

## TELECOM REGULATORY AUTHORITY OF INDIA Mahanagar Doorsanchar Bhavan, Jawaharlal Nehru Marg (Old Minto Road), New Delhi - 110 002

Comparative Performance of Telecom Service Providers in Kolkata & West Bengal Service Area, Key Quality of Service (QoS) Parameters for Quarter Ending June 2010

Cellular Mobile Telephone Service

Name of the Service Provider	QoS Parameter (Benchmark)		Base Stations (BTS) Accumulated downtime:Non- availability of Mobile network in a month in %age (≤ 2%)	Accessibility: %age of calls made by subscribers and successful within operator's network (≥ 95%)	Connection Maintena Call Drop Rate: %age of established calls getting disconnected due to network problems (≤ 2%)	nce (Retainability) %age of Calls with good voice quality (≥ 95%)	Resolution of billing charging complaint %age of billing/charg complaints resolve within 4 weeks (100% within 4 week
	Name of the service area	Data Reported by					
Bharti Airtel	Kolkata	Service Provider	0.11%	99.53%	0.71%	98.67%	100.0%
		Audit Agency (IMRB)	0.07%	99.05%	0.72%	98.60%	100.0%
	West Bengal	Service Provider	0.13%	98.93%	1.24%	98.73%	100.0%
		Audit Agency (IMRB)	0.10%	98.92%	1.25%	98.66%	100.0%
BSNL	Kolkata	Service Provider	1.49%	99.35%	0.85%	99.60%	100.0%
		Audit Agency (IMRB)	0.86%	98.19%	2.50%	98.00%	100.0%
	West Bengal	Service Provider	0.98%	97.81%	1.05%	97.77%	100.0%
		Audit Agency (IMRB)	0.00%	98.21%	0.68%	98.00%	100.0%
Dishnet	Kolkata	Service Provider	0.10%	97.97%	1.00%	97.89%	100.0%
		Audit Agency (IMRB)	0.06%	97.73%	0.81%	97.80%	100.0%
	West Bengal	Service Provider	0.16%	96.49%	1.73%	93.74%	100.0%
		Audit Agency (IMRB)	0.14%	95.16%	2.23%	97.80%	100.0%
ldea Cellular	Kolkata	Service Provider	0.23%	97.10%	0.46%	98.17%	100.0%
		Audit Agency (IMRB)	0.22%	96.51%	0.92%	96.32%	100.0%
	West Bengal	Service Provider	0.65%	96.47%	0.78%	97.72%	100.0%
		Audit Agency (IMRB)	0.47%	97.90%	0.75%	96.32%	100.0%
Reliance Comm. (CDMA)	Kolkata	Service Provider	0.12%	99.31%	0.54%	97.88%	100.0%
		Audit Agency (IMRB)	0.07%	99.49%	0.66%	97.30%	100.0%
	West Bengal	Service Provider	0.45%	98.76%	0.86%	97.76%	100.0%
		Audit Agency (IMRB)	0.25%	99.58%	1.10%	97.35%	100.0%
Reliance Telecom	Kolkata	Service Provider	0.01%	99.50%	0.75%	97.35%	100.0%
		Audit Agency (IMRB)	0.01%	98.88%	0.67%	96.97%	100.0%
	West Bengal Kolkata	Service Provider	0.08%	99.06%	0.60%	97.97%	100.0%
		Audit Agency (IMRB)	0.08%	98.19%	0.83%	98.05%	100.0%
		Service Provider	0.25%	98.64%	0.92%	99.76%	100.0%
		Audit Agency (IMRB)	0.00%	98.95%	1.05%	99.79%	100.0%
	West Bengal	Service Provider	0.58%	98.57%	1.08%	99.61%	100.0%
		Audit Agency (IMRB)	0.45%	98.03%	1.28%	98.92%	100.0%
Tata Tele. (CDMA)	Kolkata	Service Provider	0.03%	99.74%	0.73%	99.24%	100.0%
	West Bengal	Audit Agency (IMRB)	0.04%	99.01%	0.74%	97.90%	100.0%
		Service Provider Audit Agency (IMRB)	0.09%	99.65% 98.55%	0.65%	99.67% 97.90%	100.0%
		Service Provider	0.08%	98.55%	0.72%	97.90%	96.67% 100.0%
DoCoMo	Kolkata West Bengal	Audit Agency (IMRB)	0.01%	99.40%	0.80%	97.28%	100.0%
			0.01%	97.28% 98.57%	1.04%	97.88%	100.0%
		Service Provider Audit Agency (IMRB)	0.22%	98.29%	0.75%	97.28%	100.0%
Uninor	Kolkata	Service Provider				97.28%	100.0%
	West Bengal	Service Provider	0.22%	99.39% 98.26%	0.39%	99.24% 92.10%	100.0%
Vodafone Essar	Kolkata	Service Provider Service Provider	0.12%	98.26% 99.14%	0.67%	92.10% 98.76%	100.0%
		Audit Agency (IMRB)	0.05%	99.04%	0.57%	98.84%	100.0%
	West Bengal	Service Provider	0.05%	99.04% 96.99%	0.57%	98.84% 96.39%	100.0%
		Audit Agency (IMRB)	0.21%	96.99%	1.51%	96.72%	100.0%

## Resolution of billing / charging complaints: %age of billing/charging Fault incidence:No. of Fault Repair: %age of faults Mean Time to Repair: the average time taken to repair a fault. faults per 100 subscribers per repaired within one day of (≤ 8 Hrs) Name of QoS Parameter month (≤5) booking (≥90%) complaints resolved within 4 the Service (Benchmark) Provider weeks (100% within 4 weeks) Name of the Data Reported by service area 100% 100% DNF 3.42 2.54 **5.09** 97.58% 6.87 Service Provider Bharti Airtel Kolkata 5.83 7.23 **31.63** Audit Agency (IMRB) 99.93% Service Provider Audit Agency (IMRB) 86.68% Kolkata 10.23 64.77 93% DNF 100% Service Provide 5.30 94.20 10.01 BSNL West Bengal Audit Agency (IMRB) 54.02% 11.04 27.79 Andaman & Nicobar Service Provider 3.96 88.25% DNF Audit Agency (IMRB) 22.10 99.41% 3.33 NA Service Provider 1.26 100% 2.40 100% Reliance Comm Kolkata Audit Agency (IMRB) 1.43 99.03% 3.41 100% Service Provide 0.92 93.079 4.91 100% Kolkata Tata Teleservices Audit Agency (IMRB) 0.40 84.72% 7.67 40% West Bengal Ser 0.36 100% 1.50 naded boxes indicate benchmark not met DNF - Data not in format The audited data pertains to the audit period Jan'10 to June '10 (Issued in Public Interest by TRAI)