		Report for qua	rter ending: Sep	2019				Compliance S	Status		
	S1. No.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.93%		99.60	99.42%
		/Provisioning	95% success		2G		98.00				
			rate.		3G		98.00				
	2	Successful data	>80%	A11	Generations						
		transmission download			2G (GSM)	100.00	97.60	100.00			100.00
		attempts			3G	100.00	99.40	100.00			100.00
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%	A11	Generations						
		transmission upload			2G (GSM)	100.00	98.30	100.00			100.00
		attempts			3G	100.00	99.30	100.00			100.00
					4G	100.00		100.00		100.00	100.00
	4	Minimum download speed		CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI	2G	Plan 1	139.00	59.6 (Postpaid)	63.39			63.39
-				3G	Plan 1	1885.00	1405.2(Postpaid)	1527.88			1527.88
				4G	Plans	14760.00		6759.67		6074.57	6759.67
Ī	5	Average Throughput for	>75% of the	CDMA	Plan 1						
		Packet data (Kbps)	subscribed		Plan 2						
			speed.	2G	Plan 1	173.00	136(Postpaid)	176.67			176.67
				3G	Plan 1	2480.00	3161(Postpaid)	5148.33			5148.33
				4G	Plans	21638.00		9465.67		24122.46	9465.67
	6	Latency	Data <250ms	A11	Generations						
					2G (GSM)	132.00	188.20	92.11			92.11
					3G	78.00	57.20	31.19			31.19
					4G	50.00		33.28		54.48	33.28
	7	PDP Context Activation	≥95%	A11	Generations						
		Success Rate	[2G (GSM)	99.91	98.77	99.77			99.77
			Ī		3G	99.97	98.40	96.93			96.93
					4G	99.74		97.26		99.76	97.26
	8	Drop rate :	≤5%	A11	Generations						
					2G (GSM)	2.31	0.71	2.78			2.78
					3G	0.61	0.95	0.91			0.91
			[4G	0.23		0.96		0.42	0.96

		rter ending: Sep					Compliance			
S1. No.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.93%		99.50	99.88%
	/Provisioning	95% success		2G		100.00				
		rate.		3G		100.00				
2	Successful data	>80%	All	Generations						
	transmission download		2	2G (GSM)	100.00	98.30	100.00			100.00
	attempts			3G	100.00	98.60	100.00			100.00
				4G	100.00		100.00		100.00	100.00
3	Successful data	>75%		Generations						
	transmission upload		2	2G (GSM)	100.00	98.30	100.00			100.00
	attempts			3G	100.00	98.60	100.00			100.00
			<u></u>	4G	100.00		100.00		100.00	100.00
4		To be measured	CDMA	Plan 1						
		for each Plan and		Plan 2						
		Reported to TRAI		Plan 3						
			2G	Plan 1	124.00					
				Postpaid Data Plan		83	142.33			142.33
				50			142.00			142.00
				Postpaid Data Plan		83				
				75						
				Postpaid Data Plan		83				
				170						
				Postpaid Data Plan		83				
				225						
				Postpaid Data Plan		83				
				240		00				
				Postpaid Data Plan		83				
				290		00				
				Postpaid Data Plan		83				
				340		00				
				Postpaid Data Plan 501		83				
				Postpaid Data Plan		83				
				549		00				
				Postpaid Data Plan		83				
				666						
				Postpaid Data Plan		83				
				901						
				Postpaid Data Plan		83				
				1711						
				Prepaid Data		83				
				Special Tariff						
	Minimum download speed			Voucher-4						
	(Kbps)			Prepaid Data		83				
				Special Tariff						
				Voucher-7						

	Report for qua	arter ending: Sep	2019			ality of Service of	Compliance S			
S1.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafon
No.										
				Prepaid Data		83				
				Special Tariff						
				Voucher-16						
				Prepaid Data		83				
				Special Tariff						
				Voucher-17						
				Prepaid Data		83				
				Special Tariff						
				Voucher-56						
				Prepaid Data		83				
				Special Tariff						
				Voucher-109						
				Prepaid Data		83				
				Special Tariff						
				Voucher-198						
				Prepaid Data		83				
				Special Tariff						
				Voucher-597						
				Prepaid Data		83				
				Special Tariff						
				Voucher-1098						
				Prepaid Data		83				
				Special Tariff						
				Voucher-1197						
				Prepaid Data		83				
				Special Tariff						
				Voucher-1498						
			3G	Plan 1	1257.00		2069.00			2069.00
				Postpaid Data Plan		1247				
				Postpaid Data Plan		1247				
				75						
				Postpaid Data Plan		1247				
				170						
				Postpaid Data Plan		1247				
				225						
				Postpaid Data Plan		1247				
				240						
				Postpaid Data Plan		1247				
				290						
				Postpaid Data Plan		1247				
				340						
				Postpaid Data Plan		1247				
				501						
				Postpaid Data Plan		1247				
				549		16:-				
				Postpaid Data Plan		1247				
	all operators except CDMA	<u> </u>		666						

		rter ending: Sep				•	e of Wireless Data Compliance S			
S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafon
				Postpaid Data Plan		1247				
				901						
				Postpaid Data Plan		1247				
				1711						
				Prepaid Data		1247				
				Special Tariff						
				Voucher-4		1017				
	Minimum download speed			Prepaid Data		1247				
	(Kbps)			Special Tariff						
				Voucher-7		1247				
				Prepaid Data		1247				
				Special Tariff Voucher-16						
				Prepaid Data		1247				
				Special Tariff		1241				
				Voucher-17						
				Prepaid Data		1247				
				Special Tariff		1247				
				Voucher-56						
				Prepaid Data		1247				
				Special Tariff						
				Voucher-109						
				Prepaid Data		1247				
				Special Tariff						
				Voucher-198						
				Prepaid Data		1247				
				Special Tariff						
				Voucher-597						
				Prepaid Data		1247				
				Special Tariff						
				Voucher-1098						
				Prepaid Data		1247				
I				Special Tariff						
I				Voucher-1197						
				Prepaid Data		1247				
				Special Tariff						
I			4~	Voucher-1498	10462.00				6117.00	
1			4G	Plans	10423.00		6287.33		6115.38	6287.33

			rter ending: Sep		J	(2 2.22) 022 60	ality of Service o	Compliance			
	S1.	Parameters	Benchmarks		enerations enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	No.	rarameters	Denchmarks	"	enerations	Airtei	BSNL	Iuea	MIINL	Remaince 510	vouaione
n a	5	Average Throughput for	>75% of the	CDMA	Plan 1						
Assan		Packet data (Kbps)	subscribed	2G	Plan 1	202.00		171.04			171.04
4			speed.		Postpaid Data Plan		147.00				
					50						
					Postpaid Data Plan		147.00				
					75						
					Postpaid Data Plan		147.00				
					170		4.45.00				
					Postpaid Data Plan		147.00				
					225		147.00				
					Postpaid Data Plan		147.00				
					240 Postpaid Data Plan		147.00				
					290		117.00				
					Postpaid Data Plan		147.00				
					340						
					Postpaid Data Plan		147.00				
					501						
					Postpaid Data Plan		147.00				
					549						
					Postpaid Data Plan		147.00				
					666						
					Postpaid Data Plan		147.00				
					901		147.00				
					Postpaid Data Plan		147.00				
					1711 Prepaid Data		147.00				
					Special Tariff		117.00				
					Voucher-4						
					Prepaid Data		147.00				
					Special Tariff						
					Voucher-7						
					Prepaid Data		147.00				
				1	Special Tariff						
				1	Voucher-16						
					Prepaid Data		147.00				
					Special Tariff						
					Voucher-17		147.00				
				1	Prepaid Data		147.00				
				1	Special Tariff						
				1	Voucher-56 Prepaid Data		147.00				
					Special Tariff		117.00				
					Voucher-109						
				1	Prepaid Data		147.00				
				1	Special Tariff						
		fall operators except CDIVIA o]							

			ance Monitoring Report	t (PMR) on Qu	ality of Service o				
S1.	Parameters	Benchmarks	Generations	Airtel	BSNL	Compliance S	MTNL	Reliance JIO	Vodafone
No.	Parameters	benchmarks	Generations	Airtei	BSNL	idea	MIINL	Reliance 310	vocaione
			Prepaid Data		147.00				
			Special Tariff						
			Voucher-597						
			Prepaid Data		147.00				
			Special Tariff						
			Voucher-1098						
			Prepaid Data		147.00				
			Special Tariff						
			Voucher-1197		4.45.00				
			Prepaid Data		147.00				
			Special Tariff						
			Voucher-1498 3G Plan 1	3401.00		2052.00			0050.00
					2883.00	3359.39			3359.39
			Postpaid Data Plan 50		2003.00				
			Postpaid Data Plan		2883.00				
			75						
			Postpaid Data Plan		2883.00				
			170						
			Postpaid Data Plan		2883.00				
			225						
			Postpaid Data Plan		2883.00				
			240						
			Postpaid Data Plan		2883.00				
			290		2002.00				
			Postpaid Data Plan		2883.00				
			340		2883.00				
			Postpaid Data Plan		2003.00				
			501 Postpaid Data Plan		2883.00				
			549		2003.00				
			Postpaid Data Plan		2883.00				
			666		2000.00				
			Postpaid Data Plan		2883.00				
			901						
			Postpaid Data Plan		2883.00				
			1711						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-4						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-7						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-16						

	Report for qua	rter ending: Sep	2019			Compliance	Status		
S1. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafor
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-17						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-56		2002.00				
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-109		2883.00				
			Prepaid Data Special Tariff		2003.00				
			Voucher-198						
			Prepaid Data		2883.00				
			Special Tariff		2000.00				
			Voucher-597						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-1098						
			Prepaid Data		2883.00				
			Special Tariff						
			Voucher-1197						
			Prepaid Data		2883.00				
			Special Tariff						
		_	Voucher-1498						
			4G Plans	25915.00		8183.67		27834.26	8183.67
6	Latency	Data <250ms	All Generations	105.00	271 72				
		_	2G (GSM)	196.00	251.70	200.00			200.00
		-	3G CDMA	153.00	161.10	202.67			202.67
		-	4G	51.00		40.67		39.93	40.07
7	PDP Context Activation	≥95%	All Generations	51.00		40.67		39.93	40.67
,	Success Rate	29370	2G (GSM)	99.79	98.30	99.62			99.62
			3G	98.58	98.10	97.78			97.78
			CDMA	30.00	30.10	31.10			31.10
			4G	98.51		99.93		99.85	99.93
8	Drop rate :	≤5%	All Generations						22.00
			2G (GSM)	3.28		2.78			2.78
			3G	1.08	1.30	0.46			0.46
			4G	0.83		0.65		0.43	0.65

		rter ending: Sep					Compliance		1	
S1. No.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with	A11	Generations	100.00		100.00		99.70	99.50%
	/Provisioning	95% success		2G		100.00				
		rate.		3G		100.00				
2	Successful data	>80%	All	Generations						
	transmission download		-	2G (GSM)	99.25	100.00	100.00			100.
	attempts			3G	99.82	100.00	100.00			100
				4G	99.82		100.00		100.00	100
3	Successful data	>75%		Generations						
	transmission upload attempts	_		2G (GSM)	99.44	100.00	100.00			100.
	attempts	_		3G	99.74	100.00	100.00			100
				4G	99.82		100.00		100.00	100
4	Minimum download speed	To be measured for each Plan and	CDMA	Plan 1						
	(Kbps)	Reported to TRAI		Plan 2						
		reported to 11d ii	00	Plan 3	26.00	(2 F(00 Pastural)	07.07			07.07
			2G	Plan 1 Plan 2	36.00	63.5(2G Postpaid) 63.5(Prepaid 2G Data)	97.67			97.67
		-	3G	Plan 1	1474.00	804.6 (3G Postpaid Data Plans)	2584.67			2584.67
				Plan 2		804.6(3G Prepaid Data Plan)				
				Plan 3						
			4G	Plans	7753.00		3465.00		5510.77	3465.00
5	Average Throughput for	>75% of the	CDMA	Plan 1						
	Packet data (Kbps)	subscribed		Plan 2						
		speed.		Plan 3						
			2G	Plan 1 (2G Postpaid Data Plans)	142.00	116.30	185.67			185.67
				Plan 2 (Prepaid 2G Data)		116.30				
			3G	Plan 1 (3G Postpaid Data Plans)	3074.00	1905.00	3279.67			3279.67
				Plan 2 (3G Prepaid Data Plans)		1905.00				
				Plan 3						
			4G	Plans	10734.00		6265.67		23701.87	6265.67
6	Latency	Data <250ms		Generations						
		<u> </u>		2G (GSM)	148.00	206.90	226.00			226.00
		<u> </u>		3G	94.00	100.10	94.00		F0.00	94.00
	DDD Combook A. C. C.	>050/	A 11	4G	46.00		73.67		52.08	73.67
7	PDP Context Activation Success Rate	≥95%		Generations	00.70	00.00	00.71			00.71
	Success Rate		-	2G (GSM) 3G	98.78	98.00	99.51			99.51
	1	1		3G	100.00	96.90	97.54			97.54

	Qua	arterly Perform	ance Monitoring Report	t (PMR) on Qu	ality of Service of	Wireless Data	Services		
	Report for qua	rter ending: Sep	2019			Compliance St	atus		
S1.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
No.									
8	Drop rate :	≤5%	All Generations						
			2G (GSM)	3.82		2.81			2.81
			3G	0.30	0.88	2.69			2.69
			4G	0.11		0.36		0.53	0.36

		rter ending: Sep					Compliance			
S1. No.		Benchmarks	Ge	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with	All (Generations		100.00				
	/Provisioning	95% success		3G						
2	Successful data	>80%	All (Generations						
	transmission download		2	2G (GSM)		98.05				
	attempts			3G		99.10				
				CDMA						
				4G						
3	Successful data	>75%	A11 (Generations						
	transmission upload		2	2G (GSM)		97.93				
	attempts			3G		98.90				
				CDMA						
				4G						
4	Minimum download speed	To be measured	CDMA	Plan 1						
	(Kbps)	for each Plan and		Plan 2						
		Reported to TRAI		Plan 3						
		-	2G	Plan 1		42.00				
		-	3G	Plan 1						
			0.4	Plan 2		488.00				
				Plan 3		100100				
		-	4G	Plans						
5	Average Throughput for	>75% of the	CDMA	Plan 1						
ľ	Packet data (Kbps)	subscribed	021111	Plan 2						
		speed.		Plan 3						
		-	2G	Plan 1		101.00				
			3G	Plan 1		101.00				
			oa	Plan 2		3226.00				
				Plan 3		3220.00				
		-	4G	Plans						
6	Latency	Data <250ms		Generations						
	Latericy	Data \2001118		2G (GSM)		221.00				
				3G		29.00				
		-		CDMA		29.00				
		-		4G						
7	PDP Context Activation	≥95%	Δ11.	Generations						
1 ′	Success Rate	29370		2G (GSM)		97.64				
	Successo Rate			3G		99.11				
				CDMA		99.11				
				4G						
8	Dron rata :	≤5%	Λ 11 .	Generations						
ŏ	Drop rate :	≥3%		Generations 2G (GSM)		3.23				
			2	3G		1.94				
				CDMA		1.94				
				4G						

			rter ending: Sep					of Wireless Data Compliance			
	S1.	Parameters Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	No.										
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		98.13%	96.32	99.70	98.33%
		/Provisioning	95% success		3G						
	2	Successful data	>80%	A11	Generations						
		transmission download			2G (GSM)	99.91		100.00	95.77		100.00
		attempts			3G	99.94		100.00	98.48		100.00
					CDMA						
					4G	100.00				100.00	100.00
	3	Successful data	>75%	A11	Generations						
		transmission upload			2G (GSM)	99.81		100.00	90.49		100.00
		attempts			3G	99.91		100.00	98.52		99.91
					CDMA						
					4G	100.00				100.00	100.00
Ī	4	Minimum download speed	To be measured	CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI		Plan 3						
				2G	Plan 1	66.00		52.67	90.51		98.67
				3G	Plan 1	246.00		1478.33	674.48		1410.67
					Plan 2						
					Plan 3						
				4G	Plans	6302.00				7962.54	5339.33
_	5	Average Throughput for	>75% of the	CDMA	Plan 1						
Delhi		Packet data (Kbps)	subscribed		Plan 2						
Ă			speed.		Plan 3						
				2G	Plan 1	93.00		233.00	187.23		183.70
			-	3G	Plan 1	1496.00		5731.33	3764.00		4353.33
					Plan 2						
					Plan 3						
				4G	Plans	12965.00				26213.24	13309.00
-	6	Latency	Data <250ms		Generations				123.00		
					2G (GSM)	229.00		134.67			184.33
					3G	82.00		56.00			105.00
			-		CDMA			30.00			
					4G	82.00				38.25	41.33
	7	PDP Context Activation	≥95%	A11	Generations				99.90		
		Success Rate			2G (GSM)	99.83		99.77			99.61
					3G	100.00		99.40			97.02
					CDMA	, , , , ,		00.10			37.02
					4G	97.30				99.79	99.49
	8	Drop rate :	≤5%	A11	Generations	27.00			2.18		30.10
	_		_==,0		2G (GSM)	3.43		0.24	2.10		1.87
					3G	0.44		0.61			0.50
					CDMA	3.11		0.01			0.00
					4G	0.83				0.44	0.22

		arterly Perform rter ending: Sep		nitoring Repo	ort (PMR) on Qu	ality of Service o				
S1.		Benchmarks		enerations	Airtel	BSNL	Compliance Idea	MTNL	Reliance JIO	Vodafone
No.		Deliciliiai ks	G.	enerations	Alitei	BSRL	luea	MIND	Renance 010	Vouarone
1	Service Activation	Within 4 hrs with	A11	Generations	100.00	98.00	99.90%		99.60	99.22%
	/Provisioning	95% success	-	2G (GSM)						
2	Successful data	>80%	All	Generations		99.00				
	transmission download		-	2G (GSM)	100.00		99.92			100.00
	attempts			3G	100.00		100.00			100.00
				CDMA						
				4G	100.00		99.92		100.00	100.00
3	Successful data	>75%	All	Generations		99.00				
	transmission upload		-	2G (GSM)	100.00		100.00			100.00
	attempts			3G	100.00		100.00			100.00
				CDMA						
				4G	100.00		100.00		100.00	100.00
4	Minimum download speed	To be measured	CDMA	Plan 1						
	(Kbps)	for each Plan and		Plan 2						
		Reported to TRAI		Plan 3						
			2G	Plan 1	88.00		119.91			104.41
			3G	Plan 1	1345.00	1563 (kbps)	2024.34			3561.01
				Plan 2						
				Plan 3						
			4G	Plans	7426.00		7844.08		11622.74	10341.72
5	Average Throughput for	>75% of the	CDMA	Plan 1						
	Packet data (Kbps)	subscribed		Plan 2						
5		speed.		Plan 3						
			2G	Plan 1	134.00		186.35			180.95
			3G	Plan 1	2822.00	4830 (kbps)	4905.63			6077.89
				Plan 2						
				Plan 3						
			4G	Plans	11784.00		14079.64		30509.02	19549.57
6	Latency	Data <250ms	All	Generations		85 (ms)				
			2	2G (GSM)	237.00		130.65			126.00
				3G	49.00		49.96			66.50
				CDMA						
				4G	32.00		47.25		39.55	33.83
7	PDP Context Activation	≥95%	All	Generations		99.80				
	Success Rate		-	2G (GSM)	99.99		98.34			99.39
				3G	99.92		98.38			99.06
				CDMA						
				4G	99.83		99.91		99.85	99.97
8	Drop rate :	≤5%	All	Generations		1.08				
			-	2G (GSM)	4.94		0.46			4.63
				3G	0.22		0.58			0.52
				CDMA						
				4G	0.11		1.01		0.40	0.22

		rter ending: Sep				lity of Service o	Compliance				
S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone	
1	Service Activation	Within 4 hrs with	All	Generations	100.00	100.00	99.97%		99.60	99.33%	
	/Provisioning	95% success		2G (GSM)							
		rate.		3G							
				CDMA							
2	Successful data	>80%	All	Generations		93.00					
	transmission download			2G (GSM)	100.00		100.00			100.00	
	attempts			3G	100.00		100.00			100.00	
				4G	100.00		100.00		100.00	100.00	
3	Successful data	>75%		Generations		93.00					
	transmission upload			2G (GSM)	100.00		100.00			100.00	
	attempts			3G	100.00		100.00			100.00	
				4G	100.00		100.00		100.00	100.00	
4	Minimum download speed		CDMA	Plan 1							
	(Kbps) Average Throughput for	for each Plan and		Plan 2							
		Reported to TRAI	2G	Plan 1	80.00	79.00	78.37			78.37	
			3G	Plan 1	1410.00	906.00	2880.83			2880.83	
					Plan 2						
				_		Plan 3					
			4G	Plans	1116.00		4496.88		9047.66	4496.88	
5		>75% of the	CDMA	Plan 1							
	Packet data (Kbps)	subscribed		Plan 2							
		speed.	2G	Plan 1	126.00	112.00	199.81			199.81	
			3G	Plan 1	3502.00	1635.00	5007.12			5007.12	
				Plan 2							
				Plan 3							
			4G	Plans	3687.00		14657.67		30516.55	14657.67	
6	Latency	Data <250ms		Generations		88.00					
		_		2G (GSM)	234.00		211.67			211.67	
				3G	167.00		124.67			124.67	
<u> </u>		0.504	,	4G	70.00	22.22	108.00		34.27	108.00	
7	PDP Context Activation	≥95%		Generations	00.50	99.00					
	Success Rate			2G (GSM)	99.79		98.60			98.60	
				3G	100.00		98.57		00.07	98.57	
	Dura ii	ZE0/	A 11	4G	98.53	1.00	99.90		99.85	99.90	
8	Drop rate :	≤5%		Generations	1.00	1.80					
				2G (GSM)	1.93		4.19			4.19	
				3G 4G	0.43		0.67		0.41	0.67	

			rter ending: Sep			, , , ,	ality of Service o	Compliance S			
9	S1.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	lo.	Tarameters	Denominar RS	u.	cherutions	, mee	20112	Idea	MIND	Remarke 010	Vouaione
	1	Service Activation	Within 4 hrs with		Generations	100.00	98.33	99.96%		99.50	99.68%
		/Provisioning	95% success		2G (GSM)						
	2	Successful data	>80%		Generations		88.33				
		transmission download attempts	_		2G (GSM)	100.00		100.00			100.00
		attempts	_		3G	100.00		100.00			100.00
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%	Al1	Generations		88.33				
		transmission upload			2G (GSM)	100.00		100.00			100.00
		attempts	_		3G	100.00		100.00			100.00
					4G	100.00		100.00		100.00	100.00
		Minimum download speed		CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI	2G	Plan 1	144.00	76.33	116.36			116.36
				3G	Plan 1	1085.00	1737.00	2253.33			2253.33
					Plan 2						
					Plan 3						
				4G	Plans	2119.00		4219.33		15799.49	4219.33
	5		>75% of the	CDMA	Plan 1			.210.00			.2.0.00
		Packet data (Kbps)	subscribed		Plan 2						
			speed.		Plan 3						
			-	2G	Plan 1	163.00	116.33	161.04			161.04
			-	3G	Plan 1	1990.00	1812.00	4667.16			4667.16
					Plan 2			1007.10			1007.10
					Plan 3						
			-	4G	Plans	13896.00		10561.75		32491.09	10561.75
	6	Latency	Data <250ms		Generations	10050100	113.67	10001.70		02191109	10001.70
	Ŭ	<u> </u>	Batta 200mo		2G (GSM)	226.00	110.0.	127.67			127.67
			-		3G	119.00		42.17			42.17
			-		4G	82.00		54.47		42.48	54.47
	7	PDP Context Activation	≥95%	A11	Generations	02.00	96.82	04.47		12.10	U-1.41
		Success Rate			2G (GSM)	99.90	33.02	99.86			99.86
					3G	100.00		99.09			99.09
					4G	98.69		99.89		98.63	99.89
	8	Drop rate :	≤5%	A11	Generations	50.05	3.29	99.09		50.00	99.09
		- F	- 7 -		2G (GSM)	1.15		4.70			4.70
					3G	0.03		1.34			1.34
					4G	0.09		0.69		0.35	0.69

		Report for qua	rter ending: Sep	2019				Compliance	Status			
	S1. No.	Parameters	Benchmarks	Ge	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone	
	1	Service Activation	Within 4 hrs with	All	Generations	100.00	99.07	99.82		99.50	99.6	
		/Provisioning	95% success		3G							
	2	Successful data transmission download	>80%		Generations		96.00					
		attempts			2G (GSM)	100.00						
		attempts			3G	100.00						
					4G	100.00				100.00		
	3	Successful data	>75%		Generations		87.00					
		transmission upload		2	2G (GSM)	100.00						
		attempts			3G	100.00						
					4G	100.00				100.00		
	4	Minimum download speed		CDMA	Plan 1							
ıir		\ <u>1</u> /	for each Plan and Reported to TRAI	2G	Plan 1	214.00	41.00					
hn h			Reported to TRAI	Reported to TRAI	Reported to TRAI	3G	Plan 1	2500.00	1312.00			
Kas				4G	Plans	13312.00				9523.67		
ם ו	5	Average Throughput for	>75% of the	CDMA	Plan 1							
Jammu and Kashmir		Packet data (Kbps)	subscribed	2G	Plan 1	148.00	81.00					
nu			speed.	3G	Plan 1	2300.00	2658.00					
				4G	Plans	18412.00				27134.94		
ا	6	Latency	Data <250ms		Generations		183.00					
				2	2G (GSM)	210.00						
					3G	99.00						
					4G	61.00				38.33		
	7	PDP Context Activation	≥95%		Generations		99.00					
		Success Rate		2	2G (GSM)	100.00						
					3G	100.00						
					4G	100.00				99.95		
	8	Drop rate :	≤5%	All	Generations		2.00					
				- 2	2G (GSM)	2.40						
					3G	0.50						
					4G	0.90				0.37		

· <u> </u>		Report for qua	rter ending: Sep	2019				Compliance	Status		
-	61. io.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	All	Generations	100.00	95.00	99.94%		99.70	99.79%
		/Provisioning	95% success		3G						
2	2	Successful data transmission download	>80%		Generations	100.00	96.00				
		attempts	-	-	2G (GSM) 3G	100.00		99.79			100.00
		attompto	-		CDMA			99.88			100.00
			-		4G	100.00				100.00	100.00
	3	Successful data	>75%	Δ11	Generations	100.00	95.00			100.00	100.00
,	3	transmission upload	/13/0		2G (GSM)	100.00	93.00	99.39			100.00
		attempts	-	•	3G	100.00		99.67			100.00
			-		CDMA			99.07			100.00
			-		4G	100.00				100.00	100.00
	4 1	Minimum download speed	To be measured	CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI	2G	Plan 1	171.00	65.00	117.33			167.92
					Plan 2						
		Average Throughput for		3G	Plan 1		925.00	2346.67			3472.00
					Plan 2						
					Plan 3						
,			-	4G	Plans	14589.00				16468.48	12964.67
Ę	5	Average Throughput for Packet data (Kbps)	>75% of the	CDMA	Plan 1						
		Packet data (Kbps)	subscribed		Plan 2						
i			speed.	2G	Plan 1	181.00	93.30	159.00			212.33
				3G	Plan 1		2066.60	4373.33			8187.00
					Plan 2						
			-		Plan 3						
	_		5	4G	Plans	34501.00	100.00			37124.62	22883.67
(6	Latency	Data <250ms		Generations	100.00	103.30				
			-	-	2G (GSM) 3G	102.00		220.33			158.67
			-		CDMA			101.33			48.67
			-		4G	32.00				37.75	44.00
-	7	PDP Context Activation	≥95%	Δ11	Generations	34.00				31.13	44.00
1	'	Success Rate	293/0		2G (GSM)	100.00	99.83	98.66			99.64
					3G	100.00	99.80	99.78			98.13
					CDMA		33.00	00.10			50.10
					4G	99.86				99.86	99.98
8	8	Drop rate :	≤5%	A11	Generations						30.00
		•			2G (GSM)	2.72		1.04			4.23
					3G			0.04			0.64
					CDMA						
					4G	0.07				0.27	0.16

		Qu	arterly Perform	ance Mo	nitoring Repo	rt (PMR) on Qua	ality of Service o	of Wireless Data	Services		
		Report for qua	rter ending: Sep	2019				Compliance	Status		
	S1. No.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	A11	Generations	100.00		99.95%		99.50	99.98%
		/Provisioning	95% success		2G (GSM)			0000070			
	2	Successful data	>80%		Generations		98.07				
		transmission download	-		2G (GSM)	100.00		100.00			100.00
		attempts	=		3G	100.00		100.00			100.00
			=		CDMA						
			=		4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%	A11	Generations		97.39				
		transmission upload	-		2G (GSM)	100.00		100.00			100.00
		attempts	=		3G	100.00		100.00			100.00
			=		CDMA						
			=		4G	100.00		100.00		100.00	100.00
	4	Minimum download speed	To be measured	CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI		Plan 3						
			=	2G	Plan 1	59.00	50.53	150.11			154.21
			=	3G	Plan 1	1085.00	814.98	1921.48			1913.36
					Plan 2						
					Plan 3						
			-	4G	Plans	4645.00	1494.90	3371.40		8088.14	3260.56
æ	5	Average Throughput for	>75% of the	CDMA	Plan 1						
Kerala		Packet data (Kbps)	subscribed		Plan 2						
Ke			speed.		Plan 3						
			-	2G	Plan 1	125.00	87.94	181.70			182.74
			-	3G	Plan 1	2347.00	1933.14	4079.83			4069.76
					Plan 2			10.000			
					Plan 3						
			-	4G	Plans	14947.00	6174.74	11014.37		25393.85	10759.03
	6	Latency	Data <250ms		Generations		124.00				
					2G (GSM)	230.00		58.00			58.83
					3G	112.00		28.00			27.67
					CDMA			20.00			
					4G	76.00		18.00		39.42	17.83
	7	PDP Context Activation	≥95%	A11	Generations	3.00	98.44	70.00			
	1	Success Rate			2G (GSM)	99.53		97.24			98.35
					3G	99.98		96.27			72.98
					CDMA			30.27			. 2.00
					4G	99.42		97.08		99.82	100.00
	8	Drop rate :	≤5%	A11	Generations		0.56	300			
	ľ				2G (GSM)	2.99	2.00	3.01			4.01
					3G	0.22		1.53			1.25
					CDMA	0.144		1.00			1.20
	I				4G	0.01		0.74		0.51	0.14

					nitoring Repo	ort (PMR) on Qu	ality of Service o				
	S1.	Parameters	rter ending: Sep Benchmarks		enerations	Airtel	BSNL	Compliance Idea	MTNL	Reliance JIO	Vodafone
	No.	Parameters	benchmarks	G	enerations	Airtei	DSNL	Idea	MINL	Renance 310	vodaione
	1	Service Activation	Within 4 hrs with	All	Generations	100.00	100.00	98.64%		99.40	98.86%
		/Provisioning	95% success		2G (GSM)						
	2	Successful data	>80%	All	Generations						
		transmission download			2G (GSM)	100.00	100.00	100.00			100.00
		attempts			3G	100.00	100.00				100.00
					CDMA						
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%	Al1	Generations						
		transmission upload			2G (GSM)	100.00	96.67	100.00			100.00
		attempts			3G	100.00	100.00				100.00
					CDMA						
					4G	100.00		100.00		100.00	100.00
	4	Minimum download speed	To be measured	CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI		Plan 3						
				2G	Plan 1	92.00	130.93	128.67			157.30
				3G	Plan 1	1696.00	2188.33	120.07			8385.69
					Plan 2						
		Average Throughput for			Plan 3						
				4G	Plans	5831.00		4711.34		6166.69	15752.26
æ	5		>75% of the	CDMA	Plan 1			1111.01		0.0000	10702.20
Karnataka		Average Throughput for Packet data (Kbps)	subscribed	021	Plan 2						
nat			speed.		Plan 3						
Хаг				2G	Plan 1	188.00	203.59	209.33			193.32
F				3G	Plan 1	3648.00	4549.36	200.00			11892.22
				0.0	Plan 2	00.0.00	1015100				11002.22
					Plan 3						
				4G	Plans	15885.00		14123.76		23143.76	21575.13
	6	Latency	Data <250ms		Generations	10000.00	128.02	14123.70		20110.70	21070.10
	Ü	Datelley	Bata 200ms		2G (GSM)	205.00	120.02	223.33			109.90
			-		3G	71.00		220.00			26.12
			-		CDMA	71.00					20.12
					4G	16.00		60.00		52.32	43.87
	7	PDP Context Activation	≥95%	Д11	Generations	10.00	98.10	00.00		02.02	43.01
	′	Success Rate	2,070		2G (GSM)	99.40	50.10	96.39			92.85
				•	3G	99.40		30.39			82.69
					CDMA	99.91					02.09
					4G	99.67		00.17		99.60	00.50
	8	Drop rate :	≤5%	Λ 11	Generations	99.07	0.67	99.17		99.00	98.59
	°	Drop rate :	≥370			2.61	0.07	0.00			0.50
					2G (GSM)	3.61		2.28			2.58
					3G	0.24					0.41
					CDMA	0.15				52.32 99.60 0.56	
					4G	0.17		0.14		0.56	0.13

		rter ending: Sep				ality of Service o	Compliance			
S1.	. Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
110	•									
1		Within 4 hrs with		Generations	100.00	99.19	99.91%		99.50	99.04%
	/Provisioning	95% success		2G (GSM)						
2		>80%		Generations		97.60				
	transmission download attempts	-		2G (GSM)	100.00		99.91			100.00
	attempts	-		3G	100.00		100.00			100.00
				4G	100.00		91.83		100.00	100.00
3		>75%		Generations		96.32				
	transmission upload	_	2	2G (GSM)	100.00		100.00			100.00
	attempts	_		3G	100.00		100.00			100.00
				4G	100.00		99.83		100.00	100.00
4			CDMA	Plan 1						
	(Kbps)	for each Plan and		Plan 2						
		Reported to TRAI	2G	Plan 1	86.00	103.00	126.88			170.64
			3G	Plan 1	1567.00	4034.00	4843.43			3713.26
				Plan 2						
				Plan 3						
			4G	Plans	13161.00		7564.29		8911.38	11055.14
5	I	>75% of the	CDMA	Plan 1						
	Packet data (Kbps)	subscribed		Plan 2						
		speed.		Plan 3						
			2G	Plan 1	162.00	120.00	184.03			214.44
				Plan 2						
				Plan 3						
			3G	Plan 1	2755.00	4107.00	7179.92			7128.54
				Plan 2						
				Plan 3						
			4G	Plans	18818.00		14202.35		26726.20	15748.90
6	Latency	Data <250ms	All	Generations		117.00				
			2	2G (GSM)	234.00		167.00			220.67
				3G	63.00		132.00			78.67
				4G	49.00		36.00		61.42	47.33
7	PDP Context Activation	≥95%	All	Generations		97.33				
	Success Rate		2	2G (GSM)	100.00		100.00			99.86
				3G	100.00		99.85			99.51
				4G	100.00		97.33		99.75	99.92
8	Drop rate :	≤5%	All	Generations		2.02				
	_		2	2G (GSM)	0.00		2.19			3.26
				3G	0.00		1.25			0.79
				4G	0.00		0.52		0.57	0.27

	Report for qua	rter ending: Sep	2019	<u> </u>			Compliance	Status		
S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with	All Genera	tions	100.00		99.91%		99.60	99.92%
	/Provisioning	95% success		2G		97.98				
		rate.		3G		98.05				
2	Successful data	>80%	All Genera	itions						
	transmission download		2	2G (GSM)	100.00	100.00	99.87			99.87
	attempts			3G	100.00	100.00	100.00			100.00
				4G	100.00		99.86		100.00	99.86
3	Successful data	>75%	All Genera	tions						
	transmission upload		2G (GSM)		100.00	100.00	100.00			100.00
	attempts		3G		100.00	100.00	100.00			100.00
			4G		100.00		100.00		100.00	100.00
4	Minimum download speed		CDMA	Plan 1						
	(Kbps)	for each Plan and Reported to TRAI		Plan 2						
		Reported to TRAI	20	Plan 1	116.00		143.06			143.06
			3G	Plan 1	1171.00		1851.57			1851.57
				3G Postpaid Data		1541.0				
				Plans -FMC- 50						
				3G Postpaid Data		1859.0				
				Plans FMC- 225		4756.0				
				3G Postpaid Data		1756.0				
				Plans FMC- 501		1220.0				
				3G Postpaid Data		1329.0				
				Plans FMC- 666 3G Postpaid Data		1285.0				
				PlansFMC- 901		1205.0				
				3G Prepaid Data		1652.0				
				Recharge Vouchers-		1032.0				
				43						
				3G Prepaid Data		1925.0				
				Recharge Vouchers-		1525.0				
				56						
				3G Prepaid Data		2125.0				
				Recharge Vouchers-						
				197						
				3G Prepaid Data		1589.0				
				Recharge Vouchers-						
				395						
				3G Prepaid Data		1945.0				
				Recharge Vouchers-						
				443						
				3G Prepaid Data		1758.0				
				Recharge Vouchers-						
				548						
				3G Prepaid Data		1600.0				
				Recharge Vouchers-						
		I	1	597						

	Qua	arterly Perform	ance Mo	nitoring Report	t (PMR) on Quality of Service of Wireless Data Services						
	Report for quar	rter ending: Sep	2019		Compliance Status						
S1.	Parameters	Benchmarks	Ge	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone	
No.											
				3G Prepaid Data		2100.0					
				Recharge Vouchers-							
			1197								
			4G Plans		7934.00		4334.48		6636.43	4334.48	

			rter ending: Sep		and the port	(11111) 011 Qu	ality of Service o	Compliance S			
S	S1.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	lo.										
	_		==0.	CD 144	les a		•				
	5	Average Throughput for Packet data (Kbps)	>75% of the subscribed	CDMA	Plan 1						
		racket data (Kups)	subscribed speed.	20	Plan 2	141.00		204.54			004.54
			opeca.	2G	Plan 1	141.00 1650.00		201.54			201.54
				3G	Plan 1	1650.00	2050.0	3399.09			3399.09
					3G Postpaid Data		2069.0				
					Plans -FMC- 75		2404.0				
					3G Postpaid Data Plans FMC- 225		3184.0				
					3G Postpaid Data		2615.0				
					Plans FMC- 501		2015.0				
					3G Postpaid Data		3564.0				
					Plans FMC- 666		3304.0				
					3G Postpaid Data		2534.0				
					PlansFMC- 901		2556				
					3G Prepaid Data		2278.2				
					Recharge Vouchers-						
					43						
					3G Prepaid Data		3354.0				
					Recharge Vouchers-						
					56						
					3G Prepaid Data		3269.0				
					Recharge Vouchers-						
					197						
					3G Prepaid Data		3584.0				
					Recharge Vouchers-						
}					395						
					3G Prepaid Data		3768.0				
					Recharge Vouchers-						
5					443		248945.0				
					3G Prepaid Data Recharge Vouchers-		246945.0				
					548						
					3G Prepaid Data		2532				
					Recharge Vouchers-		2332				
					597						
					3G Prepaid Data		2956.0				
					Recharge Vouchers-						
					1197						
				4G	Plans	11387.00		7750.96		29817.95	7750.96
	6	Latency	Data <250ms	All Genera							
					2G (GSM)	119.00	174.10	111.29			111.29
					3G	55.00	106.30	80.27			80.27
			9		4G	39.00		29.82		59.04	29.82
1	7	PDP Context Activation	≥95%	All Genera			05.7				
		Success Rate			2G (GSM)	99.60	97.70	99.96			99.96
					3G	99.97	97.60	99.29		00.01	99.29
		all operators except CDMA o			.4G	99.92		97.19		99.84	97.19

	Qua	arterly Perform	ance Monitoring Report	t (PMR) on Qu	ality of Service of	Wireless Data	Services		
	Report for quar	rter ending: Sep	2019			Compliance St	tatus		
S1.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
No.									
8	Drop rate :	≤5%	All Generations						
			2G (GSM)	4.97		0.71			0.71
			3G	0.23	1.10	1.25			1.25
			4G	0.09		0.38		0.47	0.38

		Report for qua	rter ending: Sep	2019				Compliance S	Status			
	S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone	
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.79%	98.33	99.50	98.55%	
		/Provisioning	95% success		3G							
	2	Successful data	>80%		Generations							
		transmission download			2G (GSM)	100.00		100.00	100.00		100.0	
		attempts			3G	100.00			99.96		100.0	
					4G	100.00		100.00		100.00	100.0	
	3	Successful data	>75%	All	Generations							
		transmission upload			2G (GSM)	100.00		100.00	99.92		100.0	
		attempts			3G	100.00			99.42		100.0	
					4G	100.00		100.00		100.00	100.0	
	4	Minimum download speed	To be measured	CDMA	Plan 1							
			for each Plan and		Plan 2							
			Reported to TRAI	2G	Plan 1	224.00		96.09	53.16		172.67	
					3G	Plan 1	2661.00			475.04		4530.56
•=				4G	Plans	6982.00		6661.37		7487.00	11612.34	
Mumbai	5	Average Throughput for	>75% of the	CDMA	Plan 1							
un.		Packet data (Kbps)	subscribed		Plan 2							
M			speed.	2G	Plan 1	288.00		152.62	79.03		193.00	
			-	3G	Plan 1	5851.00			776.73		7281.92	
				4G	Plans	14673.00		12179.30		26676.61	27577.84	
	6	Latency	Data <250ms	All	Generations							
			-		2G (GSM)	107.00		107.67			95.00	
					3G	34.00			217.78		16.17	
					4G	27.00		20.17		37.92	18.00	
	7	PDP Context Activation	≥95%	All	Generations				99.07			
		Success Rate			2G (GSM)	99.99		99.77			99.75	
					3G	99.97					97.67	
					4G	99.94		99.61		99.79	99.46	
	8	Drop rate :	≤5%	All	Generations				2.25			
					2G (GSM)	3.67		0.45			4.79	
					3G	0.05				100.00 7487.00 26676.61	1.54	
					4G	0.27		0.73		0.39	0.19	

			rter ending: Sep		mtoring Keport	. (FMIC) OH QU	ality of Service o	Compliance			
	S1.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	No.			_							
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.96%		99.60	99.90%
		/Provisioning	95% success		2G		100.00				
			rate.		3G		100.00				
-	2	Successful data	>80%	All	Generations						
		transmission download			2G (GSM)	100.00	100.00	99.80			99.80
		attempts			3G	100.00	100.00	100.00			100.00
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%		Generations						
		transmission upload	-		2G (GSM)	100.00	100.00	100.00			100.00
		attempts	-		3G	100.00	100.00	100.00		100.00	100.00
L	1	Minimaxana do111	To be me 1	CDMA	4G	100.00		100.00		100.00	100.00
	4	Minimum download speed (Kbps)	To be measured for each Plan and	CDMA 2G	Plan 1 Plan 1	114.00		470.00			470.00
		(170h2)	Reported to TRAI	2G		114.00	75.90	173.33			173.33
			reported to 11am		Postpaid Data Plans 99						
					Postpaid Data Plans 125		75.90				
<u> </u>					Postpaid Data Plans 225		75.90				
North East-1					Postpaid Data Plans 501		75.90				
4					Postpaid Data Plans 901		75.90				
					Prepaid Data Special Tariff Vouchers-17		75.90				
					Prepaid Data Special Tariff Vouchers-39		75.90				
					Prepaid Data Special Tariff Vouchers-78		75.90				
					Prepaid Data Special Tariff Vouchers-98		75.90				
					Prepaid Data Special Tariff Vouchers-139		75.90				
					Prepaid Data Special Tariff Vouchers-251		75.90				

	Report for qu	arter ending: Sep 20	019			Compliance St	atus		
S1. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafon
			Prepaid Data Special Tariff Vouchers-561 Prepaid Data Special Tariff Vouchers-821		75.90 75.90				
			Prepaid Data Special Tariff Vouchers-1011		75.90				

					nitoring Report	(PMR) on Qu	ality of Service o				
	S1.	Report for qua Parameters	rter ending: Sep Benchmarks		enerations	Airtel	BSNL	Compliance S Idea	tatus MTNL	Reliance JIO	Vodafone
	No.	T urumotoro	201101111111111111111111111111111111111	u		1111101	20.12	1404			7 04410110
		Minimum download speed	To be measured	3G	Plan 1	1452.00		2525.22			2525.22
		(Kbps)	for each Plan and	3G		1452.00	1818.23	2535.33			2535.33
			Reported to TRAI		Postpaid Data Plans 99						
					Postpaid Data Plans 125		1818.23				
					Postpaid Data Plans 225		1818.23				
					Postpaid Data Plans 501		1818.23				
					Postpaid Data Plans 901		1818.23				
					Prepaid Data Special Tariff Vouchers-17		1818.23				
st-I					Prepaid Data Special Tariff Vouchers-39		1818.23				
North East-I					Prepaid Data Special Tariff Vouchers-78		1818.23				
					Prepaid Data Special Tariff Vouchers-98		1818.23				
					Prepaid Data Special Tariff Vouchers-139		1818.23				
					Prepaid Data Special Tariff Vouchers-251		1818.23				
					Prepaid Data Special Tariff Vouchers-561		1818.23				
					Prepaid Data Special Tariff Vouchers-821		1818.23				
					Prepaid Data Special Tariff Vouchers-1011		1818.23				
				4G	Plans	11570.00		6129.67		5081.64	6129.67

				ance Monitoring Repor	t (PMR) on Qu	ality of Service				
			rter ending: Sep				Compliance			
	S1. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
Ħ	5	Average Throughput for	>75% of the	CDMA Plan 1						
ast	Ŭ	Packet data (Kbps)	subscribed	2G Plan 1	195.00		173.38			173.38
North East-I		, ,	speed.	Postpaid Data Plans 99		82.98	176.65			
No				Postpaid Data Plans 125		82.98				
				Postpaid Data Plans 225		82.98				
				Postpaid Data Plans 501		82.98				
				Postpaid Data Plans 901		82.98				
				Prepaid Data Special Tariff Vouchers-17		82.98				
				Prepaid Data Special Tariff Vouchers-39		82.98				
				Prepaid Data Special Tariff Vouchers-78		82.98				
				Prepaid Data Special Tariff Vouchers-98		82.98				
				Prepaid Data Special Tariff Vouchers-139		82.98				
				Prepaid Data Special Tariff Vouchers-251		82.98				
				Prepaid Data Special Tariff Vouchers-561		82.98				
				Prepaid Data Special Tariff Vouchers-821		82.98				
				Prepaid Data Special Tariff Vouchers-1011		82.98				

			rter ending: Sep	ance Monitoring Report	(1 1111) 011 &	alley of bolvioo	Compliance			
	S1.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	No.									
		Average Throughput for	>75% of the	3G Plan 1	3344.00		2491.69			2491.69
		Packet data (Kbps)	subscribed	Postpaid Data	00100	2814.57	2101.00			2 10 1.00
		,	speed.	Plans 99						
				Postpaid Data		2814.57				
				Plans 125						
				Postpaid Data		2814.57				
				Plans 225						
				Postpaid Data		2814.57				
				Plans 501						
				Postpaid Data		2814.57				
				Plans 901						
				<u>Ртераю Data</u>		2814.57				
				Special Tariff						
				Yrephorbala		2814.57				
				Special Tariff						
				Prepaloro ala		2814.57				
				Special Tariff						
				Yrepalordala		2814.57				
_				Special Tariff						
:st-				Prepalordala		2814.57				
Ξ				Special Tariff						
North East-I				Yrephoroada		2814.57				
NO				Special Tariff		2011.07				
				Yrepaaroafa¹		2814.57				
				Special Tariff		2014.07				
				Yrepalarbafa1		2814.57				
				Special Tariff		2014.57				
				Yrepaiardaaa		0014.57				
				Special Tariff		2814.57				
	Ļ			Vouchors-1011					20100.11	
	6	Loterer	Data <250ms	4G Plans All Generations	27022.00		6362.04		30180.11	6362.04
	O	Latency	Data <250ms	2G (GSM)	211.00	231.33	226.00			226.00
				3G	156.00	165.33	174.67			174.67
				4G	53.00		49.00		50.60	49.00
	7	PDP Context Activation	≥95%	All Generations						
		Success Rate		2G (GSM)	99.97	96.50	99.62			99.62
			[3G	100.00	95.68	97.78			97.78
				4G	98.69		99.93		99.77	99.93
	8	Drop rate:	≤5%	All Generations	0.24					
				2G (GSM)	3.21	0.40	3.74			3.74
				3G 4G	0.63 0.98	0.48	0.96 0.51		0.63	0.96 0.51

			arterly Performater ending: Sep		8	1 2 2 2			iance Status	<u>- </u>	
	S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNI			Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	All	Generations		100.0	0			
		/Provisioning	95% success		3G						
	2	Successful data	>80%		Generations		99.00)			
		transmission download	_		2G (GSM)						
		attempts	_		3G						
					4G						
	3	Successful data	>75%		Generations		97.00)			
		transmission upload	_		2G (GSM)						
		attempts	_		3G						
					4G						
	4	Minimum download speed		CDMA	Plan 1						
		(Kbps)	for each Plan and	2G	Plan 1						
			Reported to TRAI	3G	Plan 1		378kb	ps			
					Plan 2						
Ħ			_		Plan 3						
st-				4G	Plans						
Б	5	Average Throughput for	>75% of the	CDMA	Plan 1						
North East-II		Packet data (Kbps)	subscribed	2G	Plan 1						
9			speed.	3G	Plan 1		971kb	ps			
~					Plan 2						
					Plan 3						
				4G	Plans						
	6	Latency	Data <250ms		Generations		114m	s			
			_		2G (GSM)						
			_		3G						
					4G						
	7	PDP Context Activation	≥95%		Generations		98.00)			
		Success Rate			2G (GSM)						
					3G						
					4G						
	8	Drop rate :	≤5%		Generations		0.63				
				-	2G (GSM)						
					3G						
			[4G						

					nitoring Report	t (PMR) on Qu	ality of Service o				
			rter ending: Sep					Compliance			
	S1. Vo.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.88%		99.70	99.99%
		/Provisioning	95% success		2G		100.00				
			rate.		3G		100.00				
	2	Successful data	>80%	A11	Generations						
		transmission download		!	2G (GSM)	100.00	100.00	100.00			100.00
		attempts			3G	100.00	100.00	100.00			100.00
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%		Generations						
		transmission upload		!	2G (GSM)	100.00	100.00	100.00			100.00
		attempts			3G	100.00	100.00	100.00			100.00
					4G	100.00		100.00		100.00	100.00
	4	Minimum download speed		CDMA	Plan 1						
		(Kbps)	for each Plan and Reported to TRAI		Plan 2						
			Reported to TRAI	2G	Plan 1	91.00		72			72.33
					Postpaid Data		103.00				
					Postpaid Data		103.00				
					Postpaid Data		103.00				
					Postpaid Data		103.00				
					Postpaid Data		103.00				
					Postpaid Data		103.00				
					Postpaid Data		103.00				
ಪ					Postpaid Data		103.00				
Oilssa					Prepaid Data		103.00				
5					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Plan		103.00				
					Prepaid Data		103.00				
					Prepaid Plan		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					PrepaidPlan		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				
					Prepaid Data		103.00				

		rter ending: Sep		omitoring Report	l (I MIK) OII Qu	ality of Service of	Compliance S			
S1.	Parameters	Benchmarks		Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafon
No.										
	Minimum download speed		3G	Plan 1	1885.00		5285			5284.67
	(Kbps)	for each Plan and Reported to TRAI		Postpaid Data		3051.00				
		Reported to Tidir		Plans 99		2051.00				
				Postpaid Data		3051.00				
				Plans 225 Postpaid Data		3051.00				
				Plans 325		3031.00				
				Postpaid Data		3051.00				
				Plans 525						
				Postpaid Data		3051.00				
				Plans 725						
				Postpaid Data		3051.00				
				Plans 799						
				Postpaid Data		3051.00				
				Plans 1125						
				Postpaid Data		3051.00				
				Plans 1525		2071.00				
				Prepaid Data		3051.00				
				Special Tariff		2051.00				
				Prepaid Data		3051.00				
				Special Tariff Prepaid Data		3051.00				
				Special Tariff		3031.00				
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff		2051.00				
				Prepaid Plan		3051.00				
				Vouchers-74		3051.00				
				Prepaid Data		3031.00				
				Special Tariff Prepaid Plan		3051.00				
				Vouchers-81						
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff						
				Prepaid Data		3051.00				
				Special Tariff						
				PrepaidPlan		3051.00				
	 of all operators except CDMA o			Special Tariff						

	Report for qu	arter ending: Sep 20)19		-	Compliance	Status		
S1. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			Prepaid Data Special Tariff		3051.00				
			4G Plans	10190.00		7225		4875.70	7224.91

				onitoring Report	t (PMR) on Qua	ality of Service o				
		rter ending: Sep					Compliance			
S1. No.	Parameters	Benchmarks	C	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
5	Average Throughput for	>75% of the	CDMA	Plan 1						
	Packet data (Kbps)	subscribed	CDMM	Plan 2						
		speed.	2G	Plan 1	161.00		152			152.41
		-	20	Postpaid Data	101.00	193.00	102			132.41
				Plans 99		193.00				
				Postpaid Data		193.00				
				Plans 225		150.00				
				Postpaid Data		193.00				
				Plans 325		130.00				
				Postpaid Data		193.00				
				Plans 525		130.00				
				Postpaid Data		193.00				
				Plans 725		150.00				
				Postpaid Data		193.00				
				Plans 799						
				Postpaid Data		193.00				
				Plans 1125						
				Postpaid Data		193.00				
				Plans 1525						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-7						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-13						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-09						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-18						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-29						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-56						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-58						
				Prepaid Data		193.00				
				Special Tariff						
				Vouchers-68						
				Prepaid Plan		193.00				
				Vouchers-74						

		uarter ending: Sep 20				Compliance	Status		
SI. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-78						
			Prepaid Plan		193.00				
			Vouchers-81						
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-98						
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-108						
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-151						
			PrepaidPlan		193.00				
			Special Tariff						
			Vouchers-187						
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-186						
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-198		400.00				
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-319		102.00				
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-399		193.00				
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-429		193.00				
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-458		193.00				
			Prepaid Data		193.00				
			Special Tariff						
			Vouchers-666		193.00				
			Prepaid Data		193.00				
			Special Tariff Vouchers-1699						

		rter ending: Sep				Compliance			
S1. No.	Parameters	Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	Average Throughput for	>75% of the	3G Plan 1	3416.00		7132			7132.33
	Packet data (Kbps)	subscribed speed.	Postpaid Data		6813.00				
			Plans 99 Postpaid Data		6813.00				
			Plans 225						
			Postpaid Data Plans 325		6813.00				
			Postpaid Data		6813.00				
			Plans 525						
			Postpaid Data		6813.00				
			Plans 725 Postpaid Data		6813.00				
			Plans 799		0010.00				
			Postpaid Data		6813.00				
			Plans 1125						
			Postpaid Data		6813.00				
			Plans 1525 Prepaid Data		6813.00				
			Special Tariff		0013.00				
			Vouchers-7						
			Prepaid Data		6813.00				
			Special Tariff		0010.00				
			Vouchers-13						
			Prepaid Data		6813.00				
			Special Tariff						
			Vouchers-09						
			Prepaid Data		6813.00				
			Special Tariff						
			Vouchers-18						
			Prepaid Data		6813.00				
			Special Tariff						
			Vouchers-29		6010.00				
			Prepaid Data		6813.00				
			Special Tariff						
			Vouchers-56		6813.00				
			Prepaid Data Special Tariff		0813.00				
			Vouchers-58						
			Prepaid Data		6813.00				
			Special Tariff		2210.00				
			Vouchers-68						
			Prepaid Plan		6813.00				
			Vouchers-74						
			Prepaid Data		6813.00				
			Special Tariff						
			Vouchers-78						

		rter ending: Sep		mtoring kepor	r (FMK) on Qu	ality of Service o	Compliance			
S1.		Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafon
No		201101111111111	.		111101	20.12	Tuou			Voucion
				Prepaid Plan		6813.00				
				Vouchers-81						
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-98						
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-108		6010.00				
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-151		6010.00				
				PrepaidPlan		6813.00				
				Special Tariff						
				Vouchers-187		6010.00				
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-186		6010.00				
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-198		6012.00				
				Prepaid Data		6813.00				
				Special Tariff						
				Vouchers-319		6813.00				
				Prepaid Data		0613.00				
				Special Tariff						
				Vouchers-399		6813.00				
				Prepaid Data		0813.00				
				Special Tariff						
				Vouchers-429		6813.00				
				Prepaid Data		0813.00				
				Special Tariff						
				Vouchers-458		6813.00				
				Prepaid Data Special Tariff		0010.00				
				Vouchers-666						
				Prepaid Data		6813.00				
				Special Tariff		0010.00				
				Vouchers-1699						
			4G	Plans	11495.00		9872		22481.12	9872.3
6	Latency	Data <250ms		Generations			3012			3012.0
۱				2G (GSM)	161.00	231.00	119			118.67
				3G	57.00	66.40	58			58.33
				4G	48.00	230	36		53.49	36.00
7	PDP Context Activation	≥95%	A11	Generations	12.00				55.12	00.00
l .	Success Rate			2G (GSM)	99.93	98.62	99			98.89
		Success Kate		3G	100.00	99.00	98			98.19
				4G	99.35		99		98.78	98.98

	Qua	arterly Perform	ance Monitoring Report	t (PMR) on Qu	ality of Service of	Wireless Data	Services				
	Report for qua	rter ending: Sep	2019	Compliance Status							
SI. Parameters Benchmarks Generations				Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone		
No.											
8	Drop rate :	≤5%	All Generations								
			2G (GSM)	4.68		3			2.67		
			3G	0.73	0.40	1			0.80		
			4G	0.44		0	•	0.43	0.36		

		rter ending: Sep			rt (PMR) on Quality of Service of Wireless Data Services Compliance Status						
S1.	Parameters	Benchmarks			Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone	
1		Within 4 hrs with			100.00	100.00	99.94%		99.70	99.89%	
	/Provisioning	95% success	2	2G (GSM)							
2		>80%		Generations		97.86					
	transmission download attempts		2G (GSM)		100.00		100.00			100.00	
	attempts			3G	100.00		100.00			100.00	
				4G	100.00		100.00		100.00	100.00	
3	Successful data	>75%		Generations		96.79					
	transmission upload attempts		2G (GSM) 3G		100.00		100.00			100.00	
	attempts				100.00		100.00		100.00	100.00	
4	Minimum 41 1	T- 1 1	ODMA	4G Plan 1	100.00		100.00		100.00	100.00	
4	Minimum download speed (Kbps)	for each Plan and	CDMA	Plan I							
		Reported to TRAI		Plan 2							
		_		Plan 3							
			2G	Plan 1	71.00		63.52			63.52	
			3G	Plan 1	777.00	1491.75	1623.25			1623.25	
				Plan 2							
				Plan 3							
			4G	Plans	3142.00		3672.21		9630.95	3672.21	
5	Average Throughput for	>75% of the	CDMA	Plan 1							
	Packet data (Kbps)	subscribed		Plan 2							
		speed.		Plan 3							
			2G	Plan 1	107.00		109.23			109.23	
			3G	Plan 1	1229.00	2301.73	3347.42			3347.42	
				Plan 2							
				Plan 3							
			4G	Plans	10422.00		10506.00		28762.12	10506.00	
6	Latency	Data <250ms	All	Generations							
			2	2G (GSM)	210.00		233.00			233.00	
				3G	175.00	133.17	111.83			111.83	
				4G	81.00		90.33		36.20	90.33	
7	PDP Context Activation	≥95%	All	Generations		97.81					
	Success Rate		2	2G (GSM)	99.87		98.60			98.60	
				3G	100.00		98.57			98.57	
				4G	98.89		99.90		99.06	99.90	
8	Drop rate :	≤5%		Generations		1.66					
				2G (GSM)	0.83		2.96			2.96	
				3G	0.34		0.40			0.40	
				4G	0.05		0.25		0.23	0.25	

		Report for qua	rter ending: Sep	2019				Compliance	Status		
	S1. Vo.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	All	Generations	100.00		99.91%		99.60	99.83%
		/Provisioning	95% success		3G		98.00	00.01,0			33.0370
	2	Successful data	>80%	All	Generations						
		transmission download		2G (GSM)		100.00		100.00			100.00
		attempts		3G		100.00	100.00	100.00			100.00
					CDMA						
					4G	100.00		100.00		100.00	100.00
	3	Successful data	>75%	All	Generations						
		transmission upload		2	2G (GSM)	100.00		100.00			100.00
		attempts			3G	100.00	100.00	100.00			100.00
				CDMA							
					4G	100.00		100.00		100.00	100.00
		Minimum download speed (Kbps)	for each Plan and Reported to TRAI	CDMA	Plan 1						
					Plan 2						
			Reported to TRAI	2G	Plan 1	106.00	1650.9(All Plans Prepaid)	121.88			134.07
				3G	Plan 1	2953.00	1606.8 (All Plans Postpaid)	2140.28			2354.30
				4G	Plans	15808.00		5226.02		12942.45	5748.62
	5	Average Throughput for	>75% of the	CDMA	Plan 1						
		Packet data (Kbps)	subscribed		Plan 2						
			speed.	2G	Plan 1	125.00	1908.9 (All Plans Prepaid)	168.70			185.57
				3G	Plan 1	4827.00	1839(All Plans Postpaid)	3132.70			3445.97
				4G	Plans	21697.00		9039.67		32765.21	9943.63
	6	Latency	Data <250ms	All	Generations						
				2	2G (GSM)	169.00		101.21			101.19
					3G	63.00	91.20	46.30			50.93
					CDMA	62.00		07.47		50.07	44.04
\vdash	7	PDP Context Activation	≥95%	A 11	4G Generations	63.00		37.47		52.07	41.21
	1	Success Rate	295%		2G (GSM)	99.94		99.52			99.60
		Duccess Rate			3G	98.85	100.00	98.94			98.85
					CDMA	50.00	100.00	30.34			30.03
					4G	98.46		99.57		99.88	98.97
H	8	Drop rate :	≤5%	All	Generations						
		_			2G (GSM)	2.12		0.15			3.39
					3G	0.70	0.27	0.16			0.56
					CDMA						
					4G	0.45		0.13		0.41	0.33

	Report for qua	rter ending: Sep	2019				Compliance	Status		
S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with		Generations	100.00	100.00	98.41%		99.50	99.56%
	/Provisioning	95% success		2G (GSM)						
2	Successful data	>80%		Generations						
	transmission download		2G (GSM)		100.00	99.07	100.00			100.00
	attempts	_		3G	100.00	99.92				100.00
				CDMA						
			4G		100.00	99.69	100.00		100.00	100.00
3	Successful data	>75%		Generations						
	transmission upload		2G (GSM)		100.00	97.81	100.00			100.00
	attempts	_	3G		100.00	99.83				100.00
		_	CDMA							
				4G	100.00	99.69	100.00		100.00	100.00
4	Minimum download speed		CDMA	Plan 1						
	(Kbps)	for each Plan and		Plan 2						
		Reported to TRAI	2G	Plan 1	147.00	73.89	96.08			122.37
			3G	Plan 1	4429.00	1078.79				2420.89
			4G	Plans	6399.00	2521.46	5303.70		9020.29	6465.45
5	Average Throughput for	>75% of the	CDMA	Plan 1						
	Packet data (Kbps)	subscribed		Plan 2						
		speed.	2G	Plan 1	215.00	122.15	168.43			175.15
			3G	Plan 1	6911.00	2145.65				7146.19
			4G	Plans	12055.00	3668.40	7544.48		28833.71	13452.83
6	Latency	Data <250ms	A11 (Generations						
		_	2G (GSM)		177.00	333.01	114.57			139.17
				3G	72.00	203.21				28.08
				CDMA						
				4G	54.00	108.08	30.73		50.66	21.67
7	PDP Context Activation	≥95%		Generations						
	Success Rate		2	2G (GSM)	100.00	100.00	98.63			99.78
				3G	99.91	100.00				98.80
				CDMA						
				4G	99.61	100.00	99.91		99.74	99.01
8	Drop rate :	≤5%		Generations						
			2	2G (GSM)	1.48	0.00	3.01			4.92
				3G	0.30	0.00				0.96
				CDMA						
				4G	0.13	0.00	0.29		0.40	0.15

		Report for qua	rter ending: Sep 2	2019				Compliance	Status		
	S1. No.	Parameters	Benchmarks		enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with		Generations	100.00	97.71	99.85%		99.70	99.88%
		/Provisioning	95% success	2G (GSM)							
	2	Successful data	>80%	All Generations			87.44				
		transmission download		!	2G (GSM)	100.00		100.00			99.65
		attempts			3G	100.00		100.00			99.92
				4G		100.00		100.00		100.00	100.00
	3	Successful data	>75%	A11	Generations		85.30				
		transmission upload		2G (GSM)		100.00		100.00			99.83
		attempts		3G		100.00		100.00			99.77
					4G	100.00		100.00		100.00	100.00
Ī	4	Minimum download speed		CDMA	Plan 1						
(Past)		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI		Plan 3						
				2G	Plan 1	77.00	84.33	180.33			137.05
				3G	Plan 1	1116.00	2094.33	6219.67			6694.54
		5 Average Throughput for >759/ of the		4G	Plans	5457.00		8105.01		9346.25	29576.02
	5	Average Throughput for	>75% of the	CDMA	Plan 1						
		Packet data (Kbps)	subscribed		Plan 2						
			speed.		Plan 3						
ottai riauesii				2G	Plan 1	274.00	161.66	236.33			194.52
				3G	Plan 1	2074.00	2690.00	8665.67			10769.39
				4G	Plans	13310.00		11833.00		33355.77	52784.86
	6	Latency	Data <250ms	A11	Generations		209.00				
					2G (GSM)	227.00		184.33			175.28
					3G	180.00		100.00			48.69
					4G	114.00		65.00		49.09	66.42
j	7	PDP Context Activation	≥95%	A11	Generations		98.45				
		Success Rate			2G (GSM)	99.47		99.85			99.65
					3G	100.00		99.15			99.45
			[4G	98.57		98.70		99.76	99.96
ľ	8	Drop rate :	≤5%	A11	Generations		0.71				
		_			2G (GSM)	4.85		3.11			2.20
					3G	0.31		0.85			0.65
					4G	0.30		0.41		0.51	0.52

		Qu	arterly Perform	ance Mo	nitoring Repo	rt (PMR) on Qu	ality of Service o	of Wireless Data	Services		
		Report for qua	rter ending: Sep	2019				Compliance	Status		
	S1. No.	Parameters	Benchmarks	G	enerations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
	1	Service Activation	Within 4 hrs with	A11	Generations	100.00	97.80	99.97%		99.70	99.99%
		/Provisioning	95% success		2G (GSM)			5515175			
	2	Successful data	>80%		Generations		94.50				
		transmission download		2G (GSM)		100.00		100.00			100.00
		attempts	-	3G CDMA		100.00		100.00			100.00
			-								
			-	4G		100.00		100.00		100.00	100.00
	3	Successful data	>75%	All	Generations		91.70				
		transmission upload	-	2G (GSM) 3G CDMA		100.00		100.00			100.00
		attempts	-			100.00		100.00			100.00
			-								
			-		4G	100.00		100.00		100.00	100.00
	4	Minimum download speed	To be measured	CDMA	Plan 1						
		(Kbps)	for each Plan and		Plan 2						
			Reported to TRAI		Plan 3						
			-	2G	Plan 1	85.00	98.30	142.37			62.97
			-	3G	Plan 1	1103.00	1970.30	1279.67			1204.97
÷					Plan 2						
(West)					Plan 3						
(8				4G	Plans	2360.00		6175.33		8246.47	1633.33
Uttar Pradesh	5	Average Throughput for	>75% of the	CDMA	Plan 1						
ad		Packet data (Kbps)	subscribed speed.		Plan 2						
. Pr					Plan 3						
tar				2G	Plan 1	193.00	140.70	198.87			239.67
5				3G	Plan 1	2049.00	2969.00	4967.00			4677.87
					Plan 2						
					Plan 3						
				4G	Plans	5400.00		15025.33		30102.42	8234.76
	6	Latency	Data <250ms	All	Generations		230.00				
					2G (GSM)	178.00		138.33			190.67
			[3G	99.00		68.33			84.00
					CDMA						
					4G	53.00		60.00		47.26	66.67
	7	PDP Context Activation	≥95%	All	Generations		97.60				
		Success Rate	[2G (GSM)	99.91		99.03			99.53
					3G	100.00		98.13			99.11
					CDMA						
					4G	96.69		95.49		99.88	99.92
	8	Drop rate :	≤5%		Generations		2.80				
					2G (GSM)	0.42		2.94			6.31
					3G	0.56		2.13			0.96
					CDMA						
	I				4G	0.17		0.80		0.39	0.47

		rter ending: Sep				Compliance S			
No.		Benchmarks	Generations	Airtel	BSNL	Idea	MTNL	Reliance JIO	Vodafone
1	Service Activation	Within 4 hrs with	All Generations	100.00	96.41	99.97%		99.80	99.76%
	/Provisioning	95% success	3G						
2		>80%	All Generations		100.00				
	transmission download		2G (GSM)	100.00		98.81			98.81
	attempts		3G	100.00		99.52			99.52
			CDMA						
			4G	100.00		99.86		100.00	99.86
3	Successful data	>75%	All Generations		100.00				
	transmission upload		2G (GSM)	100.00		98.81			98.81
	attempts		3G	100.00		99.52			99.52
			CDMA						
			4G	100.00		99.81		100.00	99.81
4	Minimum download speed		CDMA Plan 1						
	(Kbps)	for each Plan and	Plan 2						
		Reported to TRAI	2G Plan 1	70.00	116.00	88.88			88.88
			3G Plan 1	1162.00	5707.99	2123.22			2123.22
	(Kbps) for each Plan a Reported to TI Average Throughput for Packet data (Kbps) >75% of the subscribed speed.		Plan 2						
			4G Plans	6022.00		4101.14		7619.12	4101.14
5			CDMA Plan 1						
	Packet data (Kbps)		Plan 2						
		speed.	2G Plan 1	117.00	172.00	139.32			139.32
			3G Plan 1	2530.00	8742.99	4948.08			4948.08
			Plan 2						
			Plan 3						
			4G Plans	7383.00		10998.35		31650.17	10998.35
6	Latency	Data <250ms	All Generations		74.00				
			2G (GSM)	234.00		167.67			167.67
			3G	83.00		26.31			26.31
<u> </u>			4G	46.00		24.15		52.20	24.15
7	PDP Context Activation	≥95%	All Generations		95.04				
	Success Rate		2G (GSM)	98.62		99.67			99.67
			3G	98.62		98.04			98.04
			CDMA	00.01				00.17	
	D :	.50/	4G	99.94		99.97		99.17	99.97
8	Drop rate :	≤5%	All Generations	0.00					
			2G (GSM)	2.03		4.89			4.89
			3G	0.57		0.89			0.89
			CDMA					0.55	
			4G NC_PayG, Mblaze etc) a	0.93		0.22		0.56	0.22