu Min Lee	Business Development Director Inmarsat Aviation **SINGAPORE**
16.		**ICAO (5)**	
	46.	Mr. Hiroyuki Takata	Regional Officer, Air Traffic Management ICAO Asia and Pacific Regional Office **THAILAND**
	47.	Mr. Mior Adli Mior Sallehhuddin	Regional Officer, Air Traffic Management ICAO Asia and Pacific Regional Office **THAILAND**
	48.	Mr. Weng Kit Ying	Air Traffic Management Officer ICAO Asia and Pacific Regional Office **THAILAND**

		STATE/NAME	TITLE/ORGANIZATION
	49.	Mr. Tak Chuen Chui	Aeronautical Information Management/ Air Traffic Management Officer ICAO Asia and Pacific Regional Office **THAILAND**
	50.	Dr. Trish Prakayphet Chalayonnawin	Programme Analysis Associate, Air Traffic Management ICAO Asia and Pacific Regional Office **THAILAND**

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LIST OF WORKING AND INFORMATION PAPERS

WORKING PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
WP/01	1	Provisional Agenda	Secretariat
WP/02	2	FIT-Asia Central Reporting Agency (CRA) Problem Report Briefing	Boeing (FIT-Asia CRA)
WP/03	3	Regional PBCS Implementation Update	Secretariat
WP/04	3	Competent Airspace Safety Monitoring Organizations List	Secretariat
WP/05	4	Data Link Performance Report for China	China
WP/06	4	Data Link Performance Report for India	India
WP/07	4	Data Link Performance Report for Ujung Pandang FIR	Indonesia
WP/08	4	Data Link Performance Report for Malaysia	Malaysia
WP/09	4	Data Link Performance Report for Philippines	Philippines
WP/10	4	Data Link Performance Report for Sri Lanka	Sri Lanka
WP/11	4	Data Link Performance Report and Actions for Discussion from Singapore	Singapore
WP/12	4	Asia/Pacific Region Combined PBCS Monitoring Report	Indonesia and Malaysia
WP/13	5	Extension of the Network Outage Reporting and Impact Assessment (NORIA) Handbook for Global Applicability	Singapore
WP/14	6	Air Navigation Deficiencies Relating to Data Link Performance Monitoring and Analysis	Secretariat
WP/15	7	Progress on Issues Related to the Central Reporting Agency (CRA)	Secretariat
WP/16	7	FIT Points of Contact	Secretariat
WP/17	8	FIT-Asia Terms of Reference and Task List	Secretariat

INFORMATION PAPERS

NUMBER	AGENDA	TITLE	PRESENTED BY
IP/01	-	List of Papers	Secretariat
IP/02	5	Landing Information Delivery Operation in China	China
IP/03	7	USOAP Update	Secretariat

PRESENTATIONS

NUMBER	AGENDA	TITLE	PRESENTED BY
SP/01	PBCS Seminar	Standards and Recommended Practices (SARPs) and Guidance Materials related to PBCS	ICAO

NUMBER	AGENDA	TITLE	PRESENTED BY
SP/02	PBCS Seminar	ADS-C Comprehensive Monitoring	China
SP/03	PBCS Seminar	Overview of datalink communication and CRA scheme in Fukuoka FIR	Japan
SP/04	PBCS Seminar	PBCS Monitoring for Application of Performance-based Separation Minima	Singapore
SP/05	PBCS Seminar	Post Implementation Monitoring	New Zealand
SP/06	PBCS Seminar	FIT-Asia 15 Seminar	Boeing
SP/07	PBCS Seminar	Satellite Safety Data Link Services	Inmarsat

FLIMSIES

NUMBER	AGENDA	TITLE	PRESENTED BY
Flimsy/1	3	Development of the ADS-C Performance Analyzer to Support State-Level PBCS Monitoring	China

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APANPIRG Asia/Pacific Airspace Safety Monitoring

RASMAG LIST OF COMPETENT AIRSPACE SAFETY MONITORING ORGANISATIONS

The Regional Airspace Safety Monitoring Advisory Group of APANPIRG (RASMAG) is required by its terms of reference to recommend and facilitate the implementation of airspace safety monitoring and performance assessment services and to review and recommend on the competency and compatibility of airspace monitoring organisations. In order to assist in addressing these requirements, RASMAG updates and distributes the following list of competent airspace safety monitoring organizations for use by States requiring airspace safety monitoring services. In the context of the list, abbreviations have meanings as follows:

- RMA – Regional Monitoring Agency – safety assessment and monitoring in the vertical plane (i.e. RVSM);
- EMA – En-route Monitoring Agency – safety assessment and monitoring in the horizontal plane (i.e. RSP, RCP, RNP for performance-based horizontal separations);
- CRA – Central Reporting Agency – technical performance of data link systems (i.e. ADS/CPDLC); and
- FIT – FANS 1/A Interoperability/Implementation Team – parent body to a CRA.

DISCLAIMER: The presentation of material in this report does not imply the expression of any opinion whatsoever on the part of ICAO, APANPIRG or the ATM Sub-Group of APANPIRG concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

(Last updated 26 June 2025)

Organization (including contact officer)	State	Competency	Status	Airspace assessed (FIRs)
Australian Airspace Monitoring Agency (AAMA) - Airservices https://www.airservicesaustralia.com/about-us/our-services/aama/ Dr. Steven Barry, Risk Intelligence Lead steve.barry@AirservicesAustralia.com Dr Shea Houlihan, Risk Intelligence Specialist, Shea.Houlihan@AirservicesAustralia.com	Australia	RMA	Current	Brisbane, Honiara, Jakarta, Melbourne, Nauru, Port Moresby and Ujung Pandang (including Timor-Leste) FIRs
		EMA	Current	Brisbane, Melbourne, Honiara, Nauru, and Port Moresby FIRs

Organization *(including contact officer)*	State	Competency	Status	Airspace assessed (FIRs)
Risk Intelligence Airservices Australia Email: aama@airservicesaustralia.com;				
China RMA - **Air Traffic Management Bureau, (ATMB) of Civil Aviation** **Administration of China (CAAC)** http://www.chinarma.cn Mr. Yongyue Chen (Monsoon), Coordinator of China RMA, ADCC, ATMB of CAAC Email: rmachina@rmachina.cn;	China	RMA & EMA	Current	RMA for: Beijing, Guangzhou, Kunming, Lanzhou, Pyongyang, Sanya, Shanghai, Shenyang, Urumqi, and Wuhan FIRs. EMA for: Lanzhou and Urumqi FIRs
India Bay of Bengal Arabian Sea Indian Ocean Safety Monitoring **Agency (BOBASMA)** http://www.aai.aero/public_notices/aaisite_test/bobasma_index.jsp ~~Mr. A. P. Udayanarayanan~~ ~~Joint General Manager (ATM)~~ ~~Phone No:+ 91 44 22561253~~ ~~Fax No: +91 44 22561740~~ ~~Email: bobasmachennai@gmail.com; bobasma@aai.aero;~~ Mr. J. Masivayana, Assistant General Manager (ATM), Airports Authority of India Phone No:+ 91 44 22561253 Fax No: +91 44 22561740	India	EMA	Current	Chennai, Colombo, Delhi, Dhaka, Kabul, Karachi, Kolkata, Lahore, Male, Mumbai, Yangon,

Organization *(including contact officer)*	State	Competency	Status	Airspace assessed (FIRs)
Email: bobasmachennai@gmail.com; bobasma@aai.aero;				
Japan Airspace Safety Monitoring Agency (JASMA) - Japan Civil Aviation Bureau (JCAB) https://www.jasma.jp ~~Mr. Eijiro SUNOUCHI, Special Assistant to the Director, Flight Procedures and Airspace Program Office, Japan Civil Aviation Bureau, Email : sunouchi-e24qz@mlit.go.jp; hqt-JASMA@gxb.mlit.go.jp; jasma-hq@jasma.jp;~~ Mr. Kazuto Fukuda Email: fukuda-k46s4@mlit.go.jp;	Japan	RMA and EMA	Current	Fukuoka FIR
Central Reporting Agency Japan (CRA Japan) ~~Mr. Hajime AOTO, Special Assistant to the Director, Air Navigation Services Planning Division, Civil Aviation Bureau, MLIT Email: aoto-h074i@mlit.go.jp;~~ Mr. Mototsugu Ichikawa Email: ichikawa-m03c3@mlit.go.jp;		CRA	Current	Fukuoka FIR
Monitoring Agency for the Asia Region (MAAR) Aeronautical Radio of Thailand LTD (AEROTHAI) http://www.aerothai.co.th/maar Miss Saifon Obromsook Director, Safety Management Department & MAAR AEROTHAI Email: maar@aerothai.co.th;	Thailand	RMA	Current	Bangkok, Kolkata, Chennai, Colombo, Delhi, Dhaka, Hanoi, Ho Chi Minh, Hong Kong, Kabul, Karachi, Kathmandu, Kota Kinabalu, Kuala Lumpur, Lahore, Male, Manila, Mumbai, Phnom Penh, Singapore, Taibei, Ulaan Bataar, Vientiane, Yangon FIRs

Organization *(including contact officer)*	State	Competency	Status	Airspace assessed (FIRs)
Pacific Approvals Registry and Monitoring Organization (PARMO) – Federal Aviation Administration (US FAA) http://www.faa.gov/air_traffic/separation_standards/parmo/ Christine Falk Federal Aviation Administration Separation Standards Analysis Branch Safety Analysis Subject Matter Expert Email: parmo@faa.gov;	USA	RMA and EMA	Current	RMA for Anchorage Oceanic, Auckland Oceanic, Incheon, Nadi, Oakland Oceanic, Tahiti FIRs EMA for Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic, Tahiti FIRs
South East Asia Safety Monitoring Agency (SEASMA) - Civil Aviation Authority of Singapore (CAAS) ~~Mr. Goh Wen Pei,~~ ~~Air Traffic Control Manager (ANS Safety & Security), Air Navigation Services Group,~~ ~~Email: goh_wen_pei@caas.gov.sg;~~ Mr. Tai Chee Hui Senior Air Traffic Control Manager (Safety Intelligence) Email: TAI_Chee_Hui@caas.gov.sg; https://www.caas.gov.sg/operations-safety/airspace/south-east-asia-safety-monitoring-agency	Singapore	EMA and CRA	Current	EMA for Hong Kong, Ho Chi Minh, Kota Kinabalu, Kuala Lumpur, Manila, Jakarta, Sanya, Singapore and Ujung Pandang FIRs CRA for Singapore, Viet Nam and Philippines
FIT-ASIA ICAO Asia and Pacific Regional Office Email: apac@icao.int; htakata@icao.int; Mr. Hong Yang	FIT-Asia States	FIT	Current	FIRs in the Asian Region not covered by IPACG/FIT and ISPACG/FIT

Organization *(including contact officer)*	State	Competency	Status	Airspace assessed (FIRs)
Chair, FIT-Asia Email: hongyang@adcc.com.cn; Mr. Michael Matyas Boeing Engineering Email: michael.matyas@boeing.com; Mr Rami Ayari Boeing Engineering Email: rami.ayari@boeing.com	Boeing USA	CRA	Current	FIRs in the Asian Region not covered by IPACG/FIT, ISPACG/FIT, JASMA or SEASMA
IPACG/FIT Mr. Hajime AOTO IPACG/FIT Co-Chair (JCAB) Email : aoto-h074i@mlit.go.jp; ~~Mr. John Roman~~ ~~FAA~~ ~~IPACG/FIT Co-Chair (FAA)~~ ~~Email: john.roman@faa.gov;~~ Mr. Sam El Zoobi FAA ISPACG Co- Chair Email: Sam.El-Zoobi@faa.gov;	Japan and USA	FIT	Current	North & Central Pacific (Oceanic airspace within Fukuoka FIR, and Anchorage & Oakland FIRs)
Mr. Michael Matyas, Boeing Engineering IPACG CRA	Boeing USA	CRA		Oakland Oceanic, Anchorage Continental, and Anchorage Oceanic FIRs.

Organization *(including contact officer)*	State	Competency	Status	Airspace assessed (FIRs)
Email: michael.matyas@boeing.com; Mr Noah Inahara Boeing Engineering IPACG CRA Email: noah.inahara@boeing.com;				
ISPACG/FIT Mr. Todd Kendall Airways New Zealand ISPACG Co-Chair Email: Todd.Kendall@airways.co.nz; ~~Mr. Ahmad Usmani~~ ~~FAA~~ ~~ISPACG Co-Chair~~ ~~Email: ahmad.usmani@faa.gov~~; Mr. Sam El Zoobi FAA ISPACG Co- Chair Email: Sam.El-Zoobi@faa.gov;	ISPACG States	FIT&CRA	Current	South Pacific FIRs and members of the Informal South Pacific ATS Coordination Group (ISPACG)
Ms. Lisa Bee, Inmarsat Aviation ISPACG/FIT Chair Email: Lisa.Bee@inmarsat.com;	Inmarsat	FIT		
Mr. Michael Matyas, Boeing Engineering ISPACG CRA Email: michael.matyas@boeing.com;	Boeing USA	CRA		

Organization (including contact officer)	State	Competency	Status	Airspace assessed (FIRs)
Mr Christopher Jirucha Boeing Engineering ISPACG CRA Email: christopher.j.jirucha@boeing.com;				

Regional Monitoring Agencies (Vertical)

PARMO

China RMA

JASMA

AAMA

MAAR

En-route Monitoring Agencies (Horizontal)

PARMO	China RMA
SEASMA	
JASMA	
AAMA	
BOBASMA	

Central Reporting Agencies and FITs (Data-link)

Boeing CRA	
CRA JAPAN	
SEASMA CRA	
FIT-IPACG	
FIT-ISPACG	
FIT-Asia	
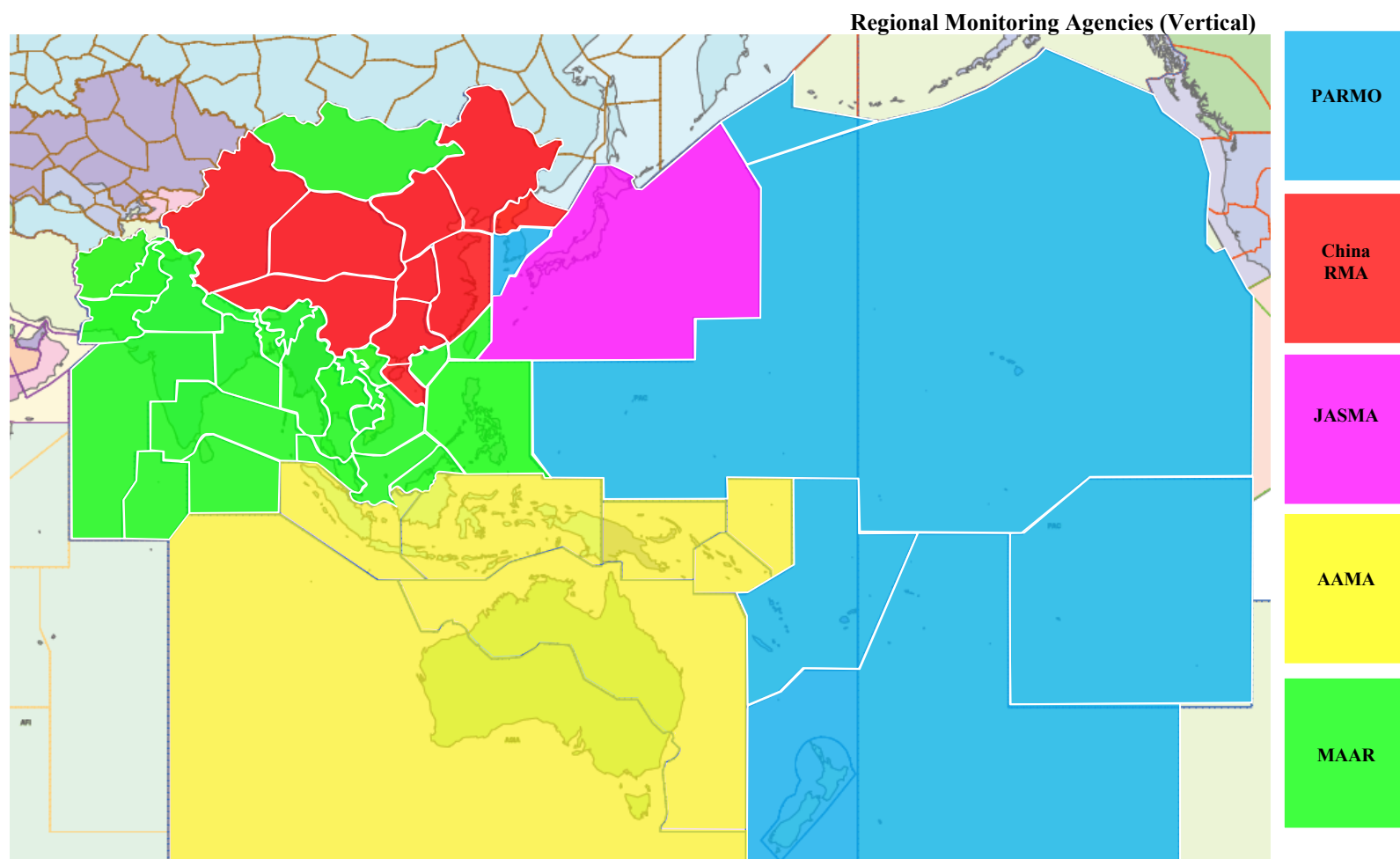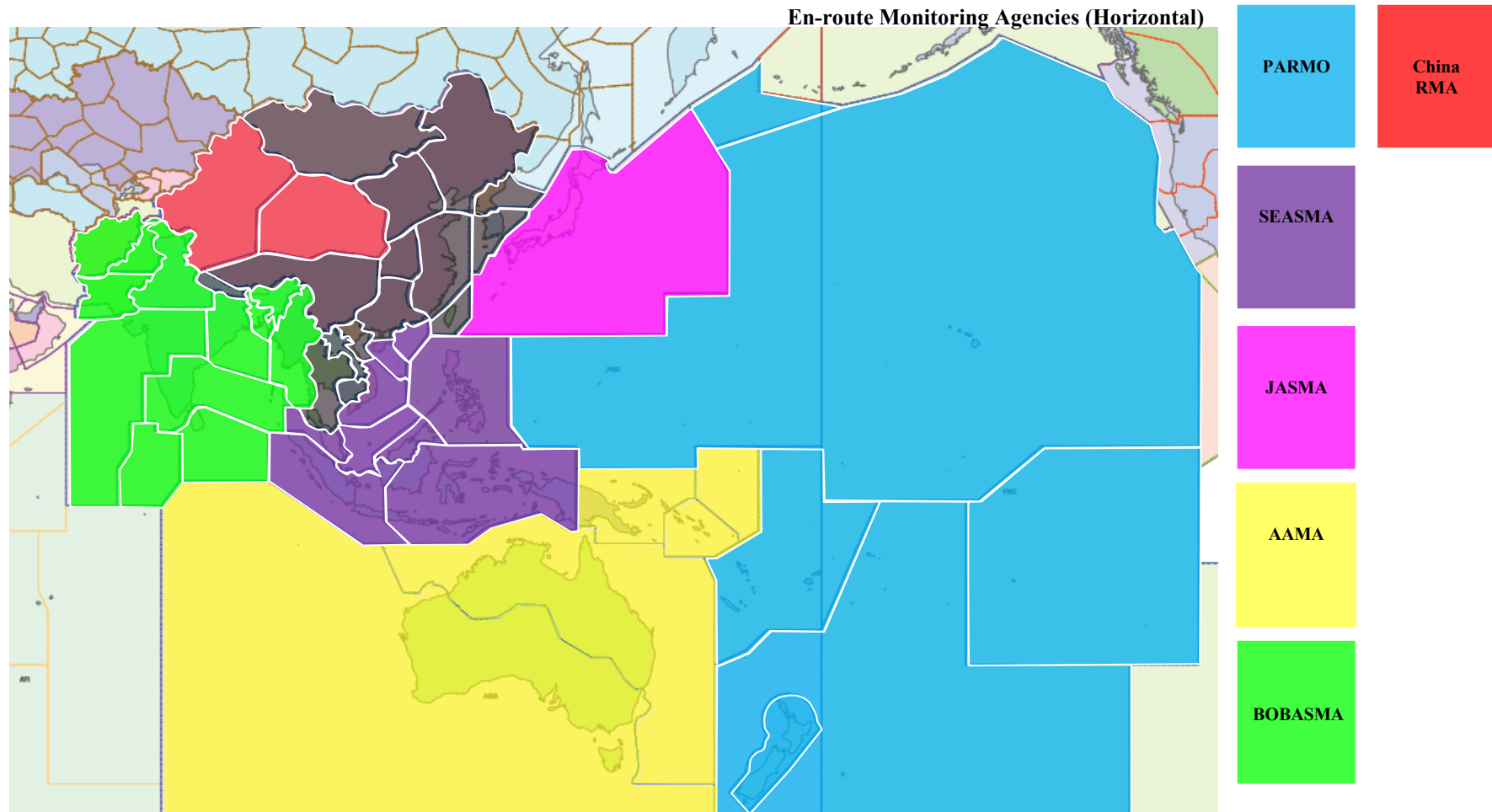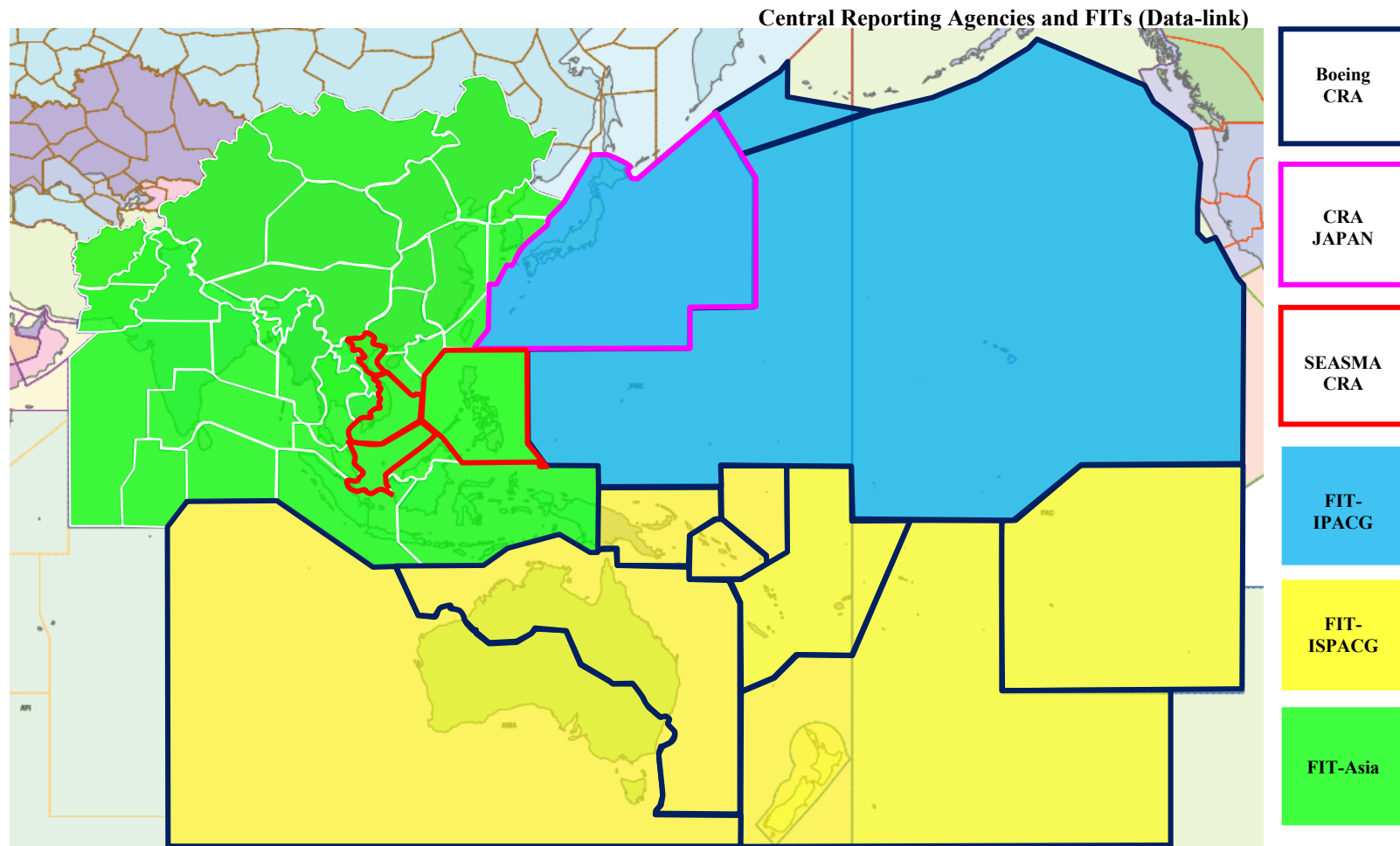
ATM and Airspace Safety Deficiencies List (Updated 01 November 2024 + FIT-Asia/15)

States/facilities	Deficiencies			Corrective Action		Priority **
	Description	Date first reported	Remarks	Executing body	Target date	
	WGS-84 Requirements of Paragraph 1.2.1 of Annex 15					
Afghanistan	WGS-84 - Not implemented	24/6/2014		Afghanistan	TBD	A
Brunei Darussalam	WGS-84 - Not implemented	24/6/2014		Brunei Darussalam	~~TBD~~ 31/12/2025	A
Marshall Islands	WGS-84 - Not implemented	24/6/2014		Marshall Islands	TBD	A
Micronesia	WGS-84 - Not implemented	24/6/2014		Micronesia	TBD	A
Nauru	WGS-84 - Not implemented		Conferring with consultant	Nauru	TBD	A
Palau	WGS-84 - Not implemented	24/6/2014		Palau	TBD	A
Samoa	WGS-84 - Not implemented	24/6/2014		Samoa	TBD	A
Vanuatu	WGS-84 – Not implemented	2/7/1999	Implemented at main airports	Vanuatu	1999	A
	AIP Format Requirements of Chapter 5 of Annex 15					
Kiribati	AIP Format - Not implemented	7/7/99	ATM/AIS/SAR/SG/18 (June 2009) was advised AIP in draft stage	Kiribati		A
~~Nauru~~	~~AIP Format - Not implemented~~	~~7/7/99~~	~~ATM/AIS/SAR/SG/18 (June 2008) was advised work soon to start~~	~~Nauru~~		~~A~~
	AIS Quality Management System Requirements of Paragraph 3.6.1 of Annex 15 Quality Management System - Not implemented					

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Afghanistan	AIS Quality Management System - Not implemented	24/6/2014		Afghanistan	TBD	A
Bangladesh	AIS Quality Management System - Not implemented	24/6/2014		Bangladesh	TBD	A
Bhutan	AIS Quality Management System - Not implemented	24/6/2014		Bhutan	TBD	A
Brunei Darussalam	AIS Quality Management System - Not implemented	24/6/2014		Brunei Darussalam	~~TBD~~ 31/03/2026	A
Cambodia	AIS Quality Management System - Not implemented	24/6/2014		Cambodia	TBD	A
Kiribati	AIS Quality Management System - Not implemented	24/6/2014		Kiribati	TBD	A
Lao PDR	AIS Quality Management System - Not implemented	24/6/2014		Lao PDR	TBD	A
Maldives	AIS Quality Management System - Not implemented	24/6/2014		Maldives	~~TBD~~ 30/09/2024	A
Marshall Islands	AIS Quality Management System - Not implemented	24/6/2014		Maldives	TBD	A
Micronesia	AIS Quality Management System - Not implemented	24/6/2014		Micronesia	TBD	A
Myanmar	AIS Quality Management System - Not implemented	9/6/2016		Myanmar	~~TBD~~ 31/12/2025	A
Nauru	AIS Quality Management System - Not implemented	24/6/2014		Nauru	TBD	A

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Nepal	AIS Quality Management System - Not implemented	24/6/2014		Nepal	TBD	A
Palau	AIS Quality Management System - Not implemented	24/6/2014		Palau	TBD	A
~~Philippines~~	~~AIS Quality Management System - Not implemented~~	~~24/6/2014~~		~~Philippines~~	~~TBD~~	~~A~~
Samoa	AIS Quality Management System - Not implemented	24/6/2014		Samoa	TBD	A
Solomon Islands	AIS Quality Management System - Not implemented	24/6/2014		Solomon Islands	TBD	A
~~Sri Lanka~~	~~AIS Quality Management System - Not implemented~~	~~9/6/2016~~		~~Sri Lanka~~	~~TBD~~	~~A~~
Timor-Leste	AIS Quality Management System - Not implemented	24/6/2014		Timor-Leste	TBD	A
Vanuatu	AIS Quality Management System - Not implemented	24/6/2014		Vanuatu	TBD	A
	Aeronautical Data Area of Responsibility - requirements of Paragraph 2.1.2 of Annex 2 to ensure that the provision of aeronautical data and aeronautical information covers its own territory and those areas over the high seas for which it is responsible for the provision of ATS					
Bangladesh	Aeronautical Data Promulgation Within the State's Area of Responsibility - Not implemented	29/03/2019 SAIOACG/9		Bangladesh	TBD	A

| States/facilities | Deficiencies | | | Corrective Action | | |
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
	Designation of Restricted Areas - requirements of Annex 2 (Definitions) to ensure that restricted areas are designated above the land areas or territorial waters of a State					
Australia	Designation of Restricted Areas Above the Land Areas or Territorial Waters of a State - Not implemented	29/03/2019 SAIOACG/9	Danger areas within international airspace that is part of a State's responsibility is acceptable	Australia	December 2022	A
India	Designation of Restricted Areas Above the Land Areas or Territorial Waters of a State - Not implemented	29/03/2019 SAIOACG/9	Danger areas within international airspace that is part of a State's responsibility is acceptable	India	TBD	A
	Airspace Classification Requirements of Paragraph 2.6 of Annex 11					
China	Airspace Classification - Not implemented	7/7/99	Difference to Annex 11 is published in AIP, China.	China	APANPIRG/19 updated, implementation planned by end 2010.	A
Macao, China	Airspace Classification - Not implemented	05/09/2018		Macau, China	TBD	A
Nauru	Airspace Classification - Not implemented	7/7/99		Nauru	TBD	A
Solomon Islands	Airspace Classification - Not implemented	7/7/99		Solomon Islands	TBD	A

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
	ATS Message Addressing Requirements of Doc 4444 PANS-ATM Section 11.4 (Message Types and their Application)		Note: the threshold for a Deficiency is 5% or more DEP messages reported to have not been sent, and where the analysed data provided evidence of a systemic (either systems or human factors) failure to send the message			
Maldives	DEP message transmission	09/08/2019	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	Maldives	TBD	A
	SAR capability: Requirements of Annex 12 as defined in the Regional Air Navigation Plan Volume II Part I – GENERAL PLANNING ASPECTS Section 3 SPECIFIC REGIONAL REQUIREMENTS, failure to reach 90% or more implementation of the Asia/Pacific SAR Plan					
Afghanistan	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/6 56%	Afghanistan	2019	U
Bangladesh	Asia/Pacific SAR Plan	17/05/2019	~~APSAR/WG/8 65%~~ APSAR/WG/9 65%	Bangladesh	2019	U
Bhutan	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/8 28%	Bhutan	2019	U
Brunei Darussalam	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 63%	Brunei	2019	U
Cambodia	Asia/Pacific SAR Plan	6/07/2015	~~APSAR/WG/4 76%~~ APSAR/WG/9 76%	Cambodia	2019	U

	Deficiencies			Corrective Action		
States/facilities	**Description**	**Date first reported**	**Remarks**	**Executing body**	**Target date**	**Priority ****
Macao, China	Asia/Pacific SAR Plan	6/07/2015	~~APSAR/WG/4 85%~~ APSAR/WG/9 88%	Macao, China	2019	U
Cook Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/8 62%	Cook Islands	2019	U
DPR Korea	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/8 71%	DPR Korea	2019	U
French Polynesia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/8 84%	French Polynesia	2019	U
Kiribati	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 26%	Kiribati	2019	U
Lao PDR	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 57%	Lao PDR	2019	U
~~Malaysia~~	~~Asia/Pacific SAR Plan~~	~~17/05/2019~~	~~APSAR/WG/8 85%~~ APSAR/WG/8 92%	~~Malaysia~~	~~2019~~	~~U~~
Maldives	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/8 78%	Maldives	2019	U
Marshall Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/5 17%	Marshall Islands	2019	U
Micronesia	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/5 17%	Micronesia	2019	U
Mongolia	Asia/Pacific SAR Plan	17/05/2019	~~APSAR/WG/5 73%~~ APSAR/WG/9 89%	Mongolia	2019	U
Myanmar	Asia/Pacific SAR Plan	6/07/2015	~~APSAR/WG/4 67%~~ APSAR/WG/9 69%	Myanmar	2019	U
Nauru	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Nauru	2019	U
Nepal	Asia/Pacific SAR Plan	6/07/2015	~~APSAR/WG/7 56%~~ APSAR/WG/9 66%	Nepal	2019	U
New Caledonia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/8 78%	New Caledonia	2019	U

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Pakistan	Asia/Pacific SAR Plan	17/05/2019	~~APSAR/WG/8 89%~~ APSAR/WG/9 89%	Pakistan	2019	U
Palau	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/5 17%	Palau	2019	U
Papua New Guinea	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/7 54%	Papua New Guinea	2019	U
~~Philippines~~	~~Asia/Pacific SAR Plan~~	~~6/07/2015~~	~~APSAR/WG/8 86%~~ APSAR/WG/9 90%	~~Philippines~~	~~2019~~	~~U~~
Samoa	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Samoa	2019	U
Solomon Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Solomon Islands	2019	U
Sri Lanka	Asia/Pacific SAR Plan	17/05/2019	~~APSAR/WG/8 83%~~ APSAR/WG/9 84%	Sri Lanka	2019	U
Thailand	Asia/Pacific SAR Plan	17/05/2019	~~APSAR/WG/8 82%~~ APSAR/WG/9 85%	Thailand	~~2019~~ 2025	U
Timor-Leste	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Timor-Leste	2019	U
Tonga	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 70%	Tonga	2019	U
Tuvalu	Asia/Pacific SAR Plan	28/05/2022	APSAR/WG/7 0%	Tuvalu	2024	U
Vanuatu	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Vanuatu	2019	U
	Non Provision of Safety-related Data Requirement of Paragraph 3.3.5.1 of Annex 11 (provision of data for monitoring the height-keeping performance of aircraft) and APANPIRG Conclusion 16/6 – Non Provision of safety related data by States					

| States/facilities | Deficiencies | | | Corrective Action | | |
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Afghanistan	Non-provision of safety related data	12/07/2019	Failure to submit Kabul LHD data for January-December 2018 and 2020. Afghanistan had submitted data for the period January to July 2021, but no further LHD reports were received after August 2021.	Afghanistan	~~RASMAG/27~~ TBD	U
	State Responsibility to comply with the Annex 6 Height-Keeping Monitoring Requirement Annex 6 Part I Section 7.2.9 (10th Ed.) and Part II Section 2.5.2.10 (9th Ed.)					
Afghanistan	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/23	Remaining monitoring burden of 50% (RASMAG/29) MAAR informed ICAO that all known airframes in Afghanistan have complied with the monitoring requirement (November 2022). Deficiency retained due to the unknown status of the Afghanistan aeronautical authority responsible for ensuring monitoring is conducted.	Afghanistan	~~RASMAG/24~~ TBD	A
India	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/29	Remaining monitoring burden of 48% (RASMAG/29)	India	TBD	A
~~Mongolia~~	~~Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)~~	~~RASMAG/28~~	~~Remaining monitoring burden of 43% (RASMAG/28)~~ Remaining monitoring burden of 18% (RASMAG/29)	~~Mongolia~~	~~TBD~~	~~A~~
Nepal	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/28	~~Remaining monitoring burden of 45% (RASMAG/28)~~ Remaining monitoring burden of 45% (RASMAG/29)	Nepal	TBD	A

	Deficiencies			Corrective Action		
States/facilities	**Description**	**Date first reported**	**Remarks**	**Executing body**	**Target date**	**Priority **
~~New Zealand~~	~~Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)~~	~~RASMAG/28~~	~~Remaining monitoring burden of 36% (RASMAG/28)~~ Remaining monitoring burden of 11% (RASMAG/29)	~~New Zealand~~	~~TBD~~	~~A~~
~~Pakistan~~	~~Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)~~	~~RASMAG/22~~	~~Remaining monitoring burden of 45% (RASMAG/26)~~ Remaining monitoring burden of 27% (RASMAG/29)	~~Pakistan~~	~~RASMAG/24~~	~~A~~
~~Papua New Guinea~~	~~Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)~~	~~RASMAG/28~~	~~Remaining monitoring burden of 69% (RASMAG/28)~~ Remaining monitoring burden of 15% (RASMAG/29)	~~Papua New Guinea~~	~~TBD~~	~~A~~
Philippines	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/29	Remaining monitoring burden of 40% (RASMAG/29)	Philippines	TBD	A
~~Solomon Islands~~	~~Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)~~	~~RASMAG/28~~	~~Remaining monitoring burden of 50% (RASMAG/28)~~ Remaining monitoring burden of 0% (RASMAG/29)	~~Solomon Islands~~	~~TBD~~	~~A~~
	Data Link Performance Monitoring and Analysis Requirements of Paragraph 2.28 and/or 3.3.5.2 of Annex 11 not met					

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
~~India~~	~~Post-implementation monitoring not implemented~~	~~13/07/2017~~	~~Performance monitoring and analysis was reported for the Chennai and Kolkata FIRs, but was not reported for the Mumbai FIR.~~ <mark>Performance-monitoring analysis for Chennai, Kolkata and Mumbai FIRs were reported, and annual Survey of the Status of Current and Planned Implementation of Performance-Based Horizontal Separation Minima form was submitted.</mark>	~~India~~	~~TBD~~	~~A~~
~~Maldives~~	~~Post-implementation monitoring not implemented~~	~~29/5/2015~~	~~Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.~~ (FIT-Asia/14): Disabled the ADS-C function from the ATM system due to an application issue, and CPDLC/HF is used beyond VHF coverage.	~~Maldives~~	~~TBD~~	~~A~~

** Note: In accordance with the *APANPIRG Handbook - Asia/Pacific Supplement to the Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies*, priority for Air Navigation Deficiencies is guided by the principle that a deficiency with respect to an ICAO Standard is accorded a "U" status, while a non-compliance with a Recommended Practice or a PANS is considered as "A" or "B" subject to additional expert evaluation. The final prioritization of deficiencies is the prerogative of APANPIRG.

FIT-ASIA — TASK LIST

(Last updated 27 June 2025)

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
7/1	All APAC FIT and CRA to provide a list of States having submitted problem report and performance analysis reports to CRA (including number of reports) and FIT	Ongoing	FIT-Asia CRA Japan IPACG/FIT ISPACG/FIT SEASMA	Open	FIT-Asia/7 IP/3 To be provided one month prior to each annual FIT-Asia meeting Updated FIT-Asia/10
7/2	Direct correspondence to survey non-respondent States with FIRs listed in Doc 7030 with performance-based separations	Ongoing	Secretariat	Open	FIT-Asia/7 WP/4 and IP/13 Include availability of guidance for operations authorizations Updated ~~FIT-Asia/11~~ FIT-Asia/12
8/1	States to complete annual data link performance analysis in new template format	Ongoing (By 28 February each year)	States	Open	1. Forward to Secretariat for forwarding to State responsible for aggregated Regional data. 2. Prepare report of State performance for FIT-Asia FIT-Asia/12 WP/8 and Flimsy 2 (Subject RASMAG agreement to Draft Conclusion)
8/2	Prepare aggregated Regional data link performance data for submission to FIT-Asia and RASMAG	Ongoing (By 31 May each year)	~~USA China (2021-2022)~~ ~~Japan (2023-2024)~~ Indonesia and Malaysia (2025-2026)	Open	Rotational responsibility ~~The US will work with Europe to assure poor performing global fleets are reported to the states of registry outside of their region of operation.~~ ~~Following FIT-Asia/10 China contacted the Secretariat and volunteered to take on this responsibility. China subsequently provided the report to~~

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
					~~FIT-Asia/11~~ ~~Updated FIT-Asia/11 FIT-Asia/12~~ FIT-Asia/14 Report paragraph 4.45
9/1	Aircraft Operators to ensure contact details on the FANS CRA website are up to date, and include, the correct contact for approving release of data link logs	Ongoing	IATA States (non-IATA members) Boeing CRA	Open	FIT-Asia/9 Report paragraph 2.5 Updated FIT-Asia/10
10/3	Confirm need for Doc 7030 procedure for Hong Kong FIR ~~and Sanya FIR~~ (50 NM longitudinal)	~~10 September 2021~~ ~~FIT-Asia/13~~ ~~RASMAG/28~~ FIT-Asia/15	Hong Kong, China ~~China~~ Secretariat	~~Open~~ Closed	FIT-Asia/10 Report paragraph 3.17 FIT-Asia/11 Report paragraph 3.21 and Table 3. Updated FIT-Asia/12
11/2	Contact relevant authority to determine whether data link ground station NTX (Natunas) can be reactivated or relocated.	~~FIT-Asia/12~~ ~~FIT-Asia/13~~ ~~FIT-Asia/14~~ ~~FIT-Asia/15~~ FIT-Asia/16	Indonesia/~~SITA/Boeing CRA/~~	Open	FIT-Asia/11 Report paragraph 2.13 Updated FIT-Asia/12 FIT-Asia/13 FIT-Asia/14 Report paragraph 2.10
13/2	Establish the service agreement with an APANPIRG recognized CRA	Ongoing	All States/Administrations providing ADS-C and/or CPDLC	Open	FIT-Asia/13 Report paragraph 3.8 FIT-Asia/14 Report paragraph 3.9
13/3	Consider signing up for the PBCS Global Charter	Ongoing	All States/Administrations and all aircraft operators	Open	FIT-Asia/13 Report paragraph 3.14
14/1	Refer to the comments on PBCS-related PRs by FIT-Asia CRA when providing a PR and also additional guidance from NAT Doc 011	Ongoing	All States/Administrations	Open	FIT-Asia/14 Report paragraph 2.5
14/2	Double-check the PBCS data before submission each year to avoid format errors and consistency	Ongoing	All States/Administrations	Open	FIT-Asia/14 Report paragraph 4.41

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
	issues				
14/3	Coordinate with Maldives if the APANPIRG deficiency on data link would be appropriate	RASMAG/29	ICAO	~~Open~~ Completed	FIT-Asia/14 Report paragraph 6.6
14/4	Conduct a one-day seminar in conjunction with FIT-Asia/15	FIT-Asia/15	China, Japan, New Zealand, Singapore, USA, Boeing, Inmarsat, ICAO	~~Open~~ Completed	FIT-Asia/14 Report paragraph 7.5 States to provide relevant topics by Dec 2024
15/1	Identify and report specific topics or areas of interest that States wish to learn about or further explore during the next FIT-Asia meeting	31 December 2025	All States/Administrations	Open	FIT-Asia/15 Report paragraph 7.32
15/2	Consider organizing a dedicated seminar on PBCS in 2026 to support regional understanding and implementation subject to expressions of interest from States	FIT/Asia/16	Secretariat	Open	FIT-Asia/15 Report paragraph 7.32
15/3	Explore the development of a PBCS monitoring tool to enable accurate, reliable, and streamlined data collection and analysis	FIT-Asia/16	All States/Administrations	Open	FIT-Asia/15 Report paragraphs 7.21 and 7.23

— END —