

International Civil Aviation Organization

# Fifteenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/15)

Bangkok, Thailand, 24 – 27 June 2025

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

#### DATA LINK PERFORMANCE REPORT FOR INDIA

(Presented by Airports Authority of India)

#### **SUMMARY**

This paper presents 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.

#### 1. INTRODUCTION

1.1 **Tables 1A to 4F** summarize Automatic Dependent Surveillance – Contract (ADS-C) and Controller-Pilot Data Link Communications (CPDLC) performance where the Required Surveillance Performance (RSP) and Required Communications Performance (RCP) criteria stipulated in ICAO Doc 4444 – Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) were not met. Actions taken to address performance not meeting the criteria are discussed, together with the outcomes of such actions.

#### 2. DISCUSSION

<u>Chennai, Kolkata and Mumbai FIRs ADS-C RSP180 Performance – Media Type, RGS and GES</u>

2.1 **Table 1A-1**C summarizes overall ADS-C performance per media type, Remote Ground Station (RGS) and Ground Earth Station (GES) for the Chennai, Kolkata and Mumbai FIRs during 2024, where performance did not meet the RSP180 performance criteria.

Table 1A: Chennai FIR ADS-C Downlink Latency per Media Type, RGS and GES

FIR	<u>• 111. c</u>	Heiliai FIK	Chennai FIR					
Criteria	1		RSP180					
Period		,	Jan-Jun 202	4	•	Jul-Dec 2024	1	
			95%	99.90%		95%	99.90%	
Colour Key Meets Crits 99.0%-99.8 Under Crits	4%	Message Counts	% < = 90sec	% <= 180sec	Message Counts	% < = 90sec	% <=180sec	
By Media Type								
SATCO	M	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%	
By Remote G	round S	Station (RG	S) Ground I	Earth Station	n (GES)			
Designator	Type	(only RGS	/GES with m	essage count	s >100 record	ded)		
APK2	SAT	3211	93.58%	98.22%	3942	89.57%	94.93%	
IG1	SAT	2869	76.93%	89.09%	3966	77.66%	89.36%	
IGW1	SAT	11031	82.87%	91.76%	11187	83.02%	91.82%	
XXF	SAT	407	94.10%	98.14%	414	90.58%	96.24%	
XXP	SAT	398	94.29%	97.48%	288	91.67%	95.52%	
BOM1	VHF	481	94.80%	98.07%				

Table 1B: Kolkata FIR ADS-C Downlink Latency per Media Type, RGS and GES

	ID. KC	IKata PIK A	kata FIR ADS-C Downlink Latency per Media Type, RGS and GES							
FIR				Kolka	ıta FIR					
Criteria	1			RS	P180					
Period			Jan-Jun 202	4	•	Jul-Dec 2024	[			
			95%	99.90%		95%	99.90%			
Colour Key Meets Cri 99.0%-99 Under Cri	.84%	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	% <= 180sec			
By Media Typ	By Media Type									
SATCON	Л	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%			
By Remote Gr	round S	tation (RG	S) Ground I	Earth Station	n (GES)					
Designator	Type	(only RGS	S/GES with n	nessage coun	ts >100 reco	rded)				
AME2	SAT	227	100.00%	100.00%	130	100.00%	100.00%			
IG1	SAT	4321	86.32%	93.57%	2762	87.07%	94.59%			
IGW1	SAT	4585	73.94%	84.14%	4723	71.71%	83.76%			
XXP	SAT	1868	94.43%	97.68%	705	97.73%	98.76%			

FIR				Kolka	ıta FIR		
Criteria	1			RS	P180		
Period			Jan-Jun 202	4		Jul-Dec 2024	1
O-lK			95%	99.90%		95%	99.90%
Colour Key Meets Criteria 99.0%-99.84% Under Criteria		Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	% <= 180sec
ADD	VHF	229	100.00%	100.00%	238	100.00%	100.00%
BOJ	VHF	141	83.72%	83.78%	108	80.26%	82.42%
CNX	VHF	1378	91.85%	94.70%	1036	94.00%	95.90%
LUM	VHF	527	94.96%	97.15%	403	94.68%	97.08%
MAA	VHF	456	99.82%	99.91%	102	100.00%	100.00%
NYT	VHF	237	78.78%	82.70%	247	74.19%	78.54%
TCZ	VHF	913	88.99%	92.63%	440	82.22%	85.31%
AUH8	VHF	346	100.00%	100.00%	149	100.00%	100.00%
DOH9	VHF	653	100.00%	100.00%	273	100.00%	100.00%
HKGV	VHF	846	100.00%	100.00%	477	100.00%	100.00%
IST7	VHF	416	79.25%	82.93%	169	78.58%	81.72%
IST8	VHF	493	93.01%	93.11%	229	91.27%	91.29%
ISTS	VHF	254	85.50%	87.60%	106	76.63%	77.37%
JED8	VHF	221	100.00%	100.00%	118	100.00%	100.00%
OTP7	VHF	256	92.97%	92.98%	111	92.82%	92.87%
RKT1	VHF	484	100.00%	100.00%	283	100.00%	100.00%
RUH8	VHF	527	100.00%	100.00%	215	100.00%	100.00%

Table 1C: Mumbai FIR ADS-C Downlink Latency per Media Type, RGS and GES

FIR			Mumbai FIR						
Criter	ia			RS	P180				
Perio	d	•	Jan-Jun 202	4		Jul-Dec 2024			
Colour Key			95%	99.90%		95%	99.90%		
99.0%	Oriteria 99.84% Oriteria	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% < = 90sec	% <= 180sec		
By Media Type									
SATCO	)M	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%		
By Remote (	Ground S	tation (RG	S) Ground I	Earth Station	n (GES)				
Designator	Type	(only RGS	(only RGS/GES with message counts >100 recorded)						
APK2	SAT	6701	89.67%	96.49%	13656	94.60%	97.41%		
IGW1	SAT	12821	93.39%	98.21%	18641	91.64%	96.73%		

FIR			Mumbai FIR					
Criter	ia			RS	P180			
Perio	d		Jan-Jun 202	4		Jul-Dec 2024	ļ	
Colour Key			95%	99.90%		95%	99.90%	
Meets Criteria 99.0%-99.84% Under Criteria		Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	% <= 180sec	
XXP	SAT	663	90.50%	95.50%	782	89.96%	95.19%	
B4P	VHF	204	91.67%	96.47%	149	84.56%	97.41%	
BOM1	VHF	9375	93.71%	96.26%	332	85.87%	90.48%	
CMB1	VHF	433	100.00%	100.00%	435	100.00%	100.00%	
DOHV	VHF	148	100.00%	100.00%	180	100.00%	100.00%	

- Table 1A-1C outline overall ADS-C performance per media type, Remote Ground Station (RGS) and Ground Earth Station (GES) for downlinks sent within the Chennai FIR, Kolkata FIR and Mumbai FIR respectively during 2024. The assessment for ADS-C performance by HF for all three FIRs were not statistically significant due to the low number of data points. ADS-C performances APK2, IG1, IGW1, XXF, XXP in Chennai FIR, IG1, IGW1 in Kolkata FIR and APK2, IGW1, XXP SATCOM in Mumbai FIR failed to meet all criteria for both semesters. IGW1 fails to meet in all three FIRs. The ADS-C performance by SATCOM and VHF almost meet the 95% requirement but fail marginally under the 99.9% performance criteria for all three FIRs. In Kolkata FIR, ADD, AUH8, DOH8, HKGV, IED8, RKT1, RUH8 VHF stations satisfy 100% criteria in both semesters, In Kolkata FIR, BOI, CNX, LUM, MDL, NYT, RGN, TCZ, ESB7, IST7, IST8, ISTS, OTP7, VAR1, VAR7 and in Mumbai FIR, B4P, BOM1 VHF ADS-C performance failed to meet all criteria for both semesters.
- 2.3 Limited VHF Coverage over the oceanic area within Indian FIRs could affect the transition duration between VHF and SATCOM. The assessment for ADS-C performance on HF is not statistically significant due to the low amount of data available for analysis.
- 2.4 The above issues will be taken up through CSP[SITA], State Regulator, Directorate of General Civil Aviation [DGCA] and CRA.
- 2.5 India is continuously monitoring the RSP180 performance and will take appropriate steps to meet the criteria.

<u>Chennai, Kolkata and Mumbai FIR ADS-C RSP180 Performance – Aircraft Operator/Type</u>

2.6 **Table 2A-2C** summarize overall ADS-C performance per Aircraft Operator/Type for downlinks sent within the Chennai, Kolkata and Mumbai FIRs during 2024, where performance did not meet the RSP180 performance criteria.

Table 2A: Chennai FIR ADS-C Downlink Latency per Aircraft Operator/Type

FIR			Chenna	ai FIR				
Criteria			RSP	180				
Period	J	an-Jun 2024			Jul-Dec 202	24		
Colour Key		95%	99.90%		95%	99.90%		
Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	% <= 180sec		
By Aircraft Operator / Type (only message counts >100 recorded)								
ADY/A320	146	93.44%	94.06%	220	92.19%	92.95%		
AIC/A20N	519	73.80%	83.37%	954	70.34%	78.83%		
ALK/A320	387	89.21%	96.04%	455	92.42%	95.27%		
AZG/B744	249	72.16%	84.94%	162	69.14%	81.94%		
CES/A333	146	74.06%	81.51%	112	88.14%	94.32%		
CLX/B744	410	91.63%	95.00%	371	92.05%	94.35%		
CPA/A333	1364	80.57%	90.32%	1429	80.20%	90.62%		
CPA/B744	1438	80.11%	90.24%	1207	81.19%	90.39%		
DHX/B763	493	89.66%	97.20%	2317	88.52%	94.26%		
KAC/A20N	614	89.41%	97.56%	672	87.41%	96.09%		
KLM/B772	281	94.02%	97.64%	146	82.88%	91.89%		
MAS/B738	11936	92.15%	96.88%	10414	90.70%	96.12%		
SIA/B38M	3323	91.30%	93.40%	3461	90.55%	93.27%		
TGW/A21N	1745	78.85%	91.63%	929	86.22%	92.90%		
UZB/A21N	172	63.87%	76.34%	171	60.82%	76.38%		
VTI/B789	126	100.00%	100.00%	141	100.00%	100.00%		

Table 2B: Kolkata FIR ADS-C Downlink Latency per Aircraft Operator/Type

FIR	C 2D. Korkata	Kolkata FIR							
Criteria		RSP180							
Period	J	an-Jun 2024		•	Jul-Dec 2024				
Colour Key		95%	99.90%		95%	99.90%			
Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	%<= 180sec			
By Aircraft Opera	By Aircraft Operator / Type (only message counts >100 recorded)								
AIC/A20N	608	86.18%	91.51%	1054	87.76%	91.62%			
CES/A333	1241	91.46%	93.19%	789	91.63%	94.39%			
CPA/A333	734	94.02%	97.46%	541	90.90%	94.33%			
CPA/B744	1813	92.77%	95.97%	1506	92.90%	96.08%			
NCR/B744	1256	93.95%	96.34%	417	89.99%	92.00%			
NOS/B789	243	100.00%	100.00%	143	100.00%	100.00%			
SIA/B38M	1484	86.02%	89.01%	399	93.23%	93.96%			

FIR		Kolkata FIR						
Criteria	RSP180							
Period	J	an-Jun 2024			Jul-Dec 2024			
Colour Key		95%	99.90%		95%	99.90%		
Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	%<= 180sec		
UZB/A21N	1688	82.52%	87.07%	980	82.76%	88.16%		
VJT/GL7T	150	83.07%	85.92%	146	93.09%	94.86%		
VKG/A339	293	89.53%	92.02%	166	85.18%	90.67%		
VSV/B39M	516	94.84%	95.81%	389	89.60%	91.60%		

Table 2C: Mumbai FIR ADS-C Downlink Latency per Aircraft Operator/Type

FIR	Willioai FIK		Mumba		, <u> </u>	<u> </u>	
Criteria			RSP1	180			
Period	Ja	an-Jun 2024		Jul-Dec 2024			
Colour Key	3.5	95%	99.90%		95%	99.90%	
Meets Criteria 99.0%-99.84% Under Criteria	Message Counts	% <= 90sec	% <= 180sec	Message Counts	% <= 90sec	% <= 180sec	
By A	By Aircraft Operator / Type (only message of						
ABD/B744	780	89.59%	96.50%	1292	88.24%	94.76%	
ADY/A320	717	73.99%	77.10%	1180	72.54%	75.56%	
AFR/B77W	3123	93.40%	98.64%	1504	90.43%	97.82%	
AIC/A20N	906	62.91%	69.66%	1305	63.07%	70.34%	
AIC/A359	496	100.00%	100.00%	699	100.00%	100.00%	
ATC/B763	143	45.98%	61.00%	121	55.65%	64.41%	
AXB/B738	189	83.01%	87.33%	172	84.88%	90.73%	
BBC/B738	129	83.82%	85.24%	148	81.26%	84.17%	
CHH/A333	576	100.00%	100.00%	177	100.00%	100.00%	
CLX/B744	819	94.38%	97.65%	904	93.14%	96.52%	
CPA/B77W	1584	94.95%	98.88%	2507	93.82%	98.58%	
EAU/B744	242	76.03%	91.46%	459	76.03%	88.37%	
ETH/B38M	171	94.22%	95.26%	263	84.22%	89.99%	
EXV/A320	708	83.90%	87.62%	517	75.53%	79.78%	
FDX/B77L	2276	94.86%	98.15%	3256	94.99%	98.03%	
GFA/A21N	1495	93.98%	97.71%	3308	94.50%	97.73%	
GNJ/CL60	133	94.17%	98.36%	108	85.56%	87.11%	
HLF/B77L	433	93.53%	97.32%	313	87.86%	96.26%	
JZR/A20N	159	75.00%	77.25%	220	78.86%	82.38%	
KLM/A332	176	100.00%	100.00%	124	100.00%	100.00%	
RCR/B744	286	92.89%	97.35%	149	86.74%	94.12%	

- Table 2A-2C outline overall ADS-C performance per Aircraft Operator/Type for downlinks sent within the Chennai, Kolkata and Mumbai FIRs respectively during 2024. The assessment for ADS-C performance by HF for all three FIRs were not statistically significant due to the low number of data points. In Chennai FIR, AIC (A320), ALK (A320), AZG (B744), CES (A333), CLX (B744), CPA (A333,B744), DHX (B763), KAC (A20N), KLM (B772), SIA (B38M), TGW (A21N), UZB (A21N), VTI (A20N) and in Kolkata FIR, AIC (A20N), CES (A333), CPA (A333, B744), NCR (B744), SIA (B38M), UZB (A21N), VJT (GL7T), VKG (A339), VSV (B39M) and in Mumbai FIR, ABD (B744), ADY (A320), AFR (B77W), AIC (A20N, B763), AXB (B738), BBC (B738), CLX (B744), CPA (B77W), ETH (B38M), FDX (B77L), GNI (CL60), JZR (A20N), RCR (B744), EAU (B744), EXV (A320), GFA (A21N), HLF (B77L), KLM (A332) Aircraft Operator/Type ADSC performance failed to meet all criteria for both semesters. The ADS-C performance by Operator/Type almost meet the 95% requirement but fail marginally under the 99.9% performance criteria for all three FIRs. In Chennai FIR VTI (B789) and in Kolkata FIR NOS (B789) and in Mumbai FIR AIC (A359), CHH (A333) satisfies 100% criteria in both semesters,
- 2.8 The aircraft captured with low performance could be due to connectivity (CSP/SSP) or improper **transfer** of control from one FIR to another FIR via datalink.
- 2.9 The above issues will be taken up through CSP[SITA], State Regulator, Directorate of General Civil Aviation [DGCA] and CRA.
- 2.10 The ANSP is continuously monitoring the ADS-C downlink performance of Aircraft Operator/Type and will take appropriate steps to mitigate the issue.

<u>Chennai, Kolkata and Mumbai FIRs CPDLC RCP240 Performance – Media Type, RGS and GES</u>

2.11 **Tables 3A and 3F** summarize overall CPDLC performance per Media Type, RGS and GES for messages sent within the Chennai, Kolkata and Mumbai FIRs during 2024, where performance did not meet the RCP240 performance criteria.

**Table 3A:** Chennai FIR CPDLC Performance Latency per Media Type, RGS and GES – Jan-Jun 2024

3411	-Juli 2024								
FIR				Chenna	i FIR				
Criteri	a		RCP240						
Period	l			Jan-Jun	2024				
			95% ben	chmark	99.9% B	enchmark	95%		
Colour Key		Message	ACP	ACTP	ACP	ACTP	PORT		
Meets Cr 99.0%-99 Under Cr	9.84%	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
By Media T	By Media Type								
SATCO	M	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%		
By I	Remote	<b>Ground Stat</b>	ion (RGS) Gr	ound Earth	Station (GE	ES)			
Designator	Type		(RGS/GES with message counts >100)						
APK1	SAT	37330	99.73%	99.77%	99.85%	99.81%	98.68%		
APK2	SAT	1112	99.51%	99.66%	99.66%	99.90%	98.02%		

FIR				Chenna	i FIR		
Criteri	a			RCP2	240		
Period	l			Jan-Jun	2024		
			95% ber	chmark	99.9% B	enchmark	95%
Colour Key		Message	ACP	ACTP	ACP	ACTP	PORT
Meets Ci 99.0%-99 Under Ci	9.84%	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs
EUA1	SAT	246	99.57%	99.43%	99.86%	99.70%	100.00%
IG1	SAT	345	97.28%	98.29%	97.72%	98.62%	93.53%
IGW1	SAT	967	95.35%	95.40%	95.92%	96.17%	95.97%
IOR5	SAT	7954	99.56%	99.84%	99.73%	99.86%	97.84%
IOR8	SAT	161	98.35%	100.00%	98.56%	100.00%	96.58%
XXP	SAT	166	99.41%	100.00%	99.61%	100.00%	95.92%
BLR2	VHF	5231	99.71%	99.94%	99.80%	100.00%	98.66%
BOM	VHF	694	100.00%	100.00%	100.00%	100.00%	98.90%
BOM1	VHF	241	99.61%	99.30%	99.70%	99.64%	99.88%
BOM9	VHF	532	99.09%	100.00%	99.16%	100.00%	96.80%
BTJ	VHF	116	99.56%	99.51%	100.00%	99.82%	99.20%
CJB1	VHF	120	98.74%	100.00%	98.90%	100.00%	94.17%
COK1	VHF	4067	99.62%	99.89%	99.80%	100.00%	96.95%
IXZ1	VHF	7574	99.68%	99.74%	99.73%	99.85%	98.77%
KDT	VHF	141	97.95%	98.23%	98.23%	98.62%	98.70%
PNQ1	VHF	439	99.05%	99.62%	99.52%	99.77%	97.86%
TRV1	VHF	2161	99.77%	100.00%	99.80%	100.00%	98.57%

**Table 3B:** Chennai FIR CPDLC Performance Latency per Media Type, RGS and GES – Jul-Dec 2024

FIR			Chenn	ai FIR			
Criteria			RCF	P240			
Period			Jul-De	c 2024			
		95% bei	nchmark	99.9% B	enchmark	95%	
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT	
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% < =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%	
By Remote Ground Station (RGS) Ground Earth Station (GES)							

FIR				Chenn	ai FIR		
Criteri	a			RCF	240		
Period	1			Jul-De	c 2024		
			95% bei	nchmark	99.9% B	enchmark	95%
Colour Key		Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99.	.84%	Counts	% <	% <=	% < =	% <=	%<60secs
Under Cri	teria		=180sec	120sec	210sec	150sec	
Designator	Туре	Designator	Ту	<b>pe</b>	,	ES with ounts >100)	
APK1	SAT	41072	99.73%	99.79%	99.82%	99.83%	98.90%
APK2	SAT	961	99.40%	99.84%	99.62%	99.94%	97.75%
EUA1	SAT	363	99.69%	99.42%	99.83%	99.58%	99.28%
IG1	SAT	559	98.22%	98.16%	98.64%	98.84%	95.89%
IGW1	SAT	902	96.08%	95.73%	97.30%	96.72%	97.23%
IOR5	SAT	11724	99.31%	99.68%	99.50%	99.71%	97.87%
IOR7	SAT	112	99.43%	100.00%	99.54%	100.00%	96.43%
IOR8	SAT	259	98.48%	100.00%	98.62%	100.00%	96.62%
XXI	SAT	16579	99.73%	99.89%	99.84%	99.93%	98.84%
XXP	SAT	118	100.00%	99.50%	100.00%	100.00%	93.47%
BLR1	VHF	4317	99.73%	99.75%	99.80%	99.87%	98.80%
BLR2	VHF	4769	99.59%	99.68%	99.69%	99.84%	98.62%
BOM	VHF	459	99.48%	99.01%	99.59%	99.44%	99.81%
BTJ	VHF	821	99.61%	99.90%	99.74%	99.98%	97.93%
BTJ1	VHF	193	99.06%	99.50%	99.50%	99.58%	95.34%
CMB1	VHF	850	99.68%	100.00%	99.74%	100.00%	96.31%
COK1	VHF	3887	99.42%	99.92%	99.61%	99.94%	97.14%
GOI1	VHF	5535	99.43%	99.74%	99.53%	99.79%	98.23%
IXZ1	VHF	9128	99.69%	99.75%	99.81%	99.85%	98.95%
KDT	VHF	137	98.29%	99.05%	99.18%	99.66%	97.47%
MAA	VHF	10760	99.75%	99.88%	99.83%	99.93%	98.93%
MAA1	VHF	6328	99.51%	99.58%	99.60%	99.69%	99.04%
PNQ1	VHF	123	98.30%	98.37%	98.88%	98.65%	97.56%
TRV	VHF	1841	99.79%	99.44%	99.88%	99.67%	99.24%
TRV1	VHF	2226	99.75%	100.00%	99.83%	100.00%	98.04%
VTZ1	VHF	965	99.23%	99.43%	99.36%	99.50%	98.86%

 $\textbf{Table 3C:} \ \ \textbf{Kolkata FIR CPDLC Performance Latency per Media Type, RGS and GES-Jan-Jun 2024}$ 

FIR	in-Jun 2	021		Kolka	ıta FIR		
Criteri	a			RC	P240		
Period				Jan-Ju	un 2024		
			95% be	nchmark	99.9% B	enchmark	95%
Colour Key		Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99 Under Cri	.84%	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs
	_		By Media T	ype			
SATCO	M	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%
By Remote (	Ground	Station (RGS	S) Ground E	arth Station	(GES)		
Designator	Type		(RGS/GES w	ith message	counts >100)		
APK1	SAT	5886	99.22%	99.22%	99.46%	99.46%	98.39%
APK2	SAT	375	99.45%	99.45%	99.76%	99.76%	95.47%
IGW1	SAT	161	71.84%	71.84%	73.84%	73.84%	76.47%
IOR5	SAT	2643	97.89%	97.89%	98.70%	98.70%	96.29%
IOR8	SAT	245	99.32%	99.32%	99.40%	99.40%	98.10%
XXA	SAT	1327	99.41%	99.41%	99.64%	99.64%	98.87%
XXI	SAT	2298	99.52%	99.52%	99.71%	99.71%	99.00%
BBI1	VHF	322	100.00%	100.00%	100.00%	100.00%	100.00%
CCU	VHF	1462	99.70%	99.72%	99.76%	99.87%	99.46%
CCU1	VHF	202	97.44%	99.23%	97.92%	99.38%	94.88%
IMF1	VHF	219	99.06%	99.54%	99.24%	100.00%	98.04%
VTZ1	VHF	1058	99.16%	100.00%	99.23%	100.00%	98.96%

**Table 3D:** Kolkata FIR CPDLC Performance Latency per Media Type, RGS and GES – Jul-Dec 2024

FIR	<u> </u>			Kolka	ta FIR		
Criteri	a			RC]	P240		
Period	l			Jul-De	ec 2024		
			95% benchmark		99.9% B	Benchmark	95%
Colour Key Meets Criteria 99.0%-99.84% Under Criteria		Message	ACP	ACTP	ACP	ACTP	PORT
		Counts	% < =180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
By Media T	ype						
SATCO	M	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	ALL 203		98.77%	98.94%	99.01%	99.16%	98.08%
By I	Remote	<b>Ground Stati</b>	on (RGS) G	round Eartl	h Station (G	ES)	
Designator	Type	Designator	Ту	/pe	`	(RGS/GES with message counts >100)	
APK1	SAT	7451	99.32%	99.43%	99.41%	99.59%	98.38%
APK2	SAT	342	96.85%	98.59%	98.65%	100.00%	93.93%
IGW1	SAT	246	69.48%	70.41%	73.26%	73.24%	83.33%
IOR5	SAT	3210	99.07%	99.23%	99.43%	99.41%	97.98%
XXA	SAT	1864	99.54%	99.79%	99.63%	99.81%	98.98%
XXI	SAT	2856	99.58%	99.58%	99.68%	99.75%	99.02%
CCU	VHF	1263	99.68%	99.79%	99.78%	99.84%	98.99%
DAC1	VHF	285	99.60%	99.41%	99.94%	99.52%	99.72%
IMF1	VHF	184	99.71%	100.00%	100.00%	100.00%	98.10%
VTZ1	VHF	665	99.45%	99.66%	99.50%	99.76%	98.90%

**Table 3E:** Mumbai FIR CPDLC Performance Latency per Media Type, RGS and GES – Jan-Jun 2024

FIR		024		Mumb	ai FIR		
Criteri	a			RC	P240		
Period				Jan-Ju	ın 2024		
			95% be	enchmark	99.9% B	enchmark	95%
Colour Key		Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99		Counts	% <=	<sup>0</sup> / <sub>0</sub> <=	% <=	% <=	%<60sec
Under Cri	iteria		180sec	120sec	210sec	150sec	70 \00sec
	By Media Type						
SATCO	M	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%
	Damata						93.90%
		Ground Station (RGS) Ground Earth Station (GES)					
Designator	Type		`	with message			2 7 5 40 /
APK1	SAT	16469	98.34%	98.93%	99.01%	99.48%	95.64%
APK2	SAT	1192	95.81%	97.23%	97.83%	98.70%	92.11%
EUA1	SAT	29291	98.66%	99.25%	99.23%	99.67%	95.63%
IG1	SAT	319	92.35%	95.92%	94.44%	98.86%	84.48%
IGW1	SAT	3329	96.49%	98.02%	97.87%	99.32%	92.43%
IOR5	SAT	11451	98.14%	99.43%	98.90%	99.76%	93.94%
IOR7	SAT	433	98.04%	100.00%	98.38%	100.00%	93.65%
IOR8	SAT	926	97.81%	100.00%	98.01%	100.00%	91.90%
XXA	SAT	4039	99.38%	99.65%	99.64%	99.73%	98.65%
XXF	SAT	8920	98.45%	99.25%	98.96%	99.67%	95.82%
XXI	SAT	33289	98.98%	99.45%	99.32%	99.80%	97.40%
XXP	SAT	165	98.90%	97.88%	99.69%	98.79%	99.09%
BOM	SAT	3229	99.55%	99.73%	99.70%	99.79%	98.45%
BOM1	SAT	1084	98.91%	99.35%	99.20%	99.80%	96.68%
BOM2	SAT	687	98.89%	99.57%	99.41%	99.67%	97.76%
BOM9	SAT	938	99.29%	99.65%	99.59%	99.80%	97.41%
COK1	SAT	183	99.52%	100.00%	99.59%	100.00%	96.17%
GOI1	SAT	8321	99.09%	99.64%	99.31%	99.72%	96.01%
JNJ1	SAT	16581	99.19%	99.65%	99.41%	99.77%	96.78%
MCT1	SAT	102	100.00%	100.00%	100.00%	100.00%	99.91%

**Table 3F:** Mumbai FIR CPDLC Performance Latency per Media Type, RGS and GES – Jul-Dec 2024

FIR	ıl-Dec 2	.024	Mumbai FIR						
Criteri	<u>a</u>			RCF					
Period				Jul-De					
			95% ber	nchmark	99.9% B	enchmark	95%		
Colour Key  Meets C	riteria	Message	ACP	ACTP	ACP	ACTP	PORT		
99.0%-9 Under C	9.84%	Counts	% < =180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs		
		J	By Media Ty						
SATCO	M	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%		
By l	Remote	Ground Stati	on (RGS) G	round Earth	Station (GF	CS)			
Designator	Туре	Designator	Ту	ре	(RGS/GES with message counts >100)				
APK1	SAT	21793	98.24%	98.82%	99.04%	99.40%	95.72%		
APK2	SAT	2542	93.90%	97.29%	96.70%	98.47%	87.45%		
EUA1	SAT	30372	98.57%	99.12%	99.16%	99.67%	95.96%		
IG1	SAT	444	95.72%	97.59%	97.75%	99.23%	93.54%		
IGW1	SAT	5154	96.92%	98.31%	97.98%	99.11%	93.34%		
IOR5	SAT	17742	98.09%	99.23%	98.73%	99.62%	94.15%		
IOR7	SAT	425	98.81%	100.00%	99.54%	100.00%	91.37%		
IOR8	SAT	1059	98.43%	100.00%	98.68%	100.00%	93.11%		
XXA	SAT	4530	99.41%	99.50%	99.58%	99.60%	98.94%		
XXF	SAT	8237	98.63%	99.36%	99.17%	99.73%	96.42%		
XXI	SAT	41373	98.87%	99.46%	99.29%	99.82%	97.27%		
XXP	SAT	150	99.49%	98.22%	100.00%	99.19%	98.06%		
BOM	VHF	3001	99.59%	99.72%	99.68%	99.78%	98.33%		
BOM2	VHF	402	98.14%	98.79%	98.71%	99.17%	97.16%		
BOM9	VHF	1357	99.45%	99.76%	99.56%	99.94%	97.57%		
COK1	VHF	150	100.00%	100.00%	100.00%	100.00%	99.54%		
GOI1	VHF	7764	98.99%	99.62%	99.30%	99.73%	95.54%		
HYD	VHF	134	100.00%	100.00%	100.00%	100.00%	99.40%		
JNJ1	VHF	17949	99.00%	99.64%	99.37%	99.81%	96.42%		
MCT1	VHF	150	97.81%	98.57%	99.76%	99.41%	96.86%		
PNQ1	VHF	161	100.00%	100.00%	100.00%	100.00%	97.87%		

- Actual Communications Performance (ACP) measurement for CPDLC messages sent within Chennai, Kolkata and Mumbai FIRs for the year 2024 are analyzed based on media type, RGS and GES. The 95% overall requirements are met in both halves and marginally fails to meet 99.9% criteria (Kolkata fails to meet 99.9% criteria in Jan-Jun), However, the SV and VS communication almost fails to meet the 95% and 99.9% requirement in both halves of the year. In Jan-Jun, in Chennai IG1 (SAT), IGW1 (SAT), KDT (VHF) and in Kolkata IGW1 (SAT), IOR5 (SAT) stations fails to meet 99.9% criteria. In Jul-Dec, in Chennai IG1 (SAT), IGW1 (SAT), PNQ1 (VHF) and in Kolkata IGW1 (SAT), stations fails to meet 99.9% criteria.
- 2.13 Limited VHF Coverage over the oceanic area within Indian FIR could affect the transition duration between VHF and SATCOM which is well understood from the SV and VS performance criteria.
- 2.14 The above issues will be taken up through CSP[SITA], State Regulator, Directorate of General Civil Aviation [DGCA] and CRA to rectify performance not meeting RCP240 criteria.
- 2.15 The ANSP is continuously monitoring RCP240 performance to rectify performances not meeting RCP240 criteria.

<u>Chennai, Kolkata and Mumbai FIRs CPDLC RCP240 Performance – Aircraft Operator/Type</u>

2.16 **Tables 4A-4F** summarize overall CPDLC performance per Aircraft Operator/Type for messages sent within the Chennai, Kolkata and Mumbai FIRs during 2024, where performance did not meet the RCP240 performance criteria.

**Table 4A:** Chennai FIR CPDLC Performance Latency per Aircraft Operator/Type – Jan-Jun 2024

FIR			Chenn	nai FIR				
				P240				
Criteria								
Period		Jan-Jun 2024						
Colour Key		95% bei	nchmark	99.9% Be	enchmark	95%		
Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT		
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
By Aircraft Operator / Type (only message counts >100 recorded)								
AFR/B77W	1163	99.49%	99.59%	99.68%	99.73%	98.05%		
AFR/B789	189	100.00%	100.00%	100.00%	100.00%	100.00%		
AIC/A20N	271	96.78%	98.73%	97.74%	99.38%	90.22%		
AIC/A359	237	99.28%	100.00%	99.39%	100.00%	91.65%		
AIC/B788	1712	99.77%	99.84%	99.79%	99.87%	98.98%		
ALK/A21N	197	99.00%	100.00%	99.10%	100.00%	93.40%		
ALK/A320	138	99.09%	99.45%	99.30%	99.82%	97.01%		
ALK/A332	779	99.68%	99.40%	100.00%	99.62%	98.87%		
ALK/A333	747	99.60%	99.92%	99.81%	99.95%	97.46%		
BAW/B788	408	99.62%	99.67%	99.71%	99.83%	98.18%		
BLX/B788	149	100.00%	100.00%	100.00%	100.00%	100.00%		

FIR			Chenn	nai FIR		
Criteria			RC	P240		
Period			Jan-J	un 2024		
Colour Key		95% benchmark 99.9%			enchmark	95%
Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
BLX/B789	178	100.00%	100.00%	100.00%	100.00%	100.00%
CPA/A333	593	97.72%	98.65%	98.17%	98.91%	93.68%
ETD/A320	1225	99.38%	99.93%	99.63%	100.00%	97.39%
ETD/A321	1224	99.79%	100.00%	99.82%	100.00%	97.30%
ETD/A332	153	98.60%	99.82%	99.67%	100.00%	94.12%
ETD/B77W	762	99.41%	99.51%	99.51%	99.65%	98.29%
ETH/B77L	606	99.62%	99.86%	99.73%	99.93%	99.31%
ETH/B788	742	99.65%	99.85%	99.69%	99.90%	99.33%
FDX/B77L	383	99.24%	99.64%	99.29%	99.76%	98.04%
FIN/A359	942	99.95%	99.74%	100.00%	99.78%	99.68%
GFA/B789	476	99.64%	99.81%	99.69%	99.83%	98.27%
GIA/A343	104	96.95%	100.00%	97.16%	100.00%	95.51%
GIA/B772	144	99.57%	100.00%	99.76%	100.00%	98.65%
JAL/B788	216	100.00%	99.42%	100.00%	99.83%	98.38%
KLM/B789	610	99.85%	99.20%	100.00%	99.45%	98.36%
LNI/A339	175	98.75%	100.00%	98.95%	100.00%	97.27%
MAS/A333	3602	99.70%	99.60%	99.85%	99.70%	99.57%
OMA/A332	436	98.86%	100.00%	98.93%	100.00%	92.66%
OMA/A333	162	100.00%	100.00%	100.00%	100.00%	93.98%
PIA/B772	101	99.49%	100.00%	99.62%	100.00%	98.82%
QFA/A388	974	98.92%	99.96%	99.17%	100.00%	94.87%
QTR/B77L	1011	99.82%	99.85%	99.83%	100.00%	99.13%
QTR/B77W	9680	99.52%	99.60%	99.72%	99.74%	98.58%
SIA/B77W	3478	99.68%	99.66%	99.85%	99.76%	99.07%
SVA/A333	908	99.25%	99.98%	99.68%	100.00%	93.28%
SVA/B77W	3880	99.41%	99.77%	99.67%	99.86%	97.32%
TGW/A21N	787	94.71%	94.85%	95.23%	95.92%	95.55%
THA/A359	712	99.74%	100.00%	99.77%	100.00%	99.07%
THA/B772	726	99.67%	99.52%	99.95%	99.81%	99.46%
THA/B788	215	99.36%	98.86%	99.65%	99.13%	100.00%
THA/B789	482	99.62%	100.00%	99.74%	100.00%	99.09%
THY/A359	1794	99.89%	99.78%	99.91%	99.82%	98.86%
UAE/B77L	503	99.81%	99.86%	99.83%	100.00%	98.39%

FIR		Chennai FIR						
Criteria		RCP240						
Period		Jan-Jun 2024						
Colour Key Meets Criteria 99.0%-99.84% Under Criteria		95% bei	nchmark	99.9% Be	enchmark	95%		
	Message	ACP	ACTP	ACP	ACTP	PORT		
	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
VKG/A339	219	99.14%	98.32%	99.22%	99.09%	99.66%		
VTI/A20N	375	97.85%	99.80%	98.33%	99.84%	91.73%		
VTI/A21N	573	98.76%	99.76%	99.16%	99.82%	95.29%		
VTI/B789	101	100.00%	100.00%	100.00%	100.00%	100.00%		

**Table 4B:** Chennai FIR CPDLC Performance Latency per Aircraft Operator/Type – Jul-Dec 2024

FIR			Chen	nai FIR		
Criteria				P240		
Period				ec 2024		
		95% ber	nchmark	99.9% Be	enchmark	95%
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs
By Aircraft Opera	ator / Type	(only messag	e counts >10	0 recorded)		
AIC/A20N	376	96.54%	98.70%	97.10%	98.78%	94.41%
AIC/A21N	490	96.63%	99.49%	97.31%	99.54%	92.65%
ALK/A20N	199	98.58%	99.59%	98.86%	99.68%	96.48%
ALK/A320	167	99.06%	99.16%	99.70%	99.51%	97.03%
ALK/A332	259	99.63%	99.45%	99.79%	99.55%	97.94%
ALK/A333	725	99.34%	100.00%	99.44%	100.00%	97.45%
BAW/B77W	344	99.87%	99.76%	99.96%	99.84%	98.84%
BOX/B77L	794	99.67%	100.00%	99.69%	100.00%	98.11%
CPA/A333	737	98.38%	98.47%	98.83%	99.08%	94.17%
ELY/B772	2201	99.63%	99.90%	99.81%	99.96%	98.18%
ETD/A20N	144	99.15%	100.00%	99.35%	100.00%	97.37%
ETD/A21N	163	98.95%	98.93%	99.02%	99.00%	98.57%
ETD/A320	764	99.48%	100.00%	99.58%	100.00%	97.19%
ETD/A321	1697	99.42%	99.96%	99.52%	99.97%	96.94%
ETD/B77W	1613	99.35%	99.77%	99.48%	99.79%	98.14%
ETD/B789	6001	99.80%	99.89%	99.84%	99.91%	99.28%
ETH/B788	481	99.56%	99.38%	99.63%	99.82%	99.42%
FDX/B77L	390	99.21%	99.50%	99.48%	99.57%	97.38%
GFA/A321	121	98.01%	100.00%	98.22%	100.00%	93.60%

FIR			Chen	nai FIR		
Criteria			RC	P240		
Period			Jul-D	ec 2024		
		95% benchmark 99.9% Benchmark			95%	
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
GFA/B789	671	99.79%	99.87%	99.84%	99.89%	98.90%
GIA/A343	160	98.37%	100.00%	98.71%	100.00%	89.69%
GIA/B77W	2369	99.57%	99.86%	99.69%	99.94%	98.73%
KLM/B789	478	100.00%	99.06%	100.00%	99.15%	98.62%
KQA/B788	472	99.56%	99.60%	99.85%	99.72%	98.15%
LNI/A339	284	99.70%	100.00%	99.73%	100.00%	97.65%
MAS/A333	2583	99.53%	99.48%	99.84%	99.53%	99.73%
MXD/A333	256	99.25%	99.54%	99.62%	99.82%	97.27%
OMA/B788	541	99.73%	100.00%	99.82%	100.00%	98.32%
PIA/B772	105	99.35%	99.27%	99.48%	99.38%	99.17%
QFA/A332	693	99.12%	99.90%	99.39%	99.94%	95.82%
QTR/A332	1067	99.40%	100.00%	99.54%	100.00%	97.38%
QTR/B77L	859	99.68%	99.44%	99.71%	99.74%	99.03%
QTR/B77W	9729	99.17%	99.03%	99.44%	99.30%	98.73%
QTR/B788	1243	99.65%	99.69%	99.76%	99.77%	98.13%
RBA/A20N	160	97.86%	97.15%	98.58%	97.92%	98.85%
SIA/A388	3309	99.72%	100.00%	99.77%	100.00%	99.24%
SIA/B77W	1656	99.73%	99.83%	99.83%	99.94%	98.55%
SVA/A333	544	98.09%	99.71%	98.30%	99.78%	91.91%
SVA/B77W	4343	99.22%	99.64%	99.54%	99.80%	97.26%
TGW/A21N	639	95.72%	95.83%	96.82%	96.77%	95.93%
THA/B772	1007	99.44%	99.54%	99.69%	99.73%	99.28%
THY/A333	584	99.71%	99.79%	99.78%	99.86%	97.26%
UAE/B77L	552	99.71%	99.38%	100.00%	99.53%	98.66%
UAE/B77W	16722	99.67%	99.78%	99.80%	99.89%	98.56%
UZB/B788	117	100.00%	100.00%	100.00%	100.00%	100.00%
VTI/A20N	371	98.34%	98.94%	98.47%	98.99%	93.53%
VTI/A21N	1155	98.47%	99.76%	98.53%	99.82%	96.62%
XAX/A333	1559	99.47%	99.77%	99.75%	99.82%	98.59%

**Table 4C:** Kolkata FIR CPDLC Performance Latency per Aircraft Operator/Type – Jan-Jun 2024

FIR		Kolkata FIR							
Criteria			RCP	240					
Period			Jan-Ju	n 2024					
Colour Key		95% benchmark		99.9% Benchmark		95%			
Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT			
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60sec			
By Aircraft Open	rator / Type	(only message	e counts >100	0 recorded)					
AFR/B77W	106	100.00%	100.00%	100.00%	100.00%	100.00%			
AIC/B788	400	99.06%	99.57%	99.14%	99.64%	98.44%			
AUA/B772	117	100.00%	100.00%	100.00%	100.00%	99.27%			
BOX/B77L	188	100.00%	100.00%	100.00%	100.00%	100.00%			
CEB/A339	167	100.00%	100.00%	100.00%	100.00%	100.00%			
ETD/B77W	254	99.85%	99.71%	100.00%	100.00%	99.65%			
ETD/B78X	363	100.00%	100.00%	100.00%	100.00%	99.72%			
EVA/B77W	131	100.00%	100.00%	100.00%	100.00%	99.35%			
GFA/B789	261	98.48%	98.68%	98.59%	98.91%	97.35%			
KAC/B77W	128	100.00%	99.44%	100.00%	100.00%	98.73%			
KLM/B77W	134	100.00%	100.00%	100.00%	100.00%	100.00%			
MAS/A333	110	97.94%	98.22%	98.51%	98.74%	98.57%			
MAS/A359	201	100.00%	100.00%	100.00%	100.00%	100.00%			
MAS/B738	303	93.95%	93.73%	94.95%	95.39%	93.09%			
OMA/B789	379	99.51%	100.00%	99.55%	100.00%	98.73%			
PAL/A333	370	99.87%	100.00%	99.96%	100.00%	98.96%			
QFA/A388	136	98.43%	100.00%	100.00%	100.00%	94.36%			
QTR/A388	144	100.00%	100.00%	100.00%	100.00%	100.00%			
QTR/B77L	252	100.00%	100.00%	100.00%	100.00%	100.00%			
QTR/B77W	994	98.39%	98.89%	99.46%	99.53%	96.68%			
QTR/B788	301	99.93%	100.00%	100.00%	100.00%	99.14%			
SIA/A359	817	97.10%	97.80%	97.40%	98.19%	97.02%			
SIA/A388	393	99.27%	99.45%	99.37%	99.61%	97.63%			
SIA/B738	217	99.95%	100.00%	100.00%	100.00%	98.99%			
SIA/B78X	149	99.88%	100.00%	100.00%	100.00%	99.42%			
SVA/B77W	142	100.00%	99.82%	100.00%	100.00%	98.91%			
SVA/B789	249	99.31%	99.50%	99.46%	99.75%	98.57%			
SWR/B77W	181	100.00%	100.00%	100.00%	100.00%	99.48%			
TGW/B788	186	100.00%	100.00%	100.00%	100.00%	100.00%			
THA/A333	119	100.00%	100.00%	100.00%	100.00%	97.06%			
THA/A359	317	100.00%	99.83%	100.00%	100.00%	99.11%			

FIR			Kolkat	a FIR			
Criteria			RCP	240			
Period		Jan-Jun 2024					
Colour Key		95% ben	chmark	99.9% Bei	nchmark	95%	
Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT	
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60sec	
THA/B77W	489	98.66%	98.59%	99.19%	98.91%	99.59%	
THA/B788	205	98.59%	98.17%	98.89%	98.44%	100.00%	
THY/A333	329	96.31%	97.70%	97.39%	98.09%	93.92%	
THY/A359	350	99.51%	100.00%	99.62%	100.00%	98.33%	
THY/B77W	225	99.64%	99.57%	100.00%	100.00%	99.19%	
UAE/B77W	864	99.78%	99.73%	99.83%	99.91%	99.53%	
VTI/A20N	200	96.79%	98.82%	97.66%	99.69%	92.50%	
VTI/A21N	812	97.49%	99.23%	97.92%	99.54%	96.06%	
XAX/A333	164	100.00%	100.00%	100.00%	100.00%	98.78%	

**Table 4D:** Kolkata FIR CPDLC Performance Latency per Aircraft Operator/Type – Jul-Dec 2024

FIR		Kolkata FIR						
Criteria		RCP240						
Period			Jul-D	ec 2024				
		95% ber	nchmark	99.9% Be	enchmark	95%		
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT		
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
By Aircraft Operat	or / Type (	only message	counts >100	recorded)				
AFR/B77W	155	100.00%	98.24%	100.00%	99.24%	99.54%		
AUA/B772	135	100.00%	100.00%	100.00%	100.00%	100.00%		
DLH/B748	104	98.11%	98.66%	99.25%	99.23%	99.19%		
EVA/B77W	191	98.99%	98.45%	99.52%	99.55%	98.69%		
FIN/A359	327	99.38%	99.49%	99.44%	99.61%	98.92%		
GEC/B77L	124	99.59%	99.47%	99.83%	99.64%	99.19%		
GFA/B789	217	99.67%	99.96%	99.76%	100.00%	99.55%		
KAC/B77W	203	99.37%	100.00%	99.51%	100.00%	98.15%		
KLM/B789	105	99.37%	100.00%	99.54%	100.00%	96.98%		
MAS/A333	171	98.67%	99.43%	98.93%	99.64%	98.90%		
MAS/B738	303	92.39%	91.16%	92.85%	92.13%	93.93%		
MXD/A333	180	93.95%	96.39%	95.77%	99.08%	93.54%		
PAL/A333	418	98.15%	98.17%	98.70%	98.24%	97.81%		
QTR/B77W	1156	96.99%	97.16%	97.53%	97.32%	97.15%		

FIR			Kolka	ta FIR				
Criteria		RCP240						
Period			Jul-D	ec 2024				
		95% ber	nchmark	99.9% Be	enchmark	95%		
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT		
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% < = 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
SIA/A359	1046	98.47%	98.69%	98.74%	98.76%	98.14%		
SIA/A388	489	99.70%	99.66%	99.81%	99.76%	98.22%		
SIA/B738	274	98.77%	98.84%	99.04%	99.09%	98.18%		
SIA/B78X	169	99.53%	99.56%	99.57%	99.66%	99.45%		
SVA/B77W	206	98.73%	98.96%	98.87%	99.22%	96.42%		
SVA/B789	285	99.69%	99.90%	99.75%	100.00%	99.37%		
THA/A333	122	100.00%	100.00%	100.00%	100.00%	100.00%		
THA/A359	321	100.00%	100.00%	100.00%	100.00%	100.00%		
THA/B772	264	98.54%	98.43%	98.63%	99.29%	98.92%		
THY/A333	267	98.75%	99.78%	99.68%	100.00%	95.13%		
THY/A359	572	99.25%	99.49%	99.38%	99.57%	98.08%		
THY/B77W	290	99.96%	99.89%	100.00%	100.00%	99.35%		
UAE/A388	700	99.54%	99.88%	99.61%	99.90%	99.23%		
VTI/A21N	575	99.07%	99.68%	99.24%	99.77%	98.26%		
VTI/B789	139	100.00%	100.00%	100.00%	100.00%	100.00%		
XAX/A333	203	98.87%	99.00%	99.12%	100.00%	97.62%		

**Table 4E:** Mumbai FIR CPDLC Performance Latency per Aircraft Operator/Type – Jan-Jun 2024

FIR		Mumbai FIR					
Criteria		RCP240					
Period		Jan-Jun 2024					
		95% ben	chmark	99.9% Be	enchmark	95%	
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT	
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs	
By Aircraft Operato	or / Type (o	nly message o	counts >100	recorded)			
ACA/B789	102	98.14%	95.70%	99.19%	98.04%	98.73%	
AFR/A332	800	98.75%	100.00%	99.63%	100.00%	93.25%	
AFR/B772	222	97.03%	98.39%	99.19%	99.57%	97.30%	
AFR/B77W	677	98.71%	99.11%	99.48%	99.37%	96.16%	
AIC/B788	1201	98.83%	99.56%	99.51%	99.94%	97.42%	
AIZ/A21N	133	86.92%	93.98%	91.26%	98.62%	74.81%	
ALK/A20N	369	95.87%	98.76%	97.39%	99.38%	90.51%	

FIR			Mum	ıbai FIR				
Criteria			RO	CP240				
Period		Jan-Jun 2024						
		95% ben	chmark	99.9% Be	enchmark	95%		
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT		
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs		
ALK/A21N	789	96.61%	99.11%	97.31%	99.41%	90.75%		
ALK/A320	228	94.20%	97.03%	96.22%	98.79%	89.47%		
ALK/A332	1347	98.22%	99.38%	99.10%	99.87%	94.28%		
ALK/A333	1985	99.19%	99.95%	99.51%	99.97%	95.77%		
ATC/B788	538	99.66%	99.95%	99.84%	100.00%	98.63%		
AUA/B772	362	98.70%	99.45%	98.89%	99.97%	95.11%		
BAW/A35K	491	98.93%	100.00%	99.74%	100.00%	96.33%		
BAW/B772	653	98.86%	99.61%	99.44%	99.74%	97.24%		
BAW/B77W	740	99.08%	99.65%	99.42%	99.84%	96.86%		
BBC/B773	433	97.48%	98.73%	97.73%	99.71%	94.23%		
BBC/B788	220	99.57%	99.60%	99.61%	99.65%	98.31%		
BOX/B77L	452	99.00%	99.80%	99.62%	100.00%	96.46%		
CHH/B789	110	97.90%	99.43%	98.31%	99.92%	96.63%		
CPA/A359	435	97.31%	98.84%	98.07%	99.27%	93.10%		
CPA/B77W	107	93.74%	95.68%	95.59%	98.60%	90.03%		
CSC/A333	314	99.38%	99.59%	99.77%	100.00%	95.97%		
CSN/B789	495	98.94%	99.82%	99.41%	99.87%	98.11%		
DHK/B77L	120	94.17%	98.47%	97.12%	99.50%	85.21%		
DLH/A343	269	99.55%	100.00%	99.66%	100.00%	98.57%		
DLH/A346	204	97.01%	98.91%	97.45%	99.89%	96.11%		
DLH/A359	524	99.01%	99.44%	99.39%	99.81%	96.60%		
DLH/B789	270	99.30%	99.84%	99.67%	100.00%	95.56%		
EDW/A343	367	99.46%	100.00%	99.51%	100.00%	94.71%		
ELY/B772	1180	99.09%	99.36%	99.62%	99.44%	97.29%		
ELY/B789	332	98.98%	99.84%	99.35%	100.00%	96.94%		
ETD/A20N	196	96.62%	97.84%	97.13%	99.63%	90.42%		
ETD/A320	3140	97.44%	99.25%	98.22%	99.48%	91.24%		
ETD/A321	4613	97.31%	99.45%	98.19%	99.71%	90.53%		
ETD/A332	189	99.24%	99.65%	100.00%	99.88%	92.06%		
ETD/A333	213	97.10%	100.00%	99.16%	100.00%	89.20%		
ETD/B77L	586	98.69%	99.40%	99.52%	99.71%	97.27%		
ETD/B77W	1616	98.59%	98.76%	99.04%	99.23%	97.34%		
ETD/B789	5534	99.19%	99.26%	99.66%	99.77%	97.47%		

FIR			Mum	ıbai FIR				
Criteria			RO	CP240				
Period		Jan-Jun 2024						
		95% ben	chmark	99.9% Be	99.9% Benchmark			
Colour Key	Message	ACP	ACTP	ACP	ACTP	PORT		
Meets Criteria 99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs		
ETD/B78X	1669	99.39%	99.36%	99.73%	99.82%	97.66%		
ETH/A359	683	99.16%	99.79%	99.38%	99.94%	96.44%		
ETH/B77L	1972	99.30%	99.29%	99.57%	99.69%	98.07%		
ETH/B77W	704	97.93%	98.28%	98.67%	98.84%	96.59%		
ETH/B788	2418	98.92%	99.46%	99.24%	99.69%	97.27%		
ETH/B789	1195	98.08%	98.69%	98.53%	99.50%	96.07%		
EXV/A320	133	91.93%	97.77%	94.55%	98.53%	83.46%		
FDX/B77L	468	95.26%	96.07%	96.67%	97.92%	93.27%		
GEC/B77L	234	96.76%	98.72%	97.55%	99.69%	95.01%		
GFA/A21N	455	98.24%	99.49%	99.12%	100.00%	91.65%		
GFA/A321	1188	98.57%	99.70%	98.98%	99.89%	90.49%		
GFA/B789	359	97.83%	99.33%	98.45%	100.00%	96.32%		
GIA/A333	719	98.42%	99.78%	98.91%	99.86%	93.74%		
GIA/A343	154	93.60%	99.72%	95.45%	100.00%	82.47%		
GIA/B77W	2222	98.06%	98.15%	98.99%	99.46%	96.80%		
IGO/B77W	219	98.18%	97.83%	98.32%	98.93%	94.29%		
KAC/A20N	1092	97.07%	99.11%	98.24%	99.97%	91.85%		
KAC/A338	190	98.60%	99.67%	99.17%	99.86%	92.82%		
KAC/B77W	173	96.68%	95.95%	97.40%	99.17%	95.49%		
KLM/A333	188	98.25%	100.00%	99.49%	100.00%	95.53%		
KLM/B772	281	99.34%	99.30%	99.69%	99.67%	95.73%		
KLM/B789	219	99.70%	100.00%	99.81%	100.00%	96.35%		
KLM/B78X	127	99.34%	100.00%	99.41%	100.00%	98.03%		
KQA/B788	607	99.11%	99.42%	99.59%	99.92%	97.78%		
LNI/A333	813	99.02%	99.67%	99.19%	99.83%	94.71%		
LNI/A339	991	99.37%	99.97%	99.65%	100.00%	96.97%		
MAS/A332	934	98.72%	99.75%	99.35%	99.83%	97.54%		
MAS/A359	876	99.49%	99.93%	99.79%	100.00%	97.15%		
MAU/A332	1568	99.06%	99.68%	99.43%	99.77%	96.49%		
MAU/A339	152	99.04%	100.00%	99.53%	100.00%	95.18%		
MSR/A332	154	96.32%	100.00%	97.06%	100.00%	93.18%		
MSR/B789	196	98.68%	99.08%	99.06%	99.21%	97.14%		
OCN/A333	151	96.87%	98.09%	97.37%	99.85%	93.71%		

FIR			Mum	ıbai FIR		
Criteria			RO	CP240		
Period			Jan-J	Jun 2024		
		95% ben	chmark	99.9% Be	enchmark	95%
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs
OMA/A332	165	96.36%	100.00%	98.79%	100.00%	90.30%
OMA/B788	240	98.43%	99.86%	98.91%	100.00%	97.08%
OMA/B789	878	99.23%	99.56%	99.49%	99.96%	97.95%
PAL/A333	234	99.58%	99.80%	99.62%	99.93%	98.38%
QFA/A388	365	100.00%	100.00%	100.00%	100.00%	94.25%
QFA/B789	1015	99.75%	99.84%	99.97%	100.00%	97.54%
QTR/A332	900	98.01%	99.80%	98.40%	99.84%	90.22%
QTR/A333	2025	97.71%	99.58%	98.42%	99.74%	91.56%
QTR/A359	3326	99.44%	99.86%	99.66%	99.93%	96.57%
QTR/A35K	2831	99.01%	99.55%	99.35%	99.73%	95.73%
QTR/A388	1781	98.15%	98.79%	98.56%	99.45%	96.57%
QTR/B77L	2288	98.51%	98.95%	99.13%	99.61%	96.77%
QTR/B77W	9722	97.73%	97.92%	98.64%	98.94%	96.55%
QTR/B788	3004	99.13%	99.26%	99.64%	99.74%	97.57%
QTR/B789	1414	99.50%	99.36%	99.73%	99.85%	98.14%
RBA/B788	203	99.57%	98.81%	100.00%	100.00%	100.00%
SEY/A20N	475	93.89%	97.84%	96.06%	99.45%	88.53%
SIA/A359	919	99.29%	99.66%	99.59%	99.91%	97.69%
SVA/A333	3057	97.17%	99.54%	97.96%	99.80%	88.06%
SVA/B77L	365	98.92%	97.88%	99.01%	98.70%	96.54%
SVA/B77W	5366	98.53%	98.68%	99.09%	99.16%	96.59%
SVA/B789	1541	98.90%	98.62%	99.58%	99.62%	97.40%
SVA/B78X	1353	99.32%	99.45%	99.83%	99.74%	98.15%
THY/A332	437	98.77%	100.00%	99.31%	100.00%	93.94%
THY/A333	878	97.45%	99.48%	98.34%	99.85%	91.12%
THY/A359	616	99.32%	100.00%	99.62%	100.00%	97.40%
THY/B77W	938	98.52%	99.17%	98.97%	99.34%	95.95%
TOM/B788	197	99.44%	99.09%	99.62%	100.00%	99.30%
UAE/A388	10630	99.09%	99.52%	99.34%	99.87%	97.36%
UAE/B77L	1759	99.40%	99.56%	99.67%	99.66%	98.24%
UAE/B77W	19317	98.86%	99.32%	99.24%	99.71%	97.50%
UGD/A338	179	97.82%	98.93%	98.04%	99.15%	96.65%
VIR/B789	715	99.34%	99.74%	99.63%	100.00%	98.39%

FIR		Mumbai FIR					
Criteria		RCP240					
Period			Jan-J	Jun 2024			
		95% ben	chmark	99.9% Be	enchmark	95%	
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT	
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs	
VKG/A339	121	98.82%	97.78%	99.57%	98.63%	96.56%	
VTI/A20N	785	96.88%	99.30%	97.89%	99.73%	91.85%	
VTI/A21N	1595	97.66%	100.00%	97.93%	100.00%	92.66%	
XAX/A333	294	99.44%	99.64%	99.63%	99.89%	97.82%	

**Table 4F:** Mumbai FIR CPDLC Performance Latency per Aircraft Operator/Type – Jul-Dec 2024

FIR			Mun	nbai FIR			
Criteria		RCP240					
Period			Jul-l	Dec 2024			
		95% be	enchmark	99.9% B	enchmark	95%	
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT	
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs	
By Aircraft (	Operator /	Type (only	message cour	nts >100 recor	ded)		
ADY/A320	148	93.75%	98.21%	94.86%	98.33%	83.78%	
AFR/A332	184	98.98%	100.00%	99.30%	100.00%	95.76%	
AFR/B772	307	97.50%	98.53%	98.45%	99.31%	95.66%	
AFR/B77W	333	98.87%	98.20%	99.19%	100.00%	95.50%	
AIC/A21N	450	97.62%	100.00%	97.79%	100.00%	92.81%	
AIC/A359	123	96.63%	99.53%	97.77%	99.94%	84.55%	
AIC/B788	972	99.28%	99.56%	99.50%	99.76%	97.12%	
ALK/A20N	689	96.34%	99.02%	98.06%	99.17%	91.00%	
ALK/A21N	1068	97.33%	98.83%	98.33%	99.23%	92.42%	
ALK/A320	319	97.18%	99.13%	97.96%	99.38%	94.04%	
ALK/A332	692	97.69%	98.96%	98.63%	99.74%	93.50%	
ALK/A333	2134	98.86%	99.75%	99.30%	100.00%	95.36%	
ATC/B788	719	99.20%	99.13%	99.29%	99.33%	98.92%	
AUA/B772	285	98.76%	99.70%	99.23%	99.94%	96.20%	
BAW/A35K	451	99.39%	99.79%	99.69%	99.85%	98.46%	
BAW/B772	797	99.19%	99.32%	99.40%	99.82%	97.24%	
BAW/B77W	573	99.55%	99.97%	99.67%	100.00%	97.56%	
BBC/B773	934	98.43%	98.72%	98.78%	99.76%	95.72%	
BBC/B788	440	98.47%	98.32%	98.67%	99.32%	97.82%	

FIR			Mun	nbai FIR		
Criteria			RO	CP240		
Period			Jul-I	Dec 2024		
		95% be	95% benchmark 99.9% B		enchmark	95%
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs
BBC/B789	107	95.48%	98.46%	97.57%	100.00%	93.02%
BOX/B77L	540	97.93%	98.52%	98.58%	99.74%	96.23%
CAL/B77L	118	98.52%	99.19%	98.90%	99.68%	95.48%
CES/A332	404	99.27%	99.77%	99.40%	99.97%	96.29%
CES/A333	198	96.97%	98.20%	99.33%	99.16%	94.44%
CES/B789	133	98.97%	99.49%	99.25%	99.67%	98.05%
CFG/A339	394	99.28%	99.81%	99.42%	100.00%	98.34%
CHH/A332	105	100.00%	100.00%	100.00%	100.00%	92.38%
CHH/B789	336	99.64%	99.62%	99.79%	99.86%	98.21%
CPA/A359	161	99.14%	99.69%	99.35%	100.00%	98.16%
CPA/B77W	377	96.02%	97.46%	97.67%	99.09%	93.72%
CSC/A332	115	96.94%	96.99%	98.35%	97.78%	95.54%
CSC/A333	381	99.27%	99.29%	99.35%	99.52%	96.50%
CSN/B789	546	99.45%	99.17%	99.79%	99.38%	99.49%
CTV/A339	733	95.93%	98.43%	97.15%	99.06%	89.63%
DLH/A343	634	98.42%	99.40%	99.54%	99.76%	96.53%
DLH/A346	185	99.46%	100.00%	100.00%	100.00%	96.76%
DLH/A359	708	99.20%	99.50%	99.66%	99.63%	97.60%
DLH/B789	148	98.47%	99.35%	99.24%	99.56%	96.68%
EDW/A343	301	99.14%	99.41%	99.31%	99.60%	97.63%
ELY/B772	1539	99.24%	99.44%	99.49%	99.68%	97.92%
ELY/B789	265	99.16%	100.00%	99.30%	100.00%	97.61%
ETD/A20N	317	97.35%	99.47%	98.09%	100.00%	88.96%
ETD/A21N	789	93.97%	97.97%	95.06%	98.53%	87.33%
ETD/A320	2633	95.71%	98.82%	97.85%	99.42%	88.49%
ETD/A321	5720	95.89%	98.74%	97.47%	99.44%	90.02%
ETD/A388	116	99.67%	100.00%	100.00%	100.00%	93.10%
ETD/B77L	808	98.87%	99.50%	99.44%	99.89%	96.73%
ETD/B77W	1882	99.26%	98.94%	99.44%	99.31%	97.69%
ETD/B789	6443	99.19%	99.16%	99.52%	99.75%	97.63%
ETD/B78X	1648	99.26%	99.36%	99.84%	100.00%	97.69%
ETH/A359	784	98.71%	99.52%	98.88%	99.61%	97.05%
ETH/B77L	2037	98.48%	98.92%	98.83%	99.67%	96.76%

FIR			Mun	ıbai FIR		
Criteria			RO	CP240		
Period			Jul-I	Dec 2024		
		95% be	enchmark	99.9% Be	enchmark	95%
Colour Key  Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% < = 210sec	% <= 150sec	%<60secs
ETH/B77W	607	97.95%	98.74%	99.09%	99.34%	97.86%
ETH/B788	2435	98.60%	99.24%	99.15%	99.61%	96.71%
ETH/B789	1149	98.92%	99.75%	99.35%	99.79%	95.78%
FDX/B77L	587	97.56%	97.50%	98.94%	98.48%	94.89%
GEC/B77L	276	99.53%	99.79%	99.73%	100.00%	98.59%
GFA/A21N	786	97.94%	98.92%	98.81%	99.64%	95.23%
GFA/A321	1111	98.48%	99.81%	98.99%	100.00%	91.45%
GFA/B789	660	99.43%	99.55%	99.72%	99.96%	96.82%
GIA/A333	249	100.00%	100.00%	100.00%	100.00%	94.78%
GIA/A343	106	96.70%	100.00%	97.76%	100.00%	81.13%
GIA/B77W	3221	98.99%	98.91%	99.41%	99.51%	97.58%
IGO/B77W	396	97.73%	96.97%	98.18%	98.69%	96.46%
KAC/A20N	1293	96.44%	97.76%	97.64%	98.70%	92.34%
KAC/A338	524	97.79%	100.00%	98.63%	100.00%	91.41%
KAC/B77W	343	98.10%	99.55%	99.44%	100.00%	96.31%
KLM/A333	146	99.04%	99.45%	99.42%	99.58%	96.97%
KLM/B78X	221	99.58%	100.00%	99.64%	100.00%	97.74%
LNI/A333	1148	99.26%	99.76%	99.43%	99.90%	96.34%
LNI/A339	1332	99.25%	100.00%	99.52%	100.00%	95.50%
MAS/A332	1273	99.22%	99.76%	99.54%	99.93%	95.99%
MAS/A333	687	98.98%	100.00%	99.35%	100.00%	95.20%
MAS/A359	1255	99.29%	99.57%	99.38%	99.97%	96.97%
MAU/A332	1300	98.86%	99.67%	99.31%	99.98%	94.31%
MAU/A339	322	98.84%	100.00%	98.99%	100.00%	96.58%
MSR/A332	105	95.71%	100.00%	97.38%	100.00%	87.84%
MSR/B789	341	99.45%	99.07%	99.59%	99.88%	98.01%
MXD/A333	153	98.36%	99.50%	99.36%	99.90%	93.14%
NOS/B789	305	99.61%	99.53%	99.78%	100.00%	98.87%
OCN/A333	118	98.60%	100.00%	98.91%	100.00%	96.66%
OMA/B788	339	98.70%	98.74%	98.97%	99.49%	96.17%
OMA/B789	1093	99.57%	99.73%	99.63%	99.98%	97.29%
PAL/A333	418	98.86%	99.38%	99.06%	99.50%	96.75%
QFA/A388	154	99.48%	99.92%	99.57%	100.00%	95.56%

FIR			Mun	ıbai FIR			
Criteria			RO	CP240			
Period		Jul-Dec 2024					
		95% be	enchmark	99.9% Be	99.9% Benchmark		
Colour Key Meets Criteria	Message	ACP	ACTP	ACP	ACTP	PORT	
99.0%-99.84% Under Criteria	Counts	% <= 180sec	% <= 120sec	% <= 210sec	% <= 150sec	%<60secs	
QTR/A332	2009	98.06%	99.50%	98.82%	99.82%	91.29%	
QTR/A333	2489	98.03%	99.46%	98.58%	99.65%	91.92%	
QTR/A359	3738	99.17%	99.59%	99.56%	99.84%	97.16%	
QTR/A35K	2523	98.99%	99.64%	99.46%	99.90%	96.91%	
QTR/A388	2249	99.04%	99.57%	99.23%	99.88%	96.89%	
QTR/B77L	3572	97.84%	98.32%	98.54%	99.23%	96.08%	
QTR/B77W	11176	96.69%	97.19%	98.09%	98.35%	95.63%	
QTR/B788	2459	99.00%	99.06%	99.54%	99.58%	97.60%	
RJA/B788	149	100.00%	100.00%	100.00%	100.00%	100.00%	
SEY/A20N	415	97.61%	98.47%	98.38%	99.06%	91.81%	
SIA/A359	648	99.13%	99.66%	99.39%	100.00%	96.60%	
SVA/A333	2969	97.00%	99.81%	97.91%	99.96%	86.09%	
SVA/B772	274	97.81%	98.68%	99.00%	99.69%	93.19%	
SVA/B77L	684	98.54%	98.63%	99.05%	99.29%	96.82%	
SVA/B77W	6742	98.49%	98.71%	99.26%	99.19%	96.63%	
SVA/B789	1851	99.46%	98.90%	99.62%	99.68%	98.11%	
SVA/B78X	2003	99.18%	99.61%	99.61%	100.00%	97.20%	
SWR/B77W	435	99.69%	100.00%	99.81%	100.00%	98.94%	
THY/A332	782	99.58%	100.00%	99.77%	100.00%	95.52%	
THY/A333	1485	97.64%	99.09%	98.52%	99.39%	92.19%	
THY/A359	860	98.86%	99.63%	99.01%	99.97%	95.81%	
THY/B77L	204	98.14%	98.39%	98.33%	100.00%	97.68%	
THY/B77W	464	99.14%	99.19%	99.62%	99.57%	96.98%	
UAE/A388	13520	98.75%	99.35%	99.12%	99.78%	97.32%	
UAE/B77L	2738	98.81%	99.53%	99.21%	99.81%	97.70%	
UAE/B77W	22450	98.91%	99.44%	99.40%	99.80%	97.43%	
UGD/A338	286	97.20%	99.41%	98.34%	99.73%	94.17%	
VIR/A35K	127	99.95%	99.94%	100.00%	100.00%	94.14%	
VIR/B789	1445	99.46%	99.65%	99.59%	99.98%	98.06%	
VTI/A20N	745	96.82%	99.28%	97.68%	99.56%	92.75%	
VTI/A21N	1332	98.02%	99.81%	98.71%	99.87%	92.12%	
XAX/A333	474	98.33%	98.44%	98.97%	98.84%	95.92%	

- Table 4A–4F outlines overall RCP240 CPDLC performance per Aircraft Operator/Type for downlinks sent within the Chennai, Kolkata and Mumbai FIRs respectively during 2024. The RCP240 CPDLC performance by Operator/Type almost meet the 95% requirement except TGW/A21N (Chennai Jan-Jun), MAS/B738 (Kolkata Jan-Jun), ALK/A320, CPA/B77W, DHK/B77L, EXU/A320, GIA/A343, SEY/A20N (Mumbai Jan-Jun) but fail marginally under the 99.9% performance criteria for all three FIRs. RCP240 CPDLC PORT almost meets 95% criteria but a significant number fails to meet 95%. In Jan-Jun semester, AIZ/A21N fails to meet all criteria in Mumbai FIR. In Chennai FIR, AFR/B789, BLX/B788, BLX/B789, VTI/B789(Jan-Jun) and in Kolkata FIR, AFR/B77W, BOX/B77L, CEB/A339, KLM/B77W, MAS/A359, QTR/B77L, QTR/A388, TGW/B788 (Jan-Jun) satisfy 100% performance.
- 2.18 The aircraft captured with low performance could be due to connectivity(CSP/SSP) or transition between SATCOM and VHF and improper transfer of control from one FIR to another FIR via datalink.
- 2.19 The above issues will be taken up through CSP[SITA], State Regulator, Directorate of General Civil Aviation [DGCA] and CRA to rectify performance not meeting RCP240 criteria.
- 2.20 ANSP is closely monitoring the RCP240 CPDLC performance per aircraft Operator/Type for appropriate action to rectify poor performance.

### Additional Information

2.21 This report contains the datalink performance report for Mumbai which is in ANS deficiency list for non-submission of Datalink Performance Monitoring Report. FIT-Asia may consider to remove Mumbai from ANS deficiency list.

#### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the information contained in this paper; and
  - b) discuss any relevant matters as appropriate.

-END-