



ICAO

International Civil Aviation Organization

Twenty-Fifth Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG/25)

Video Teleconference, 27 – 30 October 2020

Agenda Item 2: Review Outcomes of Related Meetings

FIT-ASIA MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents the outcomes of the Tenth Meeting of the Future Air Navigation Services (FANS) Interoperability Team – Asia (FIT-Asia/10) for review by RASMAG/25.

1. INTRODUCTION

1.1 The Tenth Meeting of the FANS Interoperability Team-Asia (FIT-Asia/10) was held by Video Teleconference from 03 to 06 August 2020.

1.2 The full report of the meeting is available on the FIT-Asia/10 meeting web-page at:
<https://www.icao.int/APAC/Meetings/Pages/2020-FIT-Asia10.aspx>

2. DISCUSSION

Central Reporting Agency (CRA) Reports

FIT-Asia Problem Reports

2.1 The improvement in problem reporting that was noted at FIT-Asia/9 continued at FIT-Asia/10. There were 66 problem reports raised between July 2019 and June 2020, compared with 45 in the previous 12-month period (**Figure 1**).

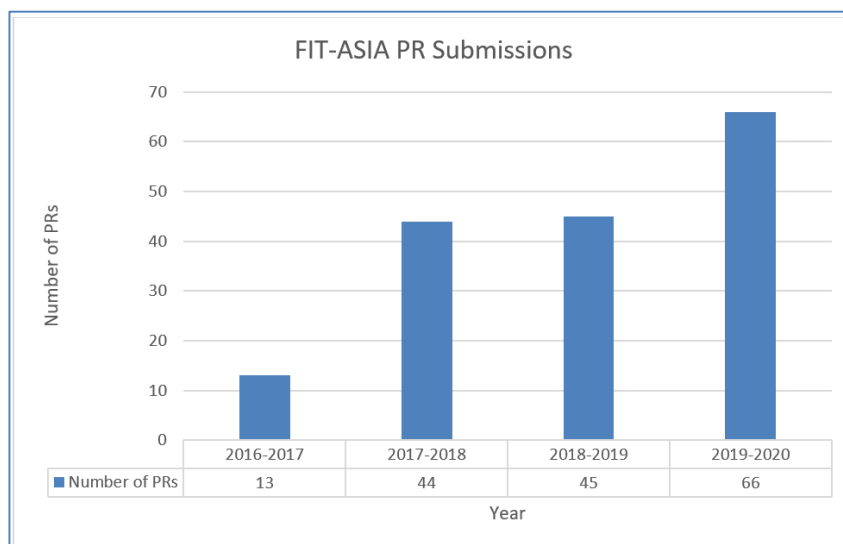


Figure 1: FIT-Asia PR Submissions

2.2 Information was provided on 11 significant PRs submitted by FIT-Asia States. The status¹ of seven was CLOSED, three remained OPEN and one was ACTIVE. Information was also provided on 47 less-significant PRs investigated since FIT-Asia/9. The meeting was further informed of six significant PRs that occurred in other regions but which may be of interest to FIT-Asia.

2.3 Among recurrent problems reported were aircraft systems receiving, acknowledging then discarding messages ('Ack'n'toss'), up-linking of UM175 message resulting in aircraft downlink error message (PANS-ATM recommended against the use of UM175), continuing poor performance of High Frequency Data Link (HFDL), and delayed or withheld authorization from aircraft operators for CRA to access data link logs.

2.4 In discussing the need for CRA access to data link logs for investigating PRs, the meeting was informed that some operators had not signed up to the Performance-Based Communications and Surveillance (PBCS) Charter, which *inter alia* facilitated the release of logs. IATA requested details of operators that were not signed up the Charter, so efforts could be made to encourage their participation. Further noting that logs were in some cases expiring while the Communications Service Provider (CSP) waited for the aircraft operator's approval to release the logs, New Zealand proposed that a simple fix may be for the CSP to extract the logs and then hold them until the approval to release them was received.

PBCS Developments and Implementation

Latency Monitor Reject Analysis

2.5 The meeting was informed of an analysis of *Latency Monitor Reject* messages received from Airbus aircraft operating in the Auckland Oceanic FIR during the period from January 2019 to June 2020. On receipt of a CPDLC uplink message for which the latency exceeded the 300 second monitored value, Airbus aircraft did not present the message to the flight crew but instead sent a reject message in response. **Table 1** summarized latency rejects by month and classification.

2.6 The meeting should note that, while there was an apparent reduction in instances of Latency Monitor Reject messages from November 2019, the data from February 2020 onwards may have been impacted by the significant reduction air traffic due to the COVID-19 pandemic.

¹ **ACTIVE:** The CRA had processed the PR and assigned it for investigation

OPEN: The PR investigation was complete but some form of correction is required before it could be closed

CLOSED: Corrective action had been implemented

Month	# Rejects	Classification						
		Unknown	Time Source	Inmarsat	Iridium	HFDL no SATCOM	Inmarsat sent HFDL	Unable SATCOM via VDL
Jan-19	22	0	0	5	0	0	16	1
Feb-19	5	0	0	2	0	0	3	0
Mar-19	9	0	0	2	4	1	2	0
Apr-19	8	0	0	2	2	1	3	0
May-19	17	1	0	4	3	6	3	0
Jun-19	1	0	0	0	0	0	1	0
Jul-19	5	0	4	1	0	0	0	0
Aug-19	1	0	0	1	0	0	0	0
Sep-19	4	0	2	0	2	0	0	0
Oct-19	14	0	4	0	8	2	0	0
Nov-19	3	0	0	2	1	0	0	0
Dec-19	6	0	0	0	4	0	2	0
Jan-20	3	0	0	2	0	0	1	0
Feb-20	3	0	0	0	1	1	1	0
Mar-20	0	0	0	0	0	0	0	0
Apr-20	0	0	0	0	0	0	0	0
May-20	0	0	0	0	0	0	0	0
Jun-20	0	0	0	0	0	0	0	0
Totals	101	1	10	21	25	11	32	1

Table 1: Latency rejects by month and classification.

Regional PBCS Implementation Update

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

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

2.9 A total of 19 APAC Administrations had responded to the survey in its four years of availability. Only six had provided their annual survey response for 2020 reporting to FIT-Asia/10:

Australia, China, Philippines, Singapore, Thailand, Viet Nam.

2.10 **Attachment A** summarizes the current implementation of performance-based separations and PBCS as reported in survey responses since 2017.

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

- by Air Navigation Service Providers applying the following commonly used performance-based separation minima¹, where supported by ADS-C/CPDLC:
 - 23 NM lateral separation (RNP 4 or RNP 2);
 - 50 NM longitudinal separation (RNAV 10/RNP 10 or RNP 4); and
 - 30 NM longitudinal separation (RNP 4 or RNP 2)
- by Regulatory Authorities:
 - For safety oversight of Air Navigation Service Provider (ANSP) PBCS operations; and
 - To approve, and monitor the performance of, PBCS operations by aircraft and aircraft operators of the State of Registry.

Regional Supplementary Procedures Update

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

2.13 States that were believed to have currently implemented, or intended to implement, performance based separations in the high seas airspace within their FIRs included India, Indonesia, Maldives, Myanmar, Philippines and Sri Lanka. States were requested to notify the ICAO Asia/Pacific Regional Office so that a coordinated PfA to Doc 7030 may be prepared. Following the receipt of information subsequent to the FIT-Asia/10 meeting, coordination has commenced on the inclusion of relevant provisions in SUPPS for Indonesia, Philippines and Sri Lanka.

Competent Airspace Safety Monitoring Organizations List

2.14 The RASMAG *List of Competent Airspace Safety Monitoring Organizations* was reviewed by FIT-Asia/10. No amendments were proposed.

Review of ADS-C/CPDLC Operations and Performance

Asia/Pacific CRA Arrangements, Problem Reporting and Performance Analysis Reporting

2.15 The meeting was provided with updated information on the status of Asia/Pacific regional engagement in data link problem reporting through the FANS-CRA website, and on the status of performance analysis reporting to a recognized FIT. It was noted that all Asia/Pacific States known to be providing data link services had registered on the FANS-CRA website. **Table 2** summarized the submission of PRs and the submission of data link performance reports to a recognized FIT.

¹ ICAO Doc 4444 Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) sections 5.4.1.2.1.6 and 5.4.2.9.2 detail the communications and surveillance performance requirements for performance-based separation minima that are supported by ADS-C/CPDLC.

State	# PR 2017	# PR 2018	# PR 2019	# PR 2020 (to 30 July)	Performance Reports to FIT
Australia	1	9	6	2	YES
China	-	2	-	1	YES ¹
Fiji	-	-	-	-	YES
France (Polynésie Française)	2	1	-	-	YES
India	7	1	24	-	YES ²
Indonesia	7	18	19	-	YES ³
Japan	N/K	N/K	5	-	YES
Malaysia	-	1	1	2	YES ⁴
Myanmar	-	-	1	-	YES
Maldives	-	-	-	-	NO
Papua New Guinea ⁵	-	-	-	-	NO
Philippines	-	9	9	-	YES
New Zealand	7	6	8	9	YES
Singapore	6	10	16	13	YES
Sri Lanka	-	6	3	2	YES
USA	4	14	7	2	YES
Viet Nam	1	1	3	1	YES

Table 2: Asia/Pacific CRA Registration and PR Activity, and Performance Reporting

2.16 The following States provided Working Papers or Information Papers communicating performance reports and other relevant information to the FIT-Asia/10 meeting:

China, India, Indonesia, Malaysia, New Zealand, Philippines, Singapore, Sri Lanka, Viet Nam.

2.17 Performance data provided by other FIT-Asia States, together with FIT-IPACG and FIT-ISPACG, was included in the aggregated regional data analysis.

Note: FIT-ISPACG (Informal South Pacific ATS Coordinating Group) is the competent FIT for Australia, Fiji, France (French Polynesia), New Zealand and Papua New Guinea.

FIT-IPACG (Informal Pacific ATC Coordinating Group) is the competent FIT for Japan and USA.

2.18 The meeting noted that, while most States providing data link services provided performance data to a recognized FIT, few provided information on their analysis of the data, or on any investigative or rectification action taken, or to evaluate the need for withdrawal of PBCS-dependent separations where RCP and/or RSP specifications were not met.

¹ Lanzhou and Urumqi FIRs

² Chennai FIR.

³ Ujung Pandang FIR.

⁴ Kuala Lumpur FIR.

⁵ Papua New Guinea commenced PBCS operations January 2020.

2.19 The meeting was reminded of the applicable standard in Annex 11 paragraph 3.3.5.2, and **Conclusion RASMAG/23-2: PBCS Action List for ANSPs** (drafted by FIT-Asia/8 in 2018). The meeting was also reminded that ICAO Doc 9869 *PBCS Manual* Chapter 4 and Appendix D provided detailed guidance on compliance with RCP/RSP specifications, and continued operational compliance through PBCS monitoring programmes and corrective action.

2.20 The Chair informed the meeting that it was expected that States would move towards providing more information on their analysis of data link issues identified in the data gathered, and detailing the actions taken to rectify issues and ensure compliance. This had been discussed at some length in FIT-Asia/9, which had drafted a Conclusion on the matter, subsequently agreed by RASMAG/24 (**Conclusion RASMAG/24-2: Continuous Data Link Performance Monitoring**).

Unsuitability of HF Data Link for Application of Performance-Based Separation Minima

2.21 During discussion the meeting noted that all reported data for HF data link did not meet any PBCS performance criteria. IATA expressed their concern on this matter, and New Zealand reiterated the previous FIT-Asia discussions in this regard: HF data link was not suitable for PBCS required to support performance-based horizontal separation minima. The meeting was advised that the New Zealand ANSP had excluded HF data link aircraft from the application of PBCS-supported separation minima.

Asia/Pacific Region Combined PBCS Monitoring Report

2.22 USA presented the Combined PBCS Monitoring Report, using data provided by the States identified in **Table 3**.

Reporting FIRs		
State	FIR	Location Indicator
Australia	Brisbane	YBBB
	Melbourne	YMMM
China	Lanzhou	ZLLL
	Urumqi	ZWWW
France (French Polynesia)	Tahiti	NTTT
Fiji	Nadi	NFFF
India	Chennai	VOMM
Indonesia	Ujung Pandang	WAAF
Japan	Fukuoka	RJJJ
Malaysia	Kuala Lumpur	WMFC
Myanmar	Yangon	VYYF
New Zealand	Auckland Oceanic	NZZO
Philippines	Manila	RPHI
Singapore	Singapore	WSJC
Sri Lanka	Colombo	VCCF
United States	Oakland Oceanic	KZAK
Viet Nam	Ho Chi Minh	VVHM
United States	Anchorage Oceanic	PAZA
	Oakland Oceanic	KZAK

Table 3: 2019 Performance Data – Reporting FIRs

REQUIRED COMMUNICATION PERFORMANCE											
Region	Asia-Pacific Region										
Performance Criteria	RCP240										
Time Period	2019 January-June				2019 July - December						
Colour key Meets criteria 99.0%-99.9% Under criteria	No. Messages	ACP Criteria		ACTP Criteria		No. Messages	ACP Criteria		ACTP Criteria		
		95%	99.90%	95%	99.90%		95%	99.90%	95%	99.90%	
Aggregate All RGS		% <= 180sec	% <= 210sec	% <= 120sec	% <= 150sec		% <= 180sec	% <= 210sec	% <= 120sec	% <=150sec	
	KZAK	295,992	99.10%	99.40%	99.50%	99.60%	306,146	99.20%	99.50%	99.30%	99.60%
	NFFF	9,533	99.55%	99.74%	99.65%	99.73%	9,731	99.44%	99.65%	99.60%	99.69%
	NTTT	2,195	99.68%	99.72%	99.86%	99.86%	2,183	99.72%	99.90%	99.86%	99.86%
	NZZO	12,133	99.42%	99.59%	99.60%	99.71%	11,741	99.60%	99.59%	99.77%	99.72%
	PAZA	84,241	99.05%	99.23%	99.33%	99.44%	85,796	98.35%	98.16%	98.76%	98.68%
	RJJJ	51,506	99.46%	99.62%	99.38%	99.62%	54,855	99.50%	99.64%	99.47%	99.70%
	RPHI	9,311	97.24%	98.71%	97.47%	98.81%	17,727	97.39%	98.62%	97.58%	98.88%
	VCCF	29,676	98.31%	99.27%	99.24%	99.69%	32,594	98.12%	99.21%	99.39%	99.68%
	VOMM	133,127	99.29%	99.50%	99.55%	99.71%	133,189	99.29%	99.51%	99.55%	99.71%
	VVTS	27,923	94.67%	99.13%	95.37%	99.48%	30,462	94.58%	99.15%	95.29%	99.48%
	VYYF	59,919	98.52%	98.90%	98.85%	99.18%	67,469	98.31%	98.69%	98.66%	99.04%
	WAAF	41,583	98.61%	99.21%	98.88%	99.44%	38,744	96.46%	99.63%	97.31%	99.68%
	WMFC	20,441	97.97%	98.73%			30,246	97.67%	98.45%		
	WSJC	31,694	98.47%	98.27%	98.93%	98.88%	47,765	98.74%	98.62%	99.16%	99.09%
	YBBB	36,891	98.99%	99.26%	99.82%	99.13%	40,094	99.30%	99.52%	99.16%	99.42%
	YMMM	38,326	99.43%	99.58%	99.39%	99.57%	42,827	99.48%	99.64%	99.54%	99.69%
	ZLLL	2,805	99.14%	99.35%	98.36%	98.89%	3,080	99.22%	99.41%	98.40%	99.18%
	ZWWW	787	97.83%	98.22%	96.56%	97.20%	558	98.74%	99.28%	97.13%	97.84%

Table 5: Asia/Pacific Region Aggregated RCP Data.

2.29 Analysis of the RCP data indicated that:

- Aggregate performance was fairly stable between the first and second half of 2019, with some degradation observed in the second half for a couple of FIRs
- Performance for CPDLC transactions delivered via HF and mixed media continues to fall below requirements for RCP240
- Performance for CPDLC transactions delivered via Iridium paths (IG1-ARINC, IGW1-SITA) fell below RCP240 95% in a few of Asia-Pacific FIRs
- A few operators are observed below the RCP240 95% requirements in multiple APAC FIRs

2.30 PBCS non-compliance report templates are intended for by ANSPs to inform the relevant Regional Monitoring Agency (RMA) of aircraft/aircraft operators where data link performance did not comply with specifications. A revised non-compliance report form template was proposed to FIT-Asia/10 (**Attachment B**) in order to include additional information, to harmonize with the template already adopted in the North Atlantic (NAT) Region, and to use MS Excel format to facilitate data handling by the RMA.

2.31 The meeting agreed to the following Draft Conclusion, for consideration by RASMAG:

Draft Conclusion RASMAG/25-X: Revised PBCS Non-Compliance Report Form Template

That, the PBCS Non-Compliance Report Form Template at **Attachment B** be uploaded to the Asia/Pacific Regional Office website, to replace the previous template.

ICAO Update on GOLD and PBCS Manuals

2.32 The meeting was informed that the updated ICAO Doc 10037 *Global Operational Data Link (GOLD) Manual* was expected to be available by the end of 2021. Due to COVID-19-related constraints on progressing the work of the Operational Data Link Working Group (OPDLWG), the availability of the updated Doc 9869 *PBCS Manual* was delayed until a date to be advised.

Air Navigation Deficiencies Relating to Data Link Performance Monitoring and Analysis)

2.33 The Secretariat presented the list of APANPIRG Air Navigation Deficiencies in the ATM field relating to data link performance monitoring and analysis. FIT-Asia/10 recommended deletion of the following Deficiency:

Myanmar: *Problem reports not provided to CRA.*

2.34 FIT-Asia/10 recommended the following Deficiencies remain current:

Fiji: *Problem reports not provided to CRA.*

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

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

2.35 The Deficiencies List as updated by the meeting is appended at **Attachment C**.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note the continued improvement in PR submission;
- c) note the regional PBCS implementation Status;
- d) note the continued need to encourage States to fully analyze PBCS performance that fails to meet RCP/RSP specifications, take rectification action, and report same to FIT;
- e) note the aggregated regional PBCS performance;
- f) agree to the **Draft Conclusion RASMAG/25-X: Revised PBCS Non-Compliance Report Form Template**;
- g) note the continuing unsuitability of HFDL for PBCS;
- h) note and agree to the proposed list of data link-related APANPIRG ANS Deficiencies.
- i) discuss any relevant matters as appropriate.

.....

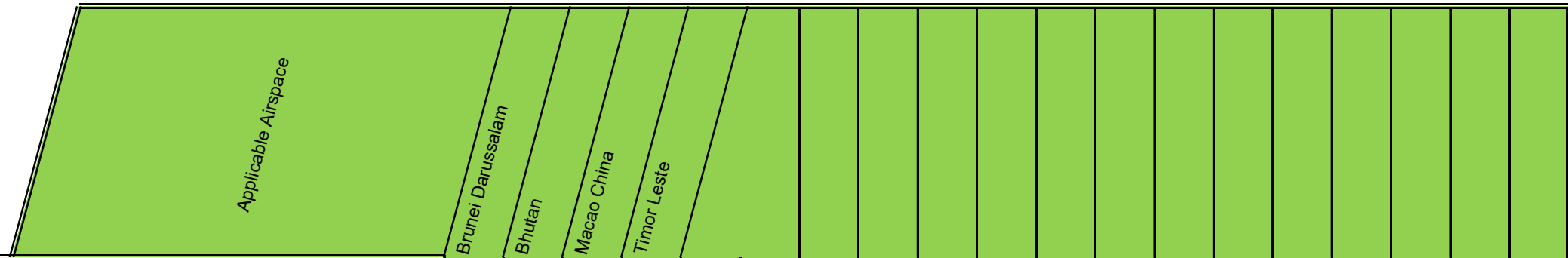
Draft Conclusion RASMAG/25-X: Revised PBCS Non-Compliance Report Form Template	
What: That, the PBCS Non-Compliance Report Form Template at Attachment B be uploaded to the Asia/Pacific Regional Office website, to replace the previous template.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To include additional information, to harmonize with the template already adopted in the North Atlantic (NAT) Region, and to use MS Excel format to facilitate data handling by the RMA.	Follow-up: <input type="checkbox"/> Required from States
When: 30-Oct-20	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

FIT-Asia PBCS Planning Chart (Administrations with FIR/s)

State	Afghanistan	Bangladesh	Cambodia	China	Hong Kong China	India	Indonesia	DPR Korea	Republic of Korea	Lao PDR	Malaysia	Myanmar	Maldives	Mongolia	Nepal	Pakistan	Philippines	Sri Lanka	Singapore	Thailand	Viet Nam
-------	-------------	------------	----------	-------	-----------------	-------	-----------	-----------	-------------------	---------	----------	---------	----------	----------	-------	----------	-------------	-----------	-----------	----------	----------

PBCS Implementation Task List	Task Group	Task ID	TASK descriptor	Afghanistan	Bangladesh	Cambodia	China	Hong Kong China	India	Indonesia	DPR Korea	Republic of Korea	Lao PDR	Malaysia	Myanmar	Maldives	Mongolia	Nepal	Pakistan	Philippines	Sri Lanka	Singapore	Thailand	Viet Nam			
	Group A	A-1	AIP (Prescription of an RCP/RSP specification)					X			X										X		X				
A-2		ANSP (PBCS policies, objectives supporting safety oversight)					X													X		X					
A-3		Operator and aircraft System- PBCS policies, objectives supporting safety oversight					X													X		X					
A-4		Regional Supplementary Procedures (Doc. 7030) for PBCS operations , if applicable					X						X									X		X			
Group B	B-1	PBCS Implementaion Plan				X				X										X		X					
	B-2	Target dates for PBCS and relevant ATM operations				X				X										X	X	X		X			
	B-3	RCP/RSP specifications				X				X										X	X	X		X			
	B-4	PBCS awareness				X				X										X	X	X		X			
Group C	C-1	Operational concepts and procedures for PBCS operations				X				X										X		X		X			
	C-2	ATC automation changes to use flight plan RCP/RSP indicators				X				X		X								X		X		X			
	C-3	ATC automation changes for PBCS monitoring				X				X										X		X		X			
	C-4	Confirm initial ANSP compliance with RCP/RSP specifications				X				X										X		X		X			
Group D	D-1	Aircraft operator readiness																		X		X	X	X			
	D-2	Confirm initial operator and/or aircraft type/system compliance with RCP/RSP																		X		X	X	X			
Group E	E-1	PBCS monitoring - post implementation				X				X										X		X					
Does your State submit data link problem reports to a recognized Central Reporting Agency (CRA)							X					X								X		X		X			
Cmmunication Specifications & Interoperability Standards	Normal	RCP240	FANS1/A CPDLC				X			X										X		X		X			
		RCP400	SATVOICE									X															
	Alternate	RCP400	HF							X			X														
		RSP180	FANS1/A ADS-C				X			X											X		X		X		
Surveillance Specifications & Interoperability Standards	Normal	RSP400	SATVOICE							X																	
		RSP400	HF							X			X														
	ADS-B																					X					
	Navigation Specifications & Applicable ATM Operations	RNAV/RNP 10	50 NM Lateral Separation						X		X			X				X		X	X	X	X		X		
50 NM Longitudinal Separation							X		X								X		X	X	X	X		X			
RNP 4		30 NM Longitudinal Separation																							X		
		30 NM Lateral Separation (pre-existing std)																								X	
		23 NM Lateral Separation (new std)																									X
RNP2		30NM Climb-Descend Through																									
		20NM Lateral Climb-Descend Through																									NOT YET SURVEYED
		07 - 15 NM VHF Lateral Separation																									NOT YET SURVEYED
8NM VHF Climb-Descend Through																									NOT YET SURVEYED		
10 MINUTE Longitudinal Separation without MNT.																											
RVSM																											
ADS-C CDP																											
ADS-B ITP																											
Tactical Lateral Offsets for Climb or Descent																											
Tailored Arrival																											
CDO																											
UPR																											
Other ATM Operations	DARP	Accept																									
		Initiate																									

FIT-Asia Seamless PBCS Planning Chart (Administrations without FIR/s)



Task Group	Task ID	TASK descriptor	Applicable Airspace																		
			Brunei Darussalam	Bhutan	Macao China	Timor Leste															
PBCS Implementation Task List	Group A	A-1	AIP (Prescription of an RCP/RSP specification)																		
		A-2	ANSP (PBCS policies, objectives supporting safety oversight)																		
		A-3	Operatpr and aircraft System- PBCS policies, objectives supporting safety oversight																		
		A-4	Regional Supplementary Procedures (Doc. 7030) for PBCS operations , if applicable																		
	Group B	B-1	PBCS Implementaion Plan																		
		B-2	Target dates for PBCS and relevant ATM operations																		
		B-3	RCP/RSP specifications																		
		B-4	PBCS awareness																		
	Group C	C-1	Operational concepts and procedures for PBCS operations																		
		C-2	ATC automation changes to use flight plan RCP/RSP indicators																		
		C-3	ATC automation changes for PBCS monitoring																		
		C-4	Confirm initial ANSP compliance with RCP/RSP specifications																		
	Group D	D-1	Aircraft operator readiness																		
	Group E	E-1	PBCS monitoring - post implementation																		
	Cmmunication Specifications & Interoperability Standards	Normal	RCP240	FANS1/A CPDLC																	
RCP400			SATVOICE																		
Alternate		RCP400	HF																		
		RCP400	HF																		
Surveillance Specifications & Interoperability Standards	Normal	RSP180	FANS1/A ADS-C																		
		RSP400	SATVOICE																		
	Alternate	RSP400	HF																		
		RSP400	HF																		
Navigation Specifications & Applicable ATM Operations	RNAV/RNP	RNAV/RNP 10	50 NM Lateral Separation																		
			50 NM Longitudinal Separation																		
		RNP 4	30 NM Longitudinal Separation																		
			30 NM Lateral Separation (pre-existing std)																		
			23 NM Lateral Separation (new std)																		
		RNP2	30NM Climb-Descend Through																		
	20NM Lateral Climb-Descend Through																				
	07 - 15 NM VHF Lateral Separation																				
	Other ATM Operations	DARP	8NM VHF Climb-Descend Through																		
			10 MINUTE Longitudinal Separation without MNT.																		
RVSM																					
ADS-C CDP																					
ADS-B ITP																					
Tactical Lateral Offsets for Climb or Descent																					
Tailored Arrival																					
CDO																					
UPR																					
DARP	Accept																				
	Initiate																				

PBCS ATSP Non-compliance Report Form							
Report Date:			10/19/2020				
Period of observed non-compliance:							
Reporting Air Traffic Service Provider (ATSP):							
Contact email address(es) at Reporting ATSP:							
Reporting to Regional Monitoring Agency (RMA):			NAT CMA				
ICAO CODE:							
Airline Operator:							
State of Operator/Registry:							
PBCS Data							
FIR	4-letter ICAO Aircraft Type	Registration	ADS-C downlink Message Counts	95% RSP 180 Benchmark	CPDLC Transaction Count	95% RCP 240 benchmark	Issue code
				ASP		ACP	
				<=90 sec		<=180 sec	
KZNY	B772	Reg 1	1,174	94.46%	88	95.45%	(*1)(*3)

PBCS ATSP Non-compliance Report Form							
Report Date:			10/19/2020				
Period of observed non-compliance:							
Reporting Air Traffic Service Provider (ATSP):							
Contact email address(es) at Reporting ATSP:							
Reporting to Regional Monitoring Agency (RMA):			NAT CMA				
ICAO CODE:							
Airline Operator:							
State of Operator/Registry:							
PBCS Data							
FIR	4-letter ICAO Aircraft Type	Registration	ADS-C downlink Message Counts	95% RSP 180 Benchmark	CPDLC Transaction Counts	95% RCP 240 benchmark	Issue code
				ASP		ACP	
				<=90 sec		<=180 sec	
KZNY	B772	Reg 1	410	93.41%	25	96.00%	(*1)(*3)
KZNY	B772	Reg 2	290	94.48%	21	95.24%	(*1)

PBCS ATSP Non-compliance Report Form							
Report Date:			10/19/2020				
Period of observed non-compliance:							
Reporting Air Traffic Service Provider (ATSP):							
Contact email address(es) at Reporting ATSP:							
Reporting to Regional Monitoring Agency (RMA):			NAT CMA				
ICAO CODE:							
Airline Operator:							
State of Operator/Registry:							
PBCS Data							
FIR	4-letter ICAO Aircraft Type	Registration	ADS-C downlink Message Counts	95% RSP 180 Benchmark	CPDLC Transaction Count	95% RCP 240 benchmark	Issue code
				ASP		ACP	
				<=90 sec		<=180 sec	
KZNY	B772	Reg 1	1,174	94.46%	88	95.45%	(*1)(*3)

ATM Deficiencies List

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
Data Link Performance Monitoring and Analysis Requirements of Annex 11 paragraph 2.29 and/or 3.3.5.2 not met.								
	Fiji	Post-implementation monitoring not implemented	25/06/2018	Problem reports not provided to CRA.		Fiji	TBD	A
	India	Post-implementation monitoring not implemented	5/6/2017	Performance monitoring and analysis not reported for the Kolkata and Mumbai FIRs.	Performance monitoring and analysis reported for Chennai FIR only. Delhi FIR N/A.	India	TBD	A
	Myanmar	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA.		Myanmar	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.		Maldives	TBD	A