



South Asia

REPORT ON

QUALITY OF SERVICE
&
CUSTOMER SATISFACTION SURVEY
(Quarter July 2006 to Sep. 2006)

SUBMITTED FOR:

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INTRODUCTION

TÜV South Asia Pvt. Ltd., with registered office at 321, Solitaire Corporate Park, Bldg. No. 3, 2nd Floor, Chakala, Andheri (E), Mumbai was awarded the contract on 19th December 2005 by Telecom Regulatory Authority of India (TRAI) for Conducting an Objective Assessment of the Quality of Service of basic and cellular mobile telephone service vis-à-vis the Quality of Service benchmarks prescribed by the Authority and a subjective customer survey to assess the customer perception of the service, as defined in the Regulation on Quality of Service of Basic and Cellular Mobile Telephone Services, Dated 1st July, 2005.



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2. EXECUTIVE SUMMARY

2.1 PREFACE

TÜV South Asia was entrusted by TRAI to carry out:

- **Objective Assessment of QOS provided by service provider**

The Objective Assessment involved audit of sampled exchanges (including customer care centre), Helpline for Basic operator, audit of sampled MSCs (including customer care centre), POI Congestion, Helpline and Drive Test for Cellular Operators.

For QOS audit of Basic telephone service, TÜV officials visited 494 Basic Telephone Exchanges (155 Urban and 339 Rural exchanges) while auditing 73 Basic Operators (licensee). Further, the operations of 129 Cellular mobile service operators were verified as a part of this exercise.

In the case of Basic service operators, a sample mix of Urban and Rural exchanges (that are representative of the circle) was selected across 10% of SDCAs (Short Distance Charging Areas) of Operators.

- **Customer Satisfaction Survey**

The subjective assessment involved survey of customer satisfaction levels for all the Basic Service Operators (BSO) and Cellular Mobile Service Providers (CMSP) including Unified Access Service Providers (UASP) spread over various operating circles.

During this quarter, a large sample of about 27423 basic and 44265 cellular telephone service subscribers were surveyed to assess their satisfaction with basic and cellular services. Telephonic as well as personal interviews were carried out for this exercise.

As regards to rural subscribers, 100% of the subscribers were personally interviewed. In case of urban subscribers, 75% of the subscribers were personally interviewed and 25% were interviewed telephonically. Subscribers were selected on the basis of their age, gender and usage.

QOS Performance Monitoring Report (PMR) for the period June 2006 was considered as reference for coverage during execution and QOS Performance Monitoring Report (PMR) for September 2006 was considered for comparison of data.



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2.2 ANALYSIS

2.2.1 QUALITY OF SERVICE OF CELLULAR MOBILE SERVICES

2.2.1.1 MSC AUDIT

As per the regulation dated July 2005, the cellular telephone service operators need to meet 15 benchmark parameters. Most of the operators performed positively vis-à-vis these parameters. The percentage of operators that met the benchmarks of these parameters is as follows:

Parameters	Operators that met the benchmarks
Service Access Delay	100%
Call Drop rate	99.2%
Call Set up Success rate	96.09%
Billing Complaints resolved within 4 weeks	85.6%
Period of Refunds due to customer from the date of resolution of complaint,	86%
% of Calls Answered Electronically within 40 sec	93.33%
% of Calls Answered Electronically within 20 sec	92.56%
% of Connection with good voice quality	86.07%
Accumulated Down Time of Community isolation	98.45%
SDCCH Congestion	84.5%
TCH Congestion	85.27%

As regards to the parameter **Accumulated Down Time of Community Isolation**, the benchmark for which is less than **24 hours**, the higher duration of **Accumulated Down Time for community isolation** was noticed in **BSNL – Gujarat (59.80 hours)** and **Bharti- Tamilnadu (30.62 hours)**.

In case of the parameter **SDCCH / Paging congestion (benchmark $\leq 1\%$)**, the highest congestion was noticed in Dishnet - NE (42.04%) followed by MTNL – Mumbai (10.98) and MTNL – Delhi (8.18). Which is way beyond the benchmark.

In the case of parameter **TCH Congestion (benchmark $\leq 2\%$)**, the TCH congestion rate was noticed at BSNL- TN(22.25%), Spice-Karnataka(15.43),Rel Tel-MP(15.66), Dishnet-NE(14.45),Rel Tel-Bihar(14.01),Rel Tel-NE(11.5), Rel Tel-Orissa(9.96) respectively, which is much beyond the benchmark.

However, the performance of service providers with respect to the parameters **% of Calls Answered by Operator within 60 seconds and % of Calls Answered by**



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Operator within 90 seconds is a matter of concern as only 60.32% and 56.8% of the operators met the benchmarks of these parameters respectively.

In case of **Billing Complaints per 100 Bills issued (benchmark <0.1%)**, a significantly higher percentage of billing complaints are observed in case of BSNL-UP West (2.11), Tata-Haryana (0.99), Tata-Gujarat (0.84), BPL-TN (0.90), Tata-Punjab (0.77), Bharti-Karnatka(0.68), Tata-Karnatka(0.65), Tata-MP(0.66), BSNL-J&K(0.66).

POI-congestion is also a matter of concern as only 18.27% of the operator are meeting the benchmark.

2.2.1.2(A) DRIVE TEST

360 drive tests were conducted to verify parameters like Call Drop Rate, Call Setup Success Rate, Blocked Call Rate and percentage Connection with good voice quality.

Despite repeated follow up with BSNL- NE circle, the drive test log files were not provided to us for our review and comments.

In **Metro Circles**, drive test was carried for 24 operators. Bharti - Mumbai did not meet any of the parameters of the drive test. Out of the 24 operators, 14 operators(58.33%) meet benchmarks for all the parameters. the details of the operators who do not meet the bench mark is given below:- **MTNL & Idea** for Delhi, **Bharti,Hutch, Tata, BPL,MTNL, Rel comm** for Mumbai, **Bharti & BSNL** for Chennai.

In **A Circles**, drive test was carried for 30 operators. **BSNL –TN** did not meet any of the parameters of the drive test. Out of 30 operators, 21 operators (70%) met benchmarks for all the parameters.

In **B Circles**, Drive test was carried for 47 operators. 34 operators (72.34%) met benchmarks for all the parameters.

In **C Circles**, Drive test was carried for 27 operators. 17 operators (62.96%) met benchmarks for all the parameters.

2.2.1.2(B) INDEPENDENT DRIVE TEST

Independent drive test were carried out for all the operators in Delhi circle as the instruction received from TRAI. Only **Rel comm** meets benchmark for all the parameters.

2.2.1.3 INTER OPERATOR CALL CONGESTION ASSESSMENT

Inter Operator calls were made to verify the **Inter opretor call congestion assessment**. Call congestion was noticed to be 100% in circles: **BSNL – TN, MP, and HP, Hutch – Rajasthan, Hutch- UP West and HFCL – Punjab.**



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In BSNL inter operator call congestion was noticed with 57 operator out of a total call assessment with 121 operators (47.11%).in Bharti circles, call congestion was with 30 operators out of 137(21.90%).similarly in Hutch circles, this was total 30 operators out of 105(28.57%),in Tata 28 out of 135(20.71%),in MTNL 7 out of 21(33.33%),in Rel comm 38 out of 133(28.57%),Rel Tel 18 out of 38(47.37%) and in Idea 8 out of 52(15.38%)

The POI Congestion Value collected from MSCs of different operators were 57.14% for RISL, 32.44% for Bharti, 34.6% for Rel Tel, 17.39% for Spice, 17.59% for Rel comm and 11.6% for Idea.

No co-relation could be established between the data of congestion assessed practically by inter operator call and that obtained from MSC. The inter operator call assessment also revealed difficulty in connecting to other operator network

2.2.1.4 HELP LINE

Calls were made to verify the percentage of Calls Answered Electronically within 20 sec and 40 sec and percentage of Calls Answered by operator within 60 sec and 90 sec. It is observed that 36.4% and 37.2% operators did not meet the parameter with respect to calls answered by operator within 60 Seconds and calls answered by operator within 90 seconds respectively.in case percentage of call answered electronically with in 20 and 40 sec is 82.2% of the operators are meeting the bench mark for both

2.2.2 QUALITY OF SERVICE OF BASIC SERVICE

2.2.2.1 EXCHANGE AUDIT

In the case of basic service, out of the 18 benchmark parameters as per QoS Regulation July 2005, the performance of all the audited licensee (73) was significantly below the benchmark vis-à-vis provision of telephone after registration, request for shift and fault incidences.

In the case of parameter **Provision of Telephone after registration, except Rel comm-Gujarat, Rel comm- H.P & Tata-Maharastra**, none of the operators met the benchmark. Only 4% of the operators met the benchmark value of the parameter.

The Parameters **Fault incidences, Fault repair by next working day, CCR in Local Network** were not met by 50.75%,44.77% and 42.85% respectively.Also 86.36%, 63.50%,31.34% of the operators do not meet the bench mark relating to **shift request,closures and additional facility** respectively



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Parameters Grade of Service-junction between local exchange, Mean time to repair, Metering and billing credibility and time taken refund after closure are not met by 36.24%, 36.36%, 16.90% and 32.86% respectively.

2.2.2.2 HELP LINE

Calls were made to verify the **percentage of Calls Answered electronically within 20 seconds and 40 seconds** and **percentage of Calls Answered by operator within 60 seconds and 90 seconds**.

13.60% and 17.80% of the operators did not meet the performance with respect to parameters **percentage of Calls Answered by operator within 60 seconds and percentage of Calls Answered by operator within 90 seconds** respectively.

2.2.3 CUSTOMER SATISFACTION SURVEY OF CELLULAR MOBILE SERVICE SUBSCRIBERS

customers perception with respect to operators' service was assessed for 7 defined parameters through 29 questions for cellular service subscribers. On an all India basis, 74 out of 124 (59.49%) operators did not meet the benchmark criteria for all the parameters taken together. As regards to the circle wise performance of the operators, 61.98% operators in Metro, 54.3% in A Circle, 64.42% in B Circle and 54.46% in C Circle did not meet the benchmark parameters. The findings with respect to major parameters are as follows:

Overall Customer Satisfaction level: (Benchmark >95%)

- The customer perception of overall customer satisfaction level was poor in all the circles, only 1 licence out of a total of 128 licences (0.78%) met the benchmark of >95%.
- With respect to metro circles, only one of the licencees attained the overall customer satisfaction level (Airtel –Mumbai 96%). The lowest overall customer satisfaction level was achieved by Idea and MTNL-Delhi with 84%. The achievement level of operators not meeting the benchmark is ranging between 84 -93% with highest achievement level of 93% for Bharti- Chennai and Hutch- Mumbai.
- In A circle, none of the licencees met the benchmark. The lowest overall customer satisfaction level was achieved by Spice (68%), in Karnataka circle. As a whole in A Circle, the achievement level ranged between 68-90%. Rel comm- Maharashtra (90%) achieved the highest achievement level.
- In B circle, none of the licencees met the benchmark. In B Circle as a whole, the achievement level of the operators ranged between 59-84%. Rel comm-W.B(59%) achieved the Lowest achievement level & the Highest achievement level was



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achieved by Rel- Comm & Rel -Tel-MP(84%). The performance of B circle is poorer than the performance of all other circles

- In C circles none of the operators achieved the benchmark. The level of overall customer satisfaction ranged between 61 - 89%.With lowest performance of BSNL-J&K (61%) and the highest performance of Aircel-J&K (89%).

- **Network performance (Benchmark >95%):**

- The customer perception of the parameter network performance was poor; only 14 out of 128 operators (10.94%) met the benchmark.
- In Metro Circle, only one licensee Mumbai - Airtel (99%) met the benchmark. The performance level of other operators ranged between 68 -94%. Mumbai – Rel comm with 68% was the lowest.
- In A circle, only in maharastra all the 6 operators met the benchmark. The lowest performance was in AP-Tata & Karnataka-Hutch with 69%. The achievement level of operators not meeting the benchmark ranged between 69-91%.
- In B circle, only 4 operators (Tata, Hutch, and Airtel – UP (E), Rel comm - Rajasthan) met the benchmark. UP (E) - BSNL (1%) & Rel-Comm(1%) had the worst performance level. As a whole, the achievement of operators not meeting the benchmark ranged between 1-94%.
- In C circle, only three licencees (Dishnet – J & K, Airtel – HP, BSNL – HP) met the benchmark. The achievement level of operators not meeting the benchmark ranged between 60-92%. BSNL- Orissa (60%) had the lowest performance level.

Billing (Benchmark >90%):

The survey was conducted separately for post-paid and pre-paid customers. In the case of post-paid segment overall 52.34% and in case of prepaid segment 75.59% of operators met the benchmark parameter.

- In Metro Circle, out of 24 operators only one operator (i.e. Airtel-Kolkata(89%)) did not meet the benchmark for pre-paid. In the case of post-paid 7 operators out of 24 met the benchmark. The achievement level of operators not meeting the benchmark ranged between 11 - 89%. The lowest satisfaction with billing services was observed with RISL - Kolkata (11%).
- In A circle, 9 out of 30 operators did not meet the benchmark for pre-paid. None of the operators of Karnataka Circle met the benchmark. The achievement level of operators not meeting benchmark ranged between 67-89%. 13 out of 30 operators did not meet the benchmark for post paid. None of the operators of Karnataka & Tamilnadu circle met the benchmark. The achievement level of operators not meeting the benchmark ranged between 57 - 88%. With lowest performance of Airtel-TN (57%)
- In the pre-paid segment of B Circle, 16 out of 47 operators did not meet the benchmark. The achievement level of the operators not meeting the benchmark ranged between 77 - 87% with lowest of BSNL-UP(E)(77%). In the post-paid segment, 19 out of 47 operators did not meet the benchmark. The achievement level of the



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operators not meeting benchmark ranged between 43 - 88%. Lowest benchmark was received by Hutch - UP (E). (43%)

- In C circle, 5 operators out of 27 did not meet the benchmark. In case of pre-paid segment. The achievement level of operators not meeting the benchmark ranged between 78 - 89% with lowestin BSNL-J&K(78%). In the post-paid segment12 out of 27 operators did not meet the benchmark .The achievement level of operators not meeting the benchmark ranged between 29 - 89% with lowest Rel Tel-NE (29.0%).

Maintainability (benchmark >95%):

Responses were received for 105 out of 128 licencees. No responses were received from subscribers of 23 licencees regarding this parameter.

90 out of 105 (85.7%) service providers did not meet the benchmark. The percentage of operators not meeting the benchmark was: Metro circle -95.83%, A Circle - 83.3%, B circle 92% and C Circle - 68%.

Achivement level of the operators not meeting the bench mark ranges between 55-90% in Metro circle, 35-90% in A circle, 19-93% in B circle and 8-93% in C circle

Help Line Service (benchmark >90%):

Responses were received for 123 out of 128 licensees. No responses were received from the subscribers of 05 licensees.

89 out of 123 (72.3%) service providers did not meet the benchmark. The percentage of operators not meeting the benchmark was: Metro Circle - 79%, A Circle - 46.6%, B Circle - 78.5% and C Circle - 85.18%.

The achivment level of operators not meeting the benchmark ranges between 62-88% in metro circles,43-88% in A circle, 36-89% in B circle and 42-88% in C circle

2.2.4 CUSTOMER SATISFACTION SURVEY FOR BASIC SERVICE

Customer perception with respect to operators' service was assessed for seven defined parameters through 30 questions. On an all India basis, 54% (38 out of 70 service providers) did not meet the benchmark for all the parameter taken together. As regards to the circle wise performance of the operators, 71.4% operators in Metro, 39.5% in A Circle, 53.03% in B Circle and 81% in C Circle did not meet the benchmark parameters. The findings with respect to major parameters are as follows:

Overall Customer Satisfaction (Benchmark >95%):

- In respect to Metro Circles, only Airtel -Mumbai met the benchmark. The achievement level of Operators not meeting benchmark ranged between 76 - 94% with lowest achivment level of BSNL- Kolkata 76%.



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- In A Circle, 07 out of 19 operators meet the benchmark. The Achievement level of operators not meeting the benchmark ranged between 77 - 94% with lowest achievement level of Rel comm-Gujrat.
- In B Circle, out of 26 operators only 5 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranged between 76 - 94% with lowest achievement level of BSNL- UP(E) 76%.
- In C Circle, none of the operators met the benchmark. The achievement level ranged between 56 – 91% with lowest achievement level of BSNL-NE-II (56%). The performance of C circle is poorer than all other circle

Maintainability (Benchmark 95%):

- In respect to Metro Circle, the only operator that met the benchmark parameter is - Rel comm -Chennai. The achievement level of operators not meeting the benchmark ranged between 33 - 92%. The lowest performance is in Airtel-Kolkata (33%).
- In A Circle, 8 out of 15 operators meet the benchmark parameters. The achievement level of operators not meeting the benchmark ranged between 59 - 90% the lowest performance is in BSNL-Gujrat (59%).
- In B Circle, 9 out of 26 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranged between 67 - 94% with lowest performance of Airtel-UP(E) (67%).
- In C Circle, none of the 12 operators met the benchmark. The achievement level of operators ranged between 57 - 91% with lowest achievement level of BSNL-Jharkhand (57%).
- .

Billing Services (Benchmark > 90%):

- In respect to Metro Circle, 9 out of 15 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranged between 81 - 88%.
- In A Circle, 14 out of 18 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranges between 67 - 83%.
- In B Circle, 20 out of 26 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranged between 61 – 89%.
- In C Circle, out of 10 operators, only 2 operators met the benchmark. The two operators are BSNL-HP (95%) and BSNL-A&N (96%). The achievement level of operators not meeting the benchmark ranged between 36 - 83%. The performance of C circle is poorer than other circle.



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Help Services (Benchmark > 90%):

- In respect to Metro Circle, only 3 operator, namely BSNL, Rel comm & Tata –all of Chennai, out of 15 operators meet the benchmark. The achievement level of the operators not meeting the benchmark ranged between 53 - 87%.
- In A Circle, 11 out of 18 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranges between 36 - 88%.
- In B Circle, only 2 namely Airtel and Rel comm-Punjab out of the 26 operators meet the benchmark. The achievement level of operators not meeting the benchmark ranged between 56 - 88%.
- In C Circle, only 1 operator i.e. Rel comm - HP (91%) met the benchmark. The achievement level of operators not meeting the benchmark ranged between 44 - 89%.

2.3 Salient Findings

During the audit of Exchanges and MSCs, there were few abnormal observations noted by TUV Auditors. Some of them have been listed below:

QOS Audit – Basic Service Providers

Data for the audits are available only at main exchange. Audit of rural exchange indicates the following issues:-

- Maintenance at Rural exchanges requires improvement. In BSNL-Uttranchal and MP. Circle, no maintenance was observed. In the surprise visit by auditor at 12:30 PM (working hours), the exchange was found locked.
- To register for new connections, the subscriber has to visit the main exchange. This leads to discomfort for the rural subscribers. This was observed at all the circles of BSNL.



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- Jumping of waiting list sequences were also being noted. Eg. In BSNL-MP the telephone no: 2491316 (Ad No: T-29/6012868 dated 29/06/2006) was installed on 07/07/2006 whereas the telephone No: 2490144 (Ad No: T-29/6013364 dated 03/07/06 was installed on 30/07/06.
- Long waiting list was observed in case where the exchange is not offering telephone connection on demand e.g. In BSNL –HP during the audit at Dharmshala covering 11 rural and 1 urban exchange, the waiting list was 70 as on 12.09.06.
- For all the parameters, when the value is calculated on exchange basis, it does not meet the benchmark set by TRAI. However, when the average value is taken for the circle together, it meets the benchmark. True picture does not get reflected.
- System of complain handling need to be revised to take care of the following issues :-
 1. Repeated complains registered by a subscriber are not being monitored e.g. Tel- 221222 BSNG-CG down five times from 10/07/06 to 24/07/06.
 2. Critical number such as 100 - Police, 101 - Fire and helpline numbers should be regulated separately. Instances are observed where no. 100 was down for 31 hours.
 3. Rent rebate not being followed for phones which are down for more than 7 days Eg: 220110 Chattisgarh-BSNL.
- Record keeping at the exchanges are not updated and maintained properly. It appears that the records are prepared just before the date of audit. There is mismatch, between the MIS data sent to their H.O and the raw data e.g. – TUMKUR, DAVANGERE, and BIDARIKERE MALLASANDRA BSNL-Exchanges in Karnataka.
- Calculation of MTTR not uniform among operators and exchanges. Some of them calculate on real time basis, others calculate on day basis. Some of the operators exclude holidays and Sundays, while others include it.

QOS Audit – Cellular Service Providers

- Generally it is observed that if calculated as a whole for the circle the operators meet the benchmark parameter, where as, if calculated individually call drop rates are alarming at few BTS, POI Congestion are alarming at few MSCs.
- During internal drive test none of the operator carry-out the indoor network testing. They don't carry out the regular planned drive test as well. Drive test is conducted by operator whenever there is a problem in their network.
- Calculation of CSSR is based on taking a sample of 100 calls only in case of Rel commTelecom. It should be calculated from all the calls passing through MSC.



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- There is a loss of 6% calls between the Switch and IVR. But the service provider is giving the IVR Response >99% e.g. BSNL – Haryana, total calls made on switch were 540063. Call reached on IVR = 509132. But the operator is providing IVR within 20 Seconds as 99.8% and within 40 seconds as 99.96%.



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3. SUMMARISED FINDINGS (ALL INDIA BASIS)

The Third Quarter involved the period July – Sep. 2006. In the Third quarter, 7 Basic and 14 Cellular Operators (Source: TRAI PMR Dt. June 2006) were required to be covered.

The 7 basic operators were audited in their Operating circles by the following activities:

- Sampled Exchanges
- Helpline
- Customer Care Centre

The 14 Cellular Operators were audited in their Operating circles by the following activities:

- Operator Assisted Drive test
- Sampled MSCs
- POI Congestion
- Helpline
- Customer Care Centre

In the Third quarter, on receipt of a request from TRAI to conduct drive tests for all operators in the Delhi circle, 6 independent drive tests were conducted. The detailed findings have been attached as Annexure 1 to this report.



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3.1 QOS - CELLULAR SERVICES

3.1.1. MSC AUDIT – CELLULAR SERVICES

3.1.1.1. COVERAGE

Table SF1 : Listed Active Operator's

Type	Nos.of Operators	Name Of Operators
Cellular (GSM+CDMA)	14 as per PMR	BPL Cellular
		Idea Cellular
		BSNL
		Bharti Cellular
		Rel commCDMA
		TATA
		Hutch
		Spice Communications
		Aircel
		Rel commGSM
		MTNL
		HFCL
		Dishnet
		Rel Commiable Internet Services



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Table SF2 : Listed Active circles - Cellular:

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
01	Bharti	Delhi	AP	Haryana	Assam
		Mumbai	Gujarat	Kerala	
		Chennai	Karnataka	MP	Bihar
		Kolkata	Maharashtra	Punjab	
			TN	Rajasthan	
				UP (E)	
				UP(W)	
				WB	Orissa
02	Hutch	Delhi	AP	Haryana	Not Operating
		Mumbai		Punjab	
		Chennai	Gujarat	Rajasthan	
		Kolkata	Karnataka	UP(E)	
				UP(W)	
				WB	
03	TATA- CDMA	Delhi	AP	Haryana	Bihar
		Mumbai	Gujarat	Kerala	
		Chennai	Karnataka	MP	HP
		Kolkata	Maharashtra	Punjab	
			TN	Rajasthan	
				UP (E)	
				UP(W)	
				WB	
04	Idea	Delhi	AP	Haryana	Not Operating
			Gujarat	Kerala	
			Maharashtra	MP	
				UP(W)	
05	MTNL	Mumbai	Not Operating	Not Operating	Not Operating
		Delhi			
06	Rel Comminace -CDMA	Delhi	AP	Haryana	Bihar
		Mumbai	Gujarat	Kerala	
		Chennai	Karnataka	MP	



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Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
				Punjab	HP
				Rajasthan	
				UP (E)	
				UP(W)	Orissa
		Kolkata	TN	WB	
07	BPL	Mumbai	Maharashtra	Kerala	Not Operating
			TN		
08	Aircel	Chennai	TN	Not Operating	Not Operating
09	Rel Commiable Internet Services	Kolkata	Not operating	Not Operating	Not Operating
10	Rel commGSM	Not operating	Not operating	WB	Assam
					Bihar
				MP	HP
					NE
					Orissa
11	Spice Communications	Not Operating	Karnataka	Punjab	Not Operating
12	BSNL	Chennai	AP	Haryana	Assam
			Gujarat	Kerala	
		Kolkata	Karnataka	MP	Bihar
			Maharashtra	Punjab	
			TN	Rajasthan	HP
				UP (E)	NE
				UP(W)	J&K
				WB	Orissa
13	HFCL	Not Operating	Not Operating	Punjab	Not Operating
14	Dishnet	Not Operating	Not Operating	WB	Assam
					NE
					J&K
					Orissa



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Total Required as per PMR	14	24	30	48	27
Total Covered	14	24	30	48	27
%age Coverage	100%	100%	100%	100%	100%
Operators Circle Coverage					129/129x100 = 100%

3.1.1.2 - CELLULAR SERVICES OBSERVATIONS

Table SF3: Parameter wise performance of the CMSPs

Parameter	Metro Circle		Circle-A		Circle-B		Circle-C		All Circle		% operators meeting bench-mark
	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	
Accumulated down time of community isolation < 24 hour	24	0	30	2	48	0	27	0	129	2	98.45
Call Setup Success Rate >95%	24	1	29	2	48	1	27	1	128	5	96.09
Service Access Delay 9-20 sec	23	0	29	0	47	0	24	0	123	0	100.00
SDCCH <1%	24	3	30	3	48	5	27	9	129	20	84.50
TCH Congestion < 2%	24	2	30	4	48	6	27	7	129	19	85.27
Call Drop Rate <3%	24	1	29	0	48	0	26	0	127	1	99.21
POI congestion	21	12	27	24	45	38	22	20	115	94	18.27
% of connections with good voice quality >95%	23	3	27	4	46	5	26	5	122	17	86.07
% of Calls answered Electronically within 20	22	2	30	3	45	0	24	4	121	9	92.56



South Asia

Parameter	Metro Circle		Circle-A		Circle-B		Circle-C		All Circle		% operators meeting bench-mark
	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	No of operators Audited	No of operator not meeting bench-mark	
Seconds >80%											
% of Calls answered Electronically within 40 Seconds >95%	21	0	30	3	45	2	24	3	120	8	93.33
% of Calls answered by operators within 60 Seconds >80%	22	9	30	14	47	18	27	9	126	50	60.32
Percentage of Calls answered by operators within 90 Seconds >95%	21	9	30	15	47	20	27	10	125	54	56.80
Billing Complaints per 100 bills issued <0.1%	23	2	30	11	48	14	25	5	126	32	74.60
% of complaints resolved within 4 weeks 100%	23	7	29	1	48	8	25	2	125	18	85.60
Period of refunds/ payment due to customers from the date of resolution of Complaints 100%	23	6	29	3	46	7	24	1	122	17	86.07
Overall Summary									1867	346	81.47

Note : The shortfall noticed in the nos. of operators audited in Metro Circle , ' A ' - Circle, ' B ', Circle – ' C ' Circle are either due to Data not provided by the service provider's or not applicable at some of the service providers.

Details are provided in note accompanying each graphs.



South Asia

3.1.1.3: CRITICAL ANALYSIS

The overall compliance with the benchmark is better in respect of the parameters Service Access Delay (100%), Call Drop Rate (99.21%), Call Setup Success Rate (96.09%), Accumulated Downtime (98.45%), percentage of Calls answered Electronically within 20 Seconds (92.56%), percentage of Calls answered Electronically within 40 Seconds (93.33%).

The parameters, which are of concern, are

- a) **Billing complaints per 100 bills issued:** 25.4% of the operators audited are not meeting the criteria.
- b) **Percentage of Calls answered by operator within 60 Seconds:** 39.7% of the operators is not meeting the criteria.
- c) **Percentage of Calls answered by operator within 90 Seconds:** 43.2% of the operators is not meeting the criteria.

The operators whose performance on a particular parameter is significantly lower i.e variation of 100% from the benchmark (for e.g. TCH Congestion Benchmark is <=2%, All the operators whose TCH Congestion is >4%) have been listed below:

Table SF4:

Parameters	Metro Circles	A Circles	B Circles	C Circles
Accumulated Down Time of Community Isolation (<=24 HOURS)	None	BSNL – Gujrat (59.8)	None	None
Call Setup Success Rate (>=95%)	None	None	None	BSNL-J&K(32.6)
Service Access Delay (9-20SECS)	None	None	None	None
SDCCH/ Paging channel cong (<=1%)	MTNL – Mumbai (10.98) MTNL-Delhi (8.18) Tata – Chennai (3.94)	BSNL-TN (3.82)	None	Dishnet – NE (42.04) Bharti – Bihar (4.190) RTL-NE(2.62)



South Asia

Parameters	Metro Circles	A Circles	B Circles	C Circles
TCH cong (<=2%)	RISL-Kolkata (4.3)	BSNL-TN (22.25) Spice-Kar (15.43)	Rel Tel – MP (15.6)	Rel Tel – Bih (14.01) Rel Tel – Assam (4.92) Rel Tel – NE (11.5) Dishnet-NE (14.45) Rel CommTel-Orrisa (9.96)
Call Drop rate (<=3%)	BSNL-Channi (5.3)	None	None	None
% Connections with Good Voice Quality (>=95%)	None	None	None	None
% of Calls answered Electronically within 20 Seconds >80%	BPL-Mumbai (17)	Idea-Guj (44.64)	None	BSNL-Assam (16.60) Bharti-NE (29)
8% of Calls answered Electronically within 40 Seconds (>95%)	None	None	None	BSNL-Assam (31.81) Bharti-NE (29)
% of Calls answered by operators within 60 Seconds(>80%)	None	BSNL – AP (14) BSNL – Mah (39.68) Bharti-Mah (40.7)	BSNL-Raj (12.71) BSNL-HAR (12) BSNL – UP W (9.94) BSNL – UP E (6.39)	Bharti-NE (0.00) BSNL- J&K (10.85) BSNL-H.P (16.41) Bharti-Assam (47.10)
Percentage of Calls answered by operators within 90 Seconds(>95%)	None	BSNL-AP (20) BSNL-Mah (39.69) Bharti-Mah (40.83)	BSNL-M.P.(58.21) BSNL-Har (20.11) BSNL-Raj (18.13) BSNL – UP W (16.85) BSNL – UP E (9.69)	Bharti-NE (6.00) BSNL-J&k (16) BSNL-HP (23.92) Bharti-Assam (48.8)
Billing Complains per 100 bills issued (0.1%)	Bharti-Channi (0.34)	BPL – TN (0.9) Tata – Guj (0.84) Aircel– TN (0.67) Bharti – Kar (0.68) Tata – Kar (0.65) Tata-AP(0.4)	Tata-Har(0.99) BSNL – UP W (2.11) Tata-Pun (0.77) Tata-M.P.(0.66) Bharti-M.p.(0.441)	BSNL-J&K (0.66) Bharti-J&K (0.60) BSNL-HP(0.58) Tata-HP(0.54)
%of Billing Complaints resolved within 4 weeks (100%)	None	None	None	None
Period of all refunds/payments due to customers from the date of resolution (<4 WEEKS)	Tata-Mumbai (40.16) MTNL-Delhi (50)	Tata-TN (57.14)	None	None



South Asia

3.1.2. INTER OPERATOR CALL ASSESSMENT (POI)

3.1.2.1: COVERAGE

Practical calls were made for all possible combinations for checking POI Congestion.

The observations have been tabulated in the ensuing pages of this report.

3.1.2.2: PERFORMANCE

Table SF 5: Performance

Circle/ Operators	Bharti	Hutch	Tata	Idea	MTNL	BSNL	Rel Comm Comm	RISL	Rel Tel	Dishnet	HFCL	Spice
Metro	11/32	4/32	4/32	0/7	7/21	4/11	6/32	5/6	NO	NO	NO	NO
A Circle	1/28	4/23	2/28	1/18	NO	14/35	4/28	NO	NO	NO	NO	NO
B Circle	12/51	22/50	16/59	7/27	NO	20/48	24/56	NO	9/15	2/7	6/6	2/6
C Circle	6/26	NO	6/16	NO	NO	19/27	4/17	NO	9/23	3/13	NO	NO
All Circles Total	30/137	30/105	28/135	8/52	7/21	57/121	38/133	5/6	18/38	5/20	6/6	2/6
% Congestion	21.90	28.57	20.74	15.38	33.33	47.11	28.57	83.33	47.37	25	100	33.33



South Asia

Circle/ Operators	BPL	AIRCELL
Metro	NO	2/19
A Circle	Merged with Hutch	1/17
B Circle	Merged with Hutch	NO
C Circle	NO	NO
All Circles Total		3/36
% Congestion		8.33

The first figure Rel Commates to number of interconnections established with other operators in all the circles where congestion is present. The second figure Rel Commates to total number of interconnections (not number of POIs) established with other operators in all the circles.

For example for in Metro Circles, the service providers are having 9 interconnections in Delhi, 12 in Mumbai, 6 in Kolkata, 5 in Chennai in all making 32 connections.



South Asia

MSC DATA – POI

TABLE SF 5A

Circle/ Operators	Bharti	Hutch	Tata	Idea	MTNL	BSNL	Rel comm
Metro	14/139	4/169	24/203	3/80	1/20	DNP	1/96
A Circle	71/257	1/192	45/732	24/189	NO	6/89	27/136
B Circle	141/365	28/214	34/309	23/159	NO	24/264	42/188
C Circle	55/105	NO	11/87	NO	NO	0/29	12/46
All Circles Total	281/866	33/575	114/1331	50/428	1/20	30/382	82/466
% Congestion	32.44	5.73	8.56	11.6	5	7.8	17.59

Circle/ Operators	RISL	Rel Tel	Dishnet	HFCL	Spice	Aircel	BPL
Metro	8/14	NO	NO	NO	NO	2/19	0/17
A Circle	NO	NO	NO	NO	NO	1/17	With Hutch
B Circle	NO	22/81	3/69	DNP	4/23	NO	With Hutch
C Circle	NO	30/69	27/193	NO	NO	NO	NO
All Circles Total	8/14	52/150	30/262	NO	4/23	3/36	0/17
% Congestion	57.14	34.6	11.4	DNP	17.39	8.33	0

DNP means – Data Not Provided by operator, "NO" means not operating

Analysis

The highest no. of POIs are found congested in case of RISL (57.14%), Rel Tel (34.6%), Bharti (32.44%), Rel comm (17.59%) .



South Asia

3.1.3 HELPLINE SERVICES – QOS CELLULAR

3.1.3.1 COVERAGE

Calls were made to call centre of 129 operators out of the 129 operating at present.

3.1.3.2 PERFORMANCE

TABLE SF 5B

Parameters	Metro Circle		A Circle		B Circle		C Circle		All circles		% Operators meeting Benchmark
	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	Total Operators audited	No of operator not meeting benchmark	
% of Calls answered Electronically within 20 Seconds >80%	24	3	30	4	48	10	27	6	129	23	82.2
8% of Calls answered Electronically within 40 Seconds (>95%)	24	2	30	4	48	12	27	5	129	23	82.2
% of Calls answered by operators within 60 Seconds(>80 %)	24	10	30	9	48	19	27	9	129	47	63.6
Percentage of Calls answered by operators within 90 Seconds(>95 %)	24	8	30	10	48	20	27	10	129	48	62.8

3.1.3.3 CRITICAL ANALYSIS

Percentage Of call answered by operator (voice to voice) within 60 sec: 36.4% of the operators audited is not meeting the criteria.

Percentage Of call answered by operator (voice to voice) within 90 sec: 37.2 % of the operators audited is not meeting the criteria.



South Asia

3.1.4 DRIVE TEST

3.1.4.1 COVERAGE

Total no. of drive test required to be conducted was 363.

360 Drive Tests were conducted in the following towns:

TABLE DT 01

Q-3			Cities
	Region	Circle	Cities
1	North	H.P	Una, Kangra, Dalhousie
2	North	Punjab	Bhatinda, Chandigarh, Patiala
3	North	Haryana	Yamuna Nagar, Sirsa, Bhiwani
4	North	UP-W	Alligarh, Barely , Dehradun
5	North	UP-E	Allahbad, Mirzapur, Fatehpur
6	North	Rajasthan	Nagour, Bikaner, Jaisalmer
7	North	M.P.+ CG	Chhatrapur, Sivpuri, Bhilai
8	North	Delhi	Delhi
9	North	J&K	Pahalgam Leh, Gadarwal,
10	East	W.B	Silliguri, Jalpaiguri, Coochbehar
11	East	Kolkata	Kolkata
12	East	Bihar	Begusarai, Lakhasarai, Munger
13	East	Jharkhand	Bokaro, Hazaribag, Deogarh
14	East	Orissa	Dhenkanal, Bhadrak, Bhubaneswar
15	East	Assam	Jorhat, Dibrugarh, Tinsukia
16	East	NE	Imphal, Senapati, Tamamglong
17	East	A & N	
18	South	Chennai	Chennai
19	South	AP	Mehboobnagar,Nalgonda,Khammam
20	South	Karnateka	Belgam, Billary, Chikmanglur
21	South	KaRel Comma	Trichur, Panghat,Kasargod
22	South	TN	Pondicherry,Errod,Mettor
23	West	Maharastra	Aurangabad,Jalgaon,Solhapur
24	West	Gujrat	Surat,Navsari,Bhavnagar
25	West	Mumbai	Mumbai

Note: In B Circle drive test was not conducted for HFCL- Punjab as it has recently been conducted to full mobility.



South Asia

3.1.4.2 PERFORMANCE

TABLE DT.02 - METRO CIRCLES

Parameters / Benchmarks		Delhi						Mumbai						Kolkata					
		Bharti	Hutch	Tata	Idea	MTNL	Rel comm	Bharti	Hutch	Tata	BPL	MTNL	Rel comm	Bharti	Hutch	Tata	BSNL	Rel co mm	Risl
% Connections with Good Voice Quality	>95%	96.76	100	95.96	92.83	92.5	98.26	88	92	95	95.50	85.5	85.5	95.53	96.2	97.66	96.12	98.9	98.54
Call Drop Rate	<3%	0	0	.5	2.225	2.9	.55	5.50	4	6.10	3.5	7.70	7.7	0	0	0	0.1	0	2.28
Call Success Rate	>95%	100	99.71	100	93.79	94.52	100	91.60	100	91.60	99.63	95.2	95.2	99.44	99.62	100	99.89	100	96.3
Blocked Calls	< 3	0	0	0	4.44	5.57	0	7.2	0	14	3.70	3.3	3.3	0.55	.35	0	0	0	2.83

	Chennai						
	Mobile	Bharti	Aircel	BPL (Hutch)	Tata	BSNL	Rel comm
% Connections with Good Voice Quality	>95%	90.56	96.08	96.54	95.64	88.6	99.02
Call Drop Rate	<3%	0	0	0	0	0.6	0
Call Success Rate	>95%	98.18	100	100	99.46	94	100
Blocked Calls	<3	0.9	0	0	0	4.2	0



South Asia

TABLE DT 03 : A CIRCLES

Parameters / Benchmarks		AP						Gujarat						Karnataka					
		Bharti	Hutch	Tata	BSNL	Rel Comm	Idea	Bharti	Hutch	Tata	BSNL	Rel Comm	Idea	Bharti	SPICE	BSNL	Rel Comm	Hutch	Tata
Percentage Connections with Good Voice Quality	>95%	98.156	98.169	99.89	93.00	99.97	99.25	97.42	95.9	97.38	87	98.95	DNP	95.13	98.57	87.13	99.60	92.54	97.66
Call Drop Rate	<3%	0	0	0	0	0	0	2.71	.85	.58	11.67	.86	0	0	0	.93	0	0	0
Call Success Rate	>95%	99.44	98.87	100	99.4	100	100	99.46	97.78	99.71	97.4	97.21	100	100	100	96.44	100	100	100
Blocked Calls	<3	0	0	0	0	0	0	.27	.55	.29	2.6	2.79	0	0	0	2.40	0	0	0

Parameters/ Benchmarks		Maharashtra						Tamil Nadu					
		Rel comm	Bharti	BSNL	BPL	TATA	Idea	Rel comm	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
Percentage Connections with Good Voice Quality	>95%	98.92	100	93.46	97.24	96.16	98.44	98.48	99.00	82.75	78.25	91.40	98.81
Call Drop Rate	<3%	0	1.15	0.90	0.54	0.27	0	0	0	1	38.57	0	0
Call Success Rate	>95%	100	98.93	98.09	99.70	100	100	100	100	99	63.02	100	100
Blocked Calls	<3	0	1.07	1.19	0.29	0	0	0	0	0	6.78	0	0



South Asia

TABLE DT 04 - B CIRCLES

Parameters/ Benchmarks		Haryana						Kerala						MP					
		Hutch	Idea	Rel Comm Comm	BSNL	Tata	Bharti	Hutch (BPL)	Bharti	BSNL	Tata	Idea	Rel comm Comm	Rel Tel	Idea	Rel Comm - Comm	BSNL	Tata	Bharti
Percentage Connections with Good Voice Quality	>95 %	98.54	94.41	99.36	97.2	97.95	98.27	98.50	98.20	97.29	99.65	99.80	98.60	95.15	98.44	99.27	100	99.37	100
Call Drop Rate	<3%	0.8	0	0	0	1.77	1.84	0	0	5.33	0	0	0	0	0.833	0	10.18	0	.36
Call Success Rate	>95 %	99.20	100	100	99.73	96.70	97.55	100	100	96.86	100	100	100	91.95	99.16	100	93.76	100	100
Blocked Calls	< 3	0	0	0	.27	1.52	2.44	0	0	1.85	0	0	0	5.22	0	0	3.54	0	0

Parameters/ Benchmarks		Punjab						Rajasthan						UP (E)					
		Spice	Hutch	Rel comm	BSNL	Tata	HFCL	Bharti	Hutch	Bharti	BSNL	Tata	Rel comm	Hutch	Bharti	BSNL	Tata	Rel Comm ane Comm	
Percentage Connections with Good Voice Quality	>95%	99.63	95.29	99.33	95.33	97.11	N.D	96.73	88.6	97.17	93.7	99.42	100	89	99.2	88.30	98.59	98.39	
Call Drop Rate	<3%	.87	0.61	0.54	.74	0.33	N.D	0	1	0	0.53	0.512	0.33	2.33	0	1.51	0.29	0.82	
Call Success Rate	>95%	99.34	99.07	99.11	100	99.75	N.D	100	97.33	100	91.66	100	99.8	98.33	100	93.14	99.57	98.25	
Blocked Calls	< 3	.42	0.92	0.81	0	0.24	N.D	0	0	0	0.33	0	0	1.3	0	0.66	0.21	1.18	

Parameters / Benchmarks		UP(W)						West Bengal											
		Hutch	Idea	BSNL	Tata	Rel Comm ine Comm	Bharti	Rel Tel	Hutch	Rel comm	BSNL	Tata	Dishnet	Bharti					
Percentage Connections with Good Voice Quality	>95%	97.69	90.71	95.45	97.60	95.95	93.37	95.9	97.81	98.7	85.75	95.69	97.44	98.06					
Call Drop Rate	<3%	2.82	0.57	0	0.20	5.07	1.36	1.06	0	1.1	3.7	0	1.06	0.61					
Call Success Rate	>95%	91.84	98.16	98.93	100	96.41	99.34	96.6	100	100	98.6	100	96.6	99.39					
Blocked Calls	< 3	4.7	0.33	0.86	0	3.8	0.4	0	0	0	1.05	0	0	0.61					

Note : N.D – Not done. Reason attributed is due to change of HFCL from Basic to Mobile in Q3.



South Asia

TABLE : DT05 - C CIRCLES

Parameters / Benchmarks		ASSAM				BIHAR					HP				
		Rel Tel	Bharti	Dishnet	BSNL	Rel Tel	Rel Commiane Comm	Tata	BSNL	Bharti	Rel Tel	Rel comm	Tata	BSNL	Bharti
Percentage Connections with Good Voice Quality	>95%	98.4	91	89.92	84.71	98.44	99.41	98.45	94.94	95.11	98.64	98.82	97.15	98.19	96.03
Call Drop Rate	<3%	0	1.125	0	1.02	0	0	.573	0.5	0	0.67	0	0	3.09	0
Call Success Rate	>95%	96.06	97.99	99.18	88.99	99.32	100	99.31	93.09	100	97.78	100	100	95.67	100
Blocked Calls	< 3	3.98	0	0.31	0	0.97	0	0	1.12	0	2.21	0	0	4.34	0

Parameters/ Benchmarks		NE				J &K			ORISSA					
		Rel Tel	Bharti	Dishnet	BSNL	Dishnet	Bharti	BSNL	Rel Tel	Rel comm	Tata	Dishnet	BSNL	Bharti
Percentage Connections with Good Voice Quality	>95%	98.2	99.5	92.67	DNP	97.35	97.8	92.88	96.28	98.42	98.66	95.92	71.6	95.53
Call Drop Rate	<3%	1.5	0.083	0.52	DNP	0	0	6.45	0.404	1.19	2.76	0.56	4.02	0
Call Success Rate	>95%	99.03	100	96.28	DNP	100	100	94.49	97.33	98.81	100	99.5	95.97	100
Blocked Calls	< 3	1.1	0	3.83	DNP	0	0	0	2.22	0.43	0	0	5.9	0

Note : Despite respected followup with BSNL- NE Circle the drive test log files were not provided to us for our review and comments.



South Asia

3.2 QOS – BASIC SERVICES

3.2.1 EXCHANGE AUDIT (INCLUDES CUSTOMER CARE CENTRES)

The following operators were covered in Quarter 3

3.2.1.1.: COVERAGE

TABLE –SF 6

Type	Nos.of Operators	Name Of Operators
Basic	7	MTNL
		BSNL
		Rel comm
		Bharti
		TATA
		Shyam
		HFCL

Table SF7: Circle wise coverage

Sr.Nos	Service Provider	Metro Circle	“A” Circle	“B” Circle	“C” Circle
01	BSNL	Chennai	AP	MP	Bihar
		Kolkata	Gujarat	Chattisgarh	A & N
			Maharashtra	Punjab	Assam
			TN	Rajasthan	HP
			Karnataka	Haryana	Jharkhand
					J&K
				Kerala	NE1
				UP(E)	NE2
				UP(W)	Orissa
				WB	
				Uttaranchal	



Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
02	MTNL	Delhi	Not Operating	Not Operating	Not Operating
		Mumbai			
03	Rel comm	Delhi	AP	MP	Bihar
		Mumbai	Gujarat	Punjab	Orissa
		Chennai	Maharashtra	Rajasthan	HP
		Kolkata	TN	Haryana	
			Karnataka	Kerala	
				UP (E)	
				UP (W)	
04	TATA	Delhi	AP		
		Mumbai	Gujarat		
		Chennai	Maharashtra		
			TN		
			Karnataka		
05	Bharti	Delhi	AP	MP	
		Mumbai	TN	Punjab	
		Kolkata	Karnataka	UP(W)	
		Chennai	Gujarat	Haryana	
			Maharashtra	UP(E)	
				Kerala	
06	Shyam	Not Operating	Not Operating	Rajasthan	Not Operating
07	HFCL	Not Operating	Not Operating	Punjab	Not Operating
Total required to be covered as per PMR	7	15	20	26	12
Total Covered	7	15	20	26	12



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Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
Percentage Covered	100%	100%	100%	100%	100%
Operators-Circle Coverage	73/73 x 100 = 100%				

3.2.1.2 PERFORMANCE

Table SF 9: Parameter wise performance of the BSOs

Parameters	Metro Circle		Circle-A		Circle-B		Circle-C		All Circle		% operators meeting bench-mark
	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	
Provision of telephone after registration of demand 100% with in 7 days	15	15	20	18	26	26	12	11	73	70	4.1
Fault incidence <5	15	6	20	6	23	14	9	8	67	34	49.25
Fault repaired by next working day>90	15	2	20	9	23	11	9	8	67	30	55.22
Mean Time to Repair (MTTR) <8	14	2	20	7	23	9	9	6	66	24	63.64
Grade of service (i)Junction between local exchange .002	15	8	20	6	25	6	9	5	69	25	63.76
(ii)Tax to Local .005	15	6	20	9	26	14	12	6	73	35	52.05



Parameters	Metro Circle		Circle-A		Circle-B		Circle-C		South Asia All Circle		% operators meeting bench-mark
	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	No of operators Audited	No of operators not meeting bench-mark	
(iii) Local to Tax .005	15	4	20	8	26	11	12	6	73	29	61.64
(iv) Tax to tax .005	15	5	20	6	26	6	12	4	73	21	71.23
Call completion rate in local network >55	15	5	19	9	25	12	11	4	70	30	57.14
Metering & billing credibility <0.1	15	1	19	6	25	5	12	0	71	12	83.10
Shifts 95	15	13	19	17	23	18	9	9	66	57	13.63
Closures 95	14	8	18	13	22	13	9	6	63	40	36.50
Additional facility 95	15	4	19	7	25	7	8	3	67	21	68.65
% of Calls answered Electronically within 20 Seconds >80%	12	2	13	0	20	1	11	0	56	3	94.64
8% of Calls answered Electronically within 40 Seconds (>95%)	12	0	13	0	20	1	11	0	56	1	98.21
% of Calls answered by operators within 60 Seconds(>80%)	13	2	17	4	24	2	6	1	60	9	85.00
Percentage of Calls answered by operators within 90 Seconds(>95%)	13	5	17	4	23	4	6	1	59	14	76.27
Time taken for refund after closure 100	15	3	20	6	26	10	9	4	70	23	67.14
Overall Summary									980	386	60.61



Note : The shortfall noticed in the number of operators audited in Metro Circle, A-Circle, B-Circle and C-Circle are either due to “ Data not provided by the service provider or ‘ Not applicable’ at some of the providers”

Details are provided in the note accompanying each graph.

3.2.1.3 CRITICAL ANALYSIS

The parameters, which are of concern are:-

- a) **Provision of Telephone:** 95.9% of the operators audited are not meeting the criteria.
- b) **Fault Incidences:** 50.75% of the operators audited are not meeting the criteria.
- c) **Fault repaired by next working day** - 44.8% of operators are not meeting the benchmark criteria.
- d) **Call Completion Rate (Local Network):** 42.9% of the operators audited are not meeting the criteria.
- e) **Shift Request:** 86.4% of the operators audited are not meeting the criteria.
- f) **Request for Closure:** 63.49% of the operators are not meeting the benchmark criteria.

The operators whose performance on a particular parameter is significantly lower than the benchmark are detailed as below:

TABLE SF 10: CRITICAL ANALYSIS

Parameters	Metro Circles	A Circles	B Circles	C Circles
Provision of Telephone after registration of demand (100% IN 7 DAYS)	None	BSNL – Mah (35.31) BSNL – Guj (34.56) BSNL – Kar (38.52)	BSNL –WB (10.22) Bharti-UP(W) (32.11) BSNL – UP (E) (35.33) BSNL – Kerla (38.54) BSNL –Rajasthan (46.16) BSNL – uttaranchal (48.48)	BSNL – J&K (8.25) BSNL – NE1 (15.80) BSNL – HP (23.07) BSNL – A&N (34.10) BSNL – Jharkand (47.45)
Fault Incidences (<5)	MTNL – Mum (18.41) MTNL – Del (14.16) BSNL – Kol (13.89)	Bharti – Guj (10.38) Bharti – AP (9.6)	BSNL – UP(E) (28.33) BSNL – WB (22.56) BSNL UP(W) (17.62) Bharti UP(W) (12.51)	BSNL – JharK (23.31) BSNL – Orissa (21.84) BSNL – NE2 (20.32)



Parameters	Metro Circles	A Circles	B Circles	South Asia C Circles
			BSNL CTG(11.87) BSNL Haryana (10.91) BSNL Uttarchal (10.80)	BSNL – A&N (20.10) BSNL – Bihar (16.57) BSNL – Assam (16.35)
Fault repair by Next Working Day (90%)	MTNL – Mum (46.96)	BSNL – Mah (17.22)	None	BSNL – J&K (4.82)
Mean time for Repair (<8 HRS)	None	BSNL – Guj (28.52) BSNL – Mah (17.08) Tata – Guj (15.91)	None	BSNL – J&K (62.42) BSNL- Bihar(12.19) BSNL-HP(12.08)
Grade of Service Junction between Local Exch (0.002%)	Tata – Mum (0.12) Rel Comm – Kol (0.49) BSNL – Kol (0.118)	None	BSNL – WB (0.54)	Rel Comm – Orissa (2.64) BSNL – Assam (0.29) BSNL-Bihar(0.19) Rel Comm –Bihar (0.19)
CCR within local network (>55%)	Rel Comm -kolkata (34.50)	Bharti-AP(33)	Bharti-Kerla (30.46) Rel Comm -UP(E) (31.50) Rel Comm -Raj (34) Rel Comm-WB (34.50)	BSNL – Orissa (24.95) Rel Comm – HP (32)
Metering and Billing Credibility (<0.10%)	BSNL – Chennai (0.35) BSNL – Kol (0.048)	Bharti – AP (0.34)	BSNL –Raj(0.835) BSNL –UP(W) (0.37) BSNL – Har (0.324) BSNL Uttranchal (0.3)	None
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	Tata – Chennai (15) Bharti – Kol (0.0) BSNL – Chennai (17) MTNL – Mum (25) Bharti – Delhi (43.98)	Tata – TN (15) BSNL – Kar (20.46) BSNL – TN (31.87) BSNL – Mah (36.68) BSNL – Guj (43.79)	BSNL –Kerla (15.61) BSNL-Uttranchal (33.33) Bharti-kerla(0) Bharti-UP(E)(25.92)	BSNL – J&K (0) BSNL – NE2 (10.14)
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	Tata – Chennai (30) Tata-Mumbai (0) BSNL – Chennai (28.36)	Bharti – AP (0) Tata – Kar (0) BSNL – Mah (23.64) Tata – TN (30) BSNL – TN (31.51)	Bharti-Kerla (0)	BSNL – J&K (0) BSNL – NE1 (25.04)
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	None	BSNL – Kar (23.19)	None	BSNL – NE1 (35.67) BSNL- J&K(0)
Time taken for refund of deposit after closure (100% WITHIN 60 DAYS)	Bharti – Del (19.75) Bharti – Mum (24.20) Tata – Mum (32.96)	Bharti – Mah (27.09) BSNL – Mah (44.86)	Bharti-Punjab(30.64) BSNL-Kerla (50.75)	BSNL – Assam (3.47) BSNL – Jhar (50)



South Asia

3.2.2 HELPLINE - BASIC SERVICES

3.2.2.1 COVERAGE

Calls were made to the call centre of 7 operators to verify the response time of IVR and Customer Agent.

3.2.2.2 PERFORMANCE

TABLE SF: 11

Parameters	Metro Circle		A Circle		B Circle		C Circle		All circles		% Operators meeting Benchmark
	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	No of operators Audited	No of operator not meeting benchmark	Total Operators audited	No of operator not meeting benchmark	
% of Calls answered Electronically within 20 Seconds >80%	15	0	20	0	26	2	12	0	73	2	97.26
8% of Calls answered Electronically within 40 Seconds (>95%)	15	0	20	0	26	3	12	0	73	3	95.89
% of Calls answered by operators within 60 Seconds(>80%)	15	3	20	4	26	2	12	1	73	10	86.3
Percentage of Calls answered by operators within 90 Seconds(>95%)	15	3	20	4	26	5	12	1	73	13	82.19



South Asia

3.2.2.3 CRITICAL ANALYSIS

The operators whose performance on a particular parameter is significantly lower than the benchmark are detailed as below

Parameter	Metro Circle	A Circle	B Circle	C Circle
% of calls answered electronically within 20 Seconds (Benchmark 80%)	None	None	REL COMM –UP(E) (20) REL COMM-Raj (52)	None
% of calls answered electronically within 40 Seconds (Benchmark 95%)	None	None	REL COMM –UP(E) (20) Rel Comm-Raj (52)	None
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	Rel Comm-Mumbai (4) REL COMM-Delhi(26) Tata-Mumbai (38)	Tata-Mah(36)	REL COMM-Raj(0) REL COMM-UP E(20)	BSNL – J&K (0)
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	REL COMM-Delhi(40) Tata-Mumbai(44)	Tata-Mah(56)	REL COMM – UP(E)(20) REL COMM-Raj (38)	BSNL – J&K (0)



South Asia

3.3 CUSTOMER SATISFACTION SURVEY (CELLULAR)

3.3.1 COVERAGE : TABLE – SF 12

State	Aircell	Dishnet	Airtel	BPL	BSNL	Hutch	Idea	Rel comm	Rel Tel	Spice	MTNL	Tata	Total
Chennai	652		529		583	603		567				182	3116
Delhi			615			649	583	589			555	604	3595
Kolkata			595		604	600		600	600			601	3600
Mumbai			590	587		586		505			584	600	3452
AP			401		401	400	402	399				400	2403
Assam		252	254		253				253				1012
Bihar			252		255			252	254			252	1265
Gujrat			404		402	401	400	401				200	2208
Haryana			250		249	250	252	278				250	1529
HP			278		263			129	229			108	1007
J&K		23	239		317								579
Karnataka			423		404	375		399		398		402	2401
Kerala			251	260	248		252	399				394	1804
Maharastra			401	399	400		400	400				198	2198
MP			250		256		259	254	249			251	1519
NE		252	255		253				252				1012
Orissa		252	252		251			255	253			253	1516
Punjab			306		182	253		395		291		200	1627
Rajasthan			264		269	240		261				253	1287
Tamilnadu	496		401	444	453			345				159	2298
UP (E)			249		280	281		395				287	1492
UP(W)			263		263	255	278	258				257	1574
WB		253	253		253	253		253	253			253	1771
Grand Total	1148	1032	7975	1690	6839	5146	2826	7334	2343	689	1139	6104	44265

Note : HFCL Punjab not covered because of Low subscriber base.



South Asia

3.3.2 PERFORMANCE

Parameter wise performance of the CMSPs

TABLE SF: 12 A

Parameters	Metro Circle		A Circle		B Circle		C Circle		All Circles		% Operators meeting Benchmark
	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	Total operators Audited	No. of operator not meeting benchmark	
% Satisfied with provision of service (95%)	24	3	30	6	47	12	27	5	128	26	79.69
% Satisfied with Prepaid Billing services (90%)	24	1	30	9	47	16	27 (* 1)	5	128 (* 1)	31	75.59
% Satisfied with Post-paid Billing services (90%)	24	17	30	13	47	19	27	12	128	61	52.34
% Satisfied with help services (90%)	24	19	30	14	47 (* 5)	33	27	23	128 (* 5)	89	27.64
% Satisfied with Network Performance (95%)	24	23	30	24	47	43	27	24	128	114	10.94
% Satisfied with maintainability (95%)	24	23	30 (* 12)	15	47 (* 9)	35	27 (* 2)	17	128 (* 23)	90	14.29
Satisfaction with supplementary services (95%)	24	10	30	13	47 (* 5)	25	27	3	128 (* 5)	51	58.54
Overall customer satisfaction (95%)	24	23	30	30	47	47	27	27	128	127	0.78
Overall Summary									990	589	40.51

Note: “(*)” - Either Subscriber unable to answer or did not access the service or no incidences reported and these are not counted when calculating percentage of operators meeting the benchmark.



South Asia

CRITICAL ANALYSIS

The operators whose performance on a particular parameter is significantly lower than the benchmark are detailed as below

TABLE SF:13

The operators whose performance on a particular parameter is significantly lower (<50%) than the benchmark are detailed as below:

Parameters	Metro Circle	A Circle	B Circle	C Circle
% Satisfied with provision of service (>95%)	none	none	none	none
% Satisfied with Prepaid Billing services (>90%)	none	none	none	none
% Satisfied with Postpaid Billing services (>90%)	Tata -Cheenai (36) RISL-Kolkata (11)	none	Hutch- UP E (43)	Rel Tel-NE (29)
% Satisfied with help services (>90%)	none	Tata-Gujarat (43) Airtel-Gujrat (45)	Rel Tel -WB(36) Tata -WB(36)	BSNL -Bihar(42)
% Satisfied with Network Performance (>95%)	none	none	BSNL –UP E(1) Rel comm -UP E(1) Rel Tel -WB(45)	none
% Satisfied with maintainability (>95%)	none	Airtel -Gujarat(45) Tata-TN (35)	Airtel -Haryana (43) Hutch-Haryana (43) Idea-Haryana (44) BPL -Kerala(38) BSNL -Keala(44) Idea-Kerala (31) Rel comm -Kerala(35) BSNL-Rajasthan (19) Hutch -Rajasthan(44) Rel Tel -WB(41) Tata –WB(44)	BSNL-Bihar (42) Airtel –J&K(13) BSNL-J&K(8)
Satisfaction with supplementary services (>95%)	none	none	None	none
Overall customer satisfaction (>95%)	none	none	None	none



South Asia

3.4 CUSTOMER SATISFACTION SURVEY BASIC

3.4.1 Coverage

State	Airtel	BSNL	HFCL	MTNL	Rel Comm	Shyam	TATA	Total
Assam		250						250
Bihar		251			200		200	651
Chennai	889	1097			234		746	2966
Delhi	619			1216	599		607	3041
HP		256			166		184	606
J&K		193						193
Jharkhand		250						250
Kolkata	253	598			249		200	1300
Mumbai	603			761	643		454	2461
NE		250						250
Orissa		250			199		199	648
NE2		499						499
A&N		25						25
AP	253	599			251		362	1465
Chattisgarh		454						454
Gujarat	1	249			410		381	1041
Haryana	103	401			216		200	920
Karnataka	602	411					398	1411
Kerala	50	320			318		268	956
Maharastra	4	399			394		395	1192
MP	244	425			224		257	1150
Punjab	91	254	464		250		200	1259
Rajasthan		483			201	255	200	1139
Tamilnadu	427	387			201		411	1426
UP (W)	90	158			152		176	576
UP-E	107	386			153		55	701
Uttranchal		92						92
WB		249			252			501
Grand Total	4336	9186	464	1977	5312	255	5893	27423



South Asia

3.4.2 PERFORMANCE

TABLE SF:14 Parameter wise performance of the BSOs

Parameters	Metro Circle		A Circle		B Circle		C Circle		All Circles		% Operators meeting Benchmark
	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	No. of operators Audited	No. of operator not meeting benchmark	Total operators Audited	No. of operator not meeting benchmark	
% Satisfied with provision of service (95%)	15	10	19	7	26	9	12 (* 1)	9	72 (* 1)	35	50.7
% Satisfied with Billing services (90%)	15	6	19 (* 1)	4	26	6	12 (* 2)	8	72 (* 3)	24	65.2
% Satisfied with help services (90%)	15	12	19 (* 1)	7	26	24	12 (* 1)	10	72 (* 2)	33	52.8
% Satisfied with Network Performance (95%)	15	13	19	9	26	15	12	11	72	48	33.33
% Satisfied with maintainability (95%)	15	14	19 (* 4)	7	26	17	12	12	72 (* 4)	50	26.4
Satisfaction with supplementary services (95%)	15	6	19 (* 3)	3	26 (* 1)	4	12 (* 3)	2	72 (* 7)	15	77.62
Overall customer satisfaction (95%)	15	14	19	12	26	21	12	12	72	59	18.06
Overall Summary									487	264	45.72

- Karnataka Rel comm not done as the directory was not available.

(*) - Means subscriber is either unable to answer or did not access the service or no incidences reported. These are not counted when calculating % of operators meeting the benchmark

For details refer to 3.6.3 of the report.



South Asia

CRITICAL ANALYSIS

The operators whose performance on a particular parameter is significantly lower (<50%) than the benchmark are detailed as below:

TABLE SF:15

Parameters	Metro Circle	A Circle	B Circle	C Circle
% Satisfied with provision of service (>95%)	None	None	None	None
% Satisfied with Billing services (>90%)	None	None	None	BSNL- Jharkhand (36)
% Satisfied with help services (>90%)	None	Rel comm -Gujarat (36) Tata -Gujarat (39)	None	BSNL -Assam – (44)
% Satisfied with Network Performance (>95%)	None	None	None	None
% Satisfied with maintainability (>95%)	Kolkatta – Airtel (33)	None	None	None
Satisfaction with supplementary services (>95%)	None	None	None	None
Overall customer satisfaction (>95%)	None	None	None	None



South Asia

3.5 SUMMARY OF FINDINGS (CIRCLE WISE)

The Telecom Regulatory Authority of India (TRAI) has a critical mandate to protect the interest of consumers in addition to various other functions bestowed on it. As part of the licence conditions to Basic and CMTS (Cellular Mobile Telephone Services) operators, it has the power and authority to measure the Quality of Service provided by various Government (BSNL & MTNL) and private operators. The parameters that need to be measured for Basic and Cellular Services have been specified in the TRAI notification of July 2005. The summarised results of the Quality of Service Audit and Customer Satisfaction Survey are given below.

3.6 COMPLIANCE REPORT – QOS CELLULAR

3.6.1 PERFORMANCE REPORT - QOS CELLULAR

Metro Circles

Parameters / Benchmark		Chennai						Delhi						Kolkata					
		Bharti	BSNL	Hutch	Rel comm	Aircel	Tata	Bharti	Hutch	Idea	MTNL	Rel comm	Tata	Bharti	BSNL	Hutch	Rel comm	RISL	Tata
Accumulated down time of community isolation	<24 hrs	0.00-	0	2.19	0	0	0	0	0	0	0	0	0	0	8.7	0	0	7.84	0
Call Setup Success Rate	>95%	99.36	98.83	99.38	99.5	99.1	99.96	98.94	98.19	99.98	85.2	99.45	97.93	97.02	96.28	99	99.45	95.77	96.95
Service Access Delay	=<20 sec	3.44	10.4	2.5	0.3	10.3	13.47	3.4	8.25	8.65	DNP	1.35	10.5	17.85	9.18	19	1	8.36	8.9
SDCCH <1%	<1%	0.2	0.195	0.37	0	0.26	3.94	0.145	0.006	0.47	8.18	0	0	0.786	0.68	0.22	0	0.52	0
TCH Congestion < 2%	< 2%	0.107	0.78	1.78	0	1.5	0.04	0.065	0.03	1.94	2.74	0	0.24	0.37	1.65	0.48	0	4.3	1.6
Call Drop Rate	<3%	0.6	5.3	0.83	0.58	0.73	0.57	1.33	1.24	0.66	1.79	0.7	0.76	1.47	0.61	0.78	0.7	1.03	0.79
% of connections with good voice quality	>95%	95.78	94.7	100	97	95.16	96.5	97.33	100	97.25	DNP	97	96.6	96.9	96	96.29	85	99.62	97.54
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	78	80	96	99.5	80	100	99.88	99.88	100	99.99	99.5	100	97.01	95	100	99.5	NA	NA
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	100	100	100	99.5	100	100	99.95	99.99	100	99.99	99.5	100	97.43	99	100	99.5	NA	NA
% of calls answered by operator within 60 Seconds Seconds	>80%	88	76	88	76	88	96	96.72	79.34	60	97.76	76	91	67.42	82	95.5	76	100	NA

Parameters / Benchmark		Chennai						Delhi						Kolkata					
		Bharti	BSNL	Hutch	Rel comm	Aircel	Tata	Bharti	Hutch	Idea	MTNL	Rel comm	Tata	Bharti	BSNL	Hutch	Rel comm	RISL	Tata
(Benchmark 80%)																			
% of calls answered by operator within 90 Seconds	>95%	100	100	100	82	100	100	97.88	83.34	DNP	98.89	82	94	71.11	95	98.98	82	100	NA
Seconds (Benchmark 80%)																			
(Benchmark 95%)																			
Billing Complaints per 100 bills issued	<0.1%	0.340	0.080	0.030	0.060	0.130	0.090	0.056	0.073	0.047	0.016	0.060	0.010	0.024	0.012	0.000	0.060	DNP	0.058
% of complaints resolved within 4 weeks	100%	100	100	100	100	99.29	100	100	100	100	98.92	100	100	100	99	100	100	DNP	95.65
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100	100	100	100	100	100	100	100	100	50	100	95.67	100	100	100	100	DNP	62.24

Parameters / Benchmark		Mumbai					
		Bharti	BPL	Hutch	MTNL	Rel comm	Tata
Accumulated down time of community isolation	<24	0.00	7.00	0.00	0.00	0.00	0.00
Call Setup Success Rate	>95%	99.30	99.38	99.00	96.33	96.33	99.47
Service Access Delay	=<20	3.42	10.38	10.50	4.39	4.39	8.30
SDCCH <1%	<1%	0.340	0.130	0.690	10.980	0.890	0.000
TCH Congestion < 2%	< 2%	0.660	1.610	1.420	1.940	1.940	0.570

Call Drop Rate	<3%	1.19	1.47	2.00	2.04	2.04	0.30
% of connections with good voice quality	>95%	94.00	98.52	95.42	95.18	95.18	95.68
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	80.00	17.00	99.20	83.00	99.50	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	95.00	NA	99.30	99.32	99.50	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	>80%	80.00	91.60	82.90	NA	76.00	74.00
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	>95%	95.00	94.00	96.90	NA	82.00	79.00
Billing Complaints per 100 bills issued	<0.1%	0.020	0.010	0.029	0.052	0.014	0.051
% of complaints resolved within 4 weeks	100%	100.00	100.00	100.00	95.00	95.00	98.99
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	99.51	99.51	40.16

METRO-CIRCLE**MSC DATA – POI**

	Delhi						Mumbai						Kolkata						RISL
	Bharti	Hutch	Tata	Idea	MTNL	Rel comm	Bharti	Hutch	Tata	BPL	MTNL	Rel comm	Bharti	Hutch	Tata	BSNL	Rel comm		
Total POIs	11	28	80	80	20	36	54	53	41	17	DNP	38	36	66	37	DNP	10	14	
POIs Not Meeting	0	0	2	3	1	1	0	4	3	0	DNP	0	9	0	12	DNP	0	8	

	Chennai					
	Bharti	Hutch	Tata	BSNL	Rel comm	Aircel
Total POIs	38	22	45	DNP	12	19
POIs Not Meeting	5	0	7	DNP	0	2

Practical Data - INTER OPERATOR CALL ASSESSMENT

	Delhi						Mumbai						Kolkata					
	Bharti	Hutch	Tata	Idea	MTNL	Rel comm	Bharti	Hutch	Tata	BPL	MTNL	Rel Comm I Comm	Bharti	Hutch	Tata	BSNL	Rel comm	RISL
Total POIs	9	9	9	7	9	9	12	12	12	12	12	12	6	6	6	6	6	
POIs Not Meeting	0	0	0	0	2	0	6	3	3	4	5	5	5	1	1	4	1	5

	Chennai					
	Bharti	Hutch	Tata	BSNL	Rel comm	Aircel
Total POIs	5	5	5	5	5	5
POIs Not Meeting	0	0	0	0	0	0

Legends:-

DNP – Data not provided; ND - Not done; NI - No incidence; NA – Not applicable.

HELPLINE DATA – PRACTICAL

Operator	DELHI						MUMBAI						KOLKATA					
	Bharti	Hutch	Tata	Idea	MTNL	Rel comm	Bharti	Hutch	Tata	BPL	MTNL	Rel comm	Bharti	Hutch	Tata	BSNL	Rel comm	RISL
%of call answered (electronically) within 20 sec	100	100	100	84	48	100	92	88	91	100	96	96	100	88	100	76	8	N/APPL
% of call answered(electronically) within 40 sec	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	8	N/APPL
% of call answered by operator(voice to voice) within 60 sec	90	100	100	84	42	76	54	50	31	42	40	40	92	92	N/AV	64	6	100
% of call answered by operator(voice to voice t within 90 sec	100	100	100	100	44	96	58	52	61	68	50	50	100	100	N/AV	100	8	100

Operator	CHENNAI					
	Bharti	Hutch	Tata	BSNL	Rel comm	Aircel
%of call answered (electronically) within 20 sec	100	100	100	100	100	80
% of call answered(electronically) within 40 sec	100	100	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	100	97	97	100	100	88
% of call answered by operator(voice to voice t within 90 sec	100	100	100	100	100	100

A Circles

Parameters / Benchmark		AP						Gujarat						Karnataka					
		Bharti	BSNL	Hutch	Idea	Rel comm	Tata	Bharti	BSNL	Hutch	Idea	Rel comm	Tata	Bharti	BSNL	Hutch	Rel comm	Spice	Tata
Accumulated down time of community isolation	<24	3.20	2.16	6.24	9.00	1.56	6.00	5.00	59.80	7.80	6.18	1.00	4.15	9.76	6.50	15.29	0.66	11.90	16.19
Call Setup Success Rate	>95%	98.24	95.71	99.00	99.99	99.70	98.20	DNP	99.51	92.58	97.05	99.50	98.44	98.15	97.81	98.29	99.62	98.64	96.98
Service Access Delay	=<20	2.24	7.12	9.00	1.00	1.50	5.60	4.55	2.25	DNP	13.37	1.60	5.23	4.60	5.20	10.29	1.50	8.44	2.69
SDCCH <1%	<1%	0.035	0.230	0.270	0.210	0.000	0.000	1.060	0.760	0.190	0.750	0.000	0.000	0.600	0.440	0.190	0.000	1.080	0.000
TCH Congestion < 2%	< 2%	1.700	2.800	0.460	1.200	0.000	0.080	2.370	0.950	1.200	0.410	0.000	0.120	1.340	1.530	1.700	0.000	15.430	0.630
Call Drop Rate	<3%	0.940	1.410	0.760	0.620	0.740	0.490	DNP	1.010	1.080	1.870	0.790	0.450	1.320	1.100	1.600	0.640	1.890	0.860
% of connections with good voice quality	>95%	99.42	93.00	98.26	99.50	99.60	98.89	DNP	DNP	97.93	98.50	98.00	97.89	94.69	97.99	98.19	99.50	99.22	99.81
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	100.00	64.00	100.00	100.00	99.50	100.00	80.13	99.00	97.17	44.64	99.50	100.00	96.64	100.00	96.00	99.50	100.00	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	100.00	72.00	100.00	100.00	99.50	100.00	80.14	99.00	97.17	82.59	99.50	100.00	96.65	100.00	97.00	99.50	100.00	100.00
% of calls answered by operator within 60 Seconds (Benchmark 80%)	>80%	100.00	14.00	100.00	100.00	76.00	100.00	73.46	99.00	70.48	61.98	76.00	88.00	85.24	88.00	97.00	76.00	92.10	96.00
% of calls answered by operator within 90 Seconds	>95%	100.00	20.00	100.00	100.00	82.00	100.00	99.50	99.00	83.00	65.40	82.00	91.00	88.87	95.00	98.00	82.00	99.20	98.00

(Benchmark 80%) (Benchmark 95%)																			
Billing Complaints per 100 bills issued	<0.1%	0.000	0.020	0.000	0.004	0.060	0.400	0.110	0.010	0.040	0.040	0.050	0.840	0.680	0.060	0.030	0.060	0.020	0.650
% of complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	DNP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.10
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	DNP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.45

Parameters / Benchmark	Maharastra						TN					
	Bharti	BPL	BSNL	Idea	Rel comm	Tata	Bharti	BPL	BSNL	Aircel	Rel comm	Tata
Accumulated down time of community isolation <24	5.43	1.91	8.00	2.50	1.56	0.00	30.62	0.83	0.00	0.00	0.60	0.00
Call Setup Success Rate >95%	99.81	99.62	99.33	99.21	99.40	97.97	99.35	99.94	87.31	99.10	95.80	98.26
Service Access Delay =<20	12.59	15.12	6.82	9.71	1.00	15.40	2.18	3.00	2.00	8.10	1.40	10.38
SDCCH <1% <1%	0.440	0.770	0.700	0.530	0.000	0.000	0.340	0.070	3.820	0.430	0.000	0.000
TCH Congestion < 2% < 2%	0.550	1.100	0.920	0.530	0.000	1.340	0.330	0.320	22.250	0.780	0.000	0.530
Call Drop Rate <3%	1.12	1.22	0.95	1.35	0.85	0.46	0.99	0.72	1.00	0.88	0.83	0.77
% of connections with good voice quality >95%	96.03	97.78	99.10	98.11	97.00	97.29	94.50	98.17	DNP	95.66	99.00	94.82
% of calls answered electronically within >80%	100.00	100.00	98.00	99.99	99.50	100.00	100.00	84.00	76.00	96.00	99.50	100.00

20 Seconds (Benchmark 80%)														
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	100.00	100.00	98.00	99.99	99.50	100.00	100.00	100.00	100.00	100.00	99.50	100.00	
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	>80%	40.70	87.74	39.68	79.58	76.00	76.94	100.00	82.00	74.00	88.00	76.00	100.00	
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	>95%	40.83	87.74	39.69	84.14	82.00	81.85	100.00	100.00	100.00	100.00	82.00	100.00	
Billing Complaints per 100 bills issued	<0.1%	0.200	0.000	0.300	0.060	0.050	0.070	0.013	0.900	0.190	0.670	0.050	0.141	
% of complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	69.61	100.00	100.00	57.14	

A-CIRCLE

MSC DATA –
POI

	Andhra Pradesh						Gujarat						Karnataka					
	Bharti	Hutch	Tata	BSNL	Rel comm	Idea	Bharti	Hutch	Tata	BSNL	Rel comm	Idea	Bharti	Spice	BSNL	Rel comm	Hutch	Tata
Total POIs	52	38	194	DNP	29	55	54	98	135	57	23	61	25	20	DNP	25	37	121
POIs Not Meeting	9	1	6	DNP	6	5	15	0	9	4	2	8	1	5	DNP	4	0	7

	Maharashtra						Tamil Nadu					
	Rel comm	Bharti	BSNL	BPL	Tata	Idea	Rel comm	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
Total POIs	37	94	32	37	186	73	22	32	17	DNP	96	19
POIs Not Meeting	11	41	2	3	16	11	4	5	1	DNP	7	0

DNP – Data not provided; ND - Not done.

PRACTICAL DATA – INTER OPERATOR CALL
ASSESSMENT

	Andhra Pradesh						Gujarat						Karnataka					
	Bharti	Hutch	Tata	BSNL	Rel comm	Idea	Bharti	Hutch	Tata	BSNL	Rel comm	Idea	Bharti	Spice	BSNL	Rel comm	Hutch	Tata
Total POIs	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5
POIs Not Meeting	1	4	2	1	3	1	0	0	0	0	0	0	0	0	2	1	1	0

	Maharashtra						Tamil Nadu					
	Rel comm	Bharti	BSNL	BPL	Tata	Idea	Rel comm	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
Total POIs	5	5	5	5	5	5	5	5	5	12	5	5
POIs Not Meeting	0	0	0	0	0	0	0	0	0	12	0	0

**HELPLINE DATA –
PRACTICAL**

Operator	AP						GUJ						KARNATAKA					
	Bharti	Hutch	Tata	BSNL	Rel comm	Idea	Bharti	Hutch	Tata	BSNL	Idea	Rel comm	Bharti	Spice	BSNL	Rel comm	Hutch	Tata
%of call answered (electronically) within 20 sec	100	100	100	100	70	100	98	92	76	86	100	83	78	100	94	100	56	100
% of call answered(electronically) within 40 sec	100	100	100	100	70	100	100	100	100	100	100	100	78	100	94	100	56	100
% of call answered by operator(voice to voice) within 60 sec	96	94	100	96	42	100	100	100	100	100	100	100	62	100	64	18	56	88
% of call answered by operator(voice to voice) within 90 sec	98	100	100	100	46	100	100	100	100	100	100	100	64	100	86	28	56	96

Operator	MAH						TN					
	Rel comm	Bharti	BSNL	BPL	Tata	Idea	Rel comm	Bharti	Aircel	BSNL	Tata	Hutch
%of call	100	100	100	100	100	100	100	100	100	100	99	100

answered (electronically) within 20 sec											
% of call answered(electro- nically) within 40 sec	100	100	100	100	100	100	100	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	56	92	42	86	90	48	100	100	100	78	100
% of call answered by operator(voice to voice t within 90 sec	70	96	60	94	94	49	100	100	100	100	100

B Circles

Parameters / Benchmark		Haryana						Kerala						MP					
		Bharti	BSNL	Hutch	Idea	Rel comm	Tata	Bharti	BPL	BSNL	Idea	Rel comm	Tata	Bharti	BSNL	Idea	Rel Tel	Rel comm	Tata
Accumulated down time of community isolation	<24	5.31	0.00	4.16	7.10	0.66	6.25	10.53	5.75	0.75	7.85	0.00	0.00	8.58	1.00	7.18	17.06	1.24	1.53
Call Setup Success Rate	>95%	99.13	97.24	99.96	99.97	99.30	99.99	99.44	95.92	99.36	97.50	99.60	98.68	97.96	92.76	98.44	100.00	99.30	97.33
Service Access Delay	=<20	3.40	3.78	4.92	2.72	1.60	1.40	12.12	7.07	3.95	14.75	1.40	18.38	7.04	8.34	3.78	14.00	1.00	4.64
SDCCH <1%	<1%	0.380	0.615	0.025	0.620	0.000	0.000	0.330	0.520	0.170	0.440	0.000	0.000	0.470	0.950	0.770	0.210	0.000	0.000
TCH Congestion < 2%	< 2%	0.380	0.500	0.650	1.170	0.000	3.070	0.237	0.770	1.250	1.840	0.000	0.000	1.390	2.000	1.360	15.650	0.000	0.000
Call Drop Rate	<3%	1.54	2.53	1.77	1.86	1.03	1.29	1.78	1.47	0.75	0.82	0.85	0.55	1.35	1.85	1.20	1.79	1.15	1.03
% of connections with good voice quality	>95%	98.10	96.74	97.03	99.69	99.50	99.76	98.54	98.75	98.48	97.70	99.80	98.02	97.08	95.79	99.22	96.60	98.00	98.99
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	99.30	99.76	88.89	85.00	99.50	100.00	100.00	100.00	100.00	95.00	99.50	100.00	99.99	87.35	100.00	NA	99.50	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	99.40	99.95	100.00	100.00	99.50	100.00	100.00	100.00	100.00	98.00	99.50	100.00	99.99	87.35	100.00	NA	99.50	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	>80%	94.00	12.00	84.26	69.50	76.00	60.00	100.00	99.99	93.23	90.00	76.00	93.00	97.06	58.20	97.89	98.20	76.00	76.66
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%)	>95%	96.00	20.11	100.00	100.00	82.00	72.50	100.00	99.99	95.51	95.00	82.00	96.00	98.85	58.21	99.36	98.20	82.00	79.66

(Benchmark 95%)																			
Billing Complaints per 100 bills issued	<0.1%	0.065	0.170	0.075	0.049	0.060	0.990	0.003	0.010	0.235	0.100	0.060	0.078	0.441	0.000	0.052	0.004	0.060	0.660
% of complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	99.83	100.00	100.00	82.83	100.00	100.00	85.17	100.00	100.00	100.00	100.00	100.00	100.00
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	DNP	100.00	100.00	100.00	99.84	100.00	100.00	85.17	100.00	100.00	82.83	100.00	100.00	100.00	100.00	100.00	100.00

Parameters / Benchmark		Punjab							Raj							UP - E						
		Bharti	BSNL	Hutch	Rel comm	Spice	HFCL	Tata	Bharti	BSNL	Hutch	Rel comm	Tata	Bharti	BSNL	Hutch	Rel comm	Tata				
Accumulated down time of community isolation	<24	4.83	10.22	6.80	0.65	4.67	1.22	0.00	7.80	7.51	7.30	1.50	7.13	5.92	5.12	0.00	1.41	7.10				
Call Setup Success Rate	>95%	99.13	98.84	99.14	99.80	97.02	97.90	98.34	98.70	97.60	98.45	99.44	97.60	99.10	98.21	98.08	99.55	97.70				
Service Access Delay	=<20	3.52	4.60	8.56	1.50	9.35	10.00	8.09	8.60	DNP	6.00	3.00	2.20	3.43	6.92	9.33	1.50	18.28				
SDCCH <1%	<1%	0.150	0.080	0.060	0.000	0.360	0.000	0.000	0.810	0.250	0.950	0.000	0.000	0.650	1.300	1.270	0.000	0.000				
TCH Congestion < 2%	< 2%	0.270	0.720	0.150	0.000	1.970	0.00018	0.000	1.250	2.500	1.870	0.000	0.360	0.890	2.000	1.800	0.000	0.045				
Call Drop Rate	<3%	1.84	2.01	1.42	1.06	1.27	0.64	0.82	1.60	2.40	1.64	0.99	0.88	2.13	2.26	1.64	0.99	1.03				
% of connections with good voice quality	>95%	98.42	100.00	99.06	99.50	96.40	DNP	97.31	95.00	94.00	84.00	95.00	96.90	97.65	91.50	97.64	97.00	98.48				
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	98.69	93.00	98.16	99.50	100.00	100.00	100.00	99.97	99.96	94.97	99.50	100.00	99.80	99.76	99.00	99.50	100.00				

% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	99.00	97.66	98.32	99.50	100.00	100.00	100.00	100.00	99.95	100.00	99.50	100.00	99.90	99.95	99.90	99.50	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	>80%	97.32	90.66	90.25	76.00	90.00	90.00	67.87	95.05	12.71	85.05	76.00	94.00	92.20	6.39	81.28	76.00	87.00
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	>95%	98.00	97.33	97.65	82.00	95.00	97.00	74.87	100.00	18.13	100.00	82.00	100.00	94.60	9.69	94.90	82.00	92.00
Billing Complaints per 100 bills issued	<0.1%	0.080	0.070	0.060	0.050	0.006	0.050	0.770	0.017	0.130	0.095	0.050	0.320	0.200	0.180	0.015	0.050	0.365
% of complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	99.30	99.24	100.00	100.00	100.00	100.00	100.00	97.50	100.00	100.00	100.00	100.00
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	100.00	100.00	100.00	99.48	100.00	100.00	100.00	100.00	100.00	100.00	95.71	100.00	100.00	99.00

Parameters / Benchmark		UP - W						WB						
		Bharti	BSNL	Hutch	Idea	Rel comm	Tata	Bharti	BSNL	Dishnet	Hutch	Rel Tel	Rel comm	Tata
Accumulated down time of community isolation	<24	14.80	10.00	3.50	2.16	1.08	11.04	7.62	0.00	1.30	0.00	1.00	0.83	0.00
Call Setup Success Rate	>95%	97.27	98.25	99.85	99.07	99.50	96.80	99.85	98.38	99.86	98.72	95.00	99.50	96.90
Service Access Delay	=<20	1.21	2.72	2.86	11.05	1.50	9.00	2.99	3.50	16.53	14.67	14.83	1.00	15.56
SDCCH <1%	<1%	0.530	1.030	0.550	0.950	0.000	0.000	0.770	1.390	0.170	0.650	1.570	0.000	0.000

TCH Congestion < 2%	< 2%	1.320	1.710	0.620	2.440	0.000	2.050	0.430	1.440	0.400	1.270	3.500	0.000	0.000
Call Drop Rate	<3%	1.57	1.17	1.96	1.21	0.95	1.31	1.92	0.18	0.50	1.27	2.20	1.35	0.91
% of connections with good voice quality	>95%	98.52	97.99	96.89	97.20	96.00	98.30	96.72	DNP	99.02	96.63	98.14	92.00	94.60
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	99.82	99.76	98.36	NA	99.50	83.28	97.10	95.00	100.00	100.00	NA	99.50	99.31
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	99.86	99.95	99.87	NA	99.50	83.28	100.00	99.00	100.00	100.00	NA	99.50	100.00
% of calls answered by operator within 60 Seconds (Benchmark 80%)	>80%	97.00	9.94	97.93	NA	76.00	77.89	90.01	82.00	100.00	97.47	100.00	76.00	100.00
% of calls answered by operator within 90 Seconds (Benchmark 80%) (Benchmark 95%)	>95%	98.00	16.85	98.30	NA	82.00	82.81	99.99	95.00	100.00	99.69	100.00	82.00	100.00
Billing Complaints per 100 bills issued	<0.1%	0.100	2.110	0.076	0.075	0.050	0.360	0.170	0.000	0.000	0.076	0.000	0.060	0.057
% of complaints resolved within 4 weeks	100%	100.00	92.44	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.00

Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	DNP	100.00	100.00	100.00	79.77	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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B-CIRCLE**MSC DATA – POI**

	Haryana						Kerala						Madhya Pradesh					
	Hutch	Idea	Rel comm	BSNL	Tata	Bharti	Hutch (BPL)	Bharti	BSNL	Tata	Idea	Rel comm	Rel Tel	Idea	Rel comm	BSNL	Tata	Bharti
Total POIs	23	23	14	9	12	25	11	38	35	48	23	15	58	54	42	67	20	66
POIs Not Meeting	0	4	1	0	4	5	6	5	1	0	5	1	10	12	9	0	0	43

	Rajasthan					UP (E)					Punjab						
	Hutch	Bharti	BSNL	Tata	Rel comm	Hutch	Bharti	BSNL	Tata	Rel comm	Spice	Hutch	Rel comm	BSNL	Tata	HFCL	Bharti
Total POIs	22	60	DNP	44	26	32	39	98	76	34	23	34	17	13	16	DNP	37
POIs Not Meeting	6	35	DNP	8	4	4	17	23	5	15	4	3	1	0	2	DNP	2

	UP (W)						West Bengal						
	Hutch	Idea	BSNL	Tata	Rel comm	Bharti	Rel Tel	Hutch	Rel comm	BSNL	Tata	Dishnet	Bharti
Total POIs	52	59	42	48	22	27	23	40	18	DNP	45	69	73
POIs Not Meeting	5	2	0	6	6	6	12	4	5	DNP	9	3	28

DNP – Data not provided; ND - Not done;

PRACTICAL DATA – INTER OPERATOR CALL ASSESSMENT

	Haryana						Kerala						Madhya Pradesh					
	Hutch	Idea	Rel comm	BSNL	Tata	Bharti	Hutch (BPL)	Bharti	BSNL	Tata	Idea	Rel comm	Rel Tel	Idea	Rel comm	BSNL	Tata	Bharti
Total POIs	9	6	8	9	9	6	9	9	4	9	9	9	8	6	7	4	9	5
POIs Not Meeting	0	0	0	0	0	0	3	1	1	2	0	4	5	5	3	4	0	0

	Rajasthan					UP (E)					Punjab						
	Hutch	Bharti	BSNL	Tata	Rel comm	Hutch	Bharti	BSNL	Tata	Rel comm	Spice	Hutch	Rel comm	BSNL	Tata	HFCL	Bharti
Total POIs	5	5	5	5	5	7	6	7	7	7	6	6	6	6	6	6	6
POIs Not Meeting	5	0	4	1	3	5	5	6	5	6	2	1	0	2	2	6	1

	UP (W)						West Bengal						
	Hutch	Idea	BSNL	Tata	Rel comm	Bharti	Rel Tel	Hutch	Rel comm	BSNL	Tata	Dishnet	Bharti
Total POIs	7	6	6	7	7	7	7	7	7	7	7	7	7
POIs Not Meeting	7	2	2	4	6	2	4	1	2	1	2	2	3

**HELPLINE DATA –
PRACTICAL**

Operator	Haryana						Kerla						M.P.					
	Hutch	Idea	BSNL	Rel comm	Tata	Bharti	Hutch	Bharti	BSNL	Tata	Idea	Rel comm	Rel Tel	Idea	Rel comm	BSNL	Tata	Bharti
% of calls answered electronically within 20 Seconds (Benchmark 80%)	98	100	100	100	84	100	100	91	100	99	100	100	N/APP	100	40	52	100	100
% of calls answered electronically within 40 Seconds (Benchmark 95%)	100	100	100	100	100	100	100	96	100	100	100	100	N/APP	100	40	70	100	100
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	32	96	0	100	50	100	97	86	100	79	97	69	96	92	32	56	100	92
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	36	100	4	100	60	100	100	100	100	81	100	74	96	96	36	80	100	100

Operator	Punjab							U.P.(E)					U.P.(W)					
	Spice	Hutch	Rel comm	BSNL	HFCL	Bharti	Tata	Bharti	Hutch	Tata	BSNL	Rel comm	Hutch	Idea	BSNL	Tata	Rel comm	Bharti
% of calls answered electronically within 20 Seconds (Benchmark 80%)	100	100	100	100	100	100	100	86	80	92	24	62	10	100	0	98	8	94
% of calls answered electronically within 40 Seconds (Benchmark 95%)	100	100	100	100	100	100	100	100	92	100	24	70	10	100	0	98	8	94
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	96	92	74	58	92	96	78	100	52	100	0	50	4	80	0	92	8	92
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	100	98	82	88	100	100	92	100	62	100	0	54	8	100	0	96	8	98

Operator	W.B.							Rajasthan				
	Rel Tel	Hutch	Rel comm	BSNL	Tata	Dishnet	Bharti	Hutch	Bharti	Tata	BSNL	Rel comm
% of calls answered electronically within 20 Seconds (Benchmark 80%)	N/APP	100	72	4	100	92	100	96	100	100	90	26
% of calls answered electronically within 40 Seconds (Benchmark 95%)	N/APP	100	100	8	100	100	100	100	100	100	90	30
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	90	100	12	N/AV	80	100	100	96	100	100	0	6
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	100	100	22	N/AV	92	100	100	100	100	100	18	8

C Circles

Parameters / Benchmark		Assam				Bihar					HP				
		Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Rel Tel	Rel comm	Tata	Bharti	BSNL	Rel Tel	Rel comm	Tata
Accumulated down time of community isolation	<24	8.70	2.33	0.00	13.13	1.05	4.04	8.02	1.36	0.00	5.10	0.50	8.14	1.18	7.50
Call Setup Success Rate	>95%	99.50	97.00	96.77	97.60	97.63	96.39	97.00	99.39	97.80	99.03	97.40	99.60	99.87	98.37
Service Access Delay	=<20	DNP	DNP	14.05	8.42	3.24	13.10	7.42	1.60	15.26	3.61	5.85	8.03	1.50	5.85
SDCCH <1%	<1%	1.140	0.900	2.230	0.830	4.190	0.600	1.920	0.000	0.000	1.040	0.800	0.350	0.000	0.000
TCH Congestion < 2%	< 2%	1.050	0.000	1.975	4.920	2.370	1.600	14.010	0.000	0.000	0.450	1.800	3.500	0.000	0.046
Call Drop Rate	<3%	0.50	2.43	1.70	0.96	1.93	1.93	1.86	0.96	0.88	1.54	1.95	2.43	0.66	0.80
% of connections with good voice quality	>95%	90.80	94.01	98.23	95.80	98.16	97.70	98.72	98.00	98.67	94.27	97.55	97.34	98.50	97.50
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	NA	16.60	100.00	93.60	91.89	95.00	98.00	99.50	98.00	98.67	99.76	NA	99.50	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	NA	31.81	100.00	100.00	94.70	99.00	100.00	99.50	100.00	99.00	99.95	NA	99.50	100.00
% of calls answered by operator within 60 Seconds (Benchmark 80%)	>80%	47.10	79.66	95.11	100.00	96.26	82.00	96.00	76.00	86.00	97.33	16.41	100.00	76.00	61.20

% of calls answered by operator within 90 Seconds	>95%	48.80	79.66	100.00	100.00	100.00	95.00	100.00	82.00	100.00	98.00	23.92	100.00	82.00	68.20
Seconds (Benchmark 80%) (Benchmark 95%)															
Billing Complaints per 100 bills issued	<0.1%	0.004	0.003	0.011	0.020	0.090	0.000	DNP	0.060	0.000	0.072	0.580	0.000	0.050	0.540
% of complaints resolved within 4 weeks	100%	96.20	100.00	100.00	100.00	100.00	100.00	DNP	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	100.00	100.00	100.00	DNP	100.00	100.00	100.00	71.74	100.00	100.00	100.00

Parameters / Benchmark	J&K			NE				Orissa						
	Bharti	BSNL	Dishnet	Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Dishnet	Rel Tel	Rel comm	Tata	
Accumulated down time of community isolation	<24	4.91	5.37	0.00	14.28	2.02	0.00	0.00	0.00	0.50	7.97	1.41	0.00	
Call Setup Success Rate	>95%	98.51	32.60	97.20	98.00	98.44	99.98	98.30	98.78	98.39	99.70	100.00	99.57	97.69
Service Access Delay	=<20	3.43	4.57	5.27	6.08	DNP	14.05	8.48	14.59	4.15	2.40	14.36	1.50	14.35
SDCCH <1%	<1%	0.470	0.900	0.505	1.160	0.700	42.040	2.620	1.200	0.310	0.000	0.550	0.000	0.000

TCH Congestion < 2%	< 2%	0.750	1.800	0.120	0.810	1.500	14.450	11.500	0.960	1.580	0.050	9.960	0.000	0.380
Call Drop Rate	<3%	1.52	2.10	1.20	2.04	DNP	1.55	2.25	0.94	2.27	1.17	1.94	0.87	0.99
% of connections with good voice quality	>95%	97.60	96.13	99.36	63.60	DNP	97.59	98.40	98.08	86.00	97.31	98.17	98.50	99.37
% of calls answered electronically within 20 Seconds (Benchmark 80%)	>80%	94.00	99.76	75.00	29.00	92.50	100.00	75.40	100.00	95.00	100.00	NA	99.50	98.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	>95%	100.00	99.95	100.00	29.00	99.00	100.00	100.00	100.00	99.00	100.00	NA	99.50	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	>80%	89.00	10.85	100.00	0.00	81.00	100.00	100.00	100.00	82.00	100.00	100.00	76.00	89.00
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	>95%	99.00	16.07	100.00	6.00	88.50	100.00	100.00	100.00	95.00	100.00	100.00	82.00	100.00
Billing Complaints per 100 bills issued	<0.1%	0.600	0.660	0.050	0.013	DNP	0.000	0.070	0.100	0.010	0.040	0.000	0.050	0.230
% of complaints resolved within 4	100%	100.00	100.00	100.00	100.00	98.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

weeks														
Period of refunds/payment due to customers from the date of resolution of complaints	100%	100.00	DNP	100.00	100.00	DNP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

C-CIRCLE**MSC DATA -
POI**

	Assam				Bihar				Himachal Pradesh					
	Rel Tel	Bharti	Dishnet	BSNL	Rel Tel	Rel comm	Tata	BSNL	Bharti	Rel Tel	Rel comm	Tata	BSNL	Bharti
Total POIs	10	11	60	DNP	25	22	27	DNP	43	12	10	25	29	19
POIs Not Meeting	8	4	10	DNP	6	8	9	DNP	33	5	2	2	0	3

	Jammu & Kashmir			Orissa					North East					
	Dishnet	Bharti	BSNL	Rel Tel	Rel comm	Tata	Dishnet	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL	
Total POIs	8	7	DNP	16	14	35	77	DNP	19	6	6	48	DNP	
POIs Not Meeting	3	2	DNP	6	2	0	2	DNP	9	5	4	12	DNP	

DNP – Data not provided; ND - Not done;

**PRACTICAL DATA – INTER OPERATOR CALL
ASSESSMENT**

	Assam				Bihar				Himachal Pradesh					
	Rel Tel	Bharti	Dishnet	BSNL	Rel Tel	Rel comm	Tata	BSNL	Bharti	Rel Tel	Rel comm	Tata	BSNL	Bharti
Total POIs	3	5	3	6	5	5	5	5	4	6	6	6	5	6
POIs Not Meeting	2	0	1	3	2	3	4	4	1	0	1	0	5	0

	Jammu & Kashmir			Orissa					North East				
	Dishnet	Bharti	BSNL	Rel Tel	Rel comm	Tata	Dishnet	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL
Total POIs	1	2	2	6	6	5	6	6	5	3	3	3	3
POIs Not Meeting	1	1	1	5	0	2	0	4	2	0	2	1	2

**HELPLINE DATA –
PRACTICAL**

Operator	Assam				Bihar					H.P.					NE			
	Rel Tel	Bharti	Dishnet	BSNL	Rel Tel	Rel comm	Tata	BSNL	Bharti	Rel Tel	Rel comm	Tata	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL
% of calls answered electronically within 20 Seconds (Benchmark 80%)	100	98	100	56		36	100	40	100	100	96	100	100	100	98	100	94	24
% of calls answered electronically within 40 Seconds (Benchmark 95%)	100	100	100	74	N/APP	100	100	50	100	100	96	100	100	100	100	100	100	42
% of calls answered by operator within 60 Seconds (Benchmark 80%)	92	96	68	24	8	36	96	14	100	100	96	75	30	100	100	98	86	0
% of calls answered by	100	100	70	66	92	100	100	30	100	100	96	85	68	100	100	100	92	0

operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)														
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Operator	J & K			Orissa					
	Bharti	BSNL	Dishnet	Rel Tel	Rel comm	Tata	Dishnet	BSNL	Bharti
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80	76	80	N/APP	98	84	100	58	100
% of calls answered electronically within 40 Seconds (Benchmark 95%)	84	100	90	N/APP	100	100	100	100	100
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80	18	82	100	100	94	100	100	100
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	80	100	90	100	100	100	100	100	100

3.6.2 PERFORMANCE REPORT QOS - BASIC

METRO CIRCLES

Parameters / Benchmark		Chennai				Delhi				Kolkata				Mumbai			
		Bharti	BSNL	Rel comm	Tata	Bharti	MTNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Bharti	MTNL	Rel comm	Tata	
Provision of telephone after registration of demand	100 %	84.28	67.11	66.50	64.03	89.77	97.46	96.00	97.00	89.06	62.89	89.00	89.34	57.50	96.00	72.50	
Fault incidence	<5	3.78	9.04	1.20	5.96	3.93	14.16	1.00	0.86	4.56	13.89	2.80	6.37	18.41	1.50	4.20	
Fault repaired by next working day	>90 %	99.78	99.00	94.00	100.00	98.90	90.05	99.00	100.00	85.79	94.02	96.30	90.00	46.96	99.50	94.50	
Mean Time to Repair (MTTR)	<8Hrs	4.77	7.21	6.50	7.14	DNP	7.44	1.50	4.00	11.38	6.55	3.50	5.70	5.40	5.00	13.35	
Grade of service I	<0.02	0.00039	0.00016	0.05	0.0025	0.02	0.0002	0.00	0.00	0.0018	0.1187	0.49	0.09	0.03	0.00	0.12	
i) Junction between local exchange																	
ii) Tax to Local	<0.005	NA	0	3.26	0.0071	NA	0.00	0.00	NA	0	1196	1.56	0	0.00	2.17	0.08	
iii) Local to Tax	<0.005	0.00065	0.0013	0.00	0.0065	.098	0.00	0.00	0.00	.004	.147	0.00	1	0.00	0.00	0.00	
iv) Tax to tax	<0.005	NA	0.00	0.8	0.0067	NA	NA	1.38	NA	NA	NA	0.5	NA	0.00	0.32	NA	
Call completion rate in local network	>55 %	63.40	80.00	65.00	54.00	61.00	61.97	50.50	50.90	65.12	62.97	34.50	63.60	57.24	47.50	76.00	
Metering & billing credibility	<0.1 %	0.015	0.35	0.00	0.0245	0.0103	0.0005	0.0003	0.007	0.00	0.048	0.0004	0.00012	0.00080	0.0004	0.014	
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	54.00	17.00	91.70	15.00	43.98	78.32	84.20	100.00	0.00	86.81	98.00	59.00	25.00	87.60	69.50	
Customer Care	95%	75.82	28.36	99.00	30.00	54.09	89.38	96.50	98.90	99.50	71.01	95.00	DNP	93.30	97.50	0.00	

Promptness Closure Requests (95% WITHIN 24 HOURS)																
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	95%	98.90	100.00	99.00	100.00	68.26	92.14	99.00	97.20	99.80	100.00	99.00	86.70	53.26	96.00	
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80%	84.00	78.00	100.00	78.00	100.00	97.51	100.00	100.00	NA	100.00	100.00	NA	NA	100.00	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	100.00	100.00	100.00	100.00	100.00	99.27	100.00	100.00	NA	100.00	100.00	NA	NA	100.00	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80%	88.00	80.00	90.50	94.00	100.00	81.27	90.50	91.00	81.78	NA	90.50	72.00	NA	90.50	74.00
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	95%	100.00	100.00	95.00	100.00	100.00	90.36	95.00	94.00	83.97	NA	95.00	77.00	NA	95.00	79.00
Timetaken for refund after closer	100 %	100.00	100.00	100.00	100.00	19.75	100.00	100.00	100.00	100.00	100.00	100.00	24.20	100.00	100.00	32.96

DNP – Data not provided; ND - Not done; NI - No recorded incidents by operator; NA – Not applicable.

A Circles

Parameters / Benchmark		AP				Gujarat				Karnataka			
		Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata
Provision of telephone after registration of demand	100%	84.00	70.00	99.00	84.50	86.86	34.56	100.00	93.60	79.77	38.52	91.50	95.11
Fault incidence	<5	9.60	2.06	2.80	4.70	10.38	7.08	4.95	1.67	2.03	5.40	0.40	2.15
Fault repaired by next working day	>90%	94.00	85.00	98.75	76.20	90.61	59.39	87.83	67.55	99.43	77.96	98.16	72.50
Mean Time to Repair (MTTR)	<8Hrs	5.65	5.90	2.50	10.69	9.85	28.52	9.00	15.91	4.02	4.81	2.50	6.30
Grade of service I													
i) Junction between local exchange	<0.002	0.00	0.00555	0.0086	0.00	0.00	0.002	0.0029	0.0012	0.00114	0.00	0.00	0.0029
ii) Tax to Local	<0.005	NA	NA	3.9	0.00	DNP	0.0004	1.36	NA	NA	0.00	0.37	0.0009
iii) Local to Tax	<0.005	0	NA	3.1	0.00	0.000005	0.00	0.00	0.00003	0.00091	0.00	0.19	0.00
iv) Tax to tax	<0.005	NA	NA	3.7	NA	NA	0.0005	0.01	NA	NA	0.00	2.46	NA
Call completion rate in local network	>55%	33.00	53.00	68.00	79.00	63.50	51.47	43.00	81.85	58.00	44.80	70.00	DNP
Metering & billing credibility	<0.1%	0.343	0.00	0.0007	0.145	DNP	0.04	0.0005	0.09	0.13	0.01	0.0004	0.11
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	56.00	77.35	90.00	99.00	53.73	43.79	81.00	86.67	80.29	20.46	89.50	71.43
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	95%	0.00	82.60	91.70	100.00	NI	69.50	92.00	100.00	99.00	58.49	89.00	0.00
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	95%	89.00	92.70	99.30	96.00	NI	63.54	98.50	99.36	99.90	23.19	98.00	95.43
% of calls answered	80%	NA	NA	100.00	100.00	NA	NA	100.00	100.00	100.00	100.00	100.00	NA

electronically within 20 Seconds (Benchmark 80%)													
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	NA	NA	100.00	100.00	NA	NA	100.00	100.00	100.00	100.00	100.00	NA
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80%	95.95	100.00	90.50	100.00	56.80	NA	90.50	71.77	100.00	99.50	90.50	98.00
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	95%	97.50	100.00	95.00	100.00	63.20	NA	95.00	76.92	100.00	99.60	95.00	98.00
Timetaken for refund after closer	100%	100	90	100	100	100	78.07	100	100	98.5	74	100	100

Parameters / Benchmark		Maharastra				TN			
		Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata
Provision of telephone after registration of demand	100%	91.00	35.31	92.50	100.00	92.19	99.00	90.50	81.22
Fault incidence	<5	4.50	5.63	0.75	4.00	3.45	3.25	0.50	6.23
Fault repaired by next working day	>90%	81.80	17.22	99.69	100.00	99.69	98.67	96.26	100.00
Mean Time to Repair (MTTR)	<8Hrs	8.92	17.08	2.00	4.00	3.89	5.50	4.00	7.40

Grade of service I i)Junction between local exchange	<0.002	0.00	0.00	0.0006	0.00	0.0005	0.00013	0.0036	0.0025
ii)Tax to Local	<0.005	0.00	1.78	1.01	0.01	NA	0.02	1.98	0.0071
iii)Local to Tax	<0.005	0.00	3.83	0.03	NA	4	0.02	8.9	0.0065
iv)Tax to tax	<0.005	NA	0.0	0.05	NA	NA	0.005	0.07	0.0067
Call completion rate in local network	>55%	62.00	54.09	39.50	67.00	68.00	89.49	43.00	52.00
Metering & billing credibility	<0.1%	0.18	0.04	0.0007	0.13	0.015	0.019	0.0005	0.0077
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	68.52	36.68	75.00	100.00	54.00	31.87	NI	15.00
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	95%	NI	23.64	92.60	100.00	75.82	31.51	97.50	30.00
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	95%	86.11	66.44	98.60	100.00	98.90	78.72	98.60	100.00
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80%	100.00	NA	100.00	100.00	84.00	NA	100.00	86.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	100.00	NA	100.00	100.00	100.00	NA	100.00	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80%	62.36	NA	90.50	76.94	88.00	NA	90.50	96.00
% of calls answered by operator within 90 Seconds Seconds	95%	67.22	NA	95.00	81.85	100.00	NA	95.00	100.00

(Benchmark 80%)								
(Benchmark 95%)								
Timetaken for refund after closer	100%	27.09	44.86	100	100	100	100	100

DNP – Data not provided; NI - No recorded incidents by operator; NA – Not applicable.

B Circles

Parameters / Benchmark		Haryana			Kerala			MP			CTG	Punjab			
		Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm	BSNL	Bharti	BSNL	HFCL	Rel comm
Provision of telephone after registration of demand	100%	98.60	79.47	93.50	79.35	38.54	92.50	94.38	90.36	89.00	60.00	87.75	78.03	96.00	94.00
Fault incidence	<5	5.30	10.91	DNP	6.33	8.80	1.67	5.26	3.80	3.87	11.87	5.75	4.98	1.67	4.67
Fault repaired by next working day	>90%	99.90	81.22	DNP	99.50	59.86	100.00	96.10	66.13	95.66	92.46	97.13	77.11	96.41	97.00
Mean Time to Repair (MTTR)	<8Hrs	7.20	7.60	DNP	4.06	9.26	1.50	6.33	4.65	4.50	9.05	9.91	10.87	6.65	4.50
Grade of service I i) Junction between local exchange	<0.002	0.00	0.0022	0.0005	0.0	0.000759	0.0044	0.00	0.00257	0.00	0.00423	0.00002	0.00	0.0002	0.0003
ii) Tax to Local	<0.005	NA	0.0026	3.44	NA	0.0001823	0.42	NA	0.38	0.17	0.537	NA	0	0.05	0.52
iii) Local to Tax	<0.005	0.50	0.0033	0	NA	0.001577	0.405	0	0.3511	0.05	0.733	0.01	0	0	0
iv) Tax to tax	<0.005	NA	0	.05	NA	NA	0.0	NA	0.388	2.43	0.686	NA	NA	NA	2.03

Call completion rate in local network	>55%	61.60	74.73	65.00	30.46	61.16	47.50	65.87	57.10	47.00	55.40	55.65	56.80	79.00	55.50	
Metering & billing credibility	<0.1%	0.10	0.324	0.00	0.01	0.00	0.00	0.028	0.062	0.00	DNP	0.00	0.001	0.01	0.00	
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	97.60	89.49	NI	0.00	15.61	96.50	45.64	84.02	62.50	50.00	71.61	83.56	94.18	89.60	
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	95%	91.41	57.90	NI	0.00	87.05	94.00	98.40	94.74	96.00	78.10	84.75	99.78	97.57	95.60	
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	95%	91.87	89.78	100.00	52.38	70.21	99.00	94.76	97.42	98.50	97.05	99.83	98.06	98.97	99.00	
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80%	NA	98.10	100.00	NA	NA	100.00	100.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	NA	100.00	100.00	NA	NA	100.00	100.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80%	98.10	82.31	90.50	98.00	98.00	90.50	85.13	100.00	90.50	88.00	100.00	97.00	90.00	90.50	
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	95%	99.40	91.11	95.00	99.00	99.00	95.00	100.00	100.00	95.00	88.00	100.00	100.00	97.00	95.00	

Timetaken for refund after closer	100%	100.00	100.00	100.00	93.33	50.75	100.00	74.00	81.77	100.00	100.00	30.64	100.00	100.00	100.00
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Parameters / Benchmark	Rajasthan			UP(E)			UP(W)			Uttranchal	WB		
	BSNL	Rel comm	Shyam	Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm	BSNL	BSNL	Rel comm	
Provision of telephone after registration of demand	100%	46.16	86.50	99.14	90.15	35.33	89.00	32.11	70.86	96.00	48.48	10.22	66.50
Fault incidence	<5	8.70	4.50	2.95	8.92	28.33	4.70	12.51	17.62	NI	10.80	22.56	NI
Fault repaired by next working day	>90%	78.17	94.64	92.96	83.84	53.00	98.81	63.35	67.69	NI	84.84	72.51	NI
Mean Time to Repair (MTTR)	<8Hrs	6.97	5.00	6.03	10.15	12.33	2.00	9.06	11.71	NI	5.64	9.30	NI
Grade of service I i)Junction between local exchange	<0.002	0.00	0.0004	0.00106	DNP	0.0012	0.0035	0.00010	0.00066	0.017	0.00	0.535	0.0049
ii)Tax to Local	<0.005	0.0018	0.64	NA	0	0.055	0.58	0.019	.00148	0.001	0.0076	0.0072	0.758
iii)Local to Tax	<0.005	0	0.017	0.056	0.000056	0	0.0002	0.009	0.00032	0.0013	0.5	0.0075	0.0002
iv)Tax to tax	<0.005	0.000015	0.0008	NA	NA	.0016	0.0019	NA	0.00037	0.0023	0.08	NA	0.0002
Call completion rate in local network	>55%	46.93	34.00	DNP	53.28	41.33	31.50	60.24	44.61	42.50	55.90	48.75	34.50
Metering & billing credibility	<0.1%	0.835	0.00	0.096	0.004	0.113	0.001	0.005	0.369	0.00	0.30	0.00	0.00
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	89.90	100.00	95.90	25.92	64.00	72.60	72.72	90.47	NI	33.33	100.00	NI
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	95%	96.72	100.00	Ni	100.00	86.00	98.50	90.60	93.59	NI	58.33	72.72	NI
Customer Care Promptness	95%	97.14	97.00	97.80	100.00	97.33	99.00	100.00	97.12	NI	84.40	72.90	98.50

Additional Facility Requests (95% WITHIN 24 HOURS)													
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80%	99.61	100.00	NA	NA	NA	100.00	99.80	100.00	100.00	35.41	100.00	100.00
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	100.00	100.00	NA	NA	NA	100.00	99.90	100.00	100.00	37.51	100.00	100.00
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	80%	100.00	90.50	91.69	49.45	NA	90.50	97.01	0.00	90.50	96.00	NA	90.50
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	95%	100.00	95.00	NA	50.54	NA	95.00	99.14	14.00	95.00	98.83	NA	95.00
Timetaken for refund after closer	100%	64.22	100.00	91.69	100.00	66.66	100.00	100.00	93.64	100.00	100.00	85.71	100.00

DNP – Data not provided; NI - No recorded incidents by operator; NA – Not applicable.

C Circles

Paramters/ Benchmark		Assam		Bihar		J&K	HP		Jharkhand	NE I	NE II	Orissa		A&N
		BSNL	BSNL	BSNL	Rel comm	BSNL	Rel comm	BSNL	BSNL	BSNL	BSNL	BSNL	BSNL	Rel comm
Provision of telephone after registration of demand	100%	80.99	84.99	93.50	8.25	100.00	23.07	47.44	15.80	88.80	76.66	90.50	34.10	
Fault incidence	<5	16.35	16.57	NI	0	NI	8.35	23.31	8.05	20.32	21.84	NI	20.10	
Fault repaired by next working day	>90%	83.64	59.36	NI	4.82	NI	72.12	67.35	82.49	89.41	94.69	NI	87.40	
Mean Time to Repair (MTTR)	<8Hrs	8.64	12.19	NI	62.42	NI	12.08	8.24	8.07	6.16	7.84	NI	5.30	
Grade of service i) Junction between local exchange	<0.002	0.29	0.192	0.19	0.00	0.10	0	0.00	DNP	0.00	DNP	2.64	DNP	
ii) Tax to Local	<0.005	0.23	0.293	0.75	NA	0.57	NA	0	DNP	0.56	0	1.94	DNP	
iii) Local to Tax	<0.005	0.25	0.175	0.02	NA	0.05	NA	0	0.003	0.77	0	0.0616	DNP	
iv) Tax to tax	<0.005	NA	0.157	0.02	NA	0.1289	NA	NA	DNP	NA	0.694	0	DNP	
Call completion rate in local network	>55%	60.13	69.17	60.50	53.50	32.00	62.93	96.58	71.33	59.07	24.95	44.50	DNP	
Metering & billing credibility	<0.1%	0.036	0.0870	0.00	0.00	0.00	0.00	0.00	0.032	0.003	0.043	0.00	0.00	
Customer Care Promptness Shift Requests (95% WITHIN 3 DAYS)	95%	72.22	60.00	NI	0	NI	52.00	72.73	62.12	10.14	92.81	NI	67.90	
Customer Care Promptness Closure Requests (95% WITHIN 24 HOURS)	95%	96.73	68.40	NI	0	NI	96.51	96.00	25.04	75.00	92.90	NI	76.50	
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)	95%	100.00	70.75	NI	0	NI	95.48	100.00	35.67	NI	97.50	NI	100.00	
% of calls answered electronically within 20 Seconds (Benchmark 80%)	80%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.33	97.33	100.00	100.00	NA	
% of calls answered electronically within 40 Seconds (Benchmark 95%)	95%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	NA	
% of calls answered by	80%	NA	NA	90.50	0.00	90.50	100.00	100.00	NA	NA	NA	90.50	NA	

operator within 60 Seconds Seconds (Benchmark 80%)														
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	95%	NA	NA	95.00	0.00	95.00	100.00	100.00	NA	NA	NA	95.00	NA	
Timetaken for refund after closer	100%	3.47	71.43	100.00	NI	100.00	92.85	50.00	DNP	DNP	100.00	100.00	DNP	

IVR Data – Practical

Metro Circle

Parameters / Benchmark		Chennai				Delhi				Kolkata				Mumbai			
		Bharti	BSNL	Rel comm	Tata	Bharti	MTNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Bharti	MTNL	Rel comm	Tata	
% of call answered (electronical ly) within 20 sec	80%	100	100	100	100	100	100	100	100	NA	100	100	100	100	100	98	100
% of call answered(el ectronically) within 40 sec	95%	100	100	100	100	100	100	100	100	NA	100	100	100	100	100	100	100
% of call answered by operator(vo ice to voice) within 60 sec	80%	100	100	100	100	100	96	26	100	92	NA	100	100	100	100	4	38
% of call answered by operator(vo ice to voice t within 90 sec	95%	100	100	100	100	100	98	40	100	100	NA	100	100	100	90	44	

A Circle

Parameters / Benchmark		AP				Gujarat				Karnataka				Maharashtra			
		Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata	Bharti	BSNL	Rel comm	Tata
%of call answered (electronically) within 20 sec	80%	NA	NA	100	100	92	100	100	100	100	100	100	100	100	100	100	100
% of call answered(electrically) within 40 sec	95%	NA	NA	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	80%	100	100	100	100	98	96	100	98	100	96	95	100	72	60	60	36
% of call answered by operator(voice to voice t) within 90 sec	95%	100	100	100	100	100	100	100	100	100	100	100	100	72	72	72	56

Parameters / Benchmark		TN			
		Bharti	BSNL	Rel comm	Tata
%of call answered (electronically) within 20 sec	80%	100	100	100	100
% of call answered(electrically) within 40 sec	95%	100	100	100	100

% of call answered by operator(voice to voice) within 60 sec	80%	100	100	100	100
% of call answered by operator(voice to voice t within 90 sec	95%	100	100	100	100

B Circle

Parameters / Benchmark		Haryana			Kerala			MP			CTG	Punjab			
		Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm		Bharti	BSNL	HFCL	Rel comm
%of call answered (electronically) within 20 sec	80%	NA	100	100	100	100	100	100	94	92	95	100	100	100	100
% of call answered(electrically) within 40 sec	95%	NA	100	100	100	100	100	100	96	92	95	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	80%	100	100	94	100	94	95	100	92	92	88	100	100	98	94
% of call answered by operator(voice to voice t within 90 sec	95%	100	100	98	100	100	100	100	94	92	88	100	100	100	100

Parameters / Benchmark		Rajasthan			UP(E)			UP(W)			WB		Uttaranchal
		BSNL	Rel comm	Shyam	Bharti	BSNL	Rel comm	Bharti	BSNL	Rel comm	BSNL	Rel comm	BSNL
%of call answered (electronically) within 20 sec	80%	100	52	NA	96	100	20	100	87	100	87	100	100
% of call answered(electrically) within 40 sec	95%	100	52	NA	100	100	20	100	100	100	100	100	100

% of call answered by operator(voice to voice) within 60 sec	80%	100	0	NA	96	100	20	98	NA	94	NA	99	NA
% of call answered by operator(voice to voice t within 90 sec	95%	100	38	NA	100	100	20	98	NA	100	NA	100	NA

C Circle

Parameters / Benchmark		Assam		Bihar		HP		J&K	Jharkand	NE-I	Orissa		A&N	NE II
		BSNL	BSNL	BSNL	Rel comm	BSNL	Rel comm	BSNL	BSNL	BSNL	BSNL	Rel comm	BSNL	BSNL
%of call answered (electronically) within 20 sec	80%	100	100	100		100	100	100	100	100	100		100	100
% of call answered(electrically) within 40 sec	95%	100	100	100		100	100	100	100	100	100		100	100
% of call answered by operator(voice to voice) within 60 sec	80%	NA	NA	92	100	93	0	99	100	NA	94	100	100	100
% of call answered by operator(voice to voice t within 90 sec	95%	NA	NA	100	100	100	0	100	100	NA	100	100	100	100

3.6.3 Performance Report – Customer Satisfaction Survey of Cellular Mobile Service

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Benchmark			>95%	>90%	>90%	>90%	>95%	>95%	>95%
CIRCLE-A									
AP									
Airtel	401	99	92	100	99	82	***	79	99
BSNL	401	96	98	100	98	80	***	80	99
Hutch	400	97	100	100	98	81	***	80	99
Idea	402	96	98	100	100	82	***	79	97
Rel comm	399	98	96	100	99	78	***	83	83
Tata	400	97	92	100	100	69	***	80	86
Gujarat									
Airtel	404	100	95	90	45	89	45	71	95
BSNL	402	97	90	94	50	81	***	75	100
Hutch	401	98	92	89	50	86	100	72	95
Idea	400	99	97	95	49	86	100	75	96
Rel comm	401	99	94	96	49	87	75	78	97
Tata	200	99	84	94	43	81	100	77	97
Karnataka									
Airtel	423	72	85	74	94	70	90	71	91
BSNL	404	70	88	69	91	71	88	70	97
Hutch	375	72	85	71	94	69	82	70	97
Rel comm	399	70	86	67	94	71	86	69	94
Spice	398	68	80	70	95	71	69	68	95
Tata	402	66	79	71	95	71	79	69	94
Maharashtra									

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Airtel	401	100	100	100	88	96	80	86	84
BPL	399	100	99	98	97	99	***	86	90
BSNL	400	95	100	84	53	95	***	82	90
Idea	400	100	100	99	92	95	***	89	94
Rel comm	400	100	100	98	99	98	***	90	84
Tata	198	99	100	98	94	97	***	86	92
Tamilnadu									
Aircell	496	95	67	92	74	90	55	72	95
Airtel	401	95	57	95	83	91	62	74	96
BPL	444	96	79	94	79	90	49	72	92
BSNL	453	98	79	95	82	85	56	72	97
Rel comm	345	98	63	95	80	90	53	73	96
Tata	159	98	65	86	57	91	35	69	90
CIRCLE-B									
Haryana									
Airtel	250	81	86	98	89	87	43	74	67
BSNL	249	93	100	98	85	79	68	72	65
Hutch	250	99	100	99	85	88	43	71	55
Idea	252	98	86	99	94	92	44	75	59
Rel comm	278	100	87	99	92	92	100	79	73
Tata	250	100	100	100	92	90	75	78	64
Kerala									
Airtel	251	90	67	84	64	90	48	70	97
BPL	260	96	60	92	64	89	38	71	96
BSNL	248	94	69	87	61	89	44	70	99
Idea	252	94	57	83	60	90	31	68	92

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Rel comm	399	94	75	83	65	90	35	69	95
Tata	394	92	73	86	60	90	49	70	97
MP									
Airtel	250	100	100	99	82	91	74	83	99
BSNL	256	100	76	100	79	90	73	82	96
Idea	259	99	100	98	78	90	70	82	99
Rel comm	254	99	100	99	79	89	***	84	100
Rel Tel	249	100	82	98	79	88	80	84	98
Tata	251	100	100	100	78	89	85	83	97
Punjab									
Airtel	306	100	100	100	96	94	84	81	85
BSNL	182	96	100	99	90	89	100	80	90
Hutch	253	99	97	99	94	93	88	82	92
Rel comm	395	99	98	99	90	94	82	81	93
Spice	291	100	96	100	90	80	93	78	90
Tata	200	100	100	98	90	94	99	83	97
Rajasthan									
Airtel	264	98	87	79	69	94	61	74	76
BSNL	269	96	77	86	67	69	19	69	72
Hutch	240	95	95	91	75	92	44	79	80
Rel comm	261	96	93	87	68	95	54	78	86
Tata	253	98	100	91	61	89	***	79	82
UP-E									
Airtel	249	83	100	86	**	100	***	69	**
BSNL	280	81	62	77	**	1	***	61	**
Hutch	281	84	43	78	**	100	***	67	**
Rel comm	395	76	56	80	**	1	***	62	**

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Tata	287	93	57	96	**	100	***	83	**
UP-W									
Airtel	263	98	99	98	80	80	68	75	80
BSNL	263	95	71	100	75	73	78	74	91
Hutch	255	98	92	97	80	81	93	79	91
Idea	278	98	90	99	68	73	80	74	90
Rel comm	258	99	88	99	80	79	91	78	95
Tata	257	99	100	95	82	69	91	76	97
WB									
Aircell	253	99	100	95	54	74	67	76	97
Airtel	253	97	100	79	49	78	***	66	89
BSNL	253	99	100	86	55	76	***	67	96
Hutch	253	100	100	77	50	80	70	67	87
Rel Tel	253	100	100	92	36	45	41	72	88
Rel comm	253	100	100	95	58	74	50	59	98
Tata	253	100	100	82	36	64	44	66	86
CIRCLE-C									
Assam									
Aircell	252	97	72	100	90	86	100	80	100
Airtel	254	98	89	98	86	88	100	78	100
BSNL	253	91	83	99	87	85	100	74	100
Rel Tel	253	95	74	79	77	71	60	68	92
Bihar									
Airtel	252	98	100	100	53	79	100	72	98
BSNL	255	99	67	98	42	76	42	68	99
Rel comm	252	99	100	100	58	83	93	75	99

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Rel Tel	254	98	100	98	52	78	50	72	99
Tata	252	99	100	98	50	74	80	73	98
HP									
Airtel	278	99	100	97	78	97	87	81	98
BSNL	263	96	100	98	71	95	87	80	99
Rel comm	129	100	100	97	86	86	67	79	98
Rel Tel	229	100	100	97	90	85	***	82	99
Tata	108	99	100	99	75	82	100	82	97
J&K									
Aircell	23	100	100	*	94	99	***	89	96
Airtel	239	78	85	96	60	79	13	72	95
BSNL	317	61	84	78	53	69	8	61	88
NE									
Aircell	252	100	100	100	88	92	100	81	100
Airtel	255	99	74	98	91	86	***	81	100
BSNL	253	100	73	93	77	79	84	72	97
Rel Tel	252	100	29	89	77	78	73	74	99
Orissa									
Aircell	252	99	100	88	68	69	100	73	99
Airtel	252	97	93	88	82	68	90	73	97
BSNL	251	89	79	91	76	60	90	70	97
Rel comm	255	94	100	93	72	70	91	72	96
Rel Tel	253	96	100	91	72	62	90	70	93
Tata	253	96	68	90	68	69	89	73	95
CIRCLE-M									

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
Chennai									
Aircell	652	99	51	96	94	80	78	90	96
Airtel	529	98	67	98	92	86	86	93	97
BSNL	583	89	57	94	88	80	68	86	96
Hutch	603	98	55	99	91	76	90	89	96
Rel comm	567	96	47	98	91	79	84	90	96
Tata	182	100	36	96	94	76	62	87	91
Delhi									
Airtel	615	97	62	91	74	86	73	85	87
Hutch	649	96	61	93	73	85	78	85	88
Idea	583	97	55	96	67	79	75	84	91
MTNL	555	98	54	94	70	82	55	84	88
Rel comm	589	98	53	96	75	83	72	86	90
Tata	604	98	45	97	69	79	68	85	93
Kolkata									
Airtel	595	99	90	89	77	85	83	87	91
BSNL	604	99	72	98	64	81	68	86	94
Hutch	600	99	82	91	76	86	64	88	91
Rel comm	600	100	82	96	73	87	75	90	96
RISL	600	98	11	98	69	79	60	89	97
Tata	601	99	100	96	62	83	55	88	95
Mumbai									
Airtel	590	98	98	95	64	99	96	96	100
BPL	587	95	97	98	70	92	78	92	98
Hutch	586	95	96	98	68	94	89	93	100

Name of the Service Providers	Sample Size	Provision of service	Billing performance		Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
			Postpaid	Prepaid					
MTNL	584	98	94	99	75	90	86	92	98
Rel comm	505	81	89	99	81	68	88	85	97
Tata	600	93	96	99	69	87	83	91	96

* (UA)-Were not able to answer

HFCL : PUNJAB WAS NOT SURVEYED BECAUSE OF LOW SUBSCRIBER BASE

** (NAS)-Did Not Access the Service

*** (NRI)-No Reproted Incidence

3.6.4 PERFORMANCE RESULTS – Customer Satisfaction Survey of Basic (Wireline) Service

Name of the Service Providers	Sample Size	Provision of service	Billing	Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
Benchmark			>95%	>90%	>90%	>95%	>95%	>95%
A-Circle								
AP	1465							
AP-Airtel	253	98	99	100	92	***	96	99
AP-BSNL	599	100	98	99	93	100	96	**
AP-Rel comm	251	99	99	98	90	***	94	97
AP-TATA	362	100	100	99	92	***	96	99
Gujarat	1041							
Gujarat-Airtel	1	100	*	**	100	***	100	**
Gujarat-BSNL	249	100	72	51	97	59	80	100
Gujarat-Rel comm	410	100	67	36	96	100	77	100
Gujarat-TATA	381	100	93	39	97	65	79	100

Name of the Service Providers	Sample Size	Provision of service	Billing	Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
karnataka	1411							
Karnataka-Airtel	602	78	83	97	96	97	94	100
Karnataka-BSNL	411	89	93	97	92	99	92	100
Karnataka-TATA	398	68	83	94	90	96	89	96
Maharastra	1192							
Maharastra-Airtel	4	80	100	100	100	100	99	**
Maharastra-BSNL	399	91	99	88	100	79	94	70
Maharastra-Rel comm	394	100	99	99	100	100	99	94
Maharastra-TATA	395	99	99	98	100	100	97	77
Tamilnadu	1426							
Tamilnadu-Airtel	427	95	92	90	88	74	90	99
Tamilnadu-BSNL	387	80	92	81	89	79	87	99
Tamilnadu-Rel comm	201	94	93	69	95	90	93	98
Tamilnadu-Tata	411	95	96	80	93	87	92	98
B-Circle								
Chattisgarh-BSNL	454							
Chattisgarh-BSNL	454	95	91	63	92	90	90	98
Haryana	720							
Haryana-Airtel	103	100	93	86	92	82	90	94
Haryana-BSNL	401	53	100	72	96	83	88	100
Haryana-Rel comm	216	99	100	85	97	93	94	100
Kerala	688							
Kerala-Airtel	50	65	100	64	100	78	93	100
Kerala-BSNL	320	73	95	71	100	81	91	98
Kerala-Rel comm	318	72	96	70	100	83	91	99
MP	893							
MP-Airtel	244	98	89	85	80	87	85	95
MP-BSNL	425	95	81	78	81	80	82	100

Name of the Service Providers	Sample Size	Provision of service	Billing	Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
MP-Rel comm	224	99	93	76	84	94	88	100
Punjab	1059							
Punjab-Airtel	91	98	100	90	99	100	97	100
Punjab-BSNL	254	98	97	88	98	96	96	100
Punjab-HFCL	464	95	96	88	97	98	95	89
Punjab-Rel comm	250	97	100	94	99	99	95	100
Rajasthan	939							
Rajasthan-BSNL	483	75	91	67	88	71	80	93
Rajasthan-Rel comm	201	95	95	70	94	86	89	100
Rajasthan-Shyam	255	92	96	74	95	95	91	86
UP-W	400							
UP (W)-Airtel	90	100	99	79	91	100	92	100
UP (W)-BSNL	158	100	66	79	92	71	83	100
UP (W)-Rel comm	152	95	93	85	93	88	92	100
UP-E	646							
UP-E-Airtel	107	90	92	60	86	67	82	100
UP-E-BSNL	386	76	69	56	74	82	76	97
UP-E-Rel comm	153	97	90	60	84	89	79	100
Uttranchal	92							
Uttranchal-BSNL	92	100	61	70	97	96	96	100
WB	501							
WB-BSNL	249	90	87	70	90	98	89	100
WB-Rel comm	252	96	99	61	93	100	90	**
C-Circle								
Assam	250							
Assam-BSNL	250	80	83	44	87	78	87	100
A&N	25							
A&N-BSNL	25	76	96	**	100	94	91	**

Name of the Service Providers	Sample Size	Provision of service	Billing	Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
Bihar	451							
Bihar-BSNL	251	77	72	76	87	59	80	100
Bihar-Rel comm	200	94	*	54	81	82	82	100
HP	422							
HP-BSNL	256	86	95	89	86	73	75	100
HP-Rel comm	166	100	*	91	93	91	83	100
J&K	193							
J&K-BSNL	193	58	82	63	85	67	76	73
Jharkhand	250							
Jharkhand-BSNL	250	***	36	75	77	57	69	**
NE2	749							
NE-BSNL	250	76	70	61	48	68	76	**
NE2-BSNL	499	55	66	52	82	80	56	100
Orissa	449							
Orissa-BSNL	250	83	61	64	75	66	82	88
Orissa-Rel comm	199	95	75	59	80	91	85	99
M-Circle								
Chennai	2966							
Chennai-Airtel	889	93	96	87	94	88	90	99
Chennai-BSNL	1097	69	92	92	88	73	86	99
Chennai-Rel comm	234	96	97	90	93	95	93	99
Chennai-Tata	746	90	94	93	93	92	93	97
Delhi	3041							
Delhi-Airtel	619	93	86	62	86	92	85	93
Delhi-MTNL	1216	86	84	67	85	84	83	90
Delhi-Rel comm	599	95	88	76	84	92	88	86
Delhi-TATA	607	93	88	68	85	90	87	91
Kolkata	1100							

Name of the Service Providers	Sample Size	Provision of service	Billing	Help Services	Network performance Rel Commiability and availability	Maintainability	Overall customer satisfaction	Supple-mentary services
kolkata-Airtel	253	98	93	61	89	33	88	80
Kolkata-BSNL	598	94	81	53	80	87	76	100
kolkata-Rel comm	249	92	87	83	90	66	93	88
Mumbai	2461							
Mumbai-Airtel	603	100	100	84	100	86	97	100
Mumbai-MTNL	761	68	97	68	91	82	86	100
Mumbai-Rel comm	643	86	93	64	94	79	89	100
Mumbai-TATA	454	100	100	78	99	87	94	100

* (UA)-Were not able to answer

** (NAS)-Did Not Access the Service

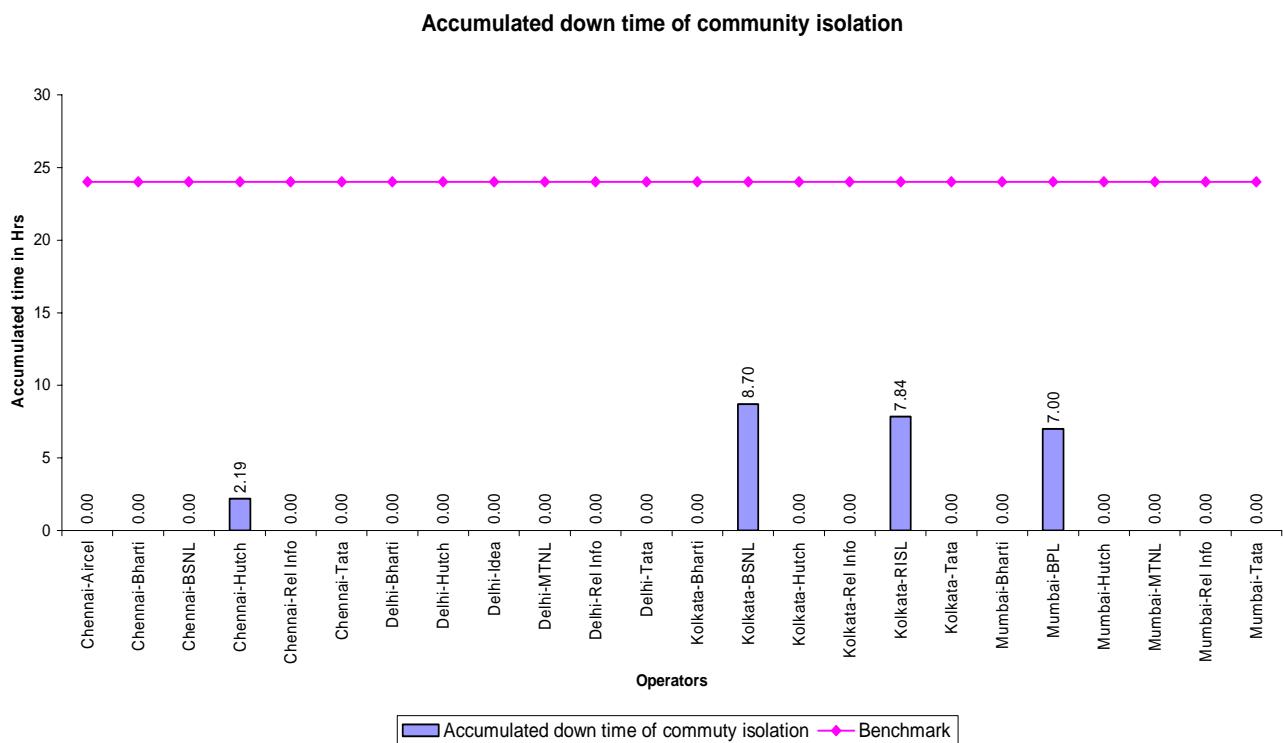
*** (NRI)-No Reported Incidence

Karnataka Rel comm not surveyed as directory was not available.

4. GRAPHICAL REPRESENTATION OF RESULTS

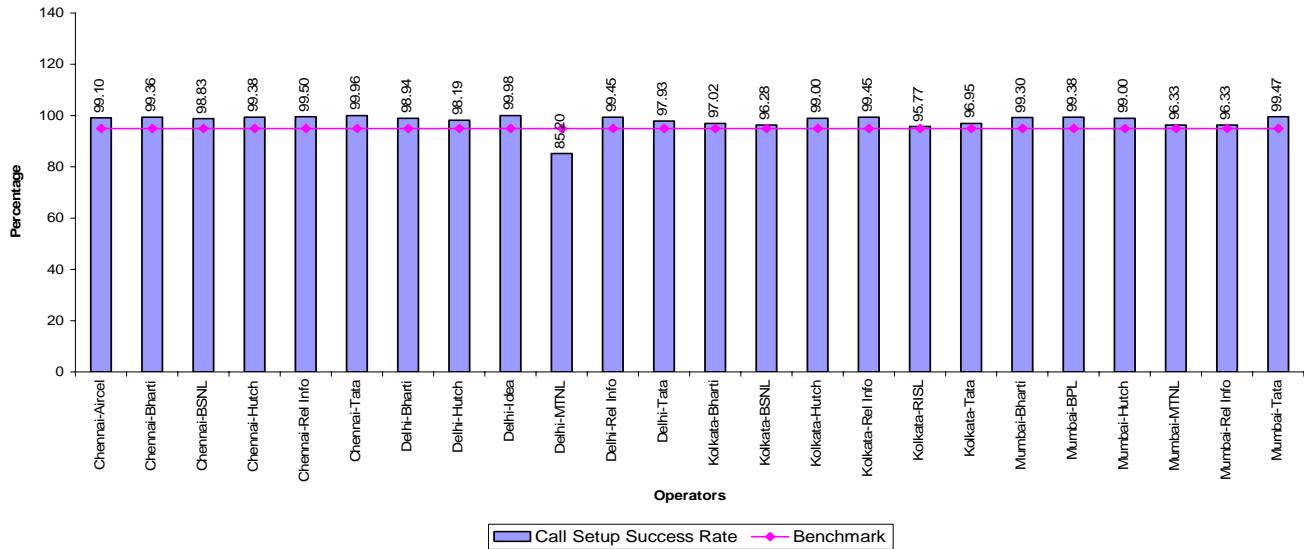
4.1 QOS CELLULAR

4.1.1 METRO CIRCLES



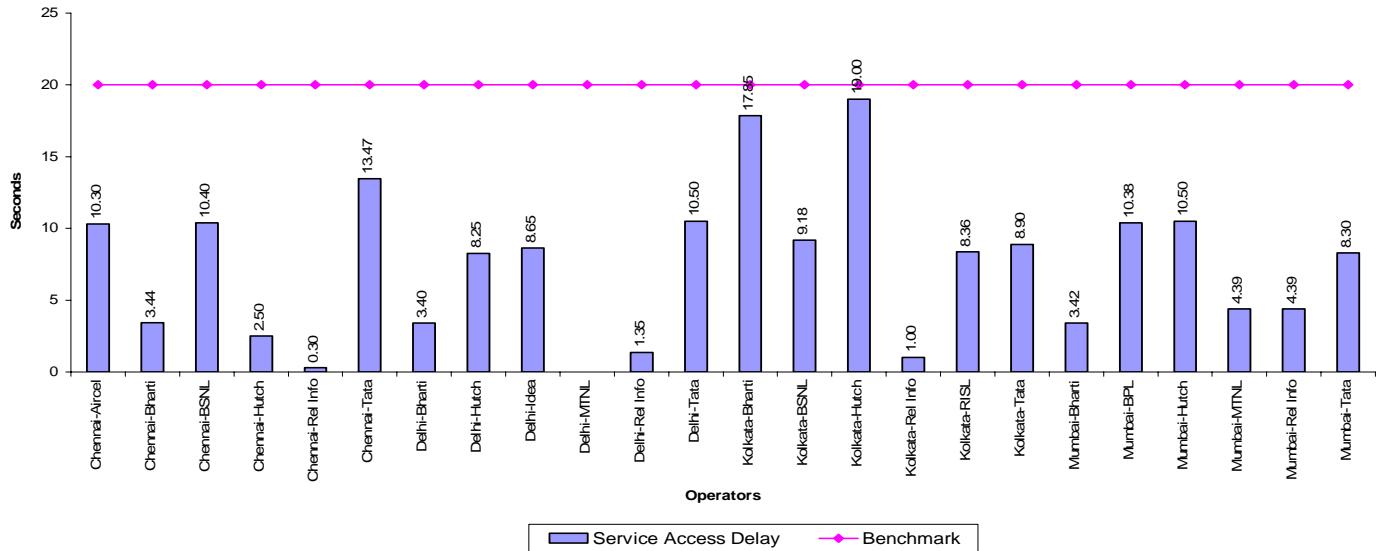
Audit was conducted for 24 operators. All operators are meeting the benchmark parameter.

Call Setup Success Rate

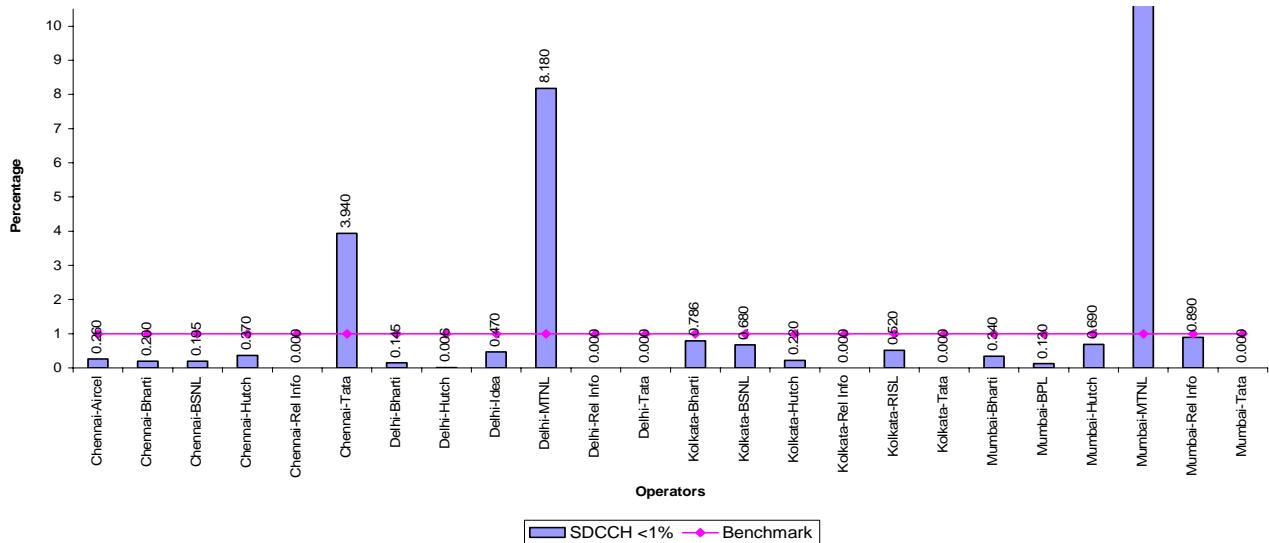


Audit was conducted for 24 operators. One operator(s) are not meeting the benchmark parameter.

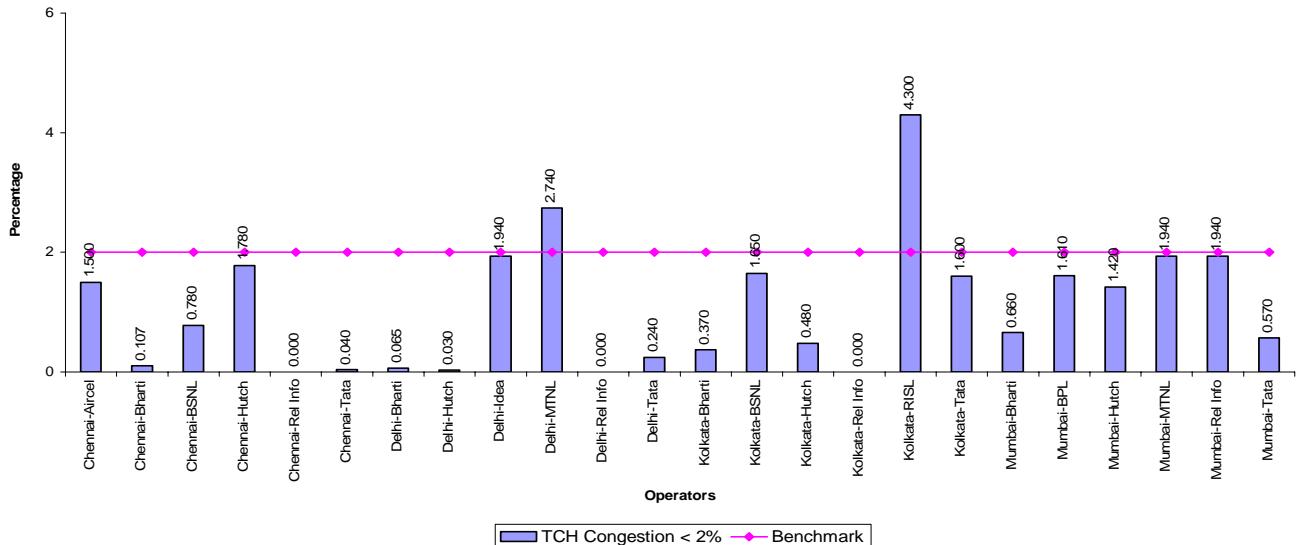
Service Access Delay



Audit was conducted for 24 operators. All Operators are meeting the benchmark parameter. . Data not provided by MTNL-Delhi.

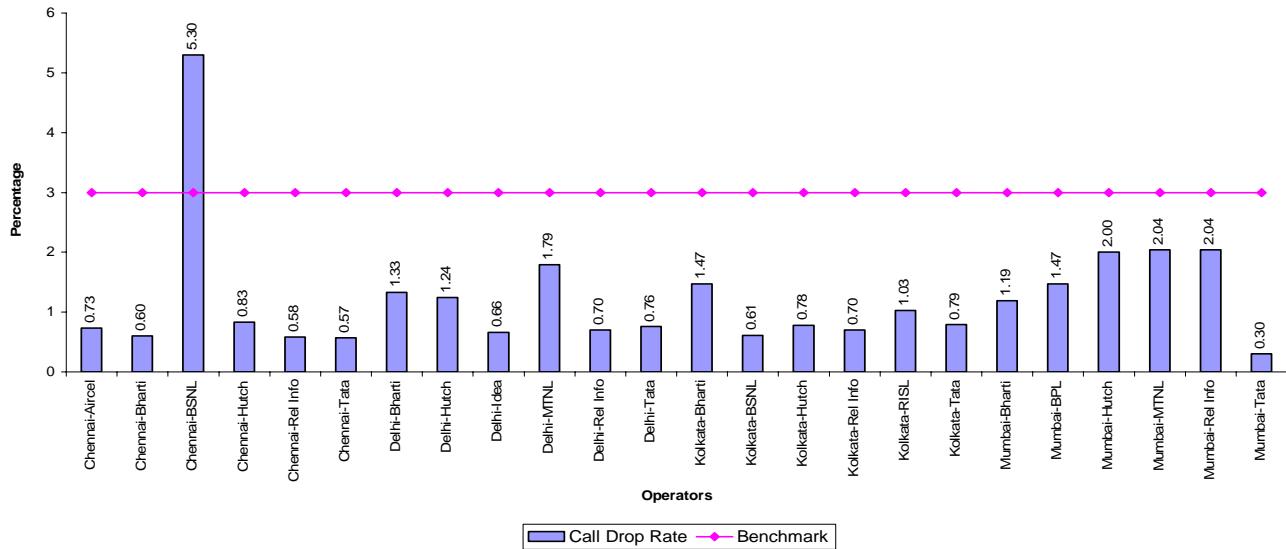
SDCCH <1%

Audit was conducted for 24 operators. Three operator(s) are not meeting the benchmark parameter.

TCH Congestion < 2%

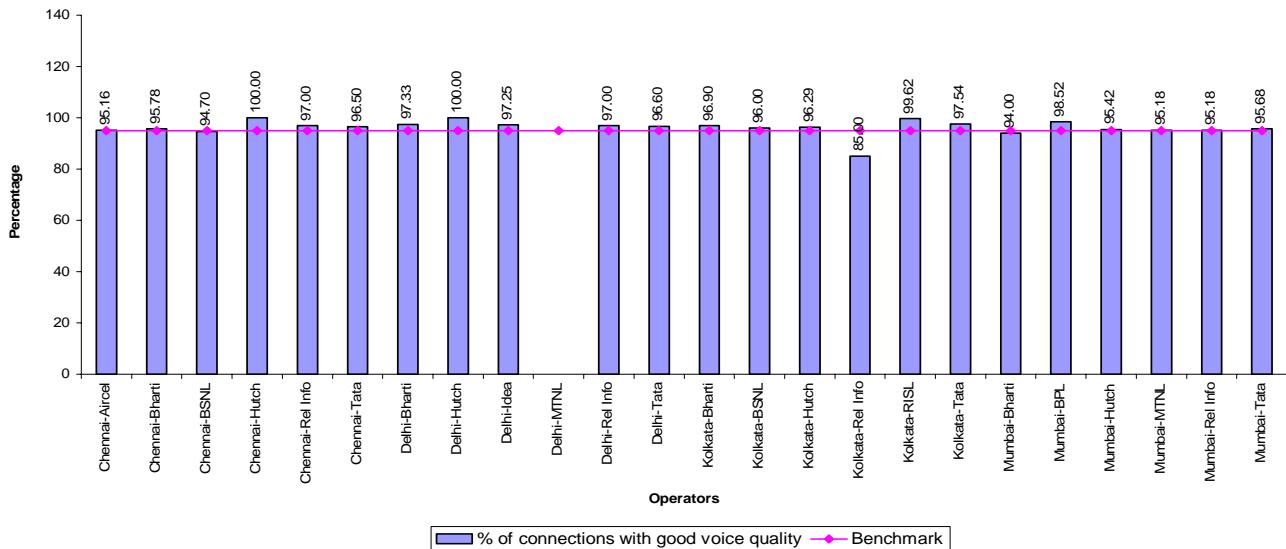
Audit was conducted for 24 operators. Two operator(s) are not meeting the benchmark parameter.

Call Drop Rate

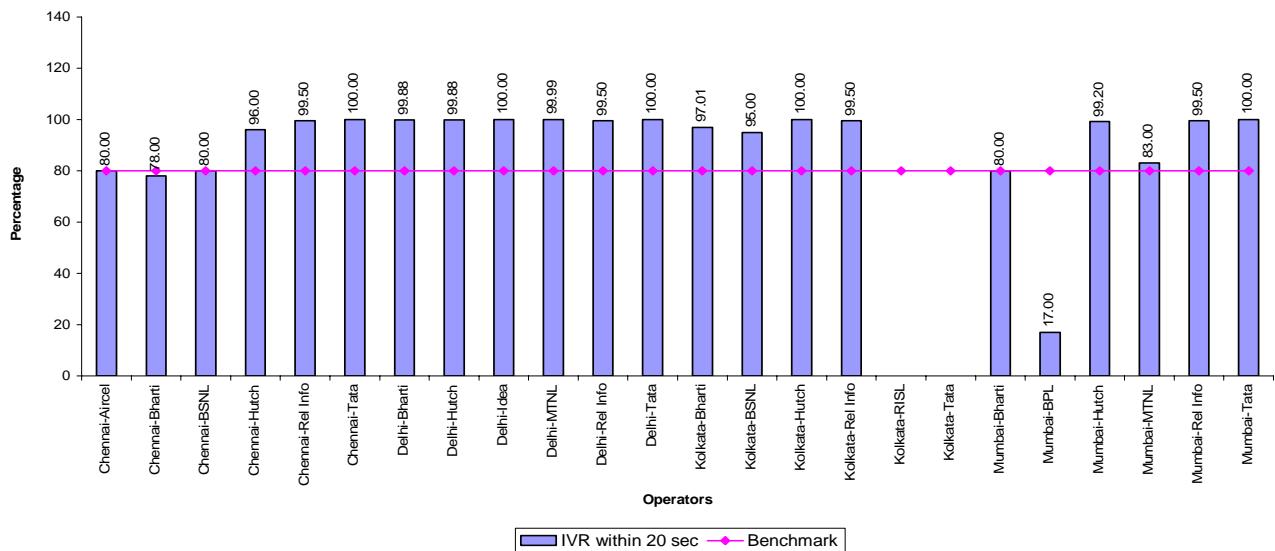


Audit was conducted for 24 operators. One operator is not meeting the benchmark parameter.

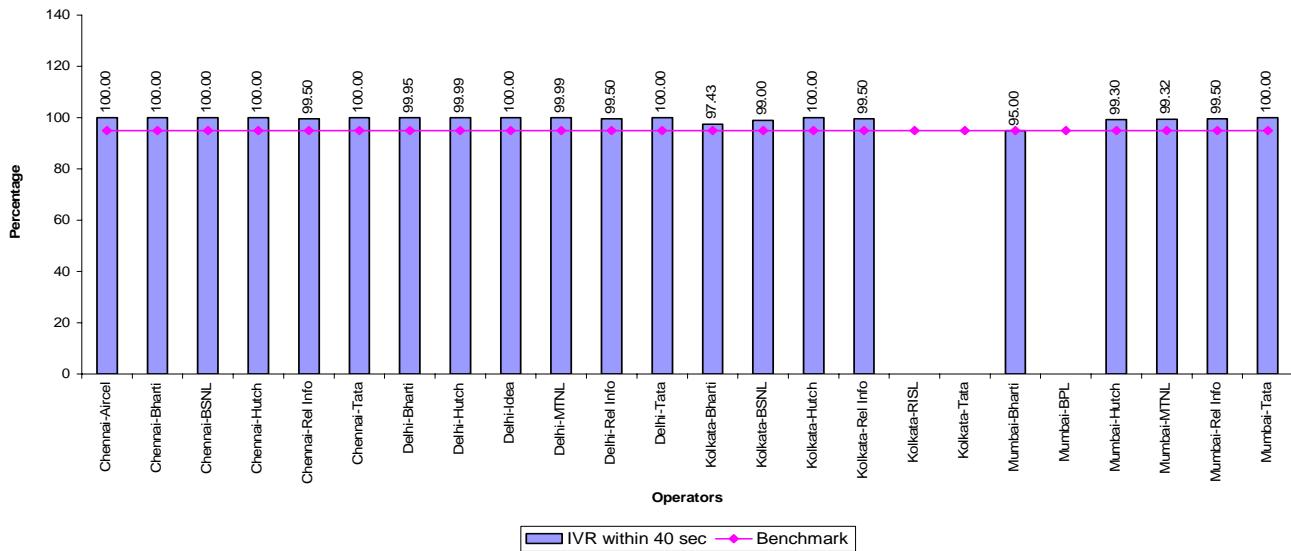
% Connection with Good Voice Quality



Audit was conducted for 24 operators. Three operators are not meeting the benchmark parameter. Data not provided by MTNL-Delhi.

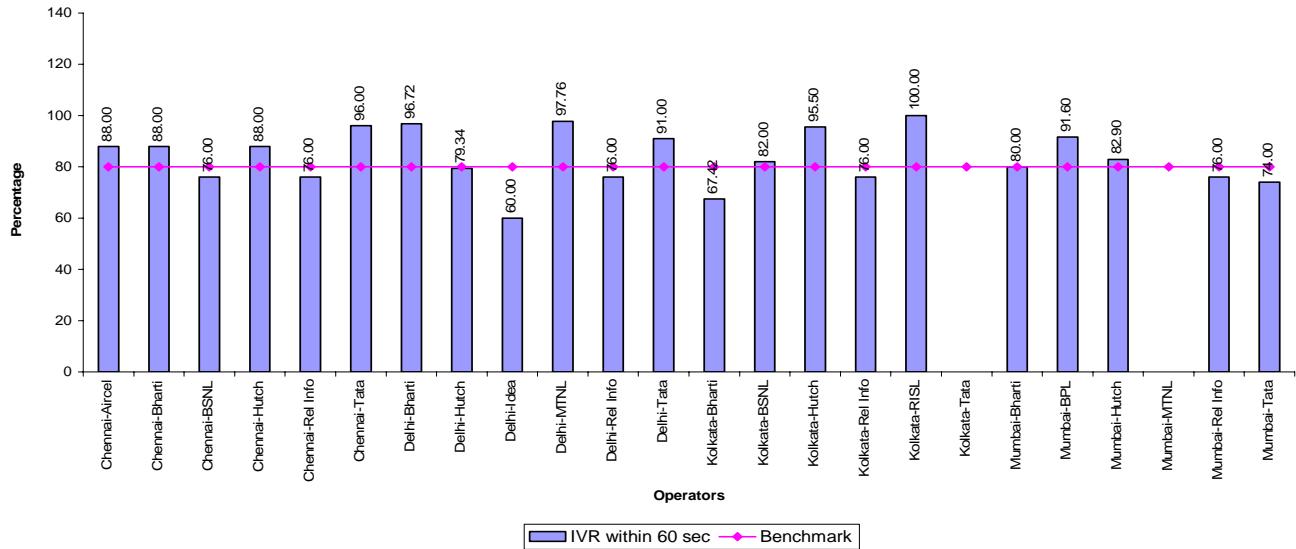
IVR within 20 seconds


Audit was conducted for 24 operators. Two operator(s) are not meeting the benchmark parameter. Tata-Kolkata & RISL – Kolkata.

IVR within 40 seconds


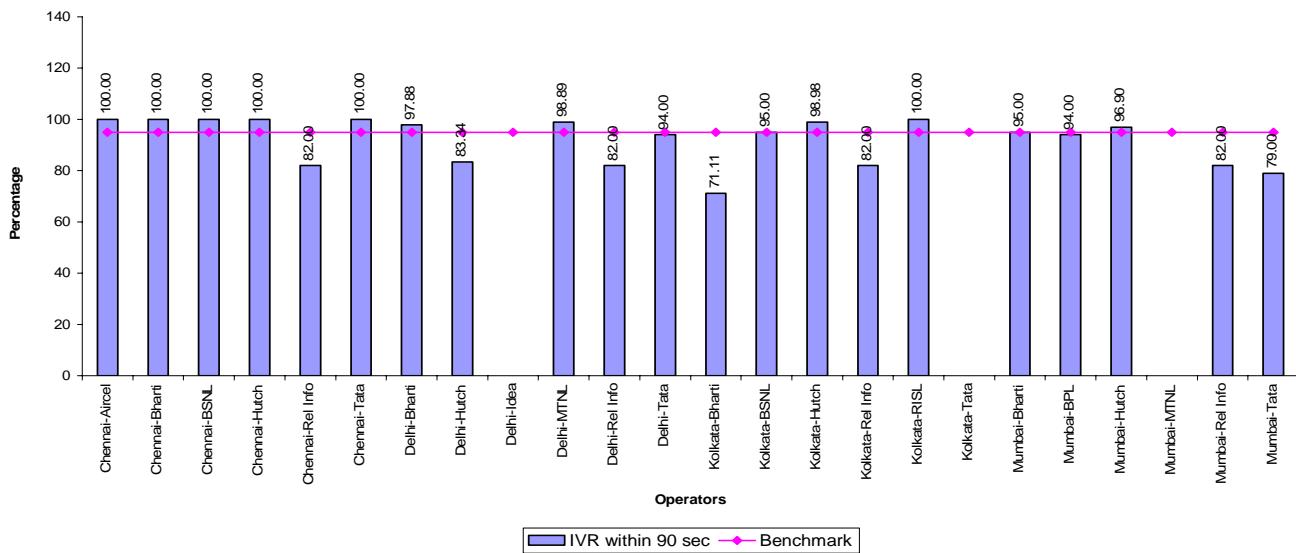
Audit was conducted for 24 operators. All operator(s) are meeting the benchmark parameter. Not available for BPL – Mumbai, Tata-Kolkata & RISL – Kolkata

Voice within 60 seconds



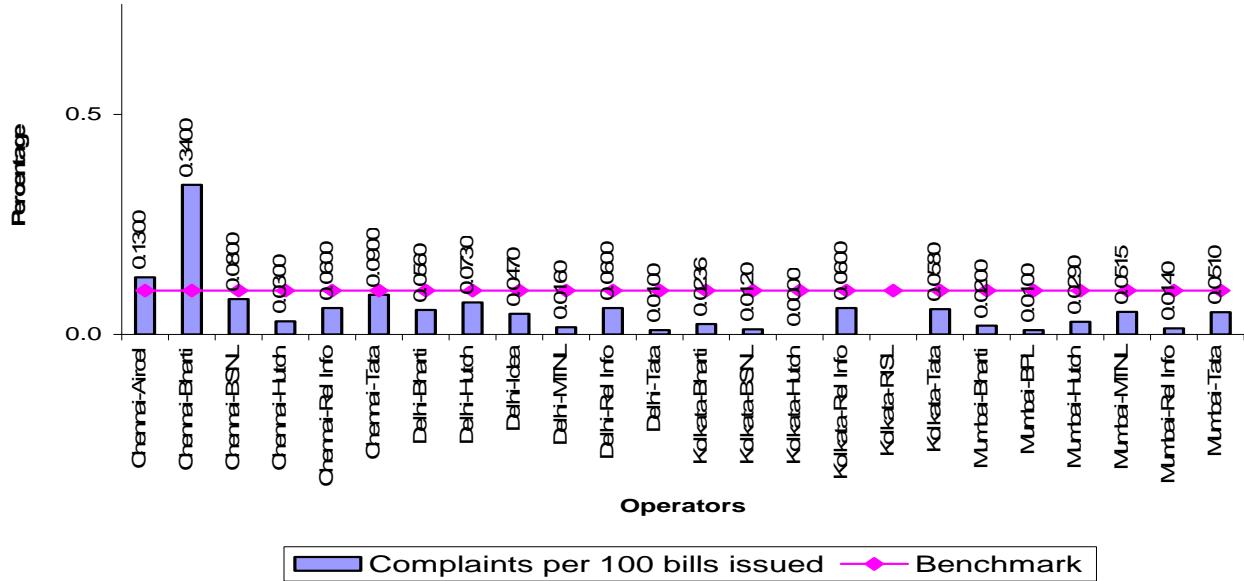
Audit was conducted for 24 operators. Nine operator(s) are not meeting the benchmark parameter. Not available for MTNL –Mumbai and Tata-Kolkata.

Voice within 90 seconds



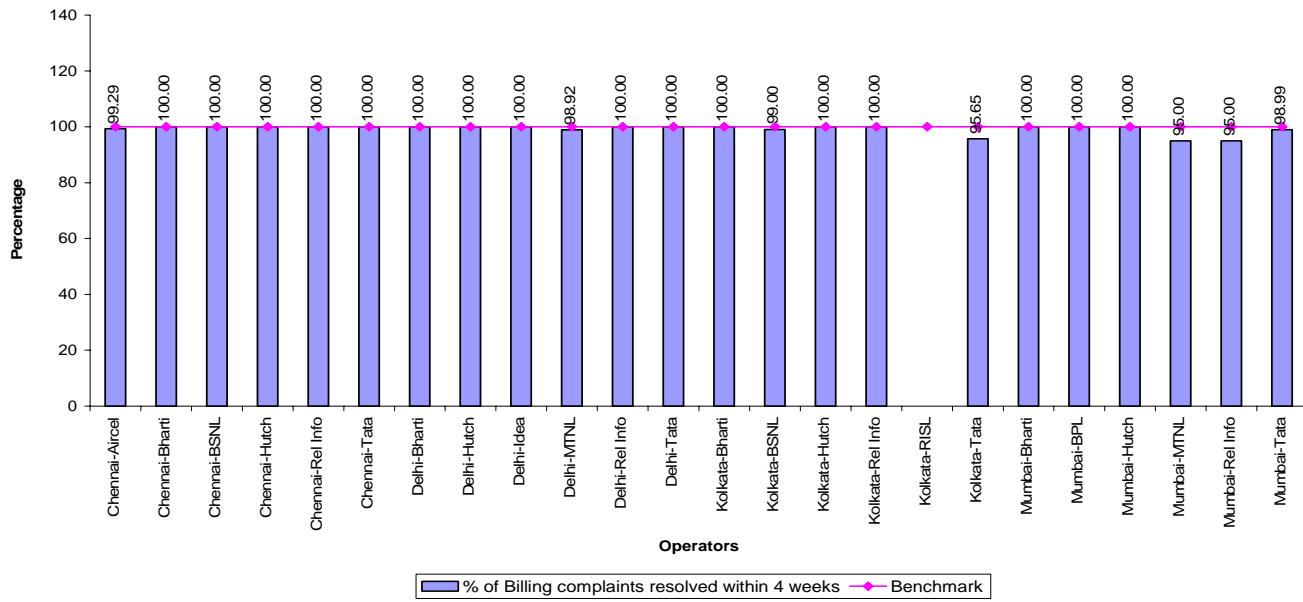
Audit was conducted for 24 operators. Nine operator(s) are not meeting the benchmark parameter. Not available for MTNL –Mumbai and Tata-Kolkata & Idea- Delhi.

Billing Complains per 100 bill issued



Audit was conducted for 24 operators. Two operator(s) are not meeting the benchmark parameter. No incidences were reported at RISL - Kolkata

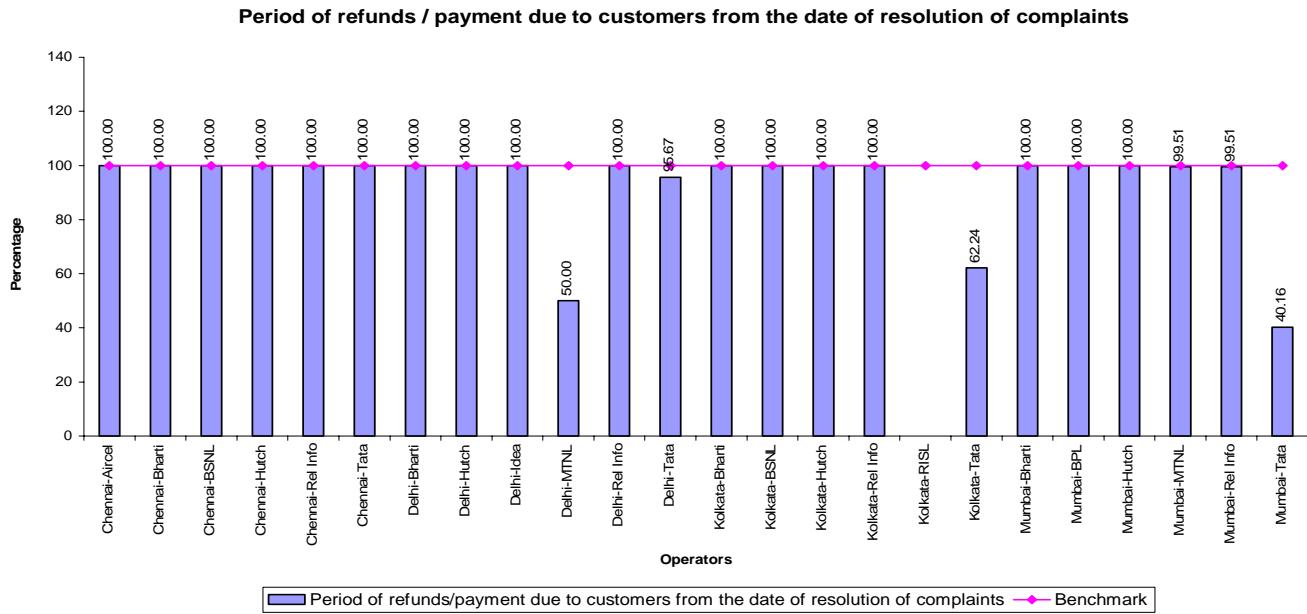
% of Billing Complaints resolved within 4 weeks



Audit was conducted for 24 operators. Seven operator(s) are not meeting the benchmark parameter. No incidences were reported at RISL - Kolkata



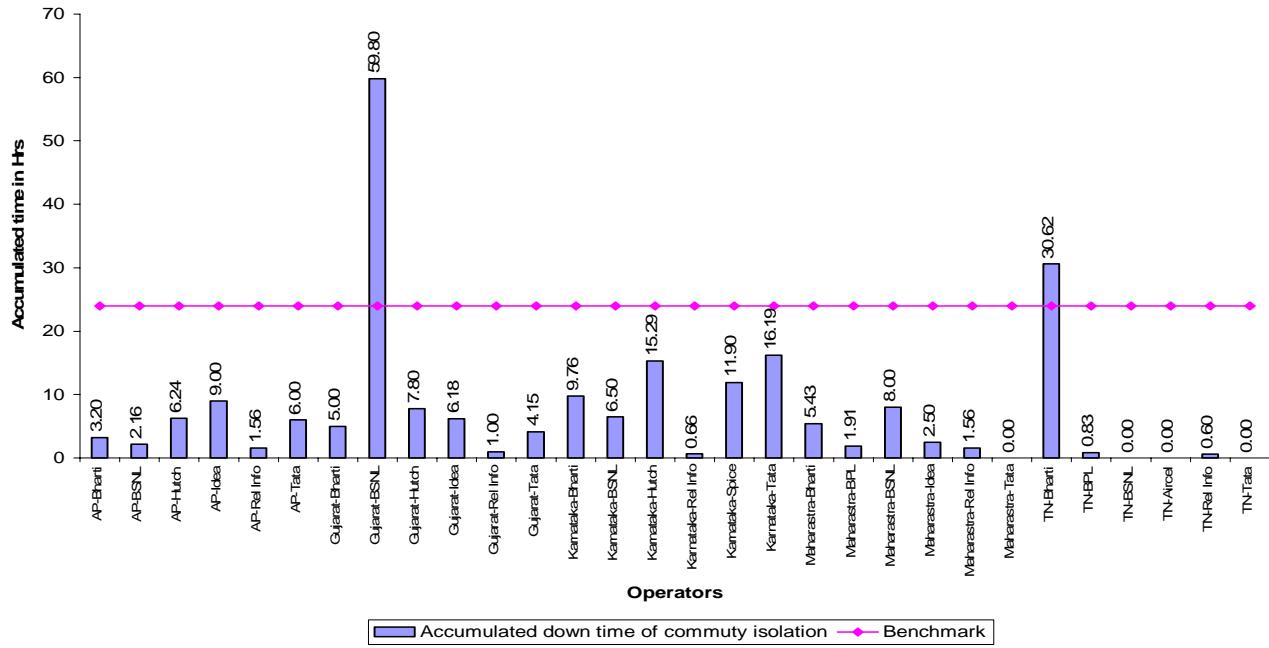
South Asia



Audit was conducted for 24 operators. Six operator(s) are not meeting the benchmark parameter. No incidences were reported at RISL - Kolkata

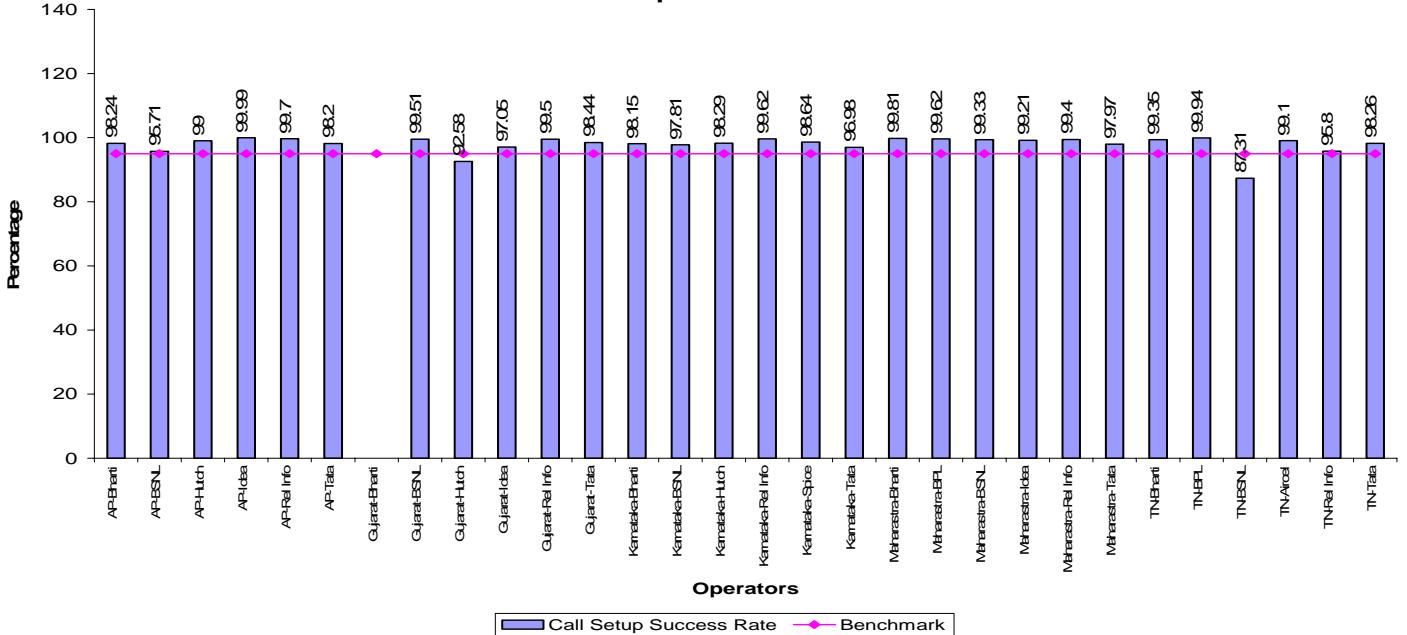
4.1.2 A CIRCLES

Accumulated down time of community isolation



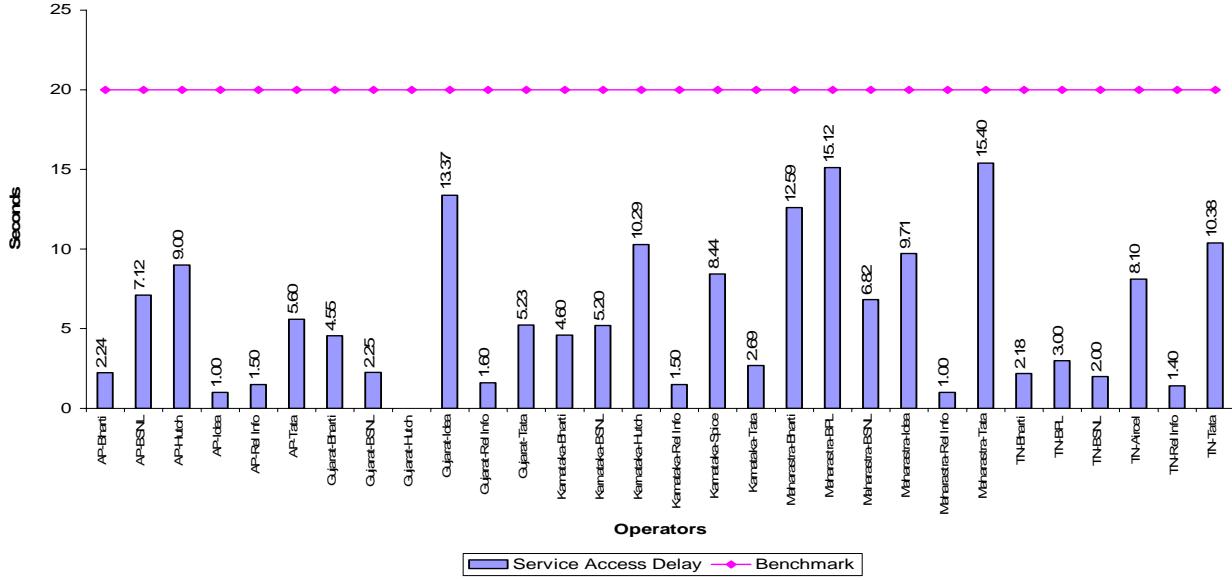
Audit was conducted for 30 operators. Two operator(s) are not meeting the benchmark parameter.

Call Setup Success Rate



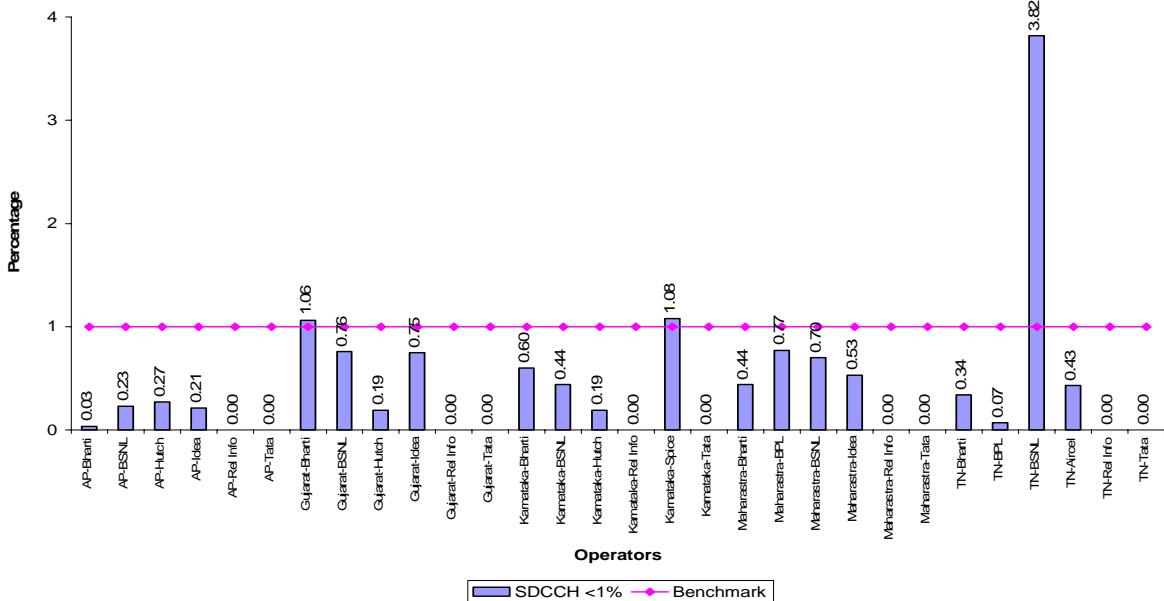
Audit was conducted for 30 operators. Two operator(s) are not meeting the benchmark parameter. Data not provided by Bharti Gujarat.

Service Access Delay

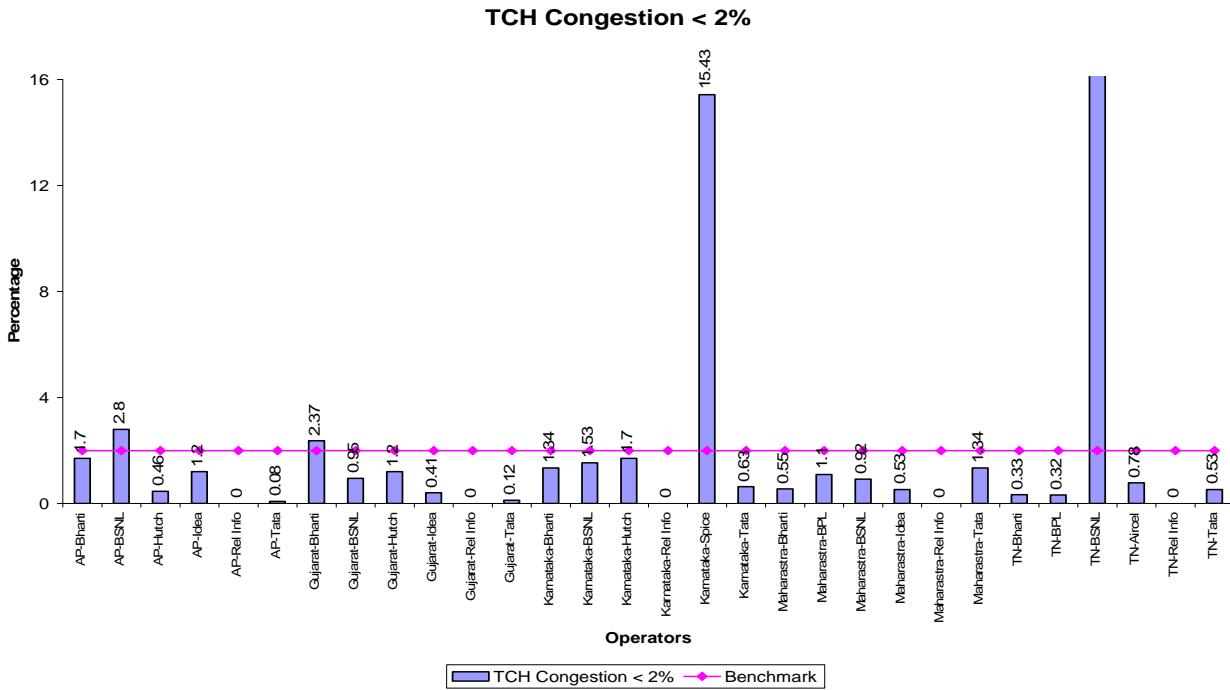


Audit was conducted for 30 operators. All operator(s) are meeting the benchmark parameter.
Data Not provided by Hutch – Gujarat.

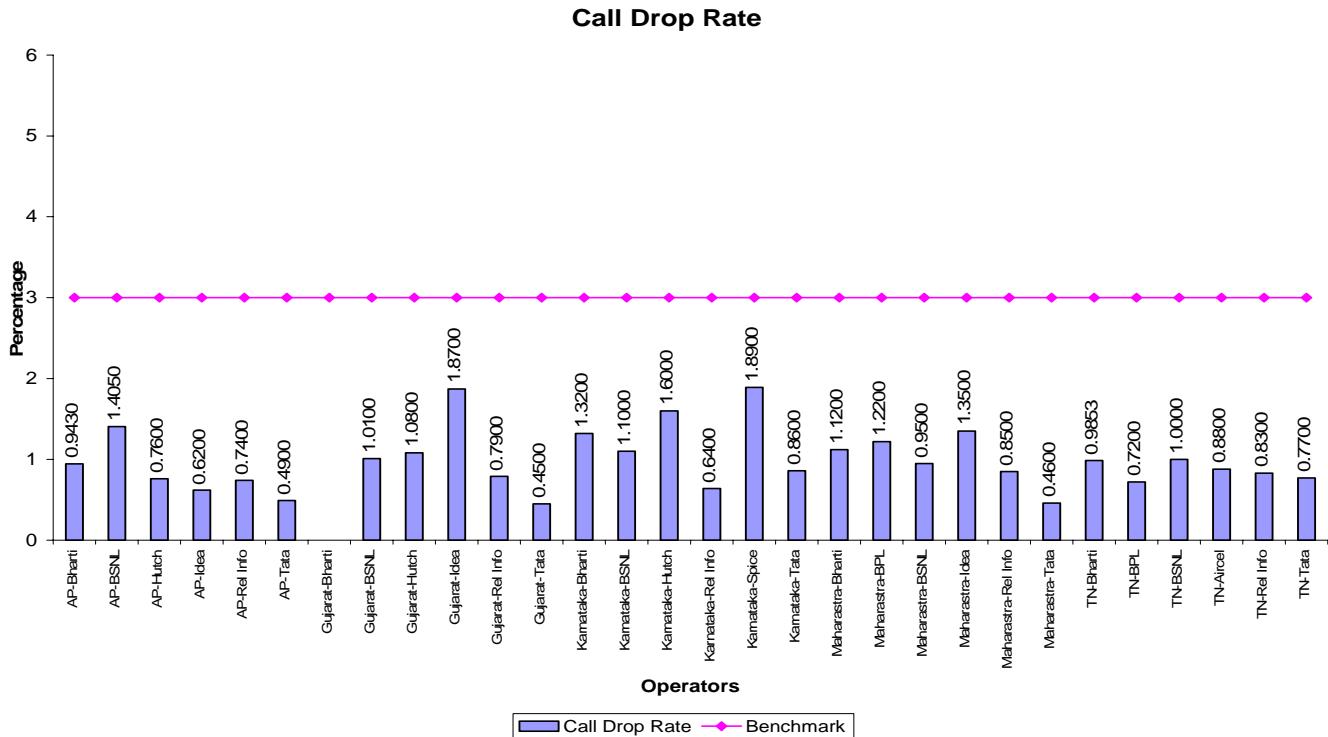
SDCCH <1%



Audit was conducted for 30 operators. Three operator(s) are not meeting the benchmark parameter.

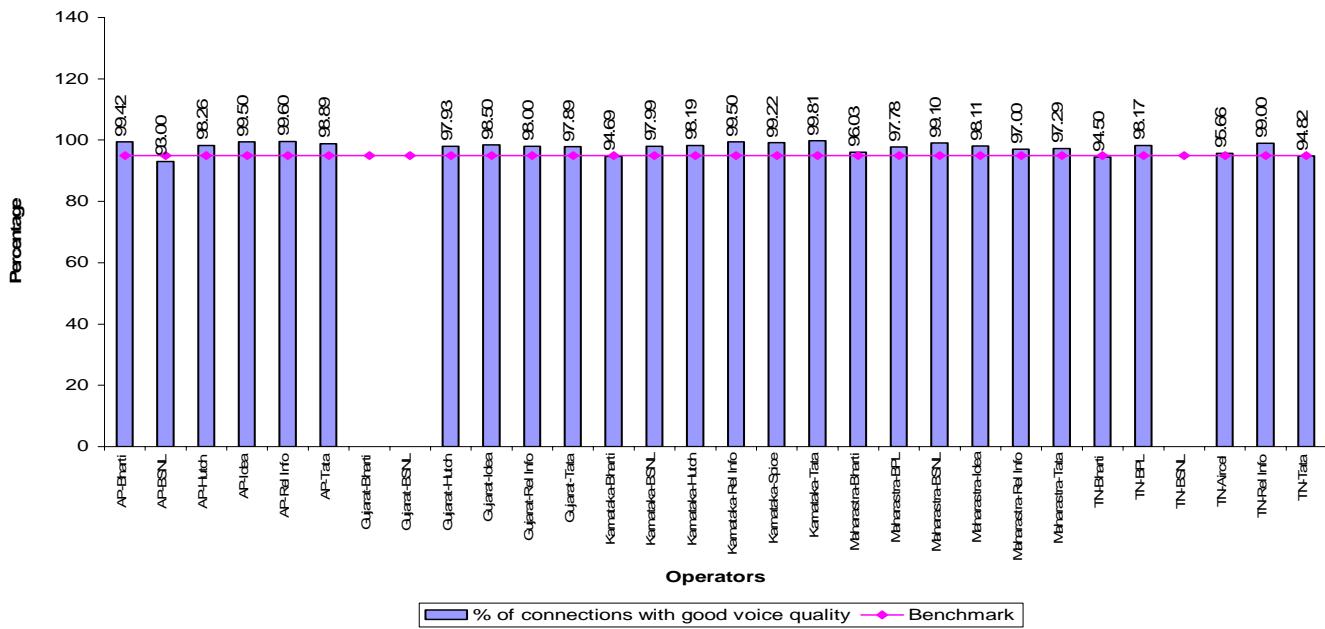


Audit was conducted for 30 operators. Four operator(s) are not meeting the benchmark parameter.



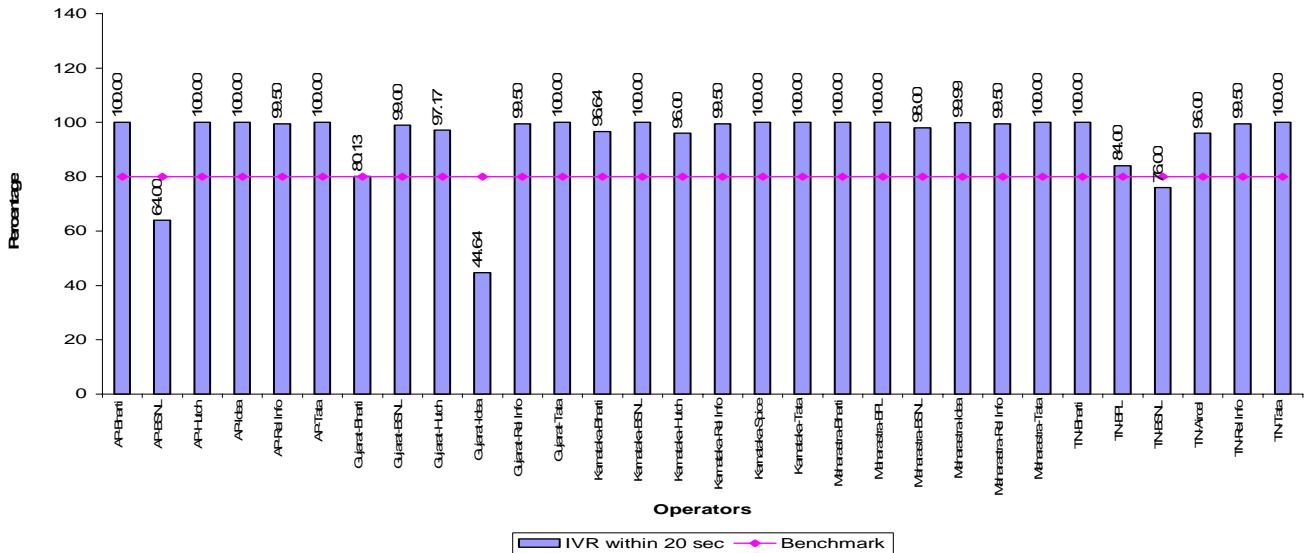
Audit was conducted for 30 operators. All operator(s) are meeting the benchmark parameter. Data not provided by Bharti-Gujrat.

% Connection with Good Voice Quality

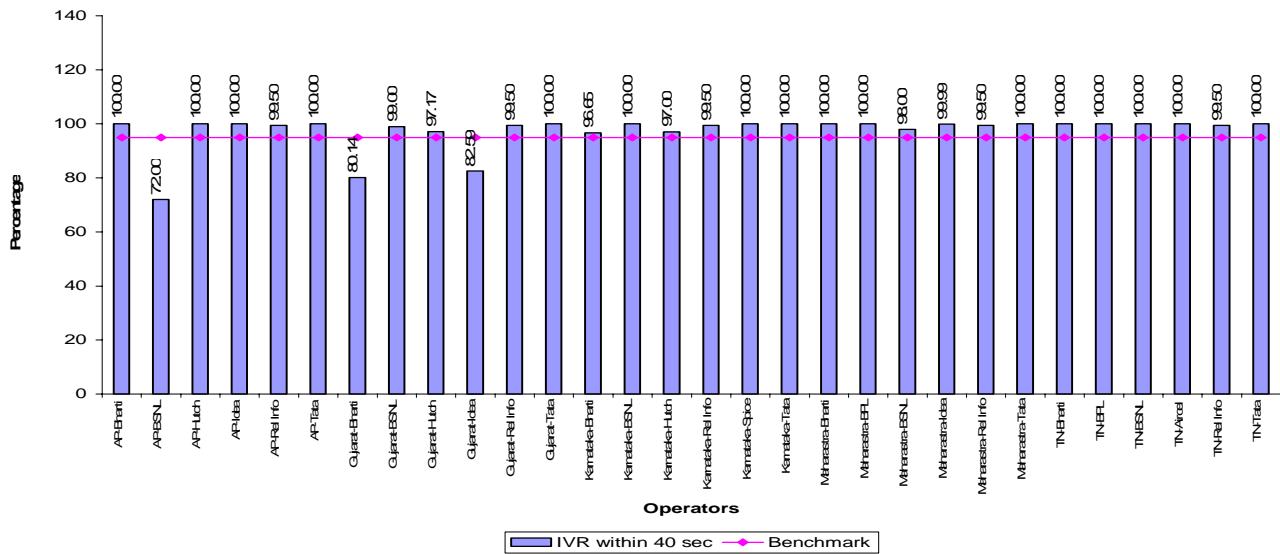


Audit was conducted for 30 operators. Four operator(s) are not meeting the benchmark parameter. Data not provided by Bharti-Gujrat, BSNL-Gujrat & BSNL-TN.

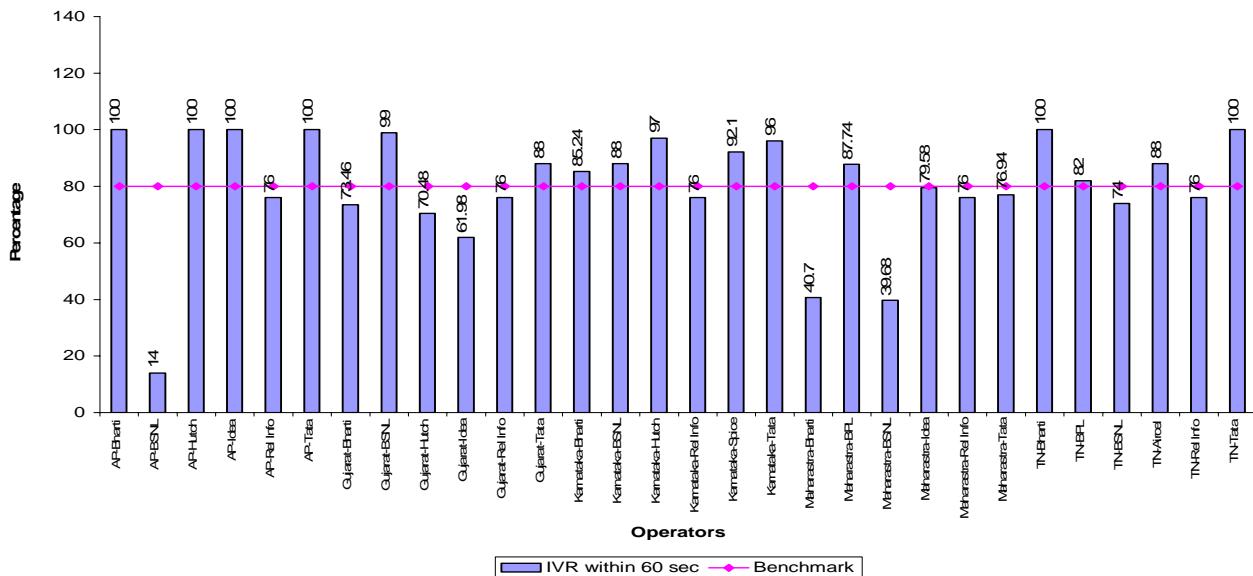
IVR within 20 seconds



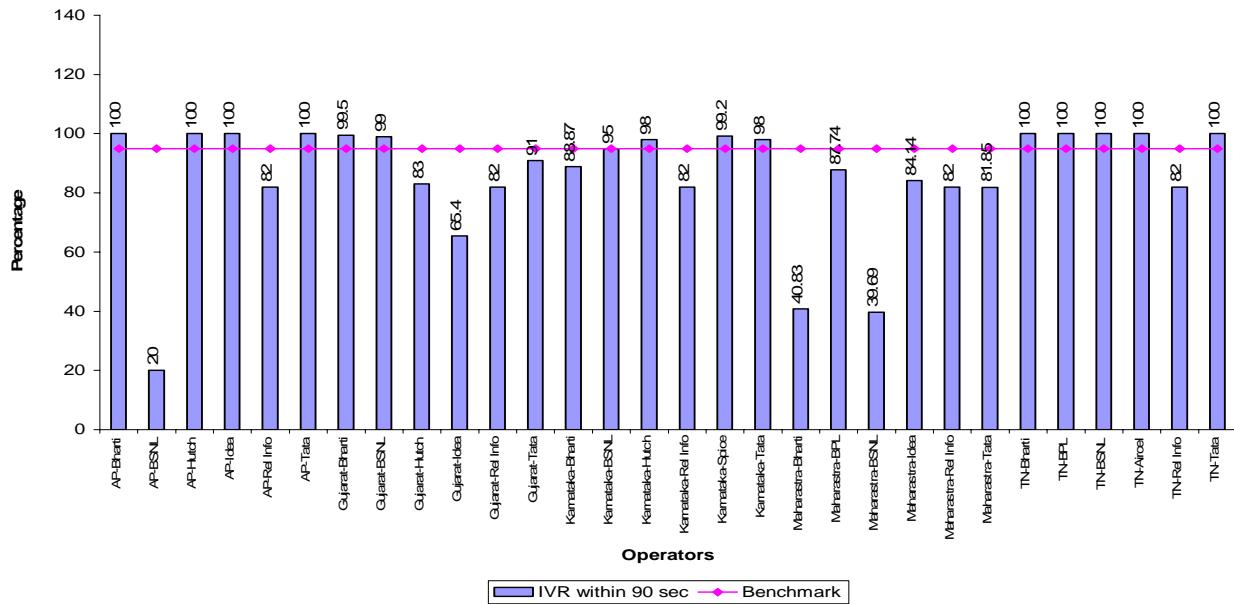
Audit was conducted for 30 operators. Three operator(s) are not meeting the benchmark parameter.

IVR within 40 seconds


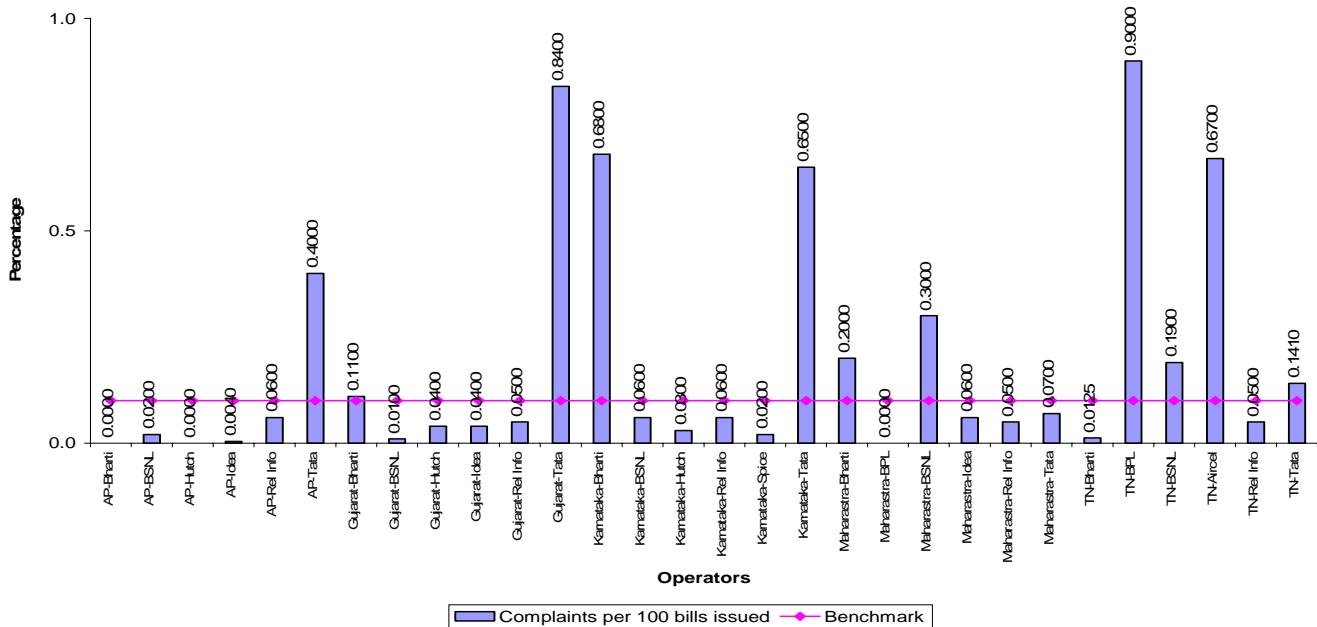
Audit was conducted for 30 operators. Three operator(s) are not meeting the benchmark parameter.

Voice within 60 seconds


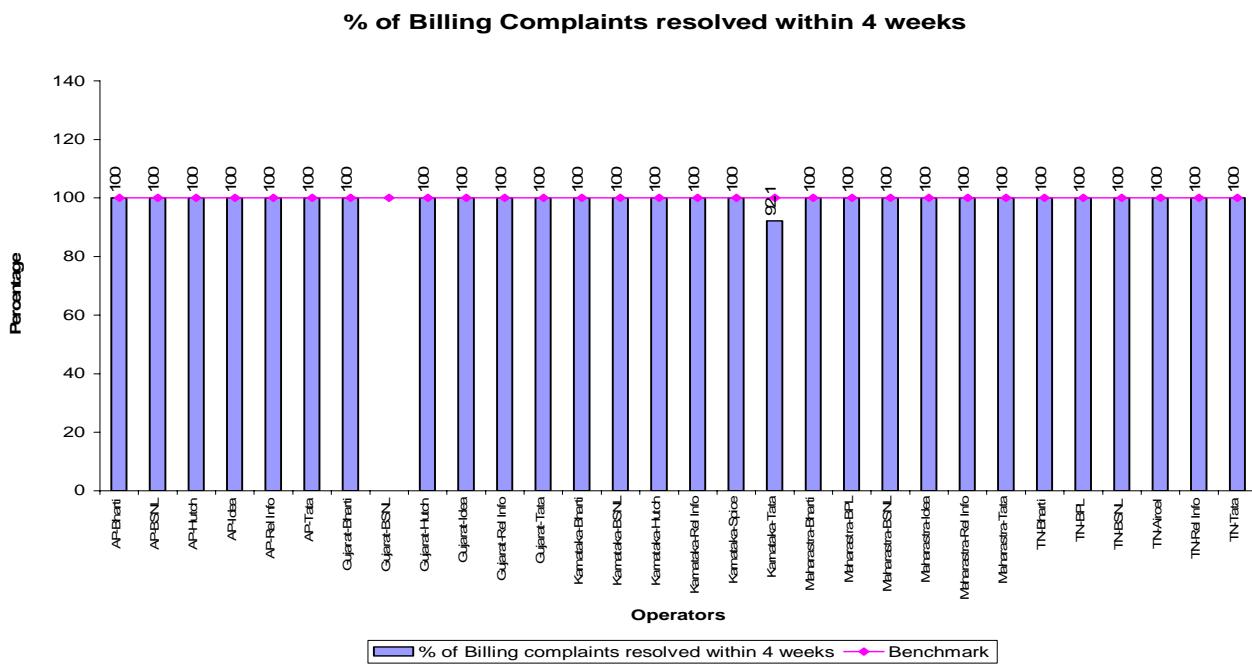
Audit was conducted for 30 operators. Fourteen operator(s) are not meeting the benchmark parameter.

Voice within 90 seconds


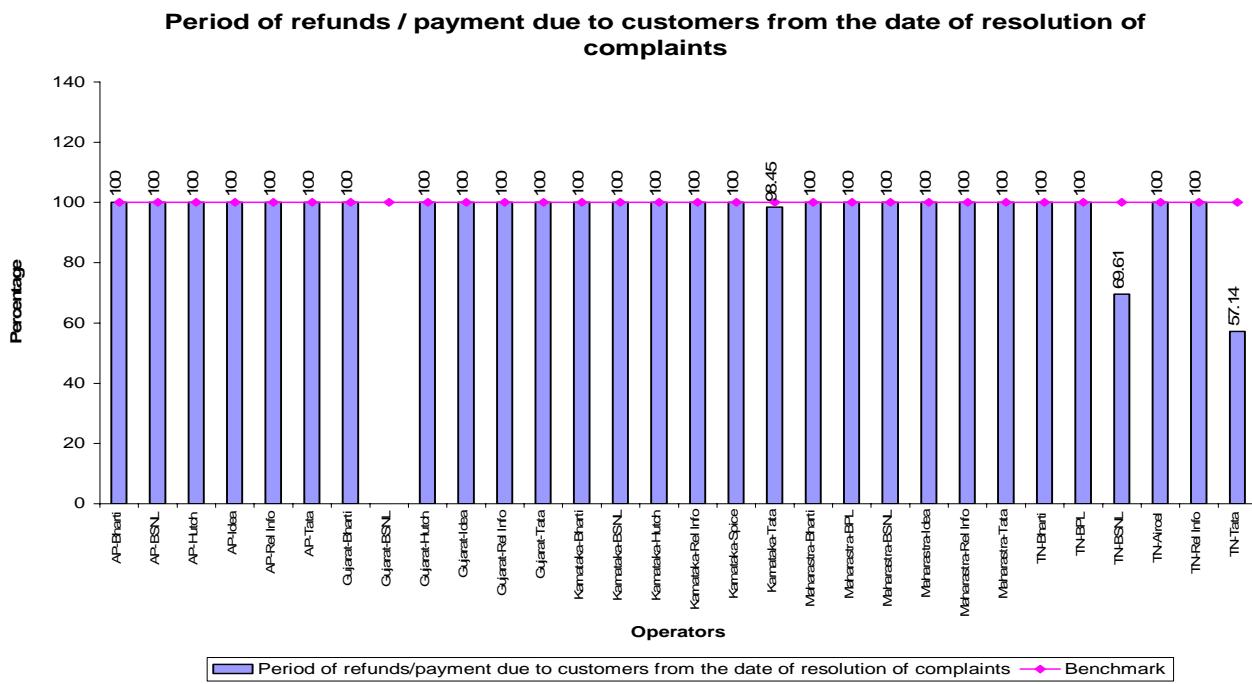
Audit was conducted for 30 operators. Fifteen operator(s) are not meeting the benchmark parameter.

Billing Complains per 100 bill issued


Audit was conducted for 30 operators. Eleven operator(s) are not meeting the benchmark parameter.



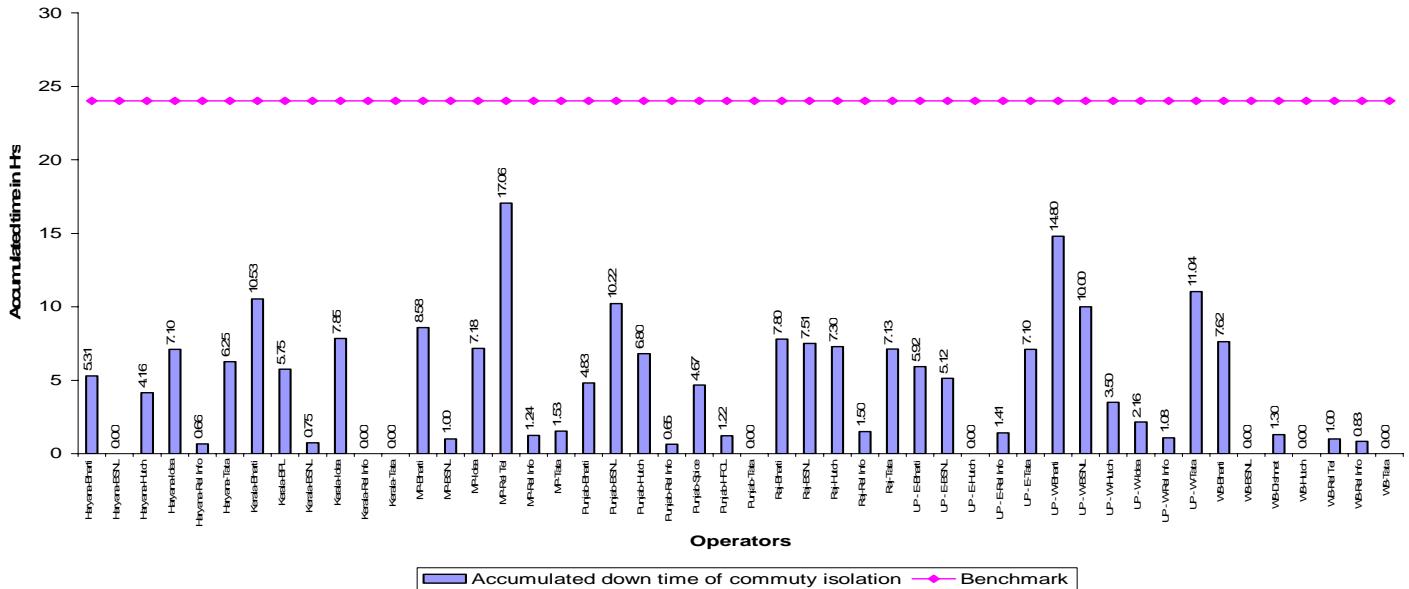
Audit was conducted for 30 operators. one operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-Gujrat



Audit was conducted for 30 operators.Three operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-Gujrat.

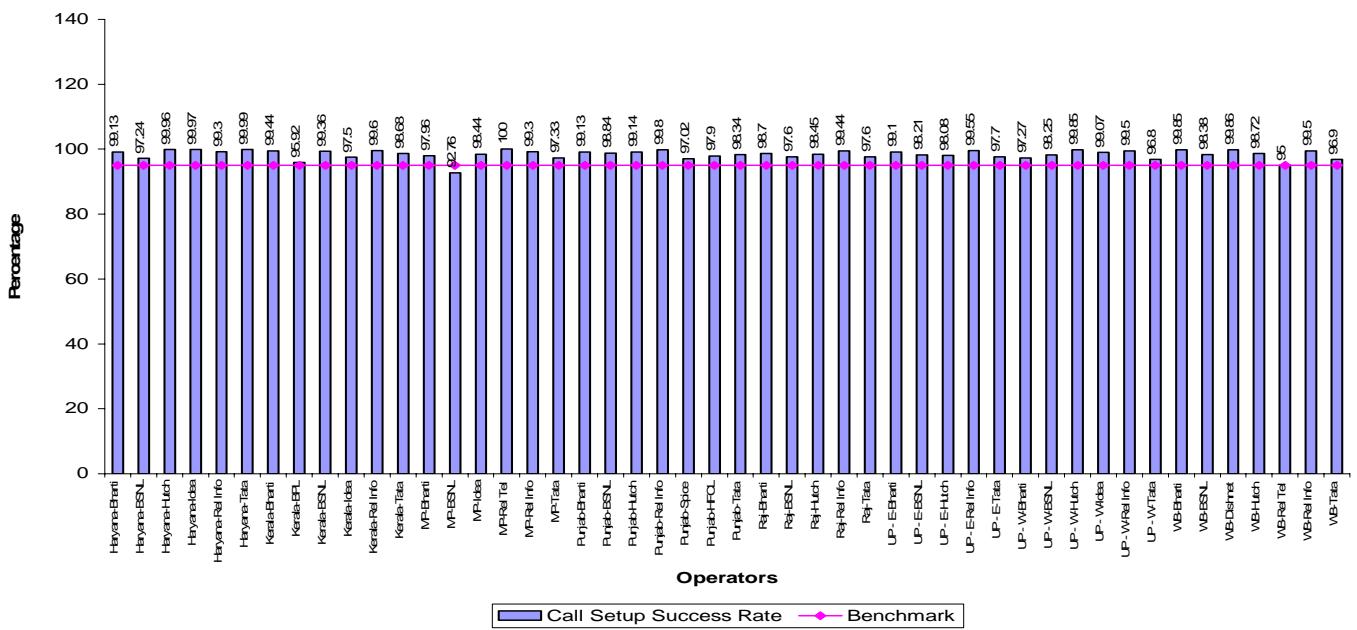
4.1.3 B CIRCLES

Accumulated down time of community isolation



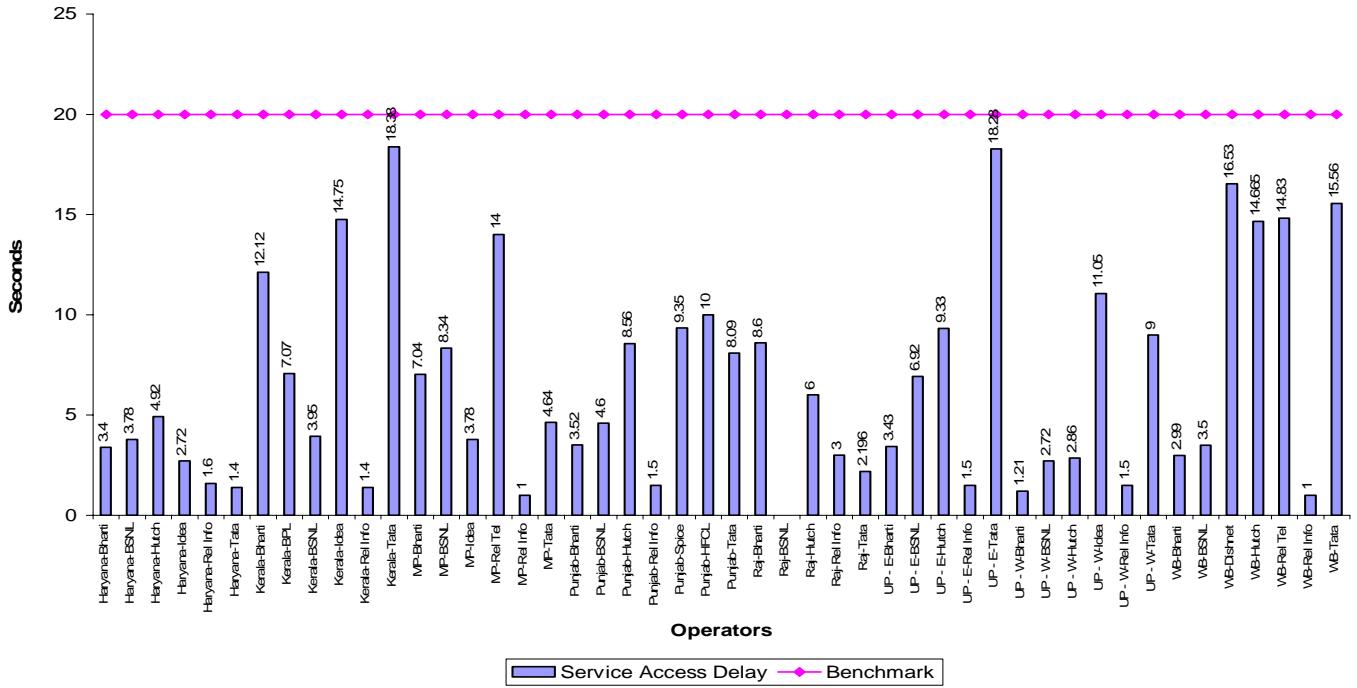
Audit was conducted for 48 operators. All operator(s) are meeting the benchmark parameter.

Call Setup Success Rate



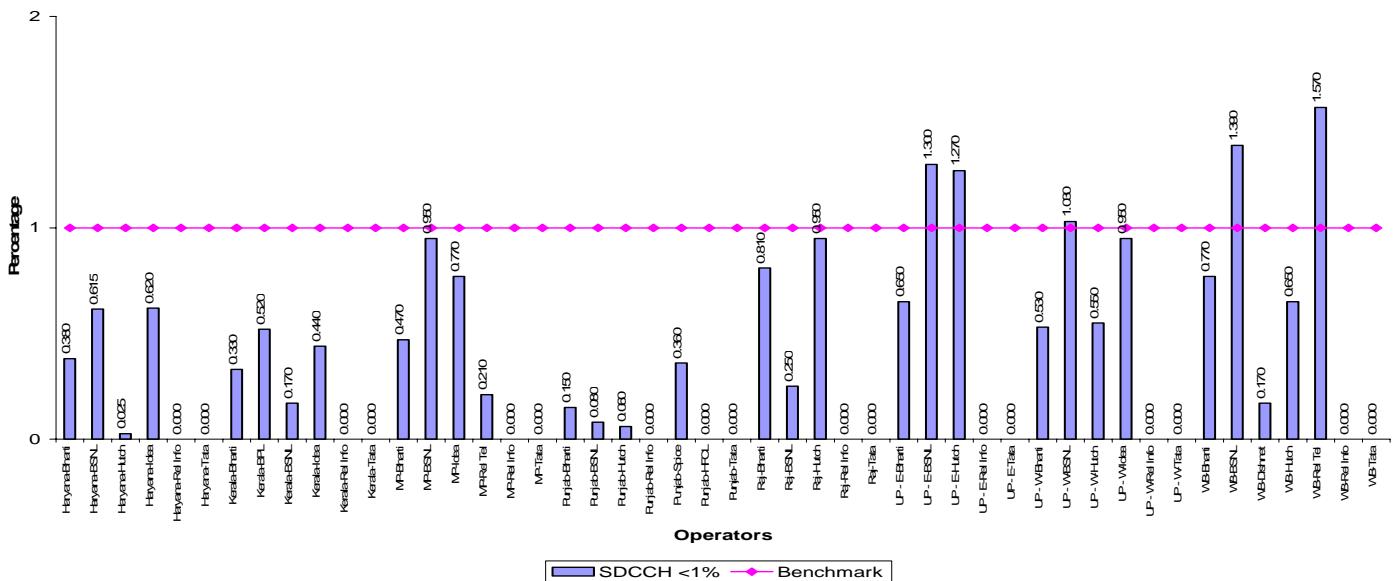
Audit was conducted for 48 operators. One operator(s) are not meeting the benchmark parameter.

Service Access Delay



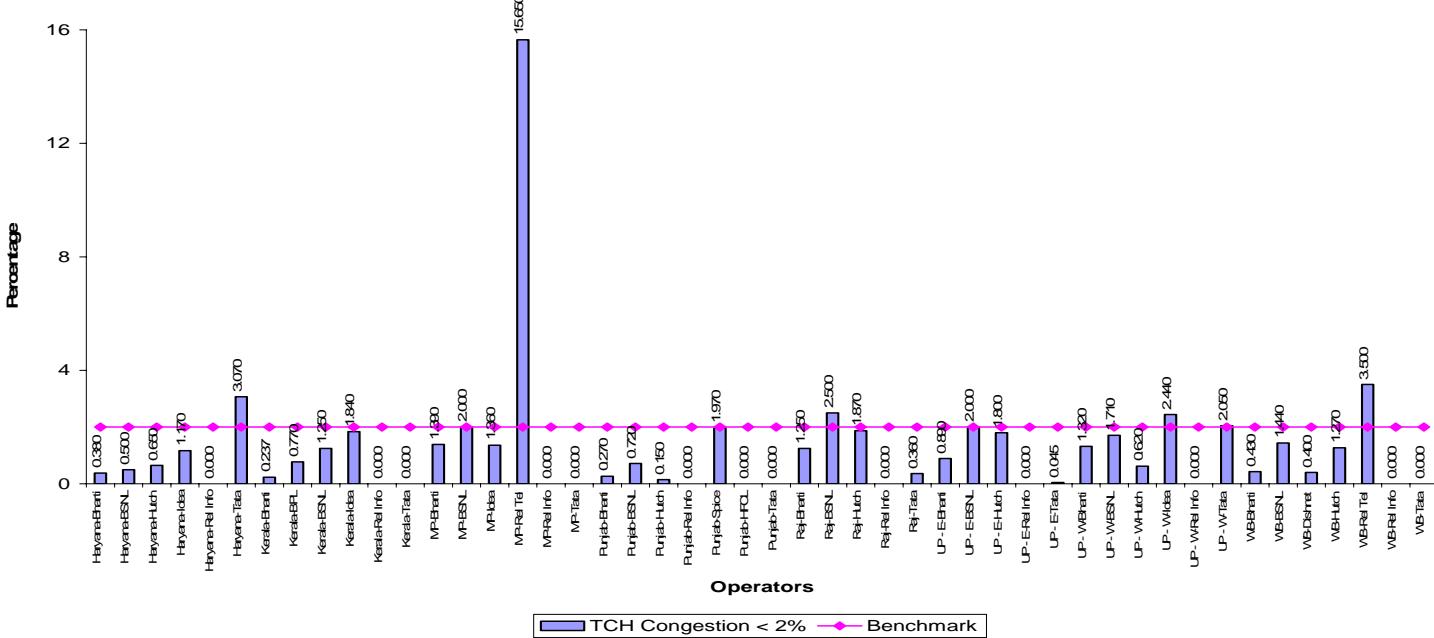
Audit was conducted for 48 operators. All operator(s) are meeting the benchmark parameter. Data not provided by BSNL- Rajasthan.

SDCCH <1%



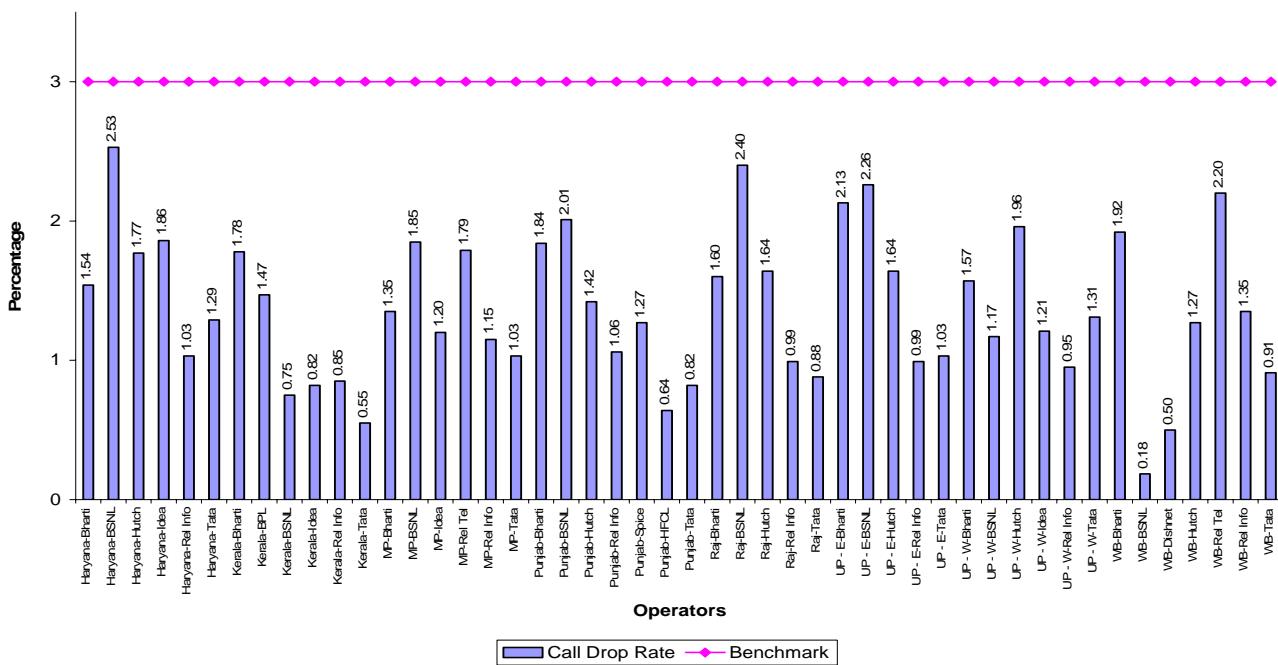
Audit was conducted for 48 operators. Five operator(s) are not meeting the benchmark parameter..

TCH Congestion < 2%



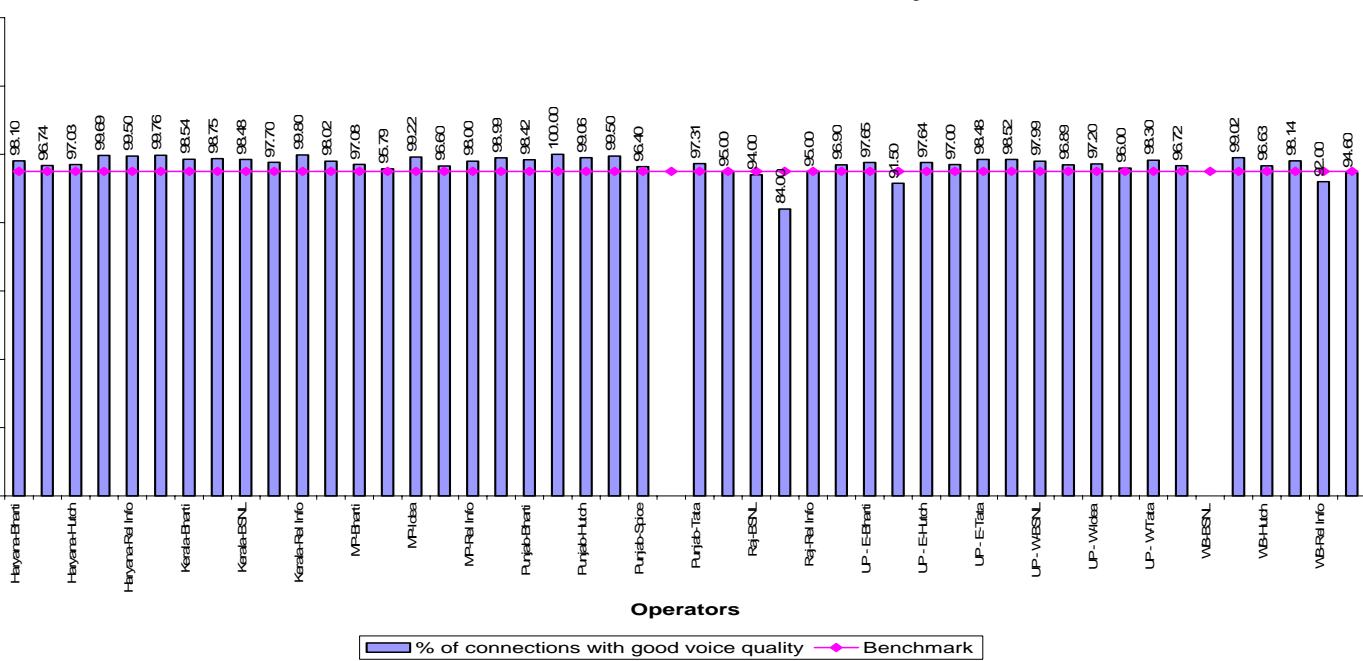
Audit was conducted for 48 operators. Six operator(s) are not meeting the benchmark parameter.

Call Drop Rate



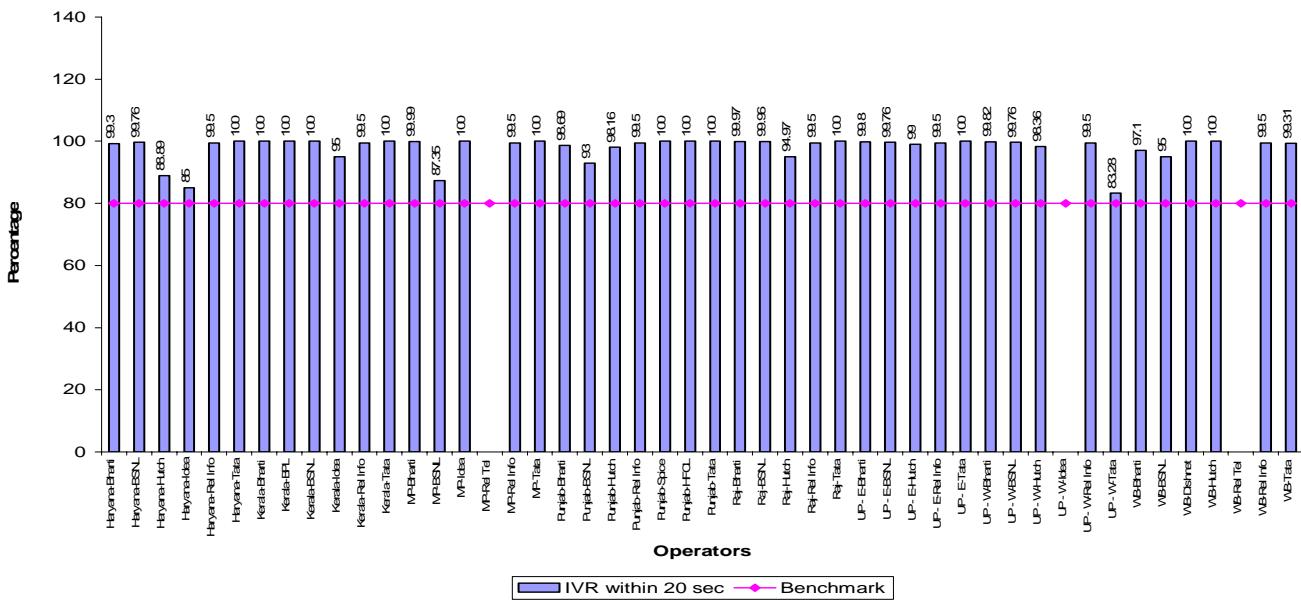
Audit was conducted for 48 operators. All operator(s) are meeting the benchmark parameter.

% Connection with Good Voice Quality

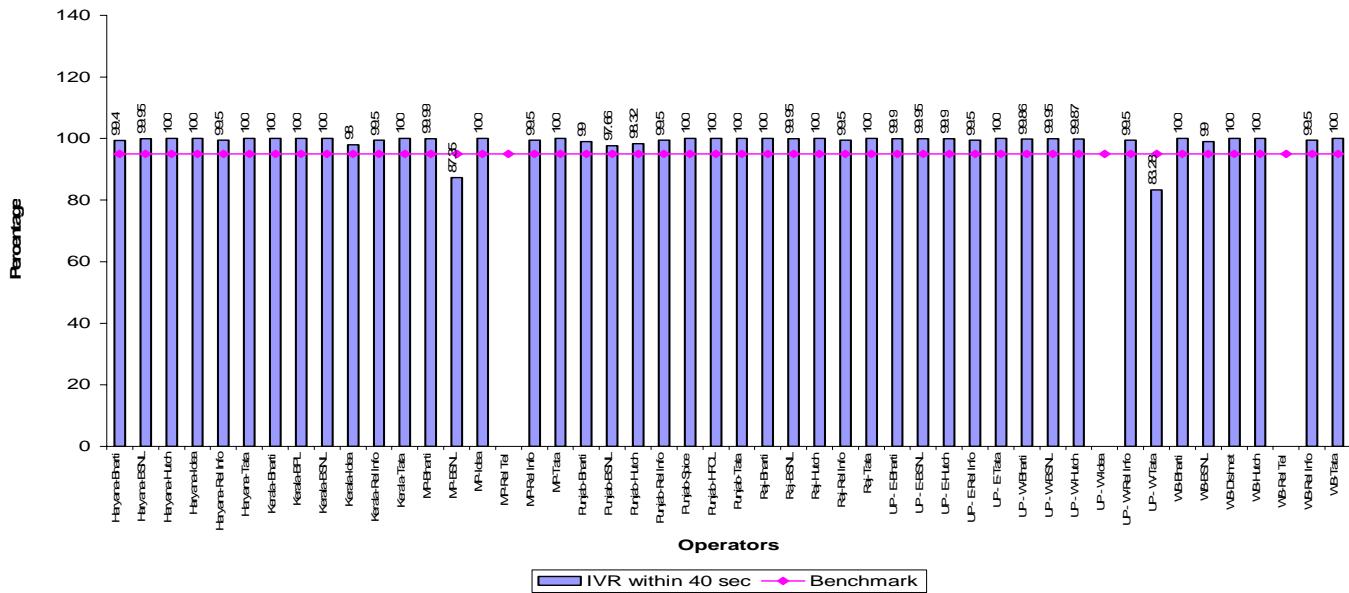


Audit was conducted for 48 operators. Five operator(s) are not meeting the benchmark parameter. Data not provided by WB- BSNL & HFCL – Punjab .

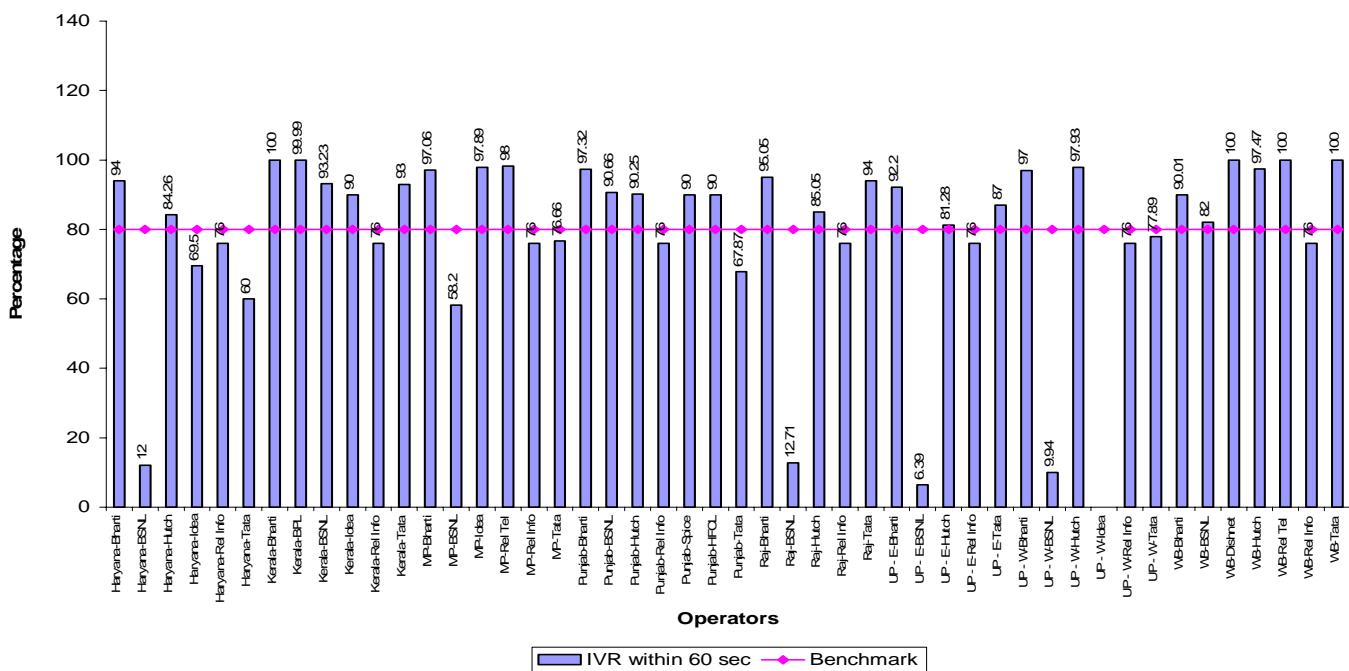
IVR within 20 seconds



Audit was conducted for 48 operators. All operator(s) are meeting the benchmark parameter. Not available for Rel Tel-MP, Idea UP(W) and Rel CommTel- WB .

IVR within 40 seconds

Audit was conducted for 48 operators. Two operator(s) are not meeting the benchmark parameter. Not available for Rel Tel-MP, Idea UP(W) and Rel CommTel- WB .

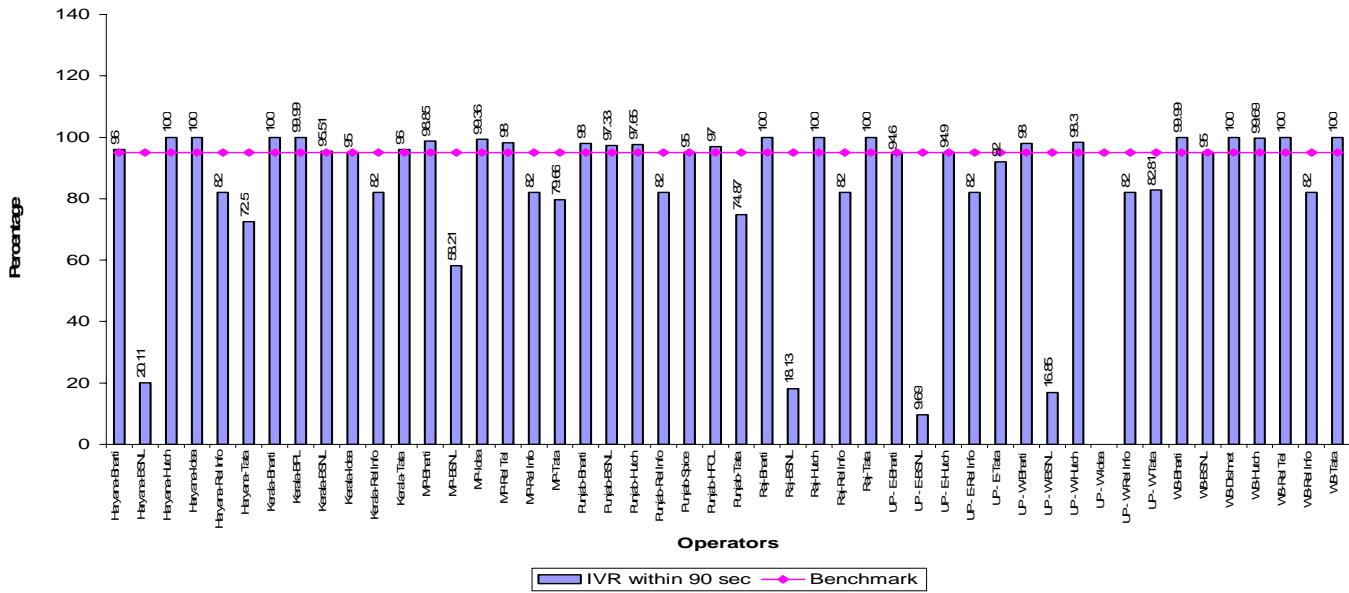
Voice within 60 seconds

Audit was conducted for 48 operators. Eighteen operator(s) are not meeting the benchmark parameter. Not available for -UP(W).



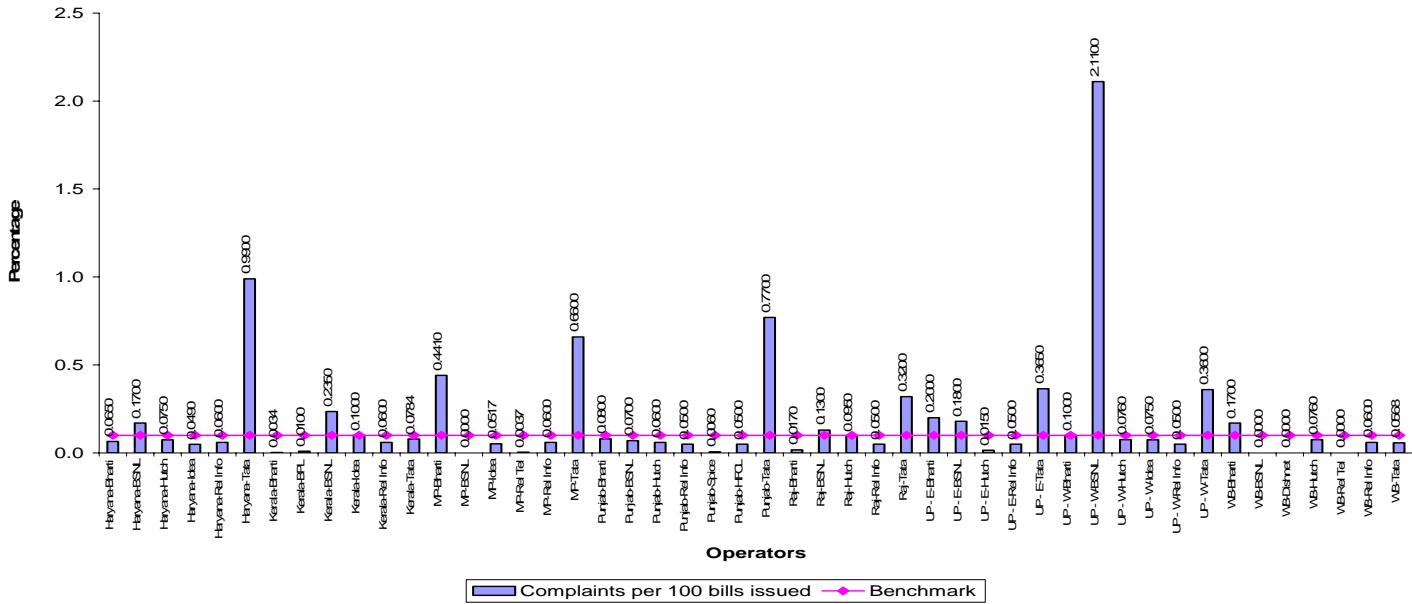
South Asia

Voice within 90 seconds



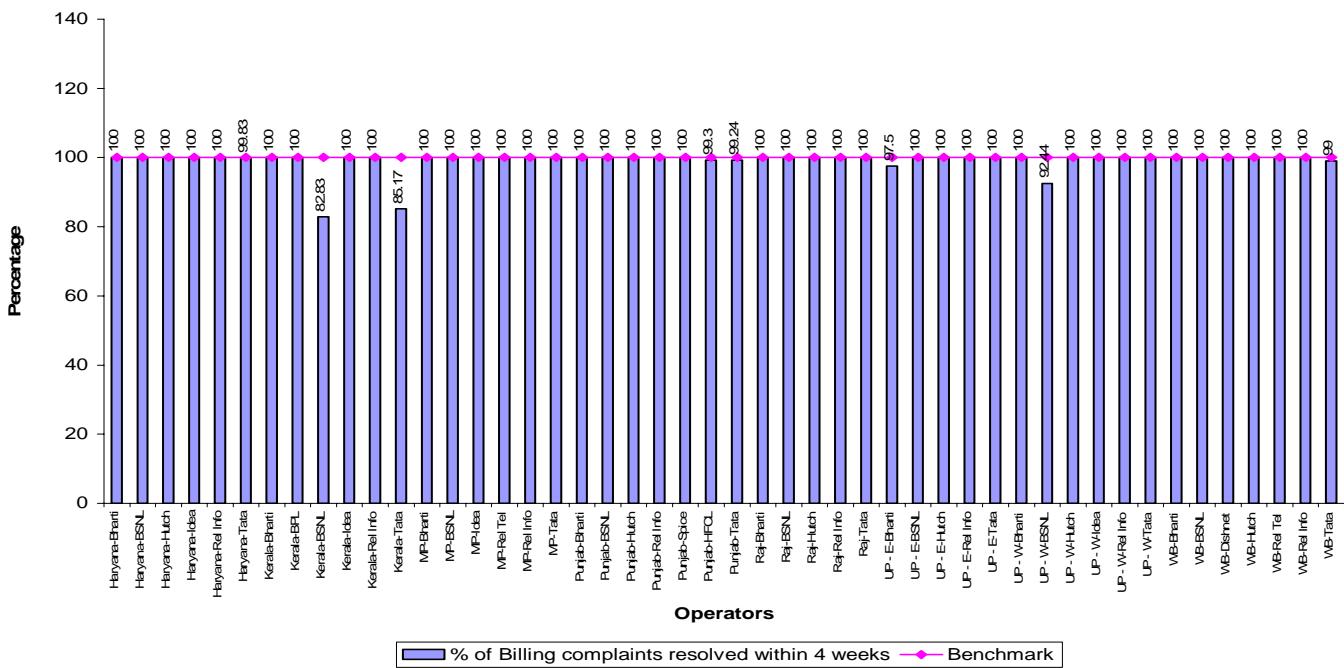
Audit was conducted for 48 operators.Twenty operator(s) are not meeting the benchmark parameter. Not available for -UP(W).

Billing Complains per 100 bill issued



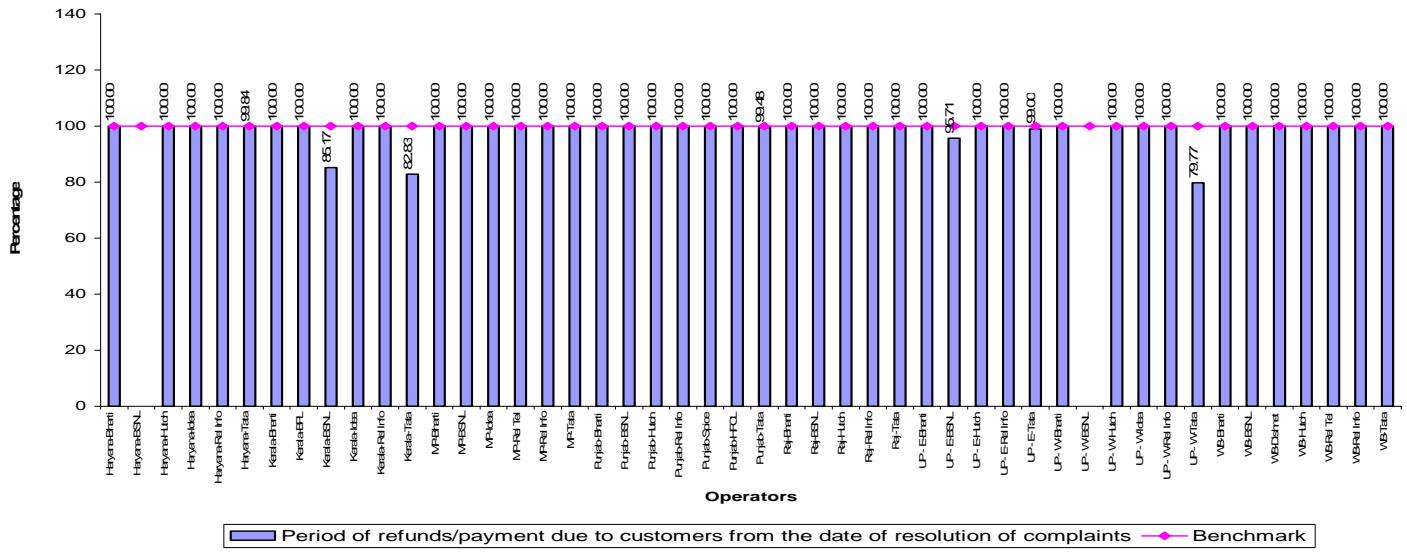
Audit was conducted for 48 operators. Fourteen operator(s) are not meeting the benchmark

% of Billing Complaints resolved within 4 weeks



Audit was conducted for 48 operators. Eight operator(s) are meeting the benchmark parameter.

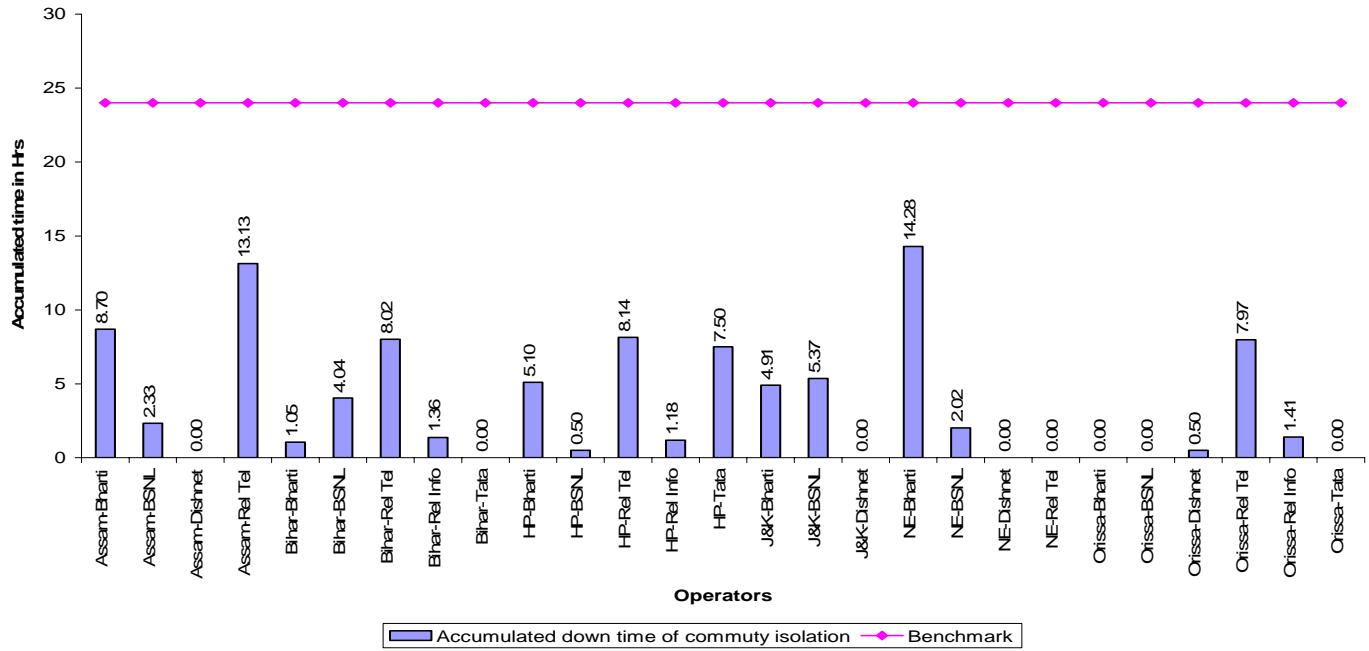
Period of refunds / payment due to customers from the date of resolution of complaints



Audit was conducted for 48 operators. Seven operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-Haryana & BSNL-UP(w).

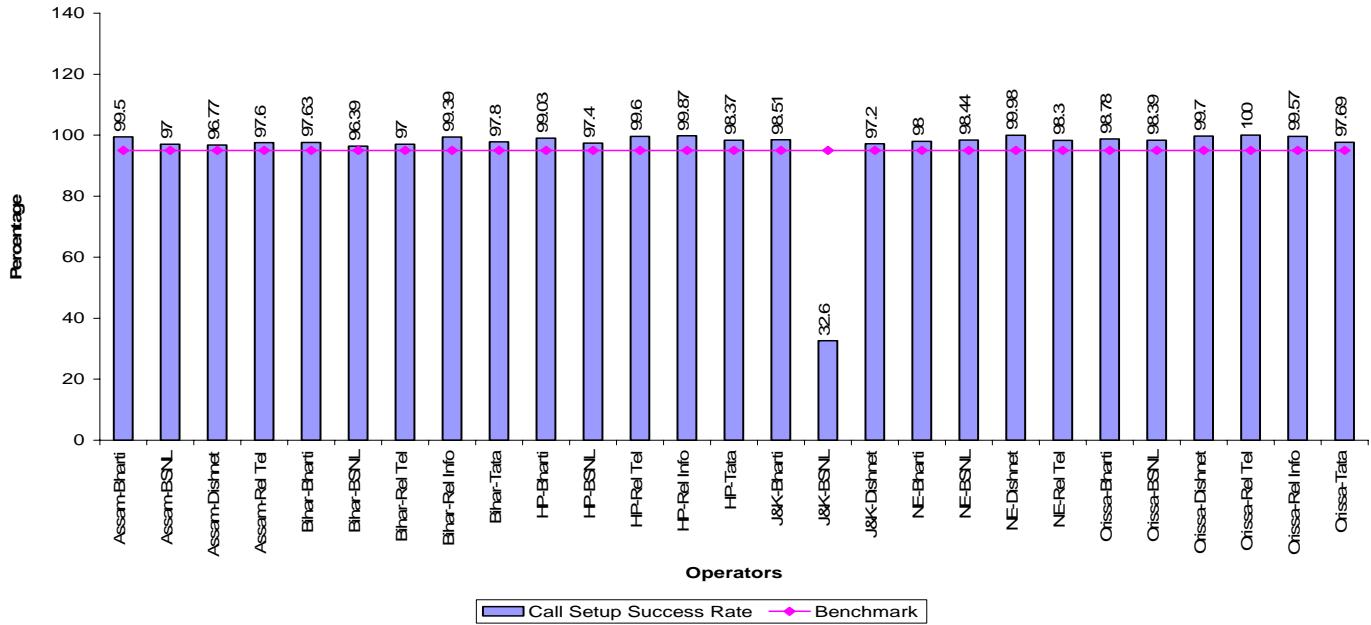
4.1.4 C CIRCLES

Accumulated down time of community isolation

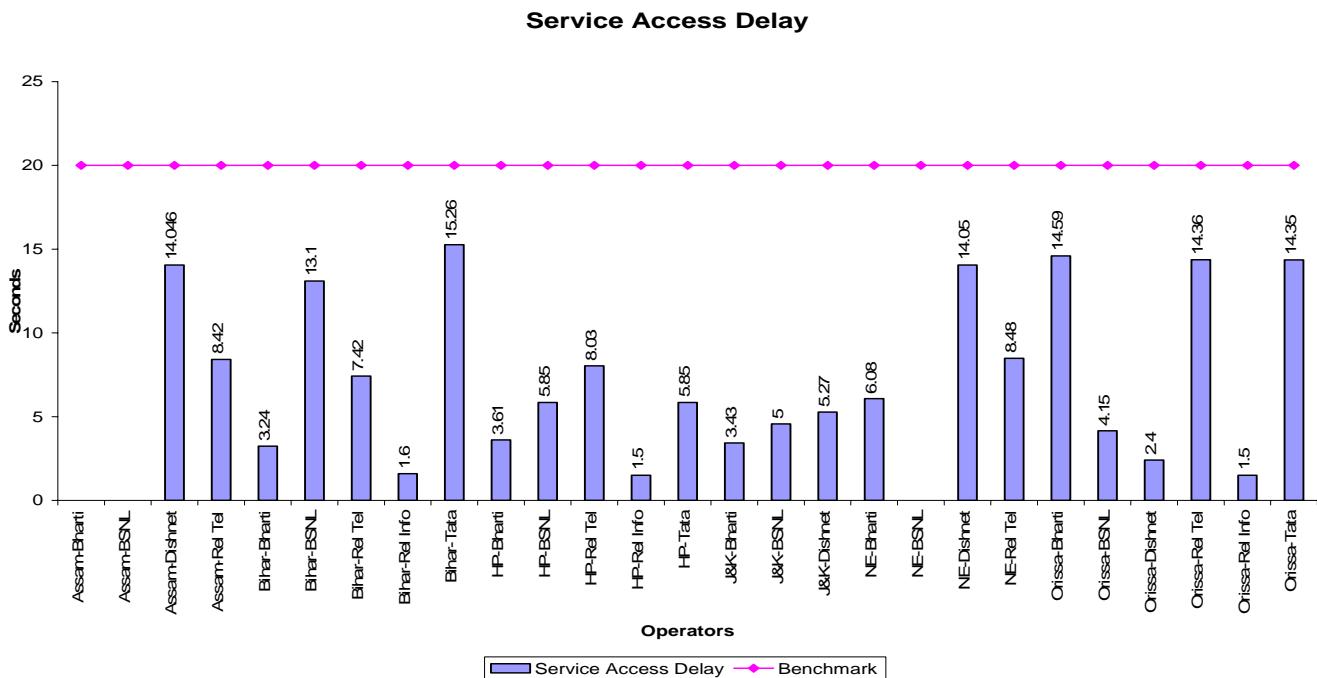


Audit was conducted for 27 operators. All operator(s) are meeting the benchmark parameter.

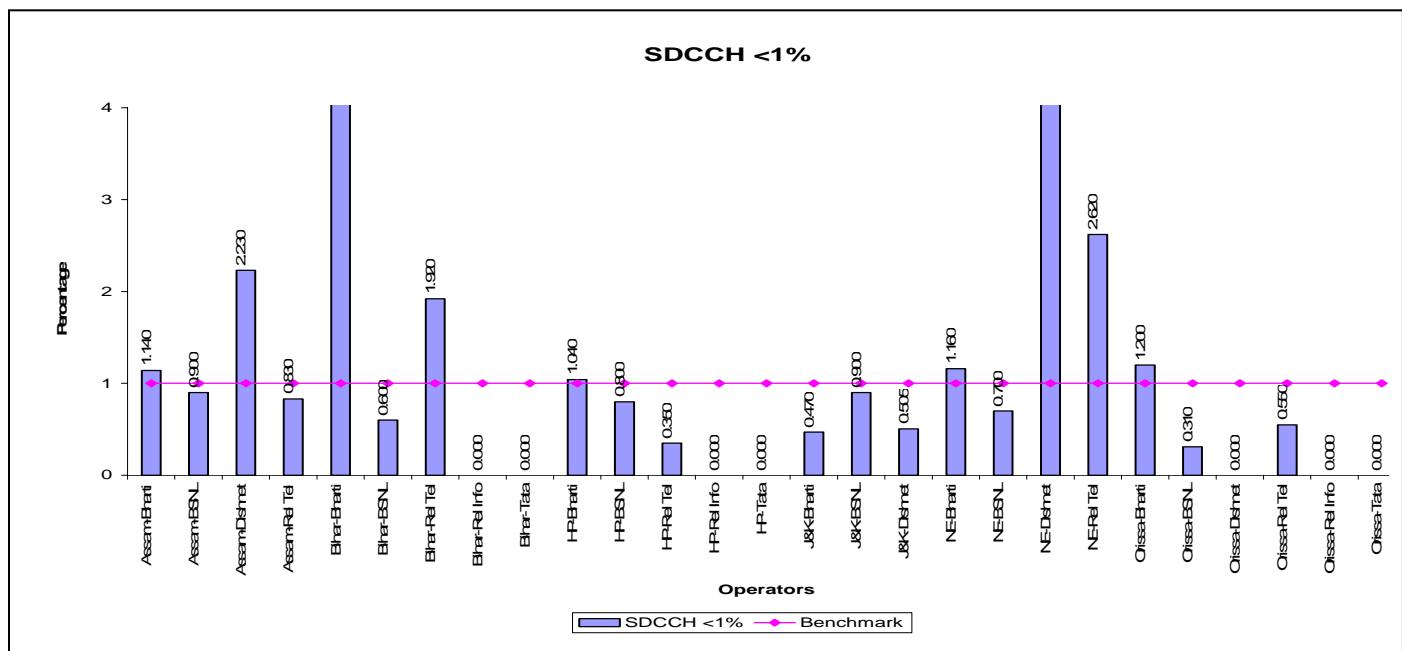
Call Setup Success Rate



Audit was conducted for 27 operators. One operator(s) are not meeting the benchmark parameter.

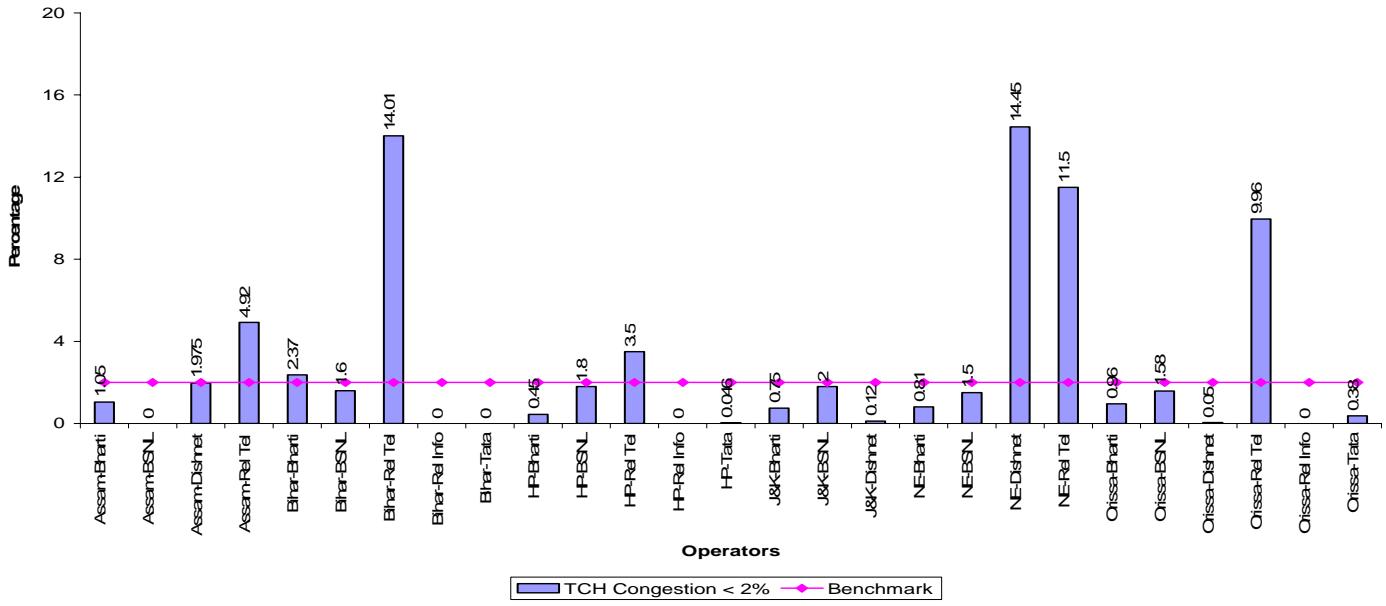


Audit was conducted for 27 operators. All operator(s) are meeting the benchmark parameter. Data not provided by Bharti & BSNL-Assam, BSNL-NE.



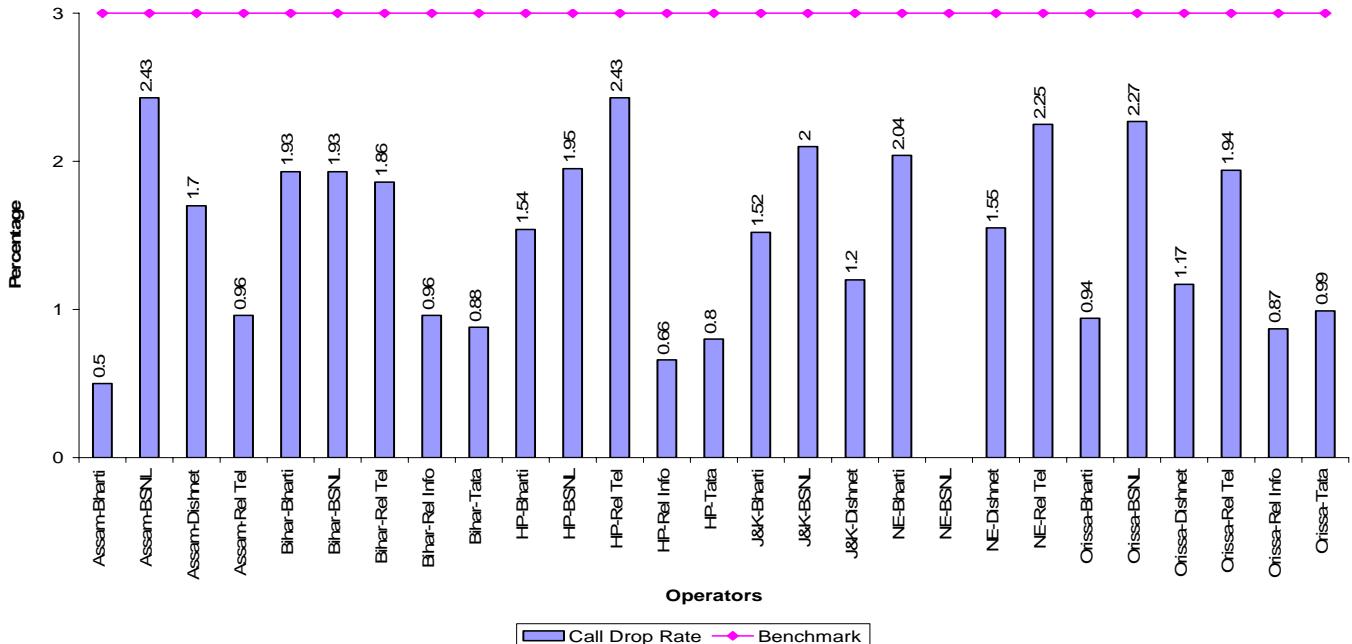
Audit was conducted for 27 operators. Nine operator(s) are not meeting the benchmark parameter.

TCH Congestion < 2%



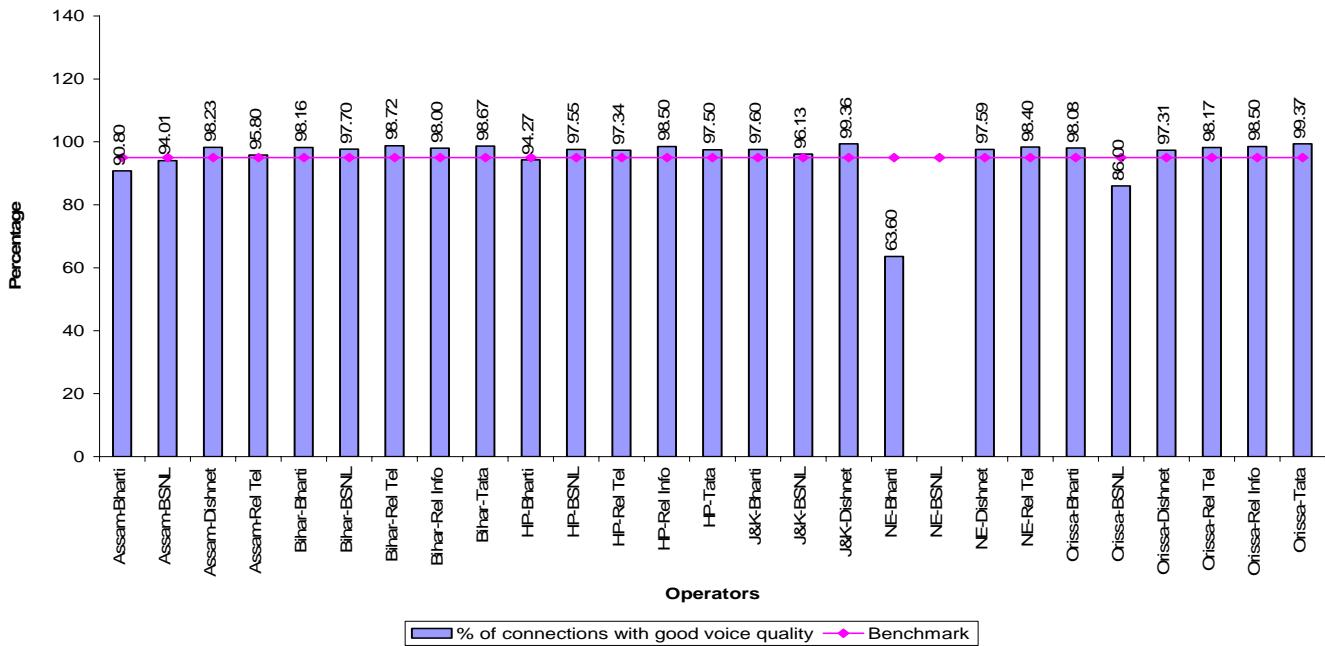
Audit was conducted for 27 operators. Seven operator(s) are not meeting the benchmark parameter.

Call Drop Rate



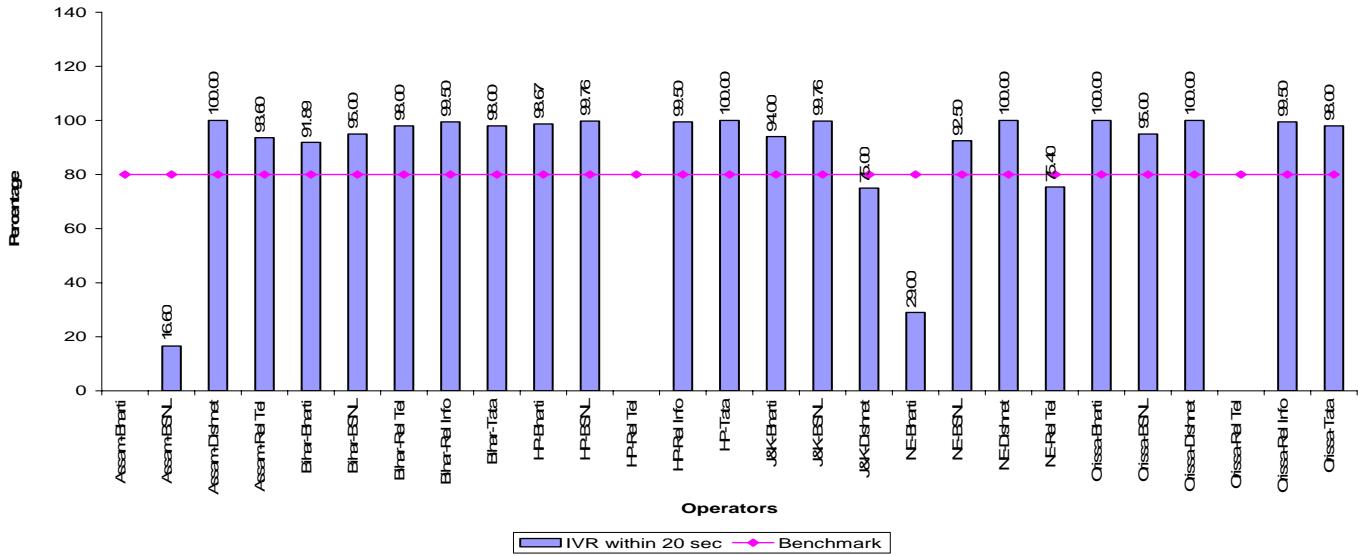
Audit was conducted for 27 operators. All operator(s) are meeting the benchmark parameter. Data not provided by BSNL-NE.

% Connection with Good Voice Quality



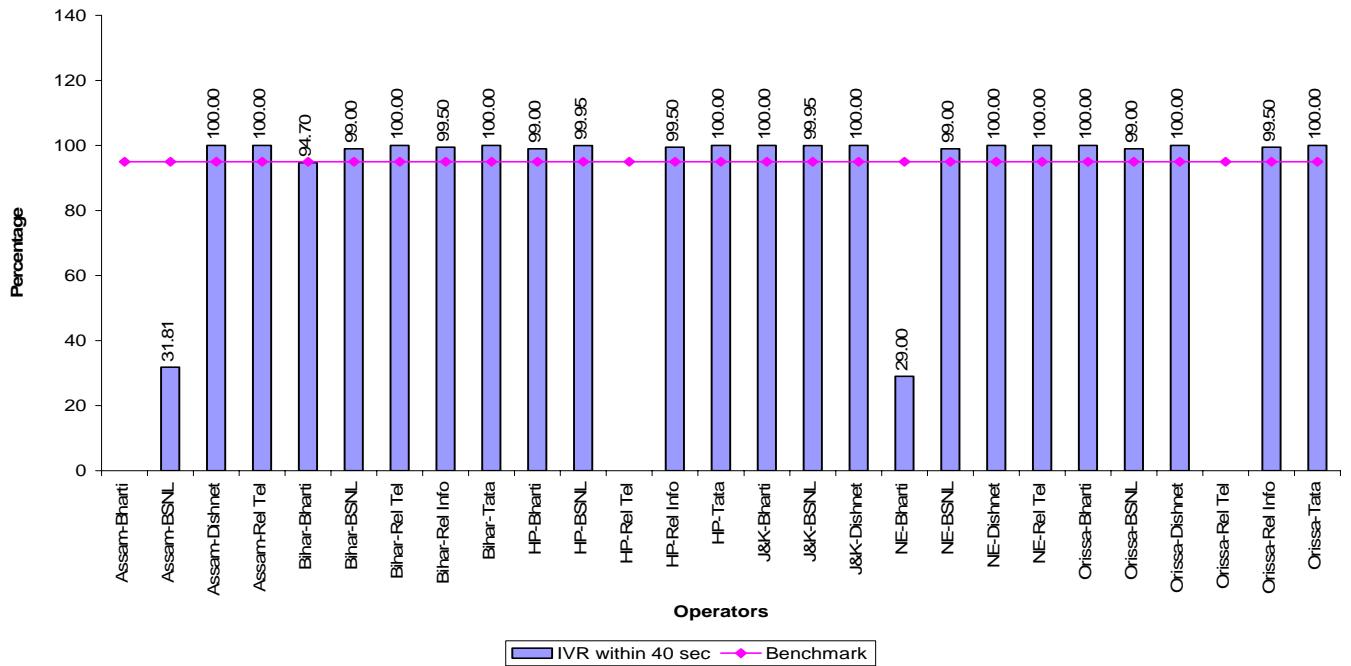
Audit was conducted for 27 operators. Five operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-NE.

IVR within 20 seconds



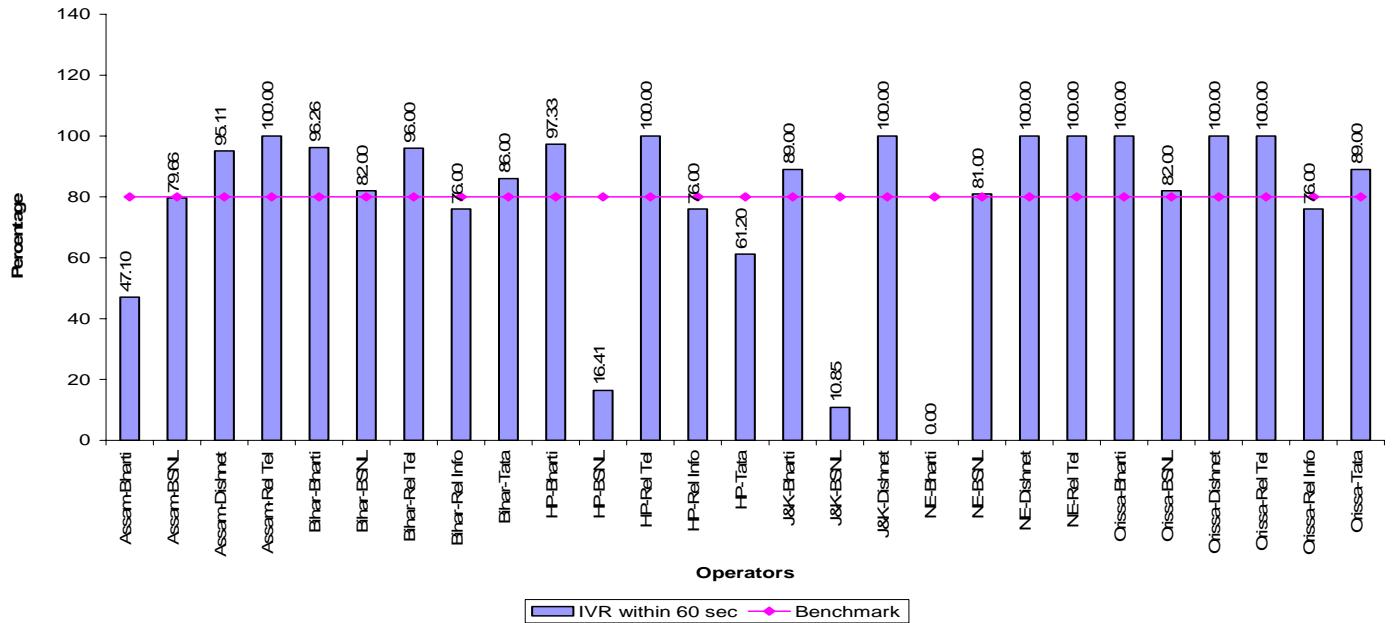
Audit was conducted for 27 operators. Four operator(s) are not meeting the benchmark parameter. Not applicable for Bharti-Assam, Rel Tel- HP, Orissa

IVR within 40 seconds



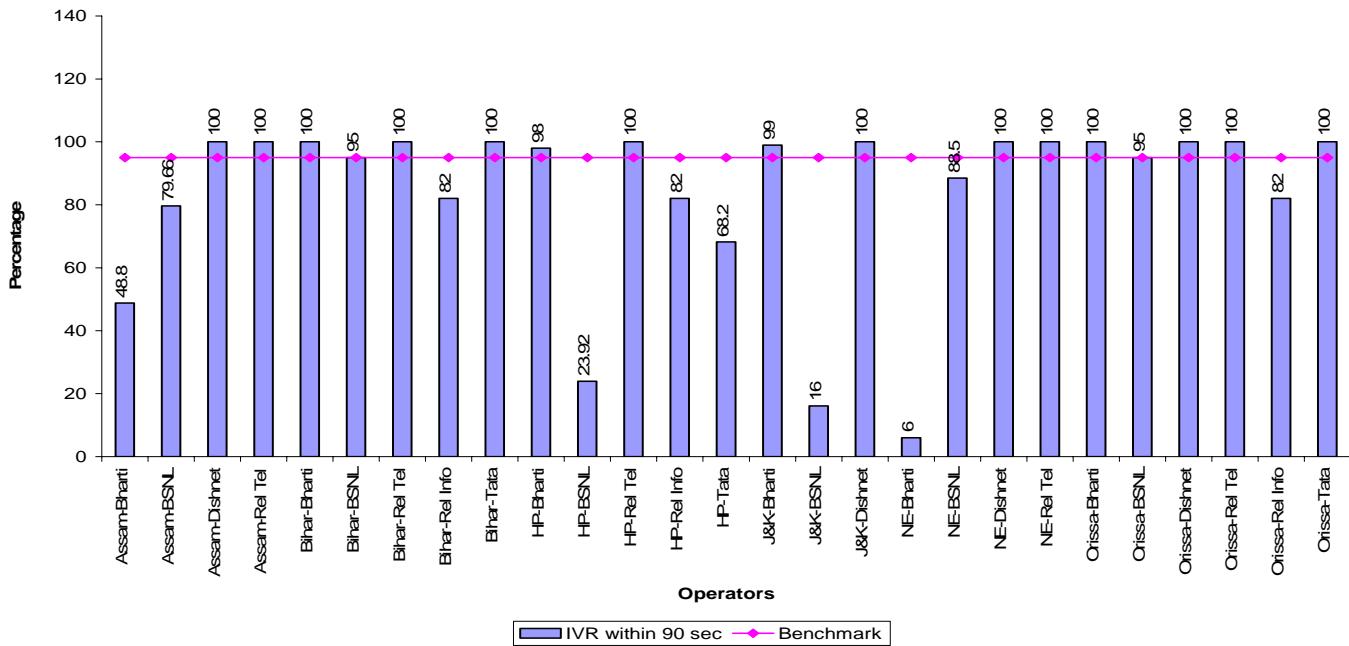
Audit was conducted for 27 operators. Three operator(s) are not meeting the benchmark parameter. Not available for Bharti-Assam, Rel Tel- HP, Orrisa

Voice within 60 seconds



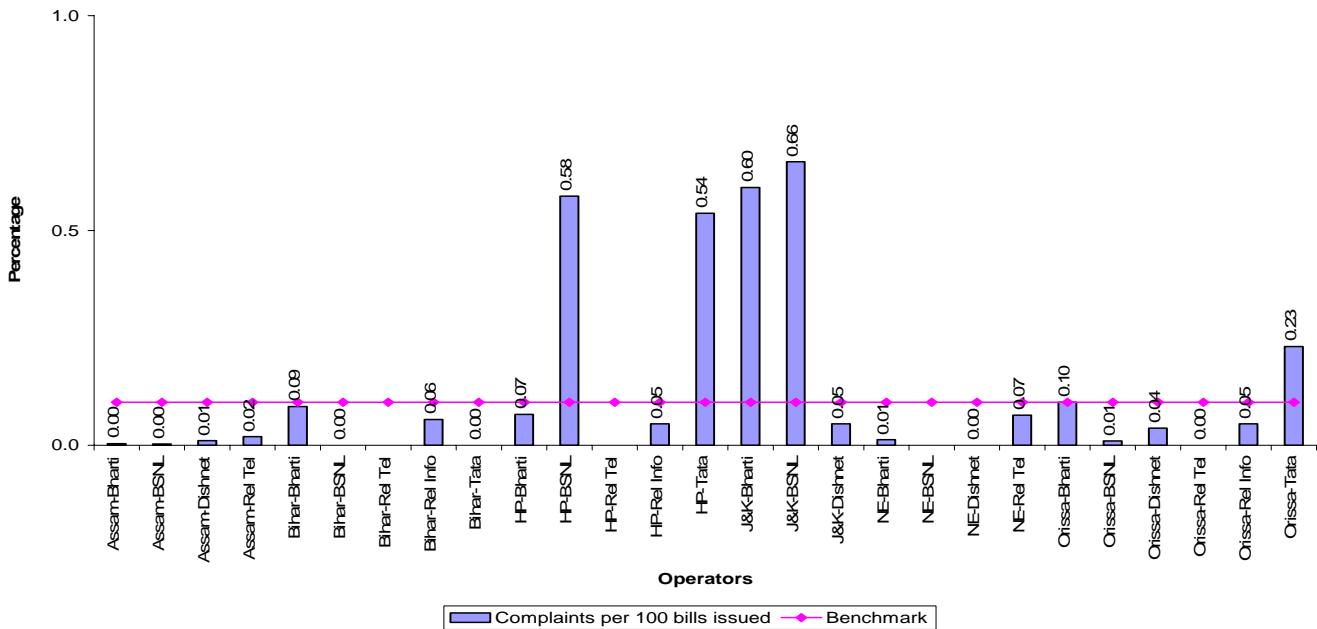
Audit was conducted for 27 operators. Nine operator(s) are not meeting the benchmark parameter..

Voice within 90 seconds



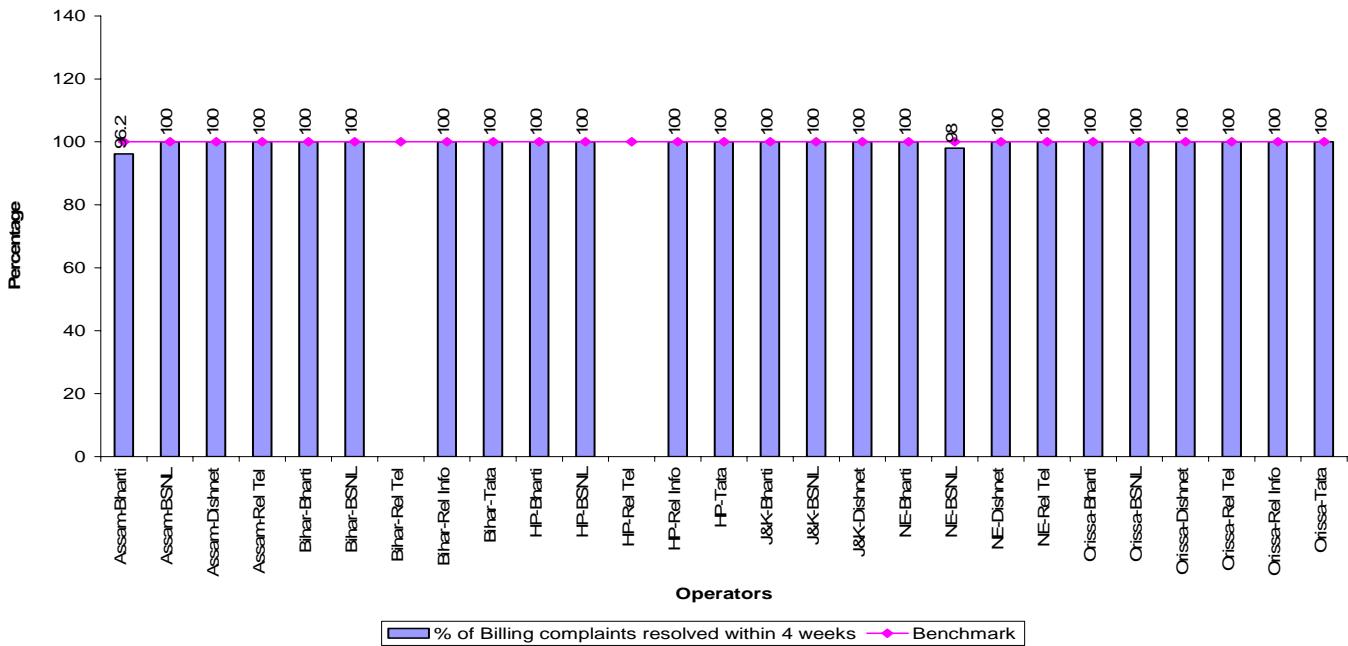
Audit was conducted for 27 operators. Ten operator(s) are not meeting the benchmark parameter.

Billing Complains per 100 bill issued



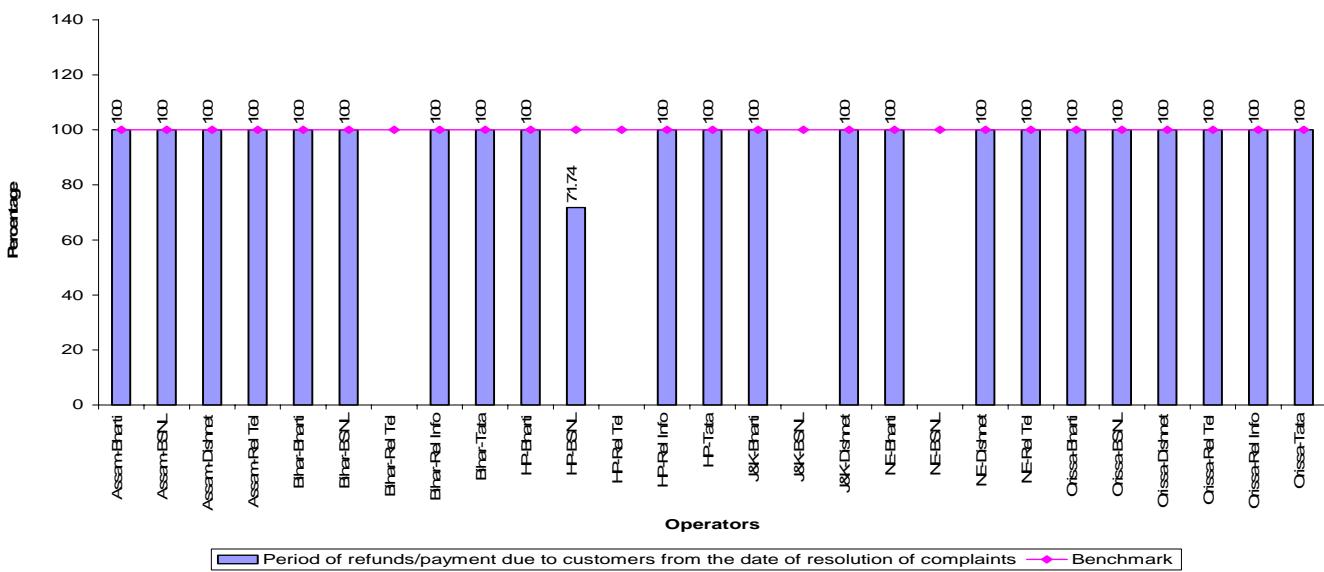
Audit was conducted for 27 operators. Five operator(s) are not meeting the benchmark parameter. Data not provided by BSNL – NE & No incidences were observed for Rel Tel- Bihar.

% of Billing Complaints resolved within 4 weeks



Audit was conducted for 27 operators. Two operator(s) are not meeting the benchmark parameter.NI cases for Rel Tel- Bihar & HP.

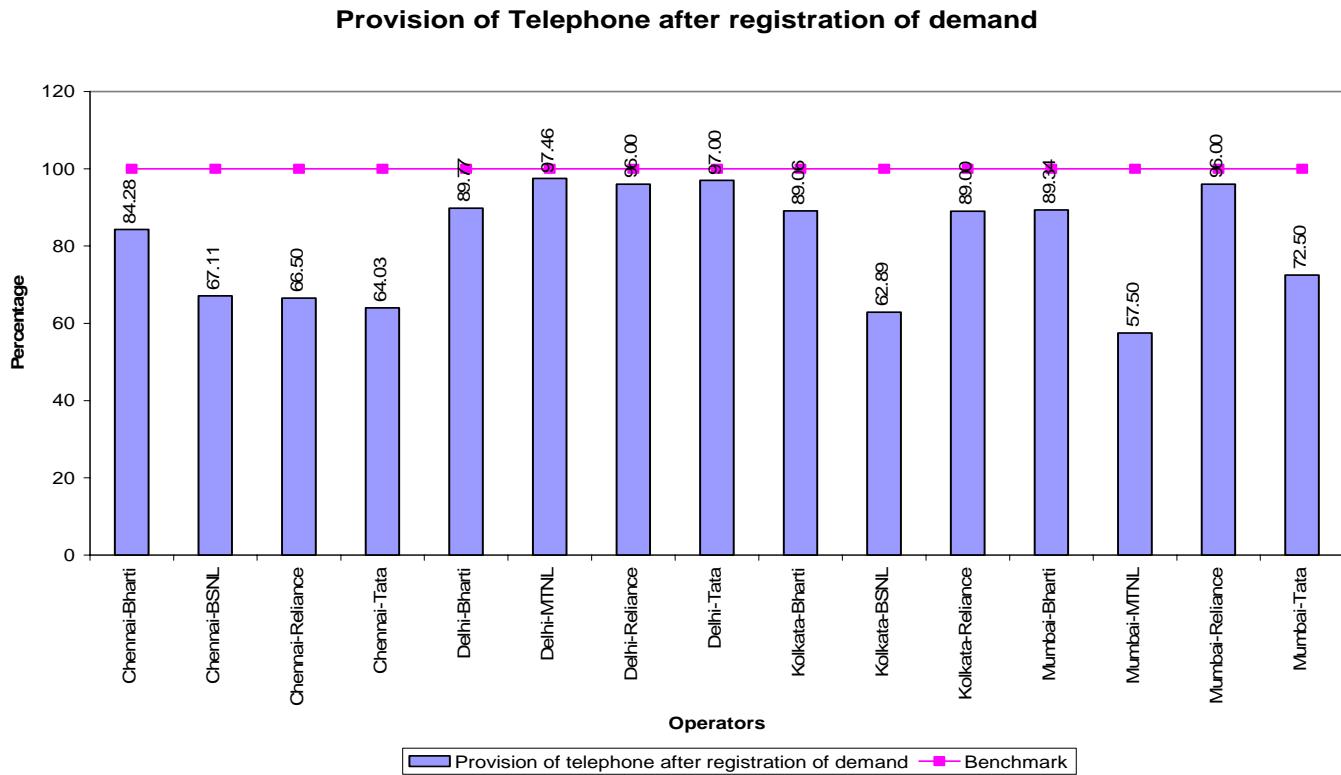
Period of refunds / payment due to customers from the date of resolution of complaints



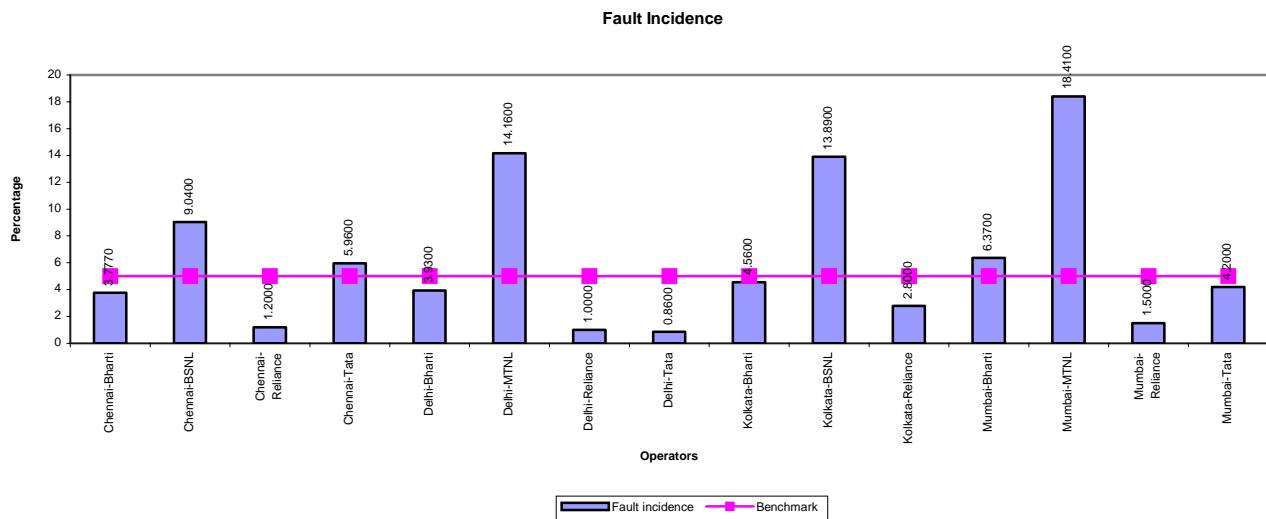
Audit was conducted for 27 operators. One operator(s) are not meeting the benchmark parameter. Data not provided by BSNL – NE, BSNL-J&K and No Incidence cases for Rel Tel- Bihar.

4.2 QOS – BASIC

4.2.1 METRO CIRCLES

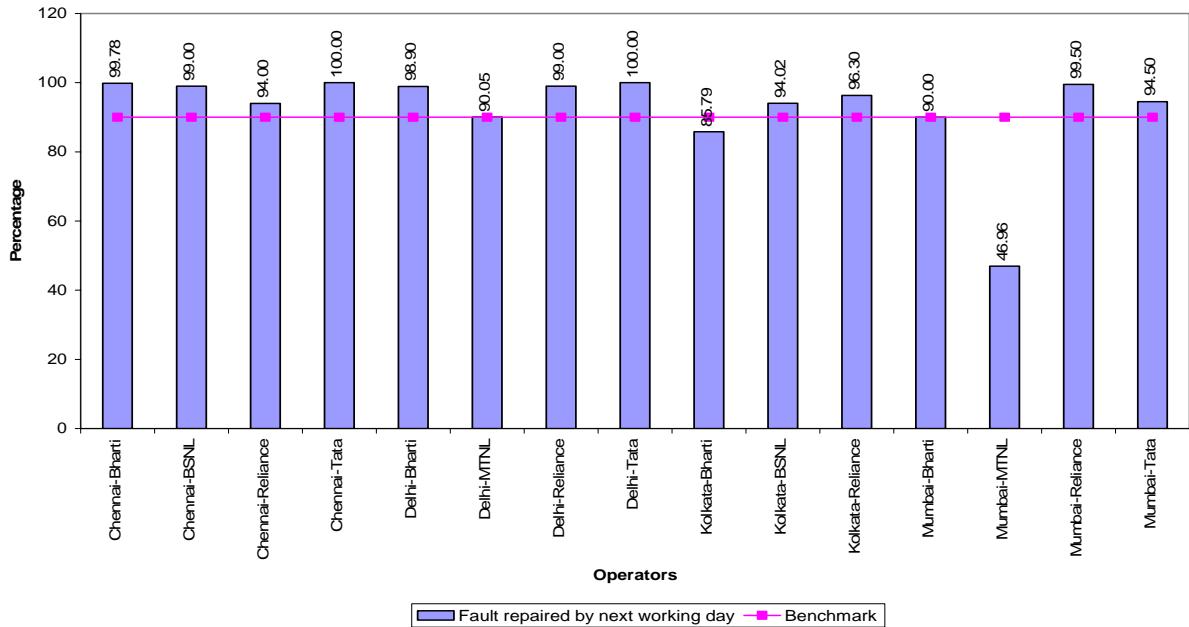


Audit was conducted for 15 operators. All operator(s) are not meeting the benchmark parameter.



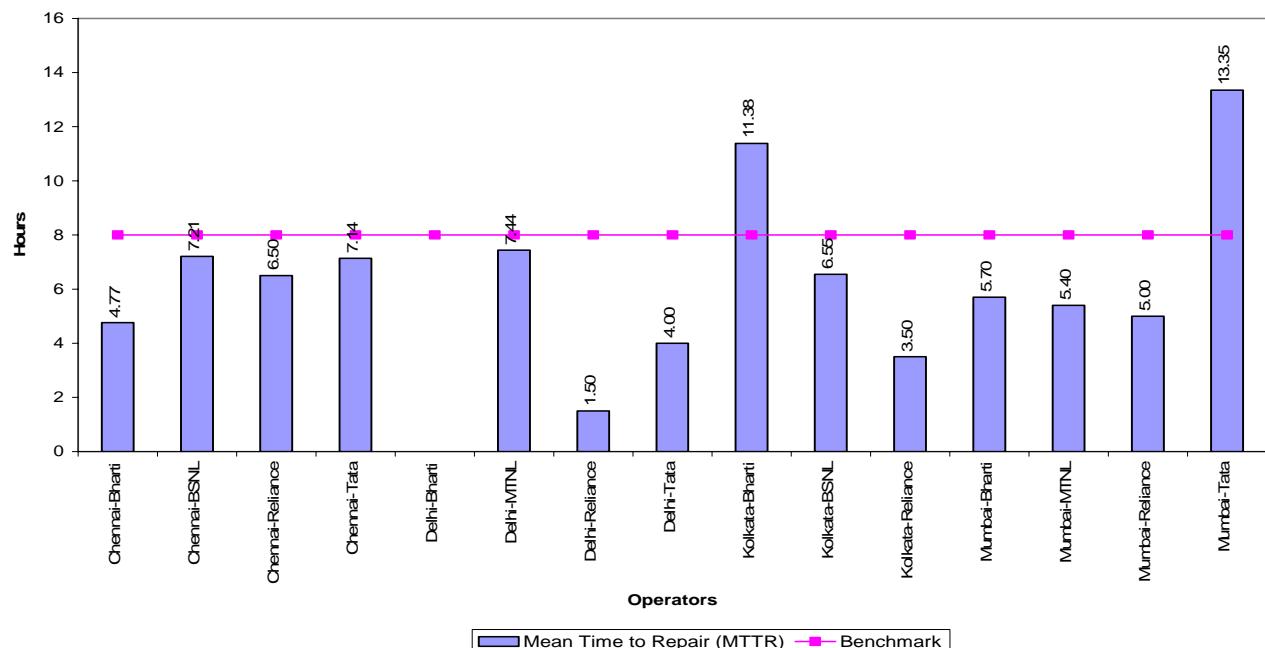
Audit was conducted for 15 operators. Six operator(s) are not meeting the benchmark parameter.

Fault Repair by next working day



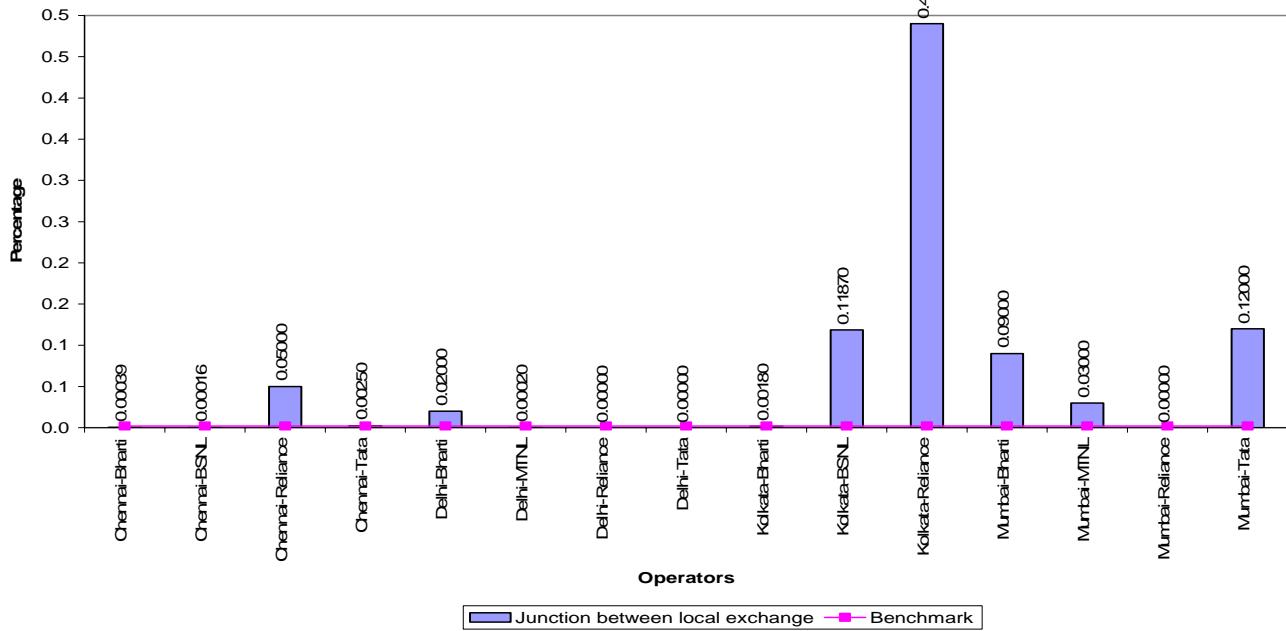
Audit was conducted for 15 operators. Two operator(s) are not meeting the benchmark parameter.

Mean Time for Repair



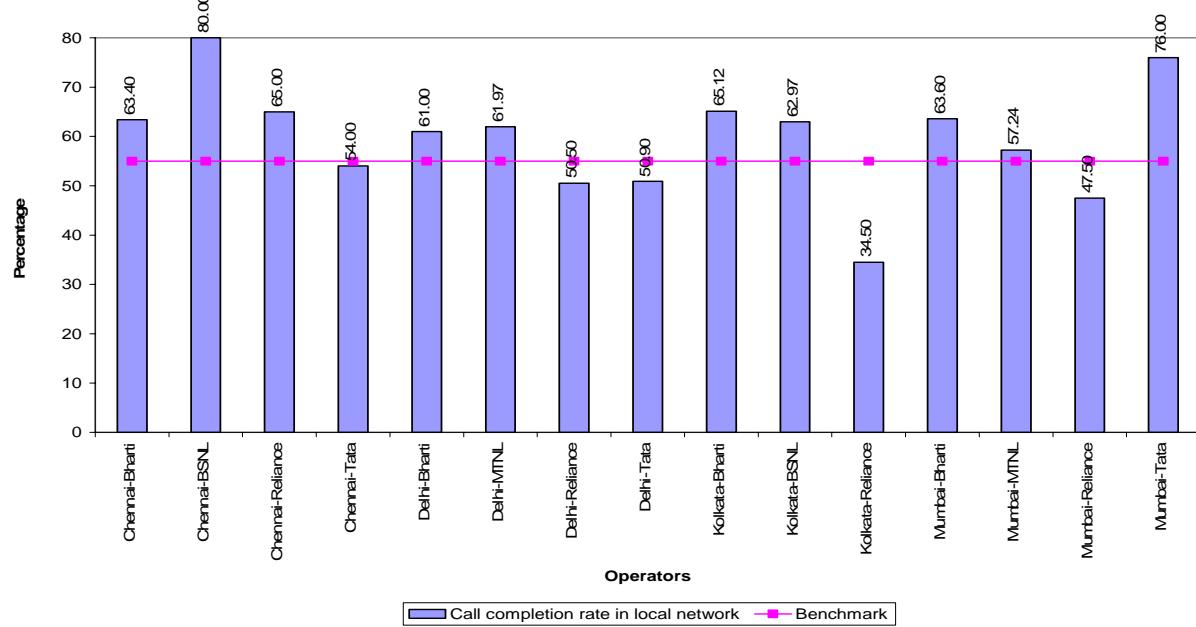
Audit was conducted for 15 operators. Two operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Delhi.

Junction to Local Exchange



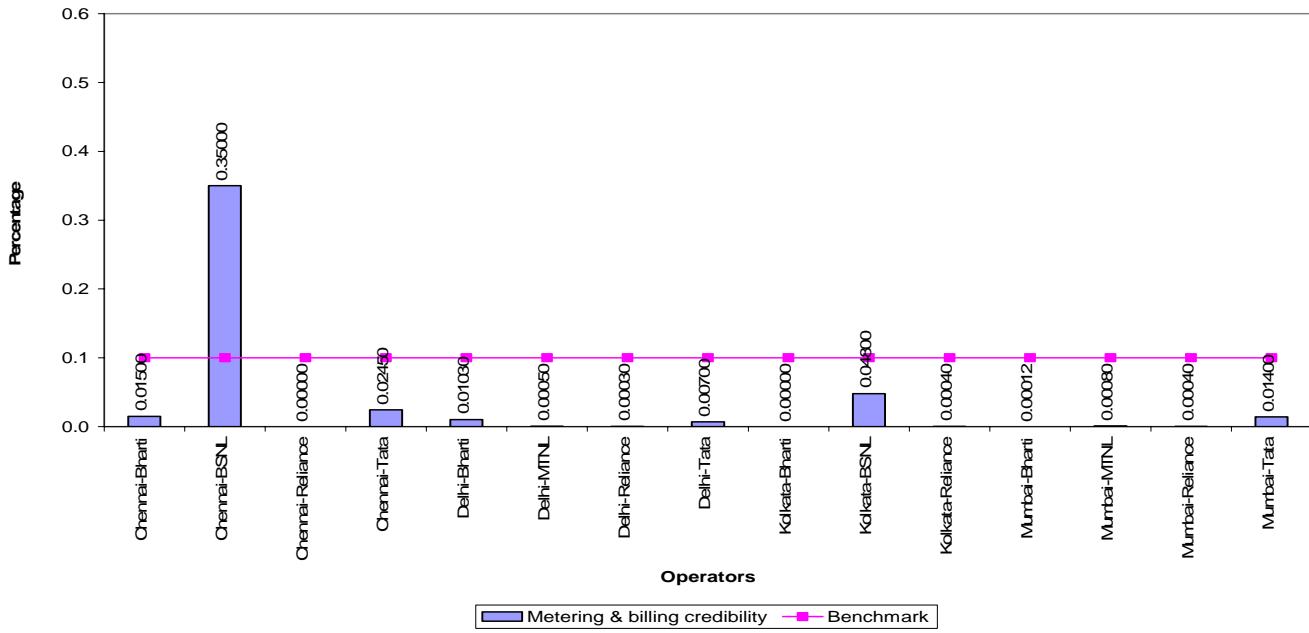
Audit was conducted for 15 operators. Eight operator(s) are not meeting the benchmark parameter.

Intra office



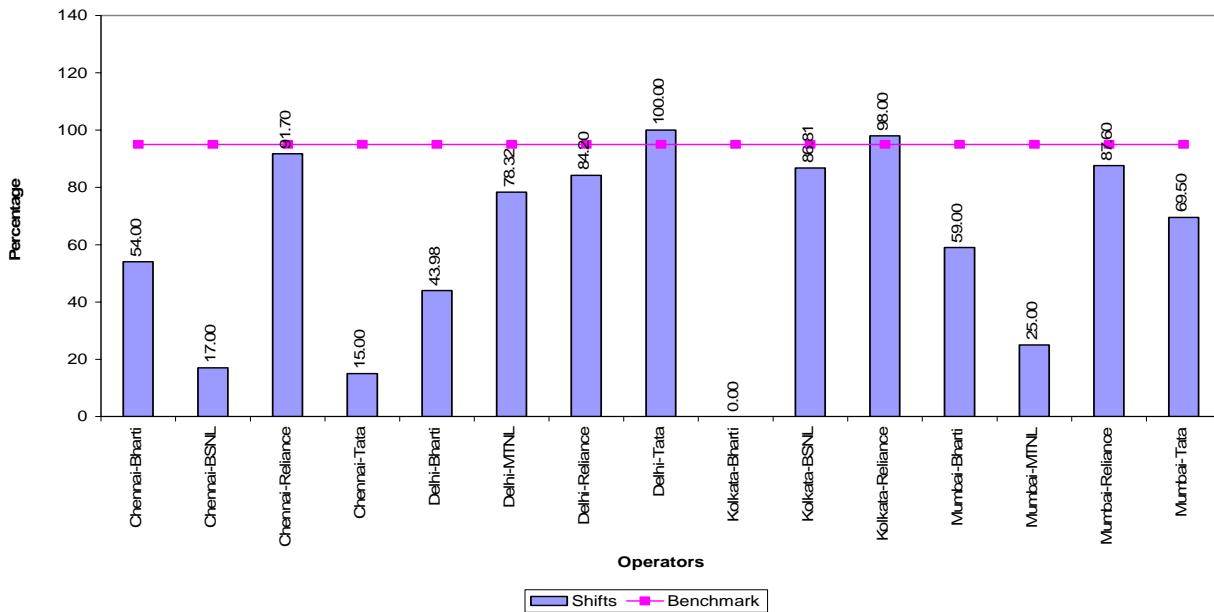
Audit was conducted for 15 operators. Five operator(s) are not meeting the benchmark parameter.

Metering & Billing Credibility



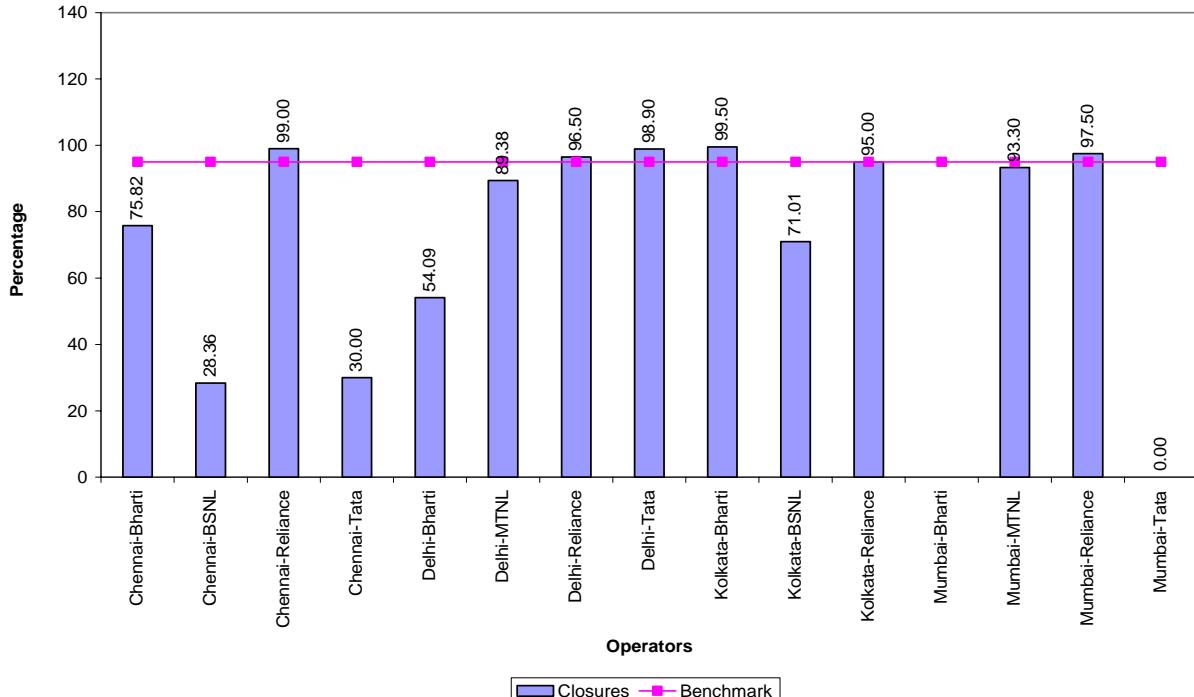
Audit was conducted for 15 operators. One operator(s) are not meeting the benchmark parameter.

Shift



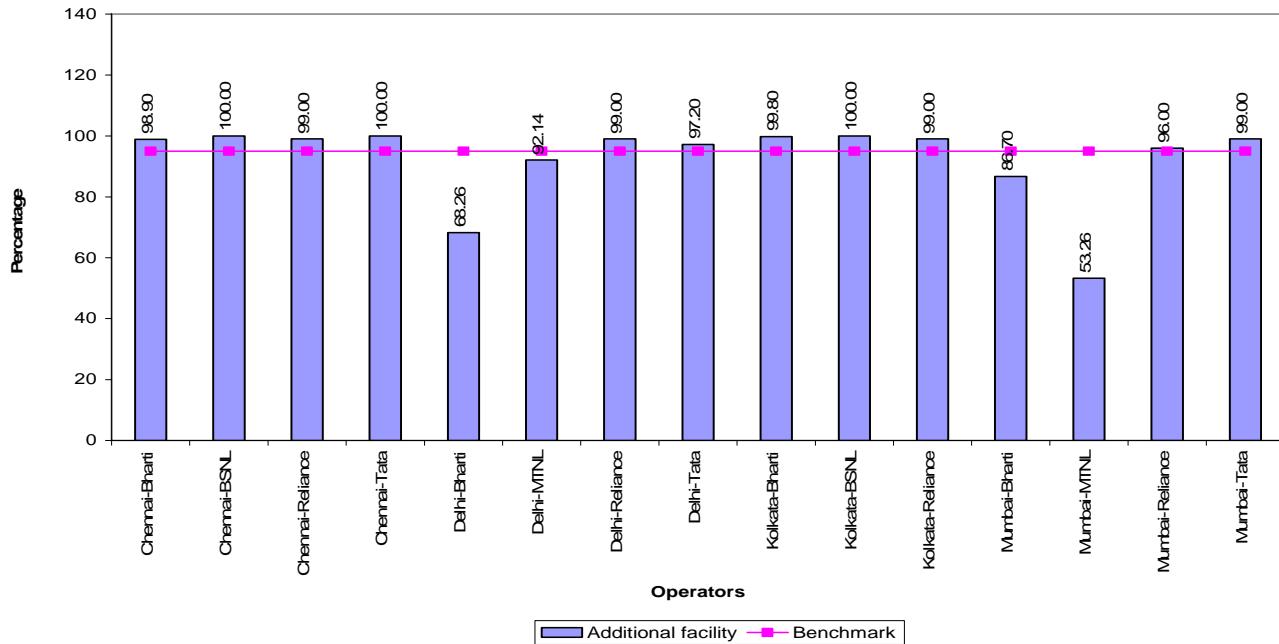
Audit was conducted for 15 operators. Thirteen operator(s) are not meeting the benchmark parameter.

Closure



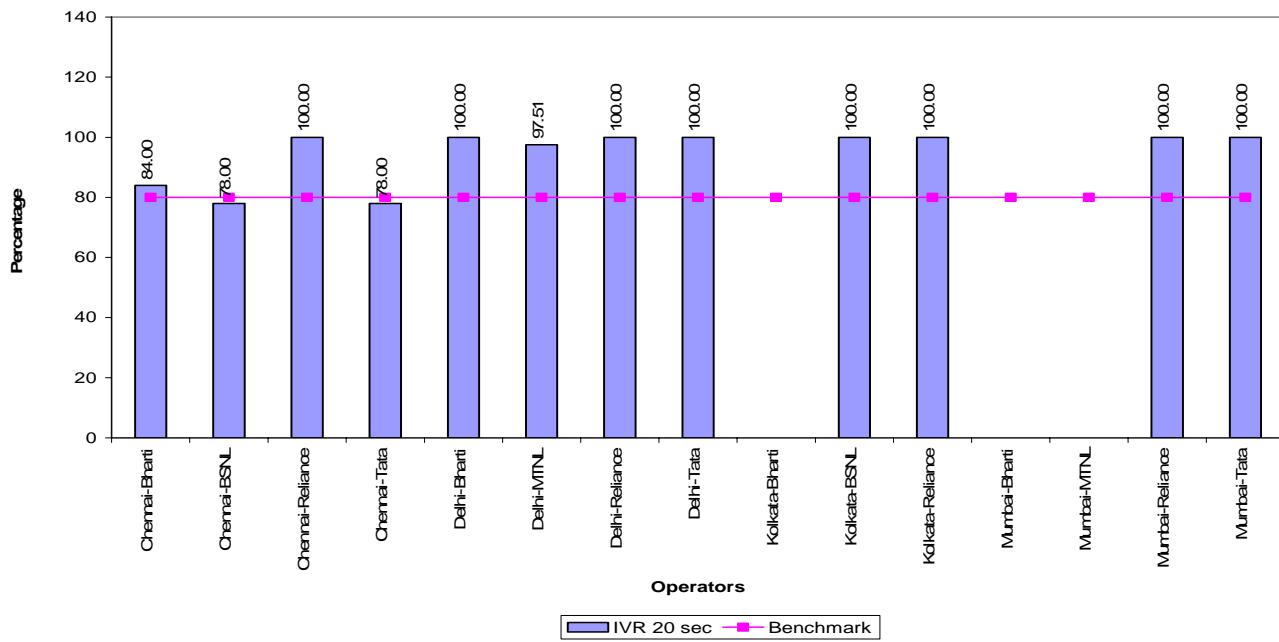
Audit was conducted for 15 operators. Eight operator(s) are not meeting the benchmark parameter. Data not provided by Bharti-Mumbai.

Additional Facility



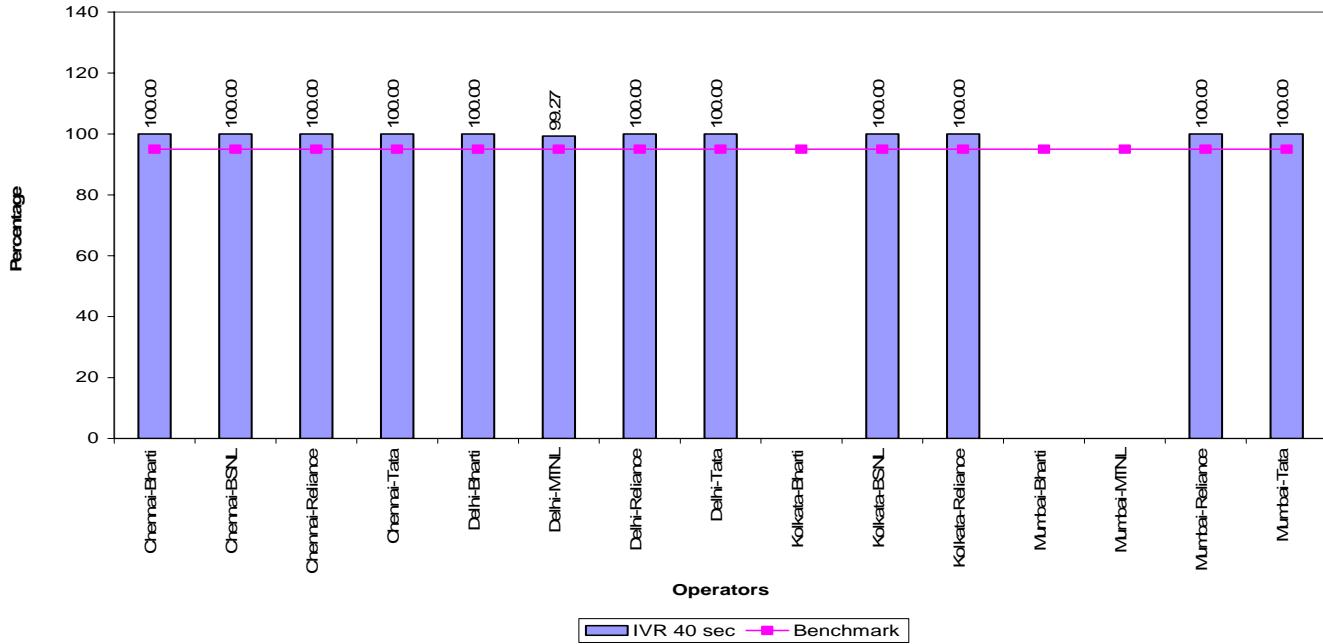
Audit was conducted for 15 operators. Four operator(s) are not meeting the benchmark parameter.

IVR 20 Seconds



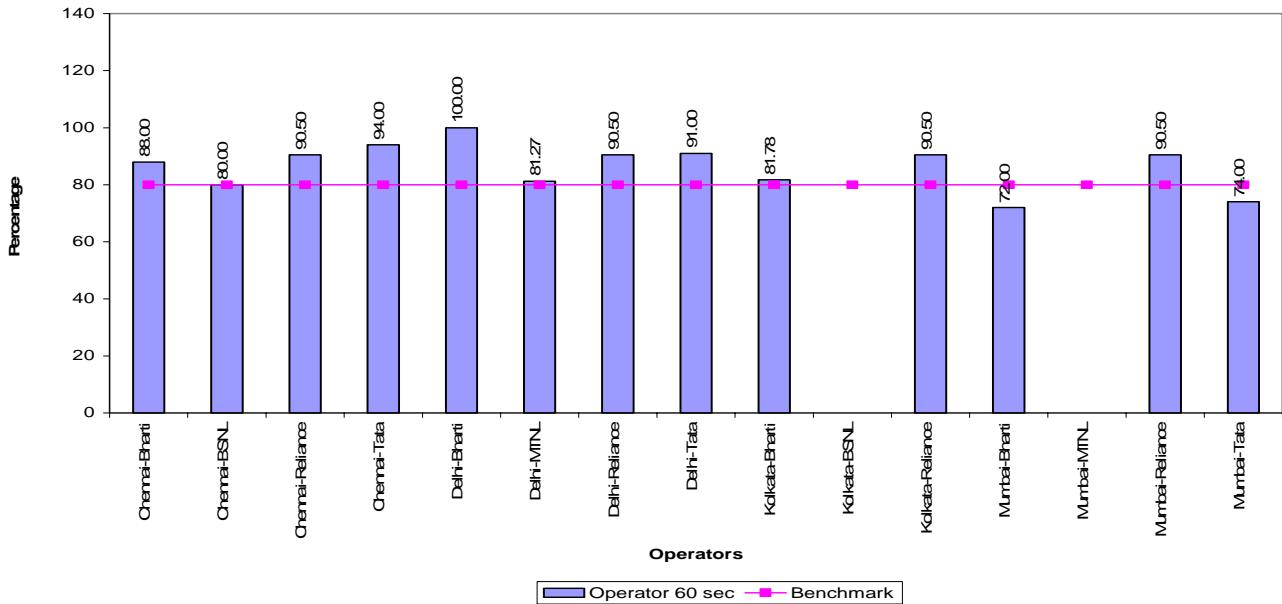
Audit was conducted for 15 operators. Two operator(s) are not meeting the benchmark parameter. Data not available for Kolkata – Bharti and Mumbai Bharti & MTNL

IVR 40 Seconds



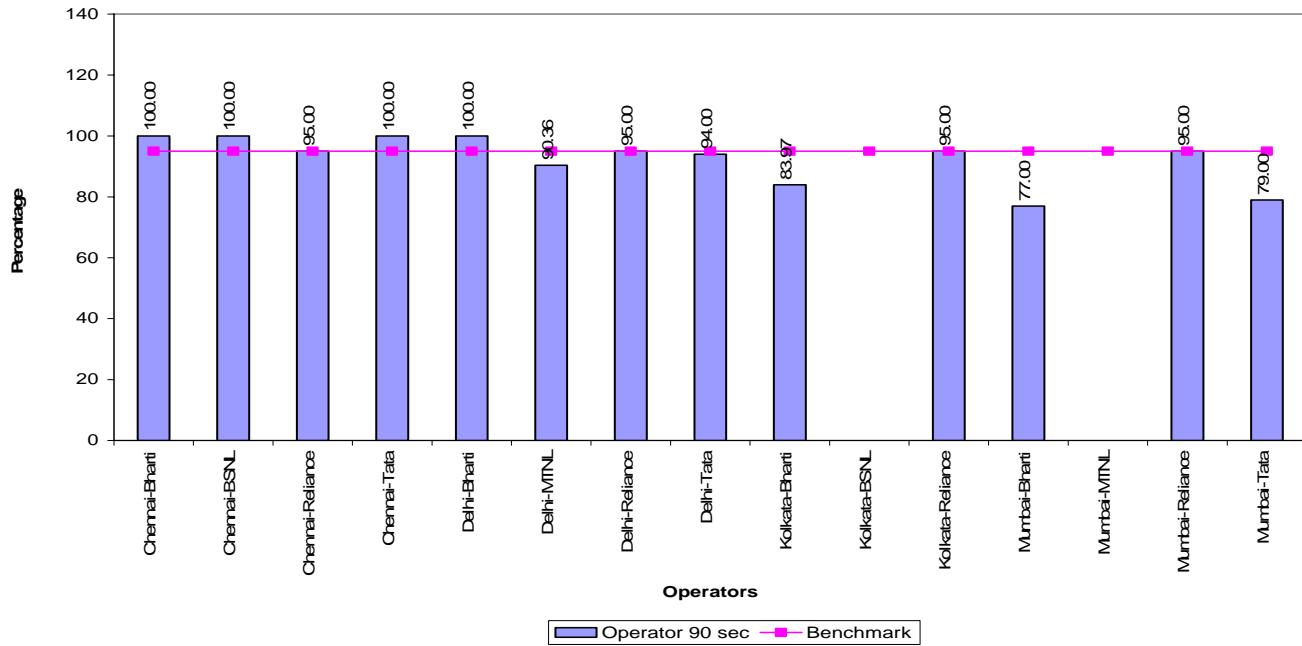
Audit was conducted for 15 operators. All operators are meeting the benchmark parameter. Data not available for Kolkata – Bharti and Mumbai Bharti & MTNL

Operator 60 Seconds



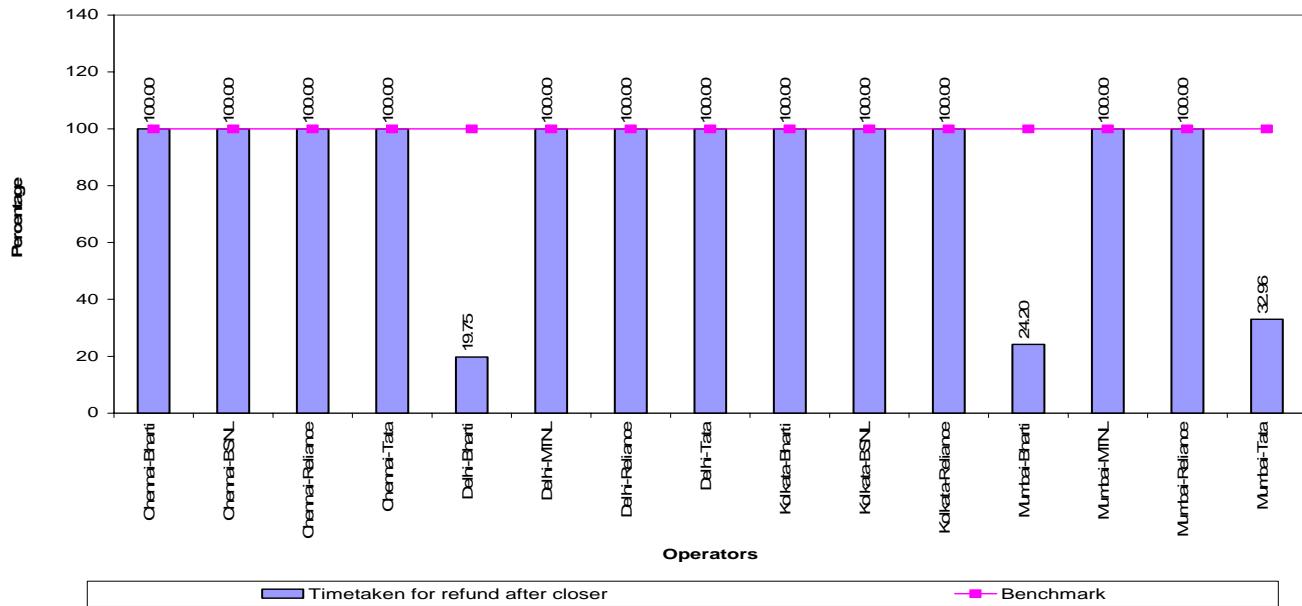
Audit was conducted for 15 operators. Two operator(s) are not meeting the benchmark parameter. Data not available for Kolkata – Bharti and Mumbai -MTNL

Operator 90 Seconds



Audit was conducted for 15 operators. Five operator(s) are not meeting the benchmark parameter. Data not available for Kolkata – BSNL and Mumbai - MTNL

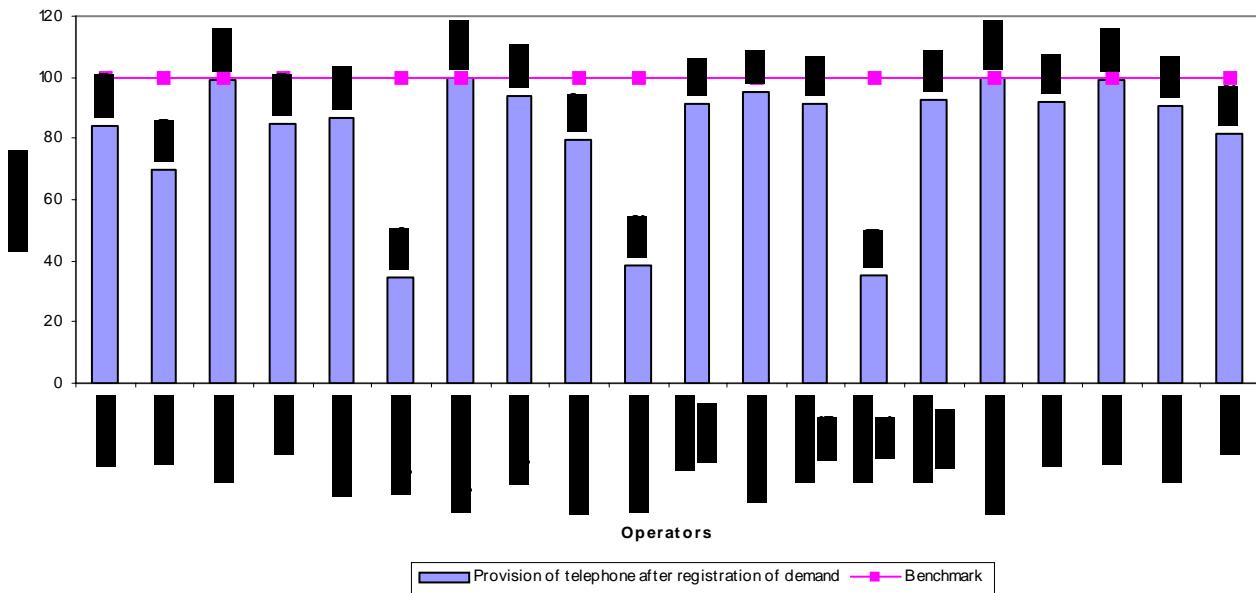
Time taken for refund of deposits after closure



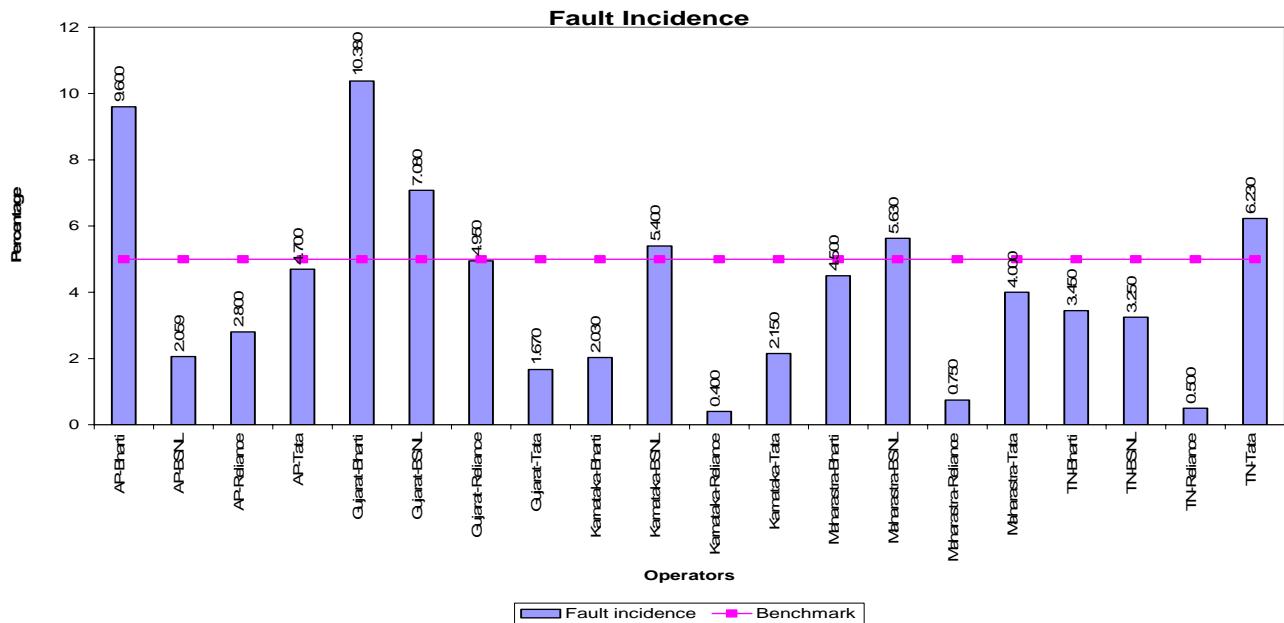
Audit was conducted for 15 operators. Three operator(s) are not meeting the benchmark parameter. .

4.2.2 A CIRCLES

Provision of Telephone after registration of demand

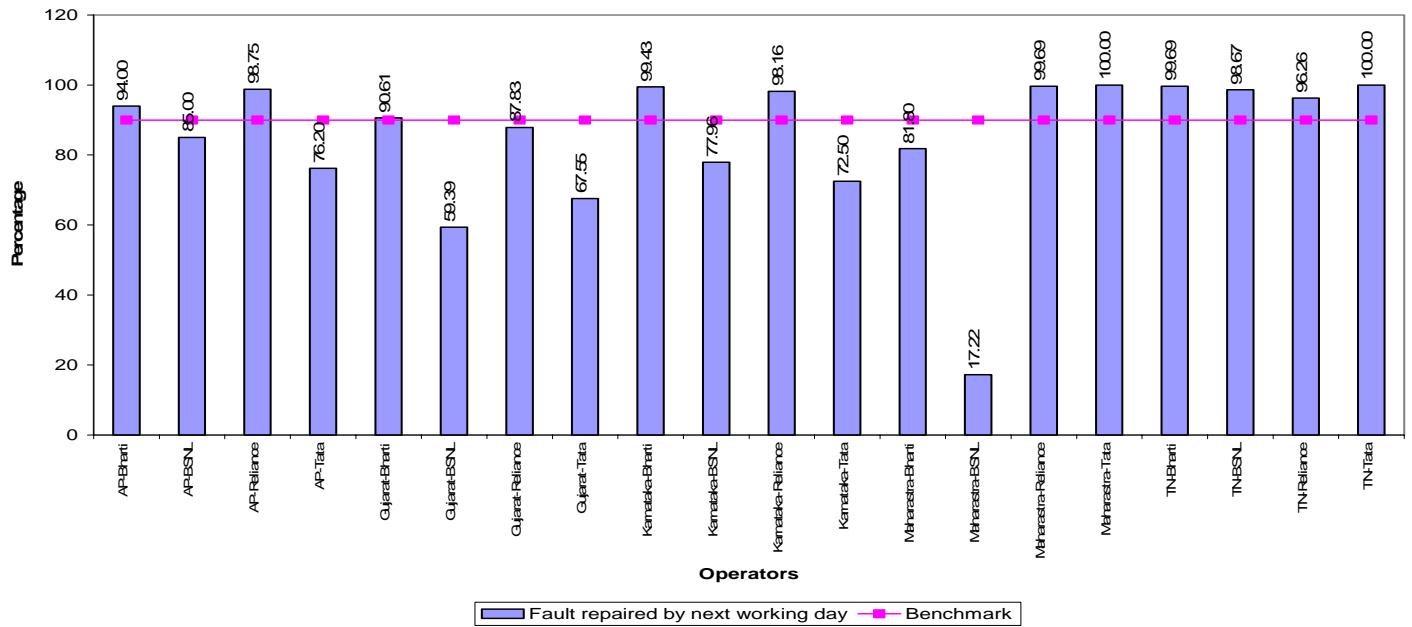


Audit was conducted for 20 operators. Eighteen operator(s) are not meeting the benchmark parameter.



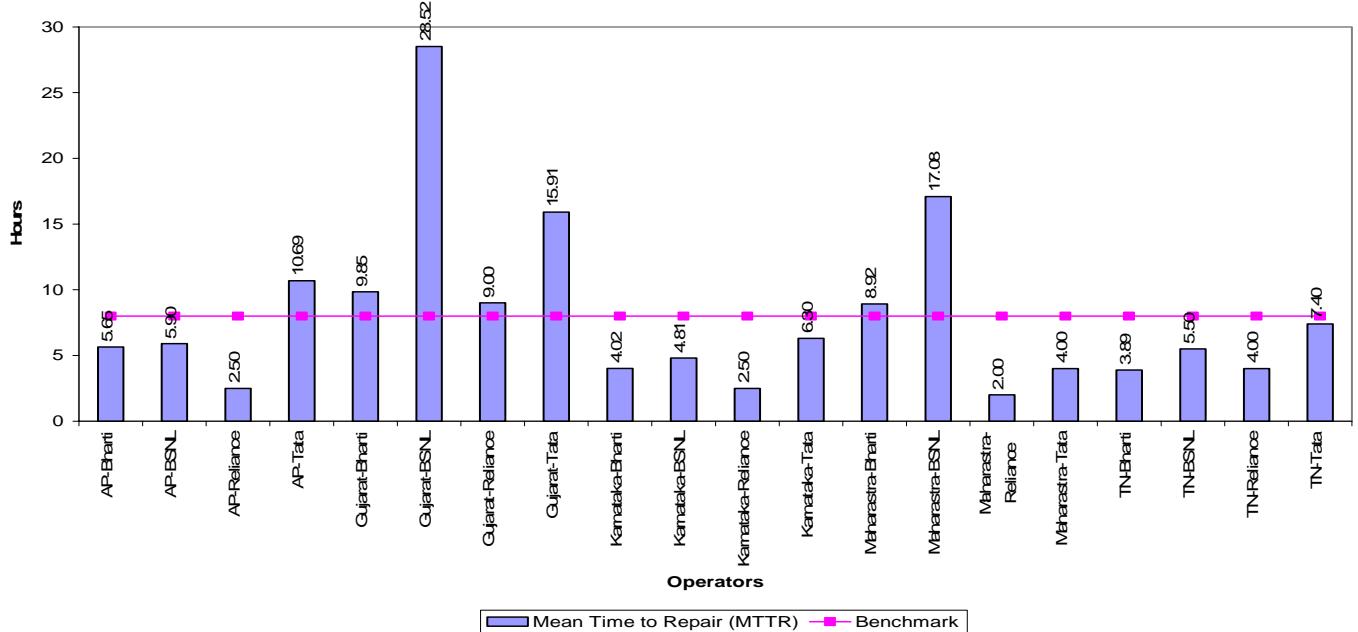
Audit was conducted for 20 operators. Six operator(s) are not meeting the benchmark parameter.

Fault Repair by next working day



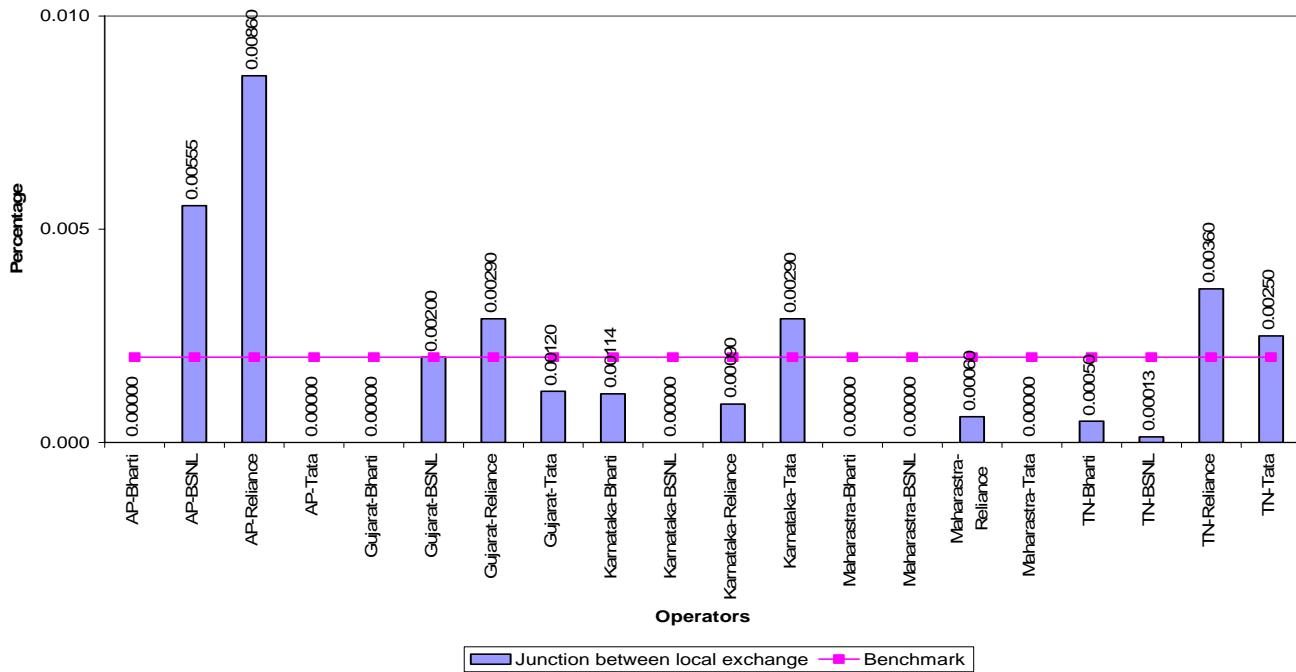
Audit was conducted for 20 operators. Nine operator(s) are not meeting the benchmark parameter.

Mean Time for Repair



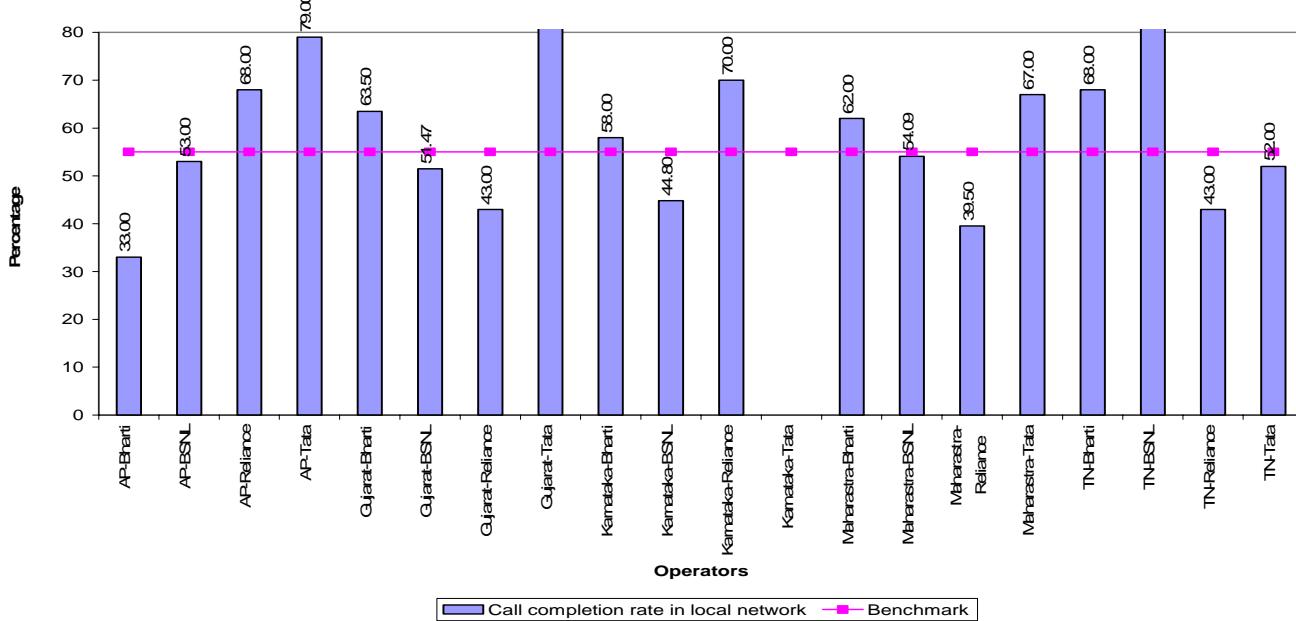
Audit was conducted for 20 operators. Seven operator(s) are not meeting the benchmark parameter.

Junction to Local Exchange



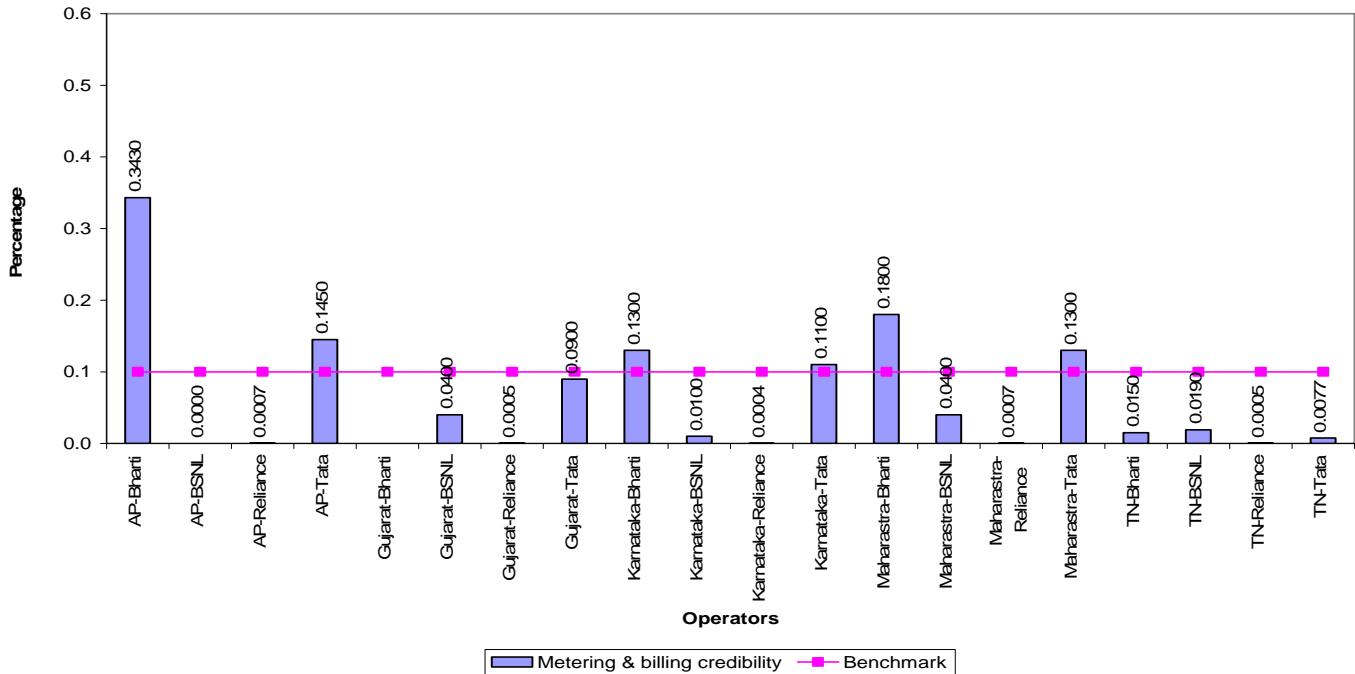
Audit was conducted for 20 operators. Six operator(s) are not meeting the benchmark parameter.

Intra office



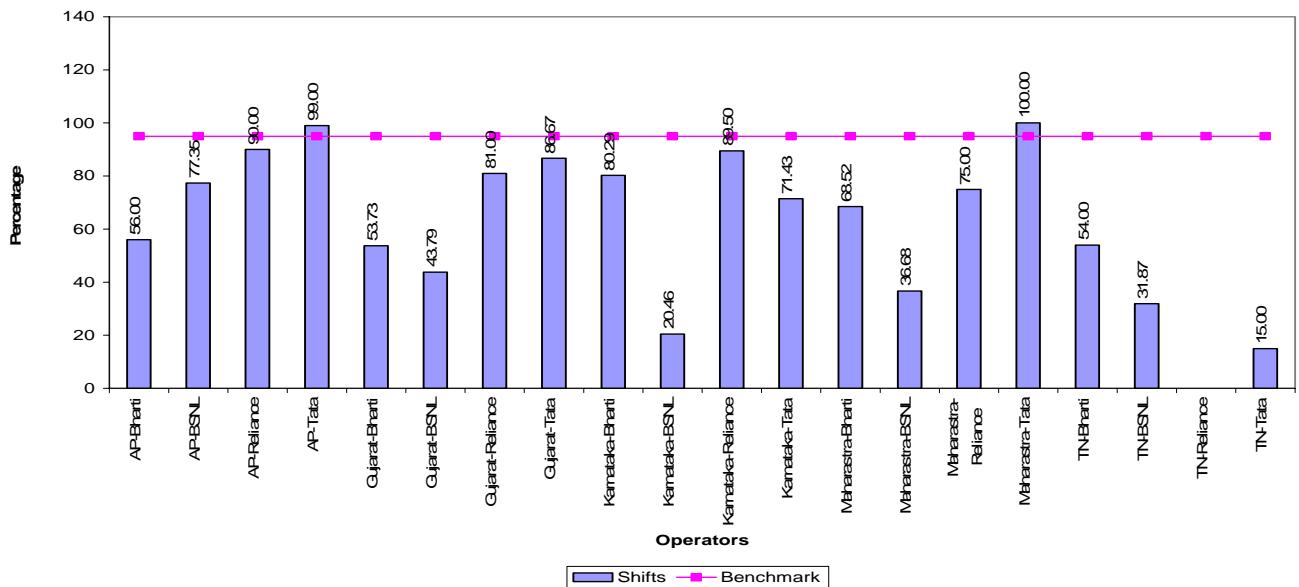
Audit was conducted for 20 operators. Nine operator(s) are not meeting the benchmark parameter. Not applicable for Tata-Karnataka

Metering & Billing Credibility



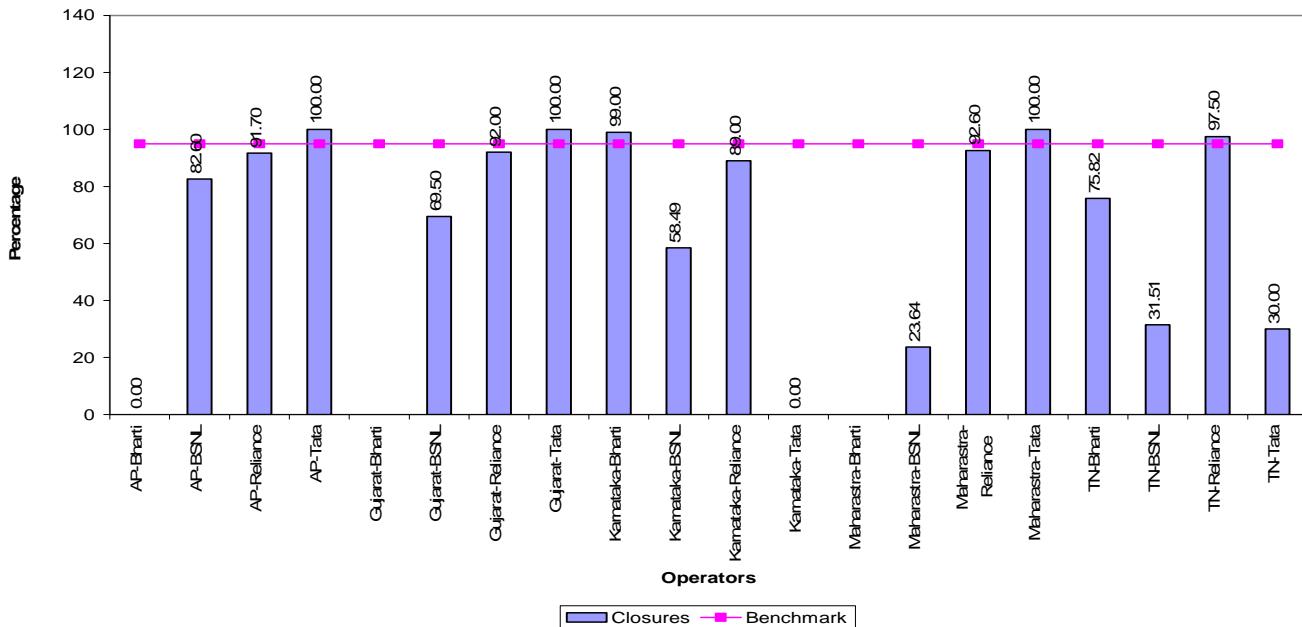
Audit was conducted for 20 operators. Six operator(s) are not meeting the benchmark parameter. . Data not provided by Bharti-Gujrat.

Shift



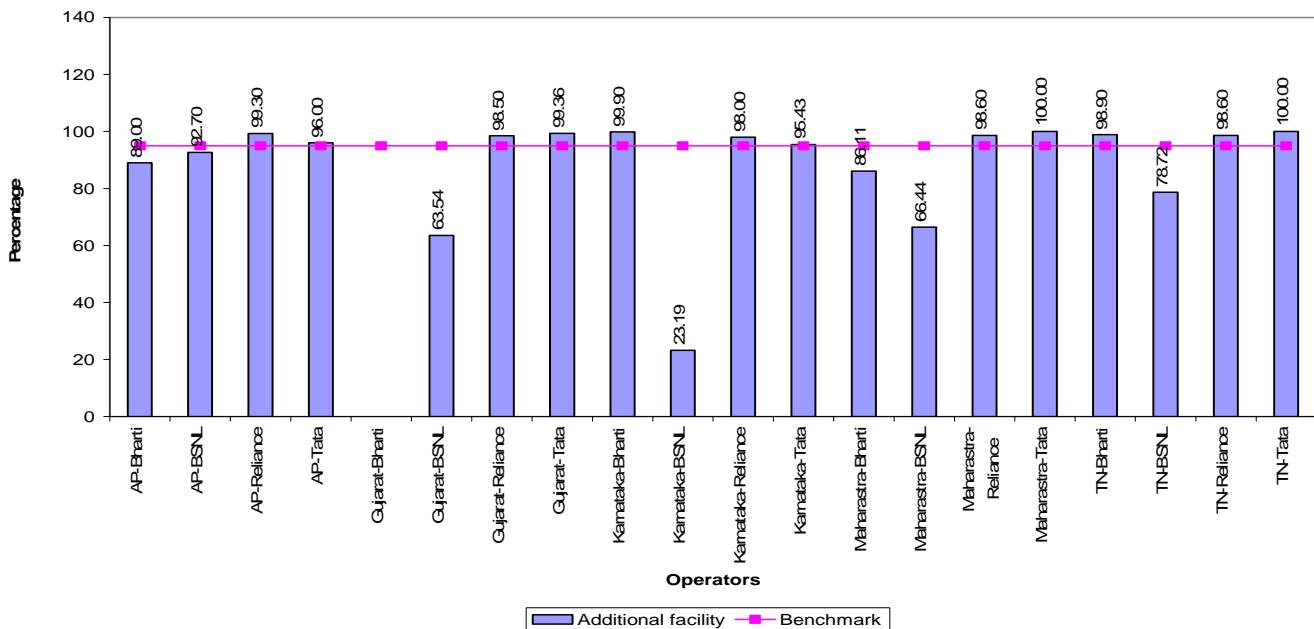
Audit was conducted for 20 operators. Seventeen operator(s) are not meeting the benchmark parameter. NI case for Rel comm –TN.

Closure

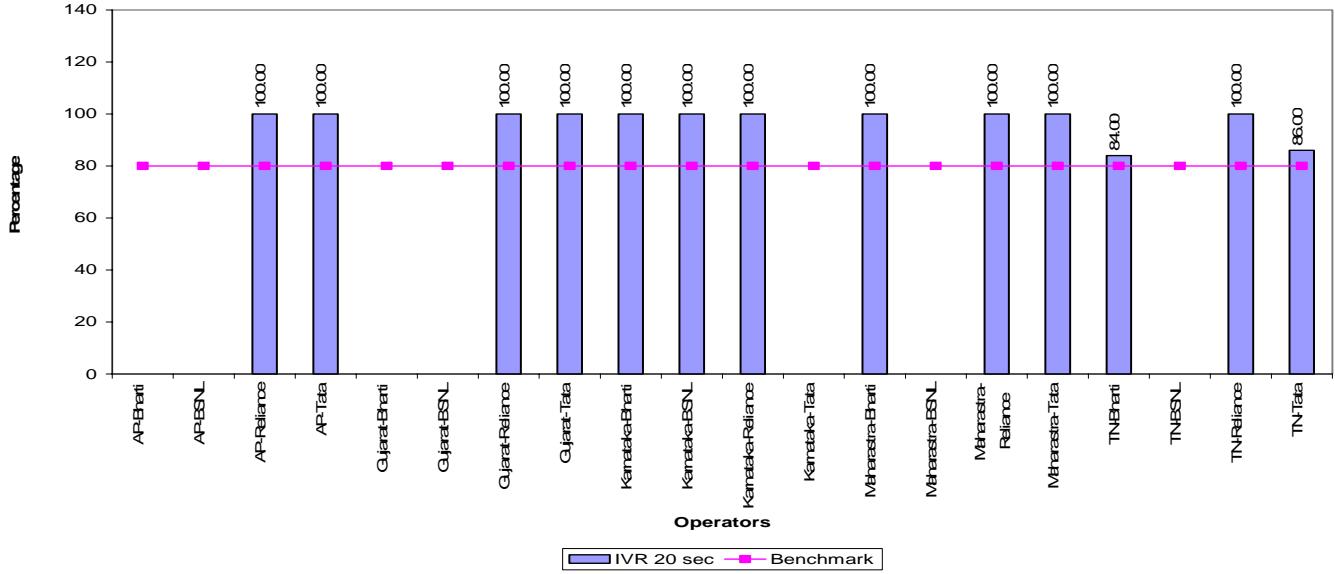


Audit was conducted for 20 operators. Thirteen operator(s) are not meeting the benchmark parameter. Data not provided by Bharti Gujarat & Bharti Maharashtra.

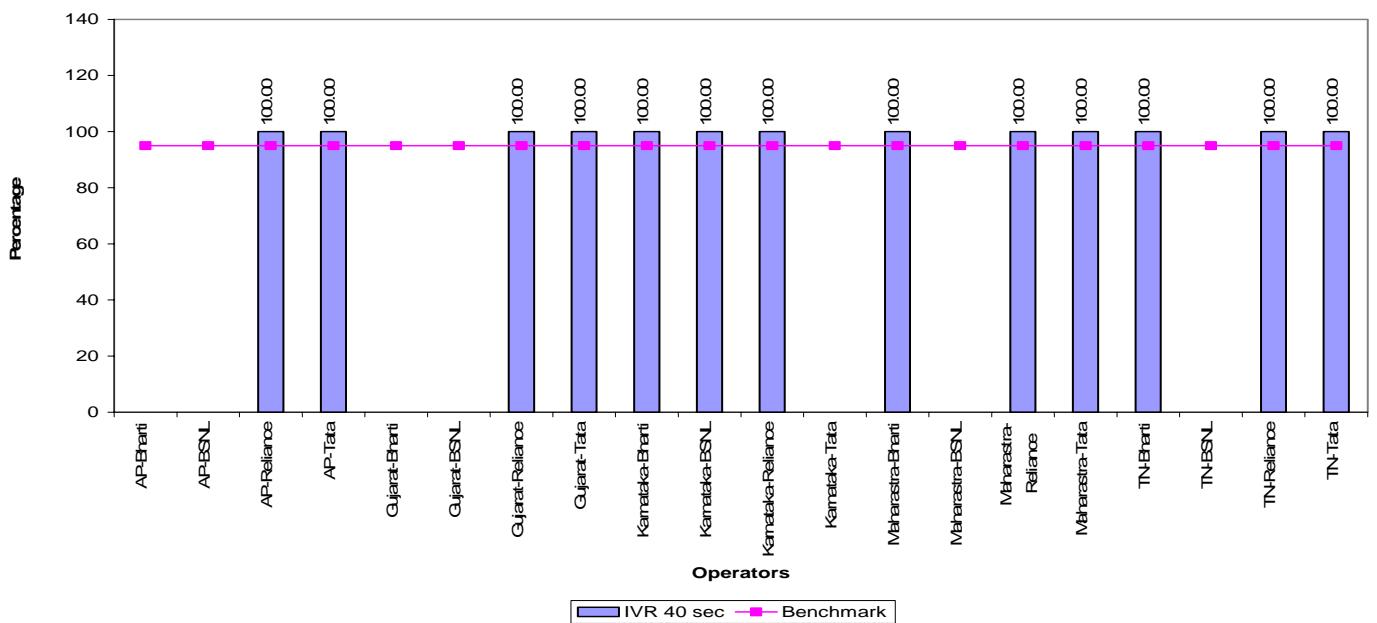
Additional Facility



Audit was conducted for 20 operators. Seven operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Gujarat.

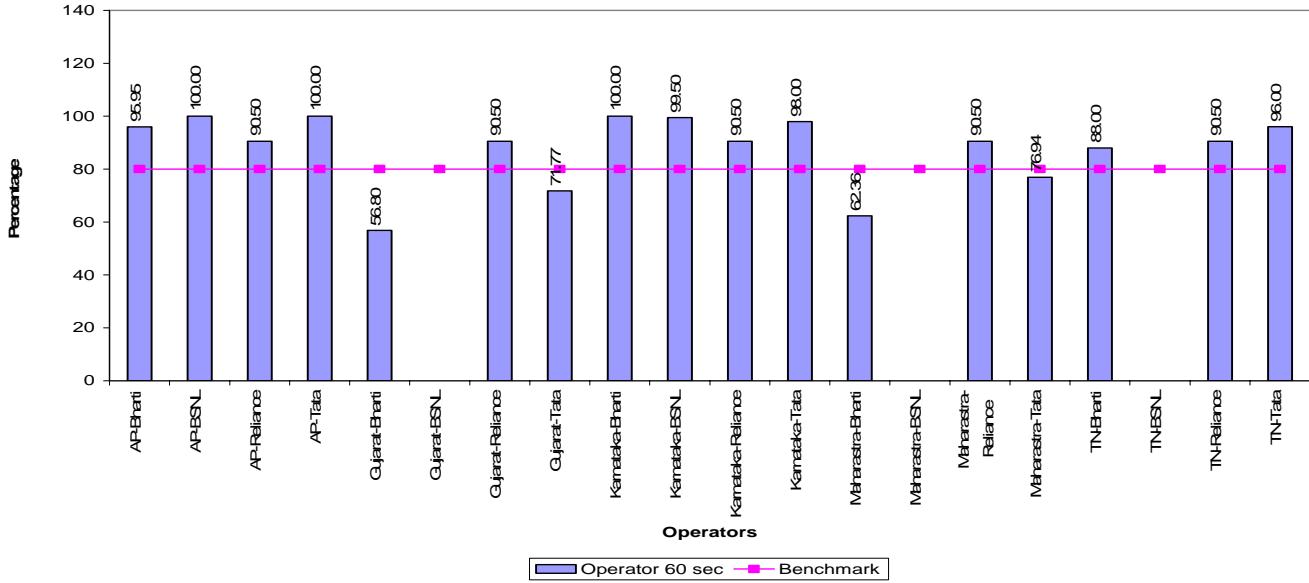
IVR 20 Seconds


Audit was conducted for 20 operators. Thirteen are meeting the benchmark parameter. Data not available for rest seven operators.

IVR 40 Seconds


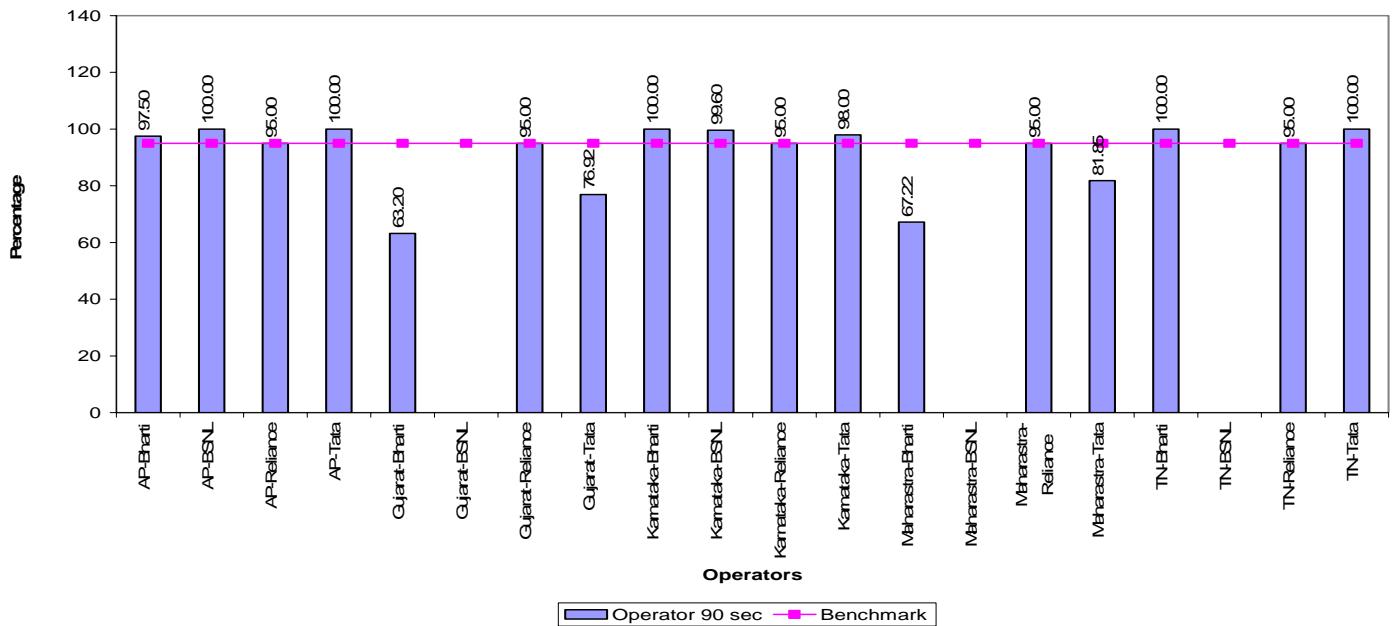
Audit was conducted for 20 operators. Thirteen are meeting the benchmark parameter. Data not available for rest seven operators.

Operator 60 Seconds



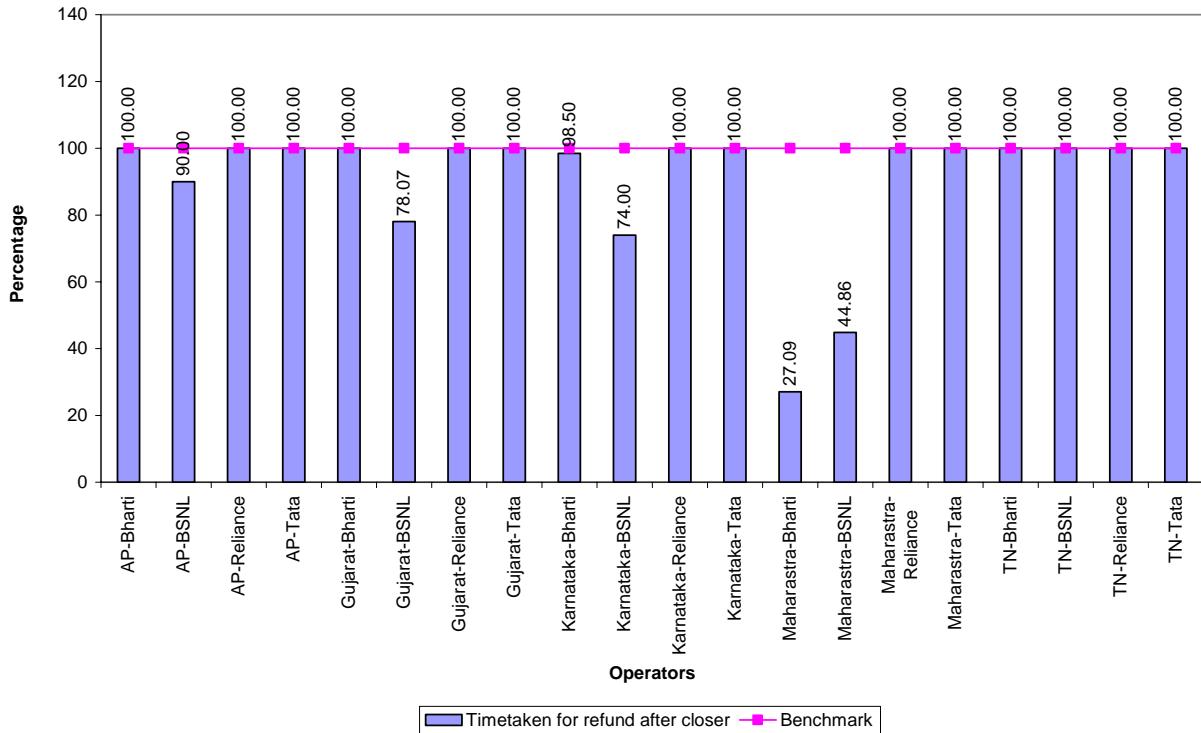
Audit was conducted for 20 operators. Four are not meeting the benchmark parameter. Data not available for BSNL – Gujarat, Maharashtra & Tamil Nadu.

Operator 90 Seconds



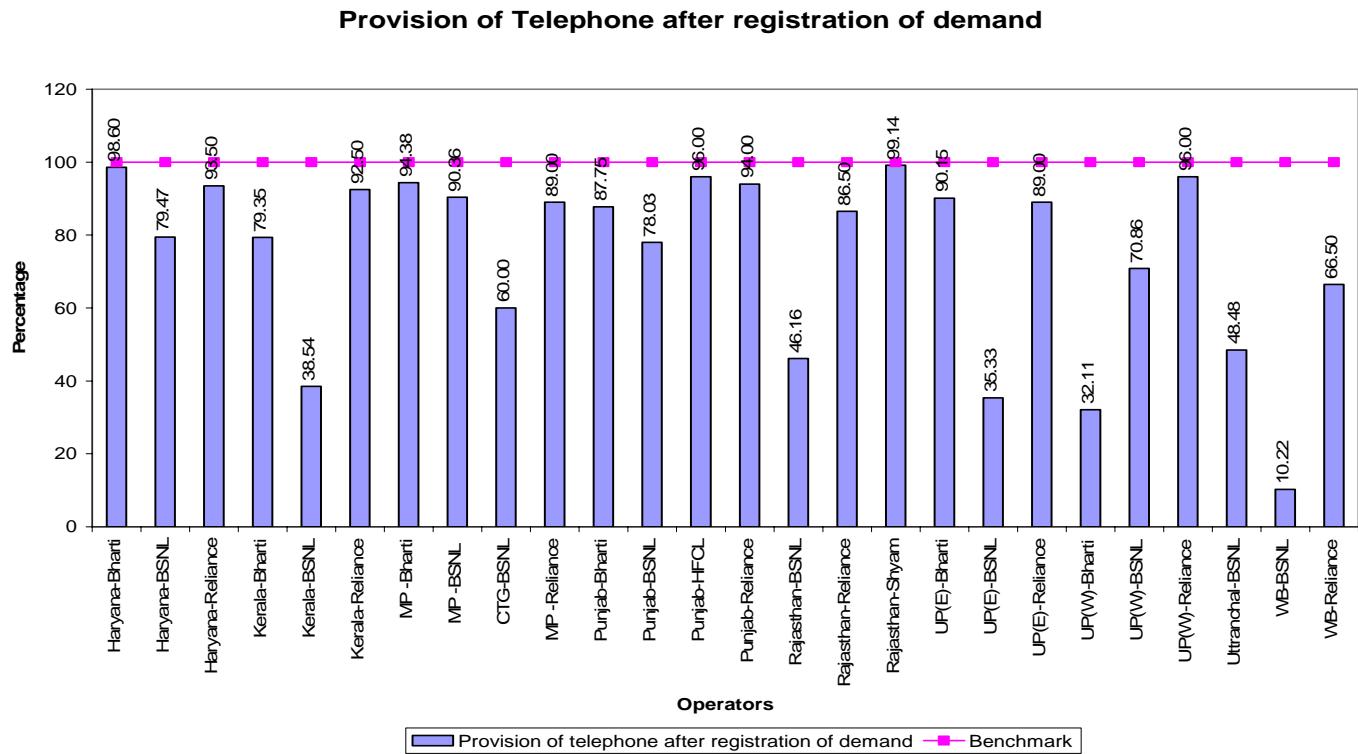
Audit was conducted for 20 operators. Four are not meeting the benchmark parameter. Data not available for BSNL – Gujarat, Maharashtra and Tamil Nadu .

Time taken for refund of deposits after closure



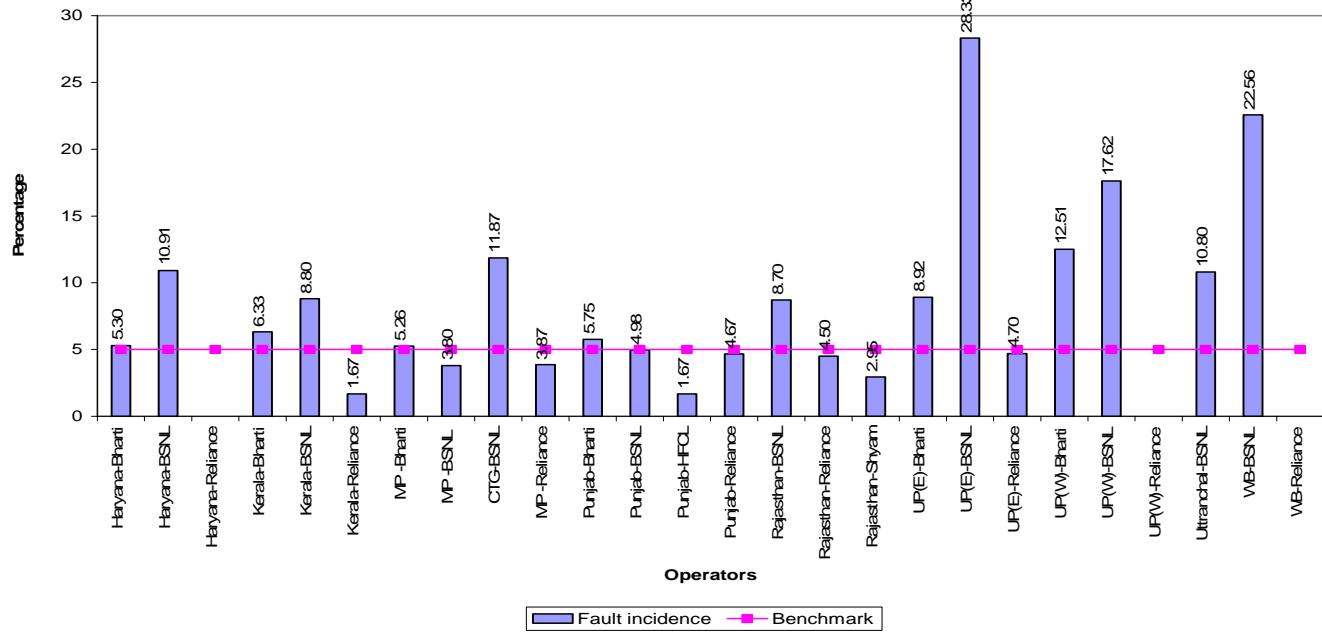
Audit was conducted for 20 operators. Six operator(s) are not meeting the benchmark parameter.

4.2.3 B CIRCLES



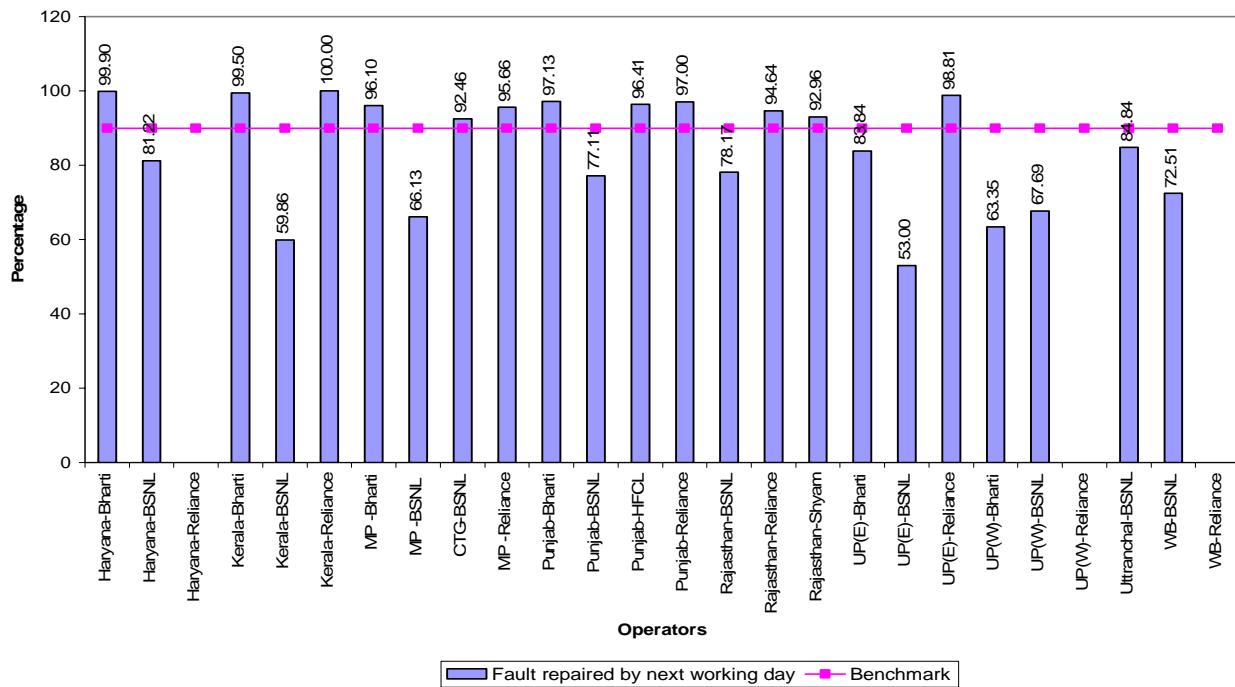
Audit was conducted for 26 operators. All operator(s) are not meeting the benchmark parameter.

Fault Incidence



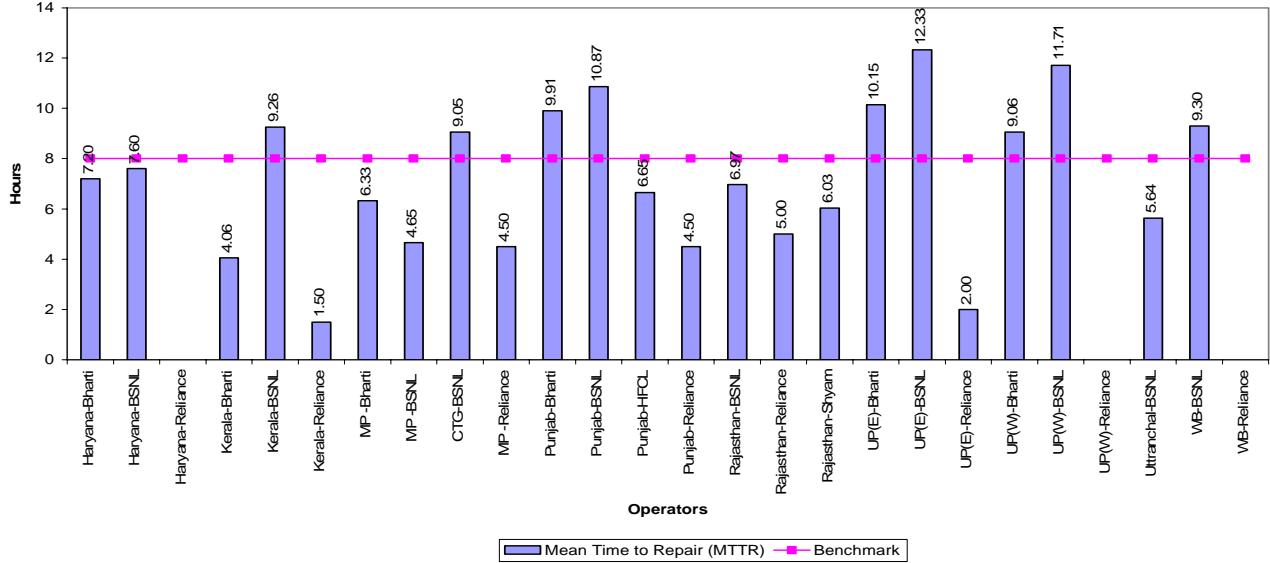
Audit was conducted for 26 operators. Fourteen operator(s) are not meeting the benchmark parameter. Rel Comm Haryana, UP W and WB are NI cases.

Fault Repair by next working day



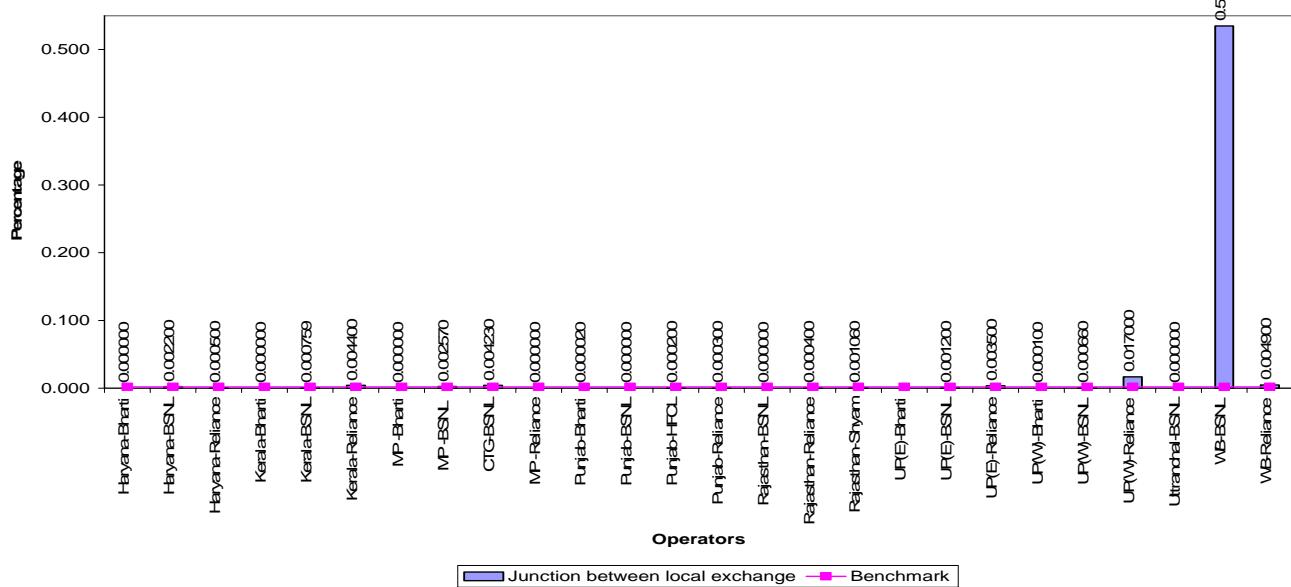
Audit was conducted for 26 operators. Eleven operator(s) are not meeting the benchmark parameter. Rel Comm Haryana ,UP W and WB are NI cases.

Mean Time for Repair

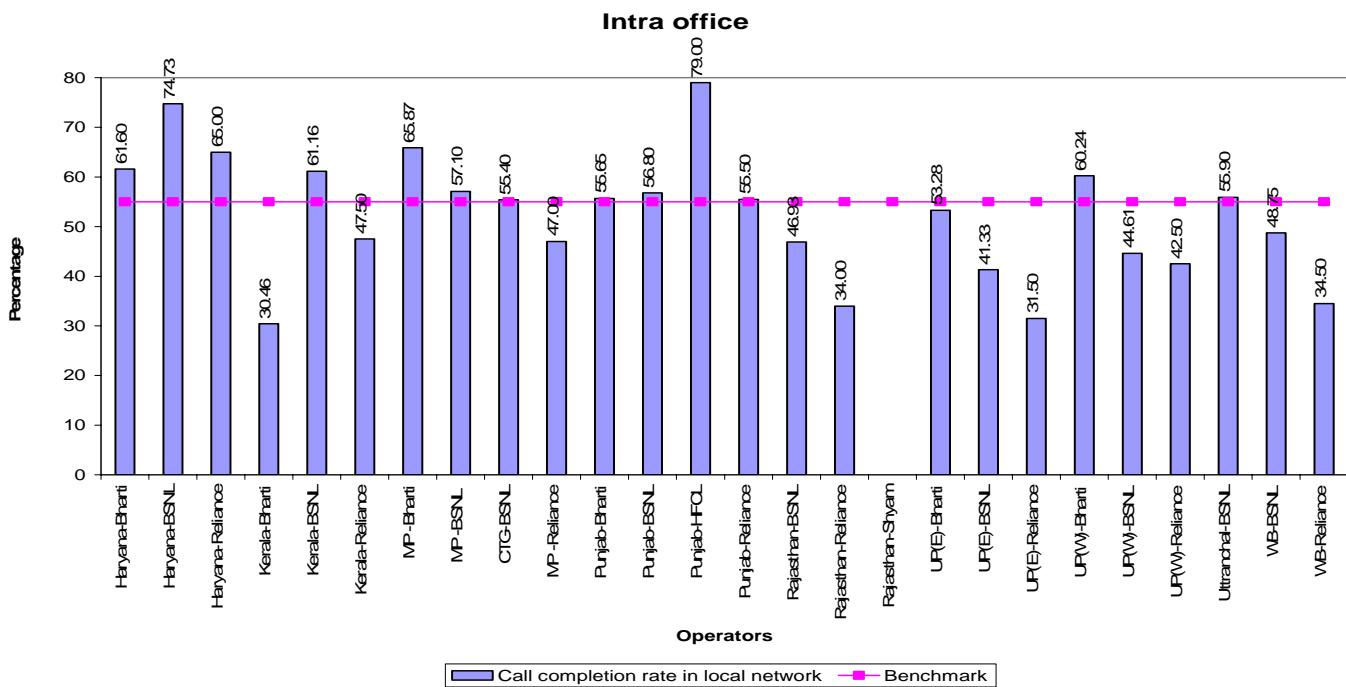


Audit was conducted for 26 operators. Nine operator(s) are not meeting the benchmark parameter. Rel Comm for Haryana ,UP W and WB are NI cases .

Junction to Local Exchange

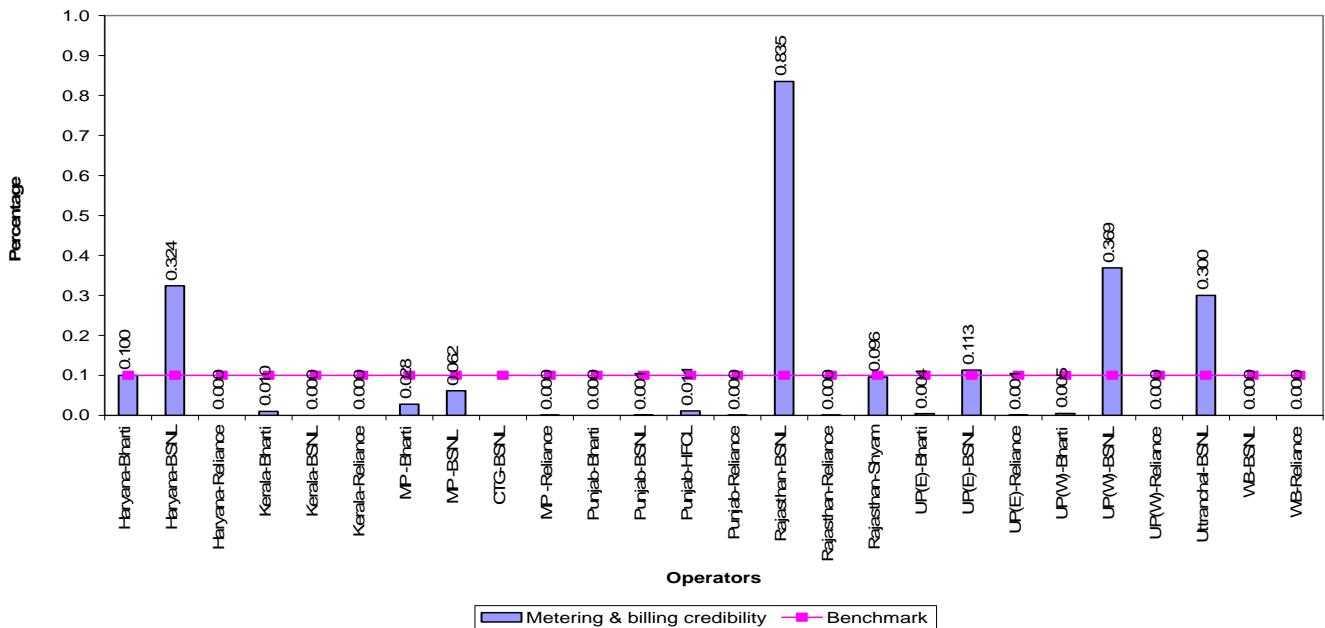


Audit was conducted for 26 operators. One operator(s) are not meeting the benchmark parameter.data not provided by Bharti-UP(E)

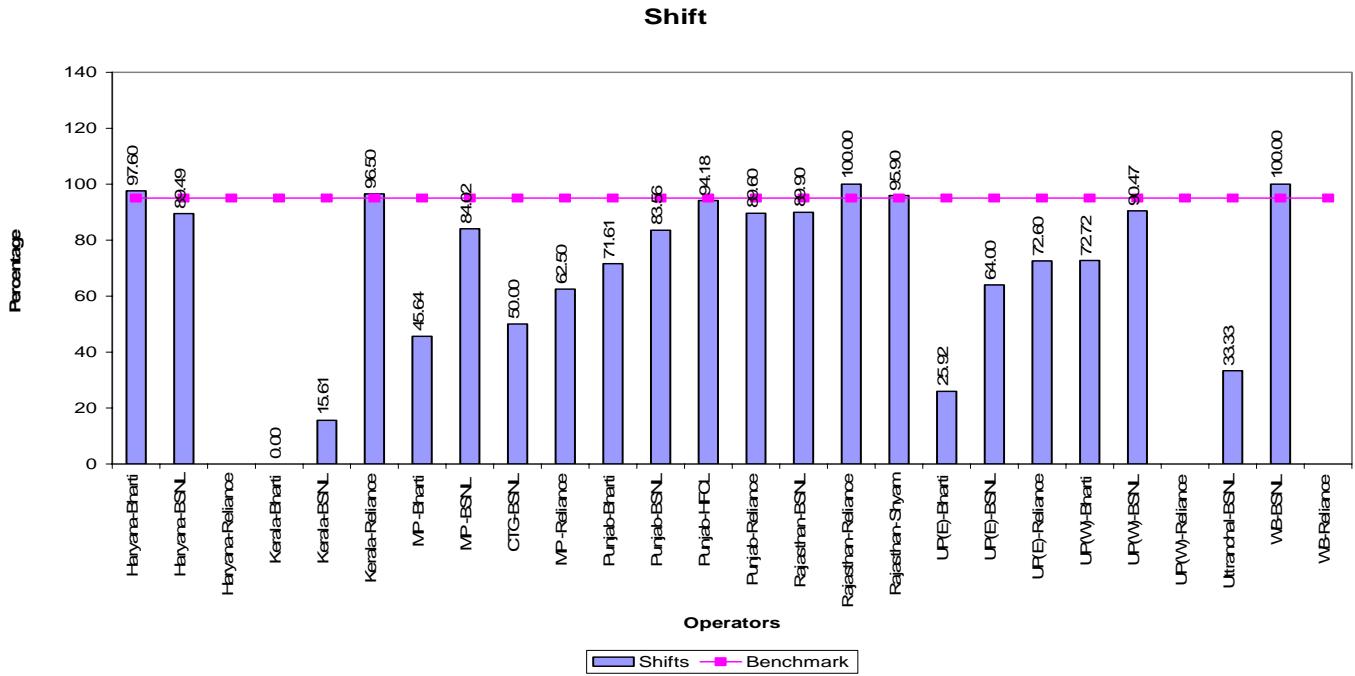


Audit was conducted for 26 operators. Twelve operator(s) are not meeting the benchmark parameter. Not applicable for Shyam - Rajasthan

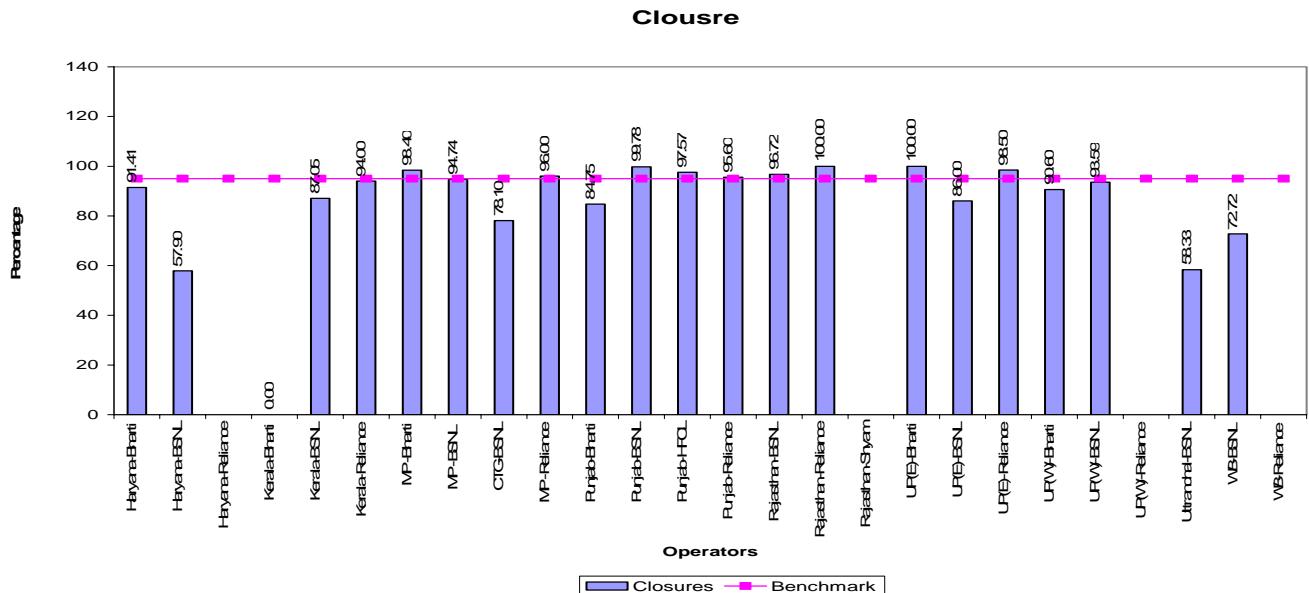
Metering & Billing Credibility



Audit was conducted for 26 operators. Five operator(s) are not meeting the benchmark parameter. NI cases for BSNL-CG.

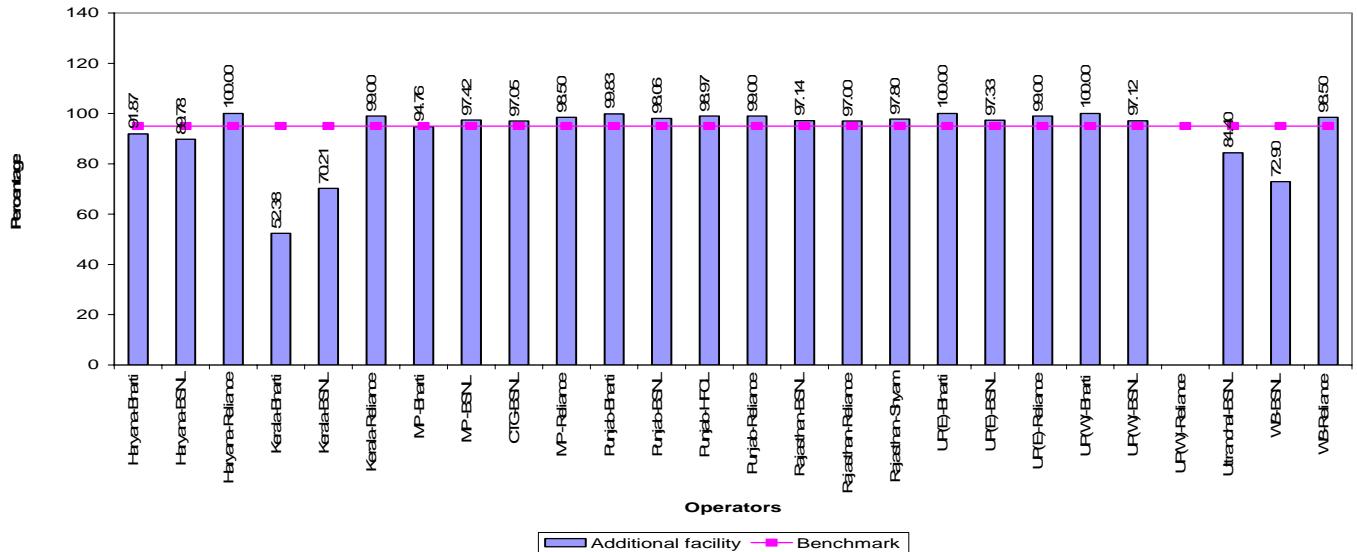


Audit was conducted for 26 operators. Eighteen operator(s) are not meeting the benchmark parameter. NI cases for Rel comm-Haryana, Rel comm-UP(W) & Rel comm-WB.



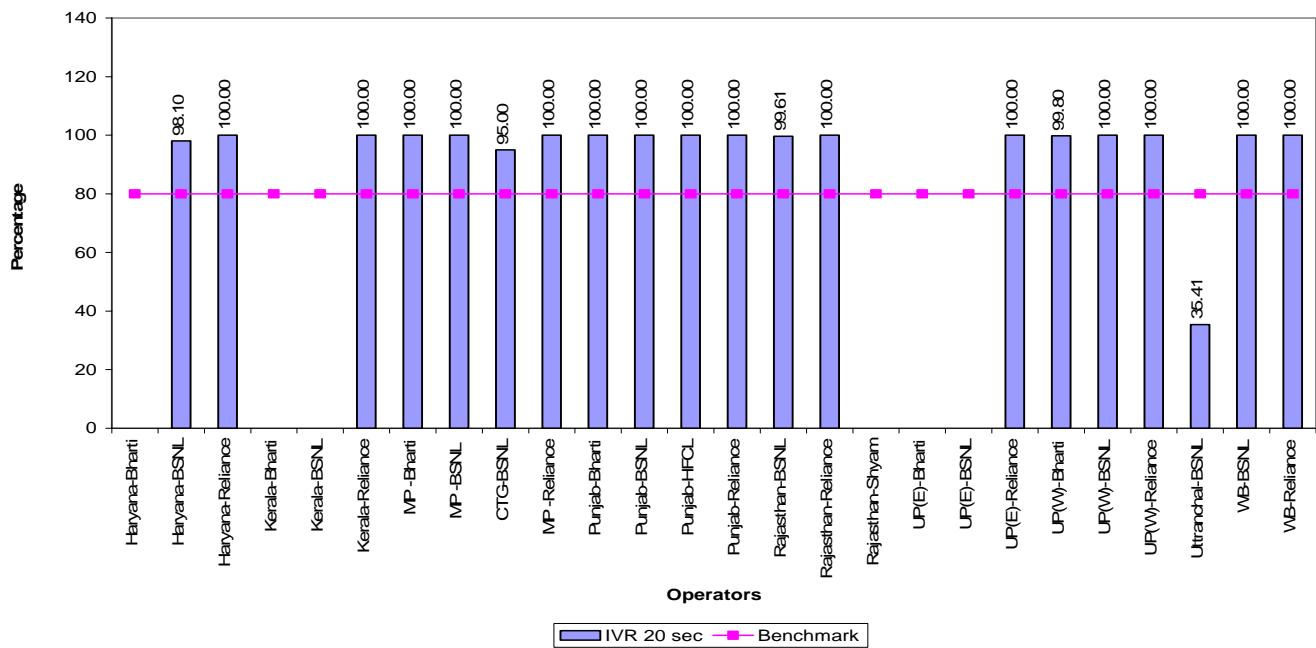
Audit was conducted for 26 operators. Thirteen operator(s) are not meeting the benchmark parameter. Data not provided by Shyam-Rajasthan & NI cases for Rel comm-WB, Rel comm-Haryana, Rel comm-UP(W),..

Additional Facility



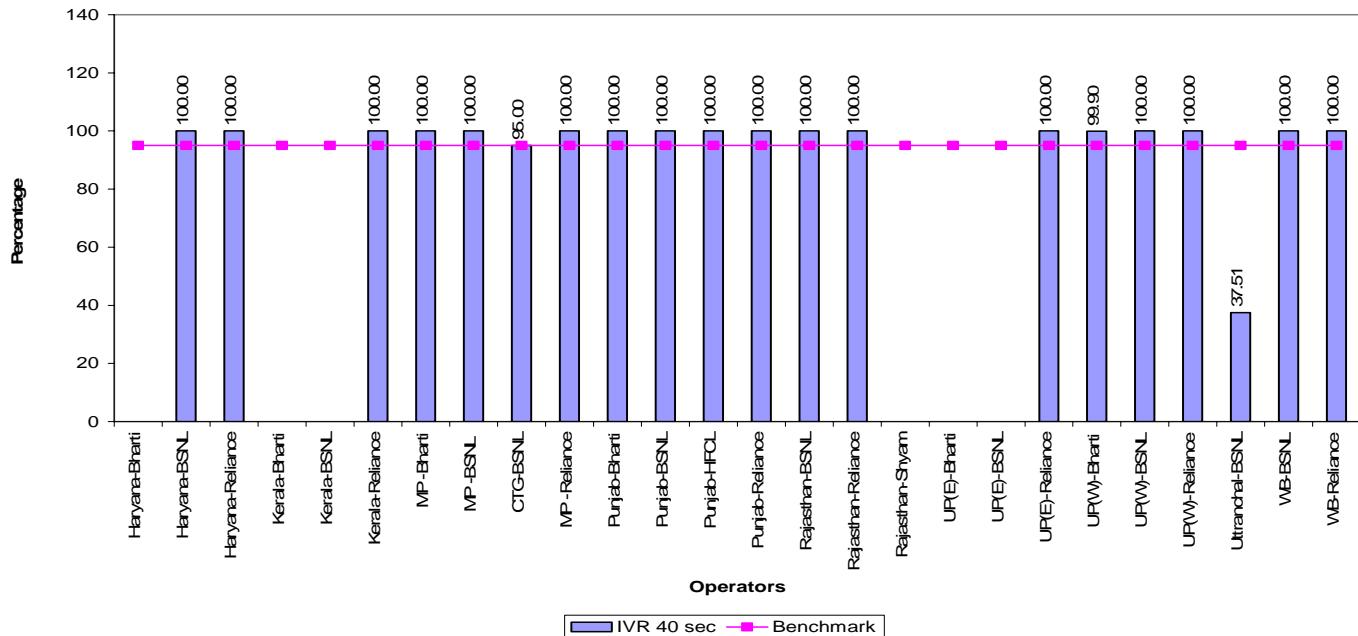
Audit was conducted for 26 operators. Seven operator(s) are not meeting the benchmark parameter. NI case for Rel comm-UP(W) .

IVR 20 Seconds



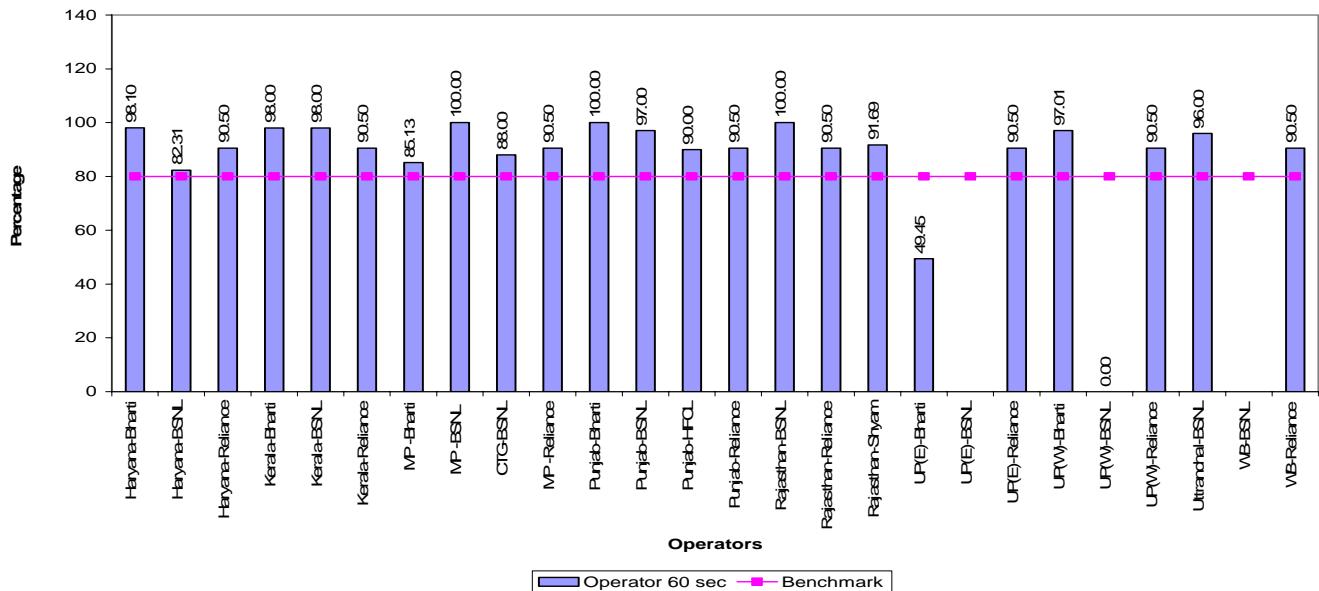
Audit was conducted for 26 operators. One is not meeting the benchmark parameter. Data not available for Bharti – Haryana, Kerala and UP East., BSNL – UP East and Kerala, Shyam – Rajasthan.

IVR 40 Seconds



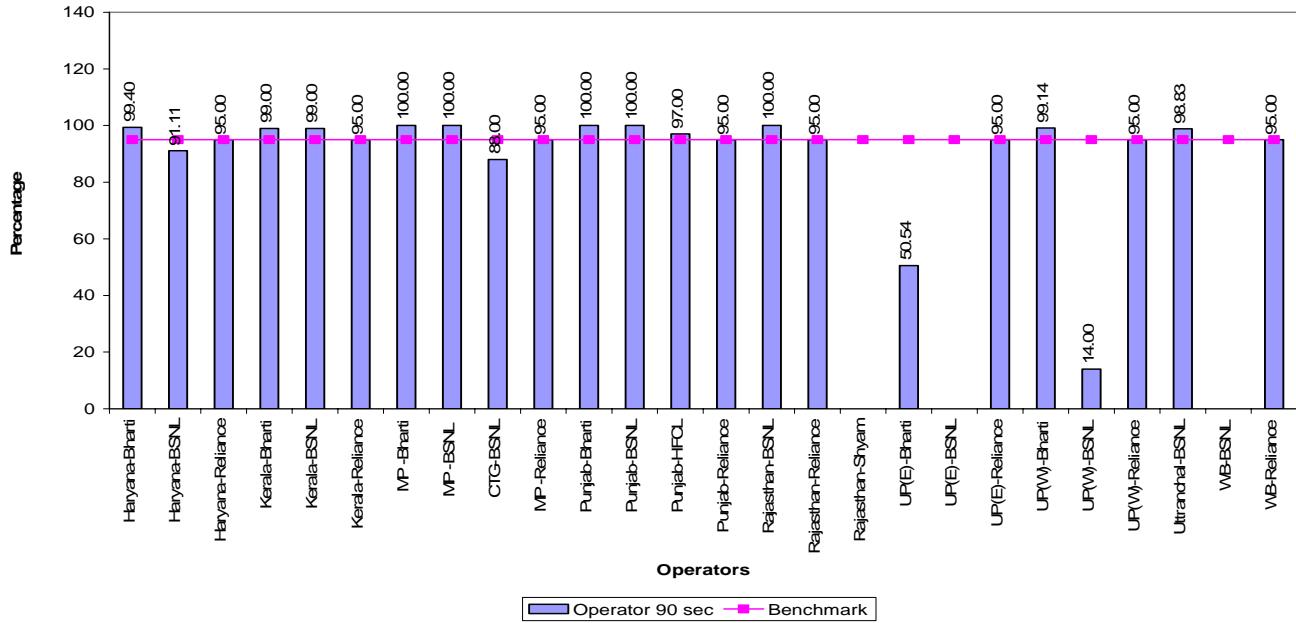
Audit was conducted for 26 operators. One is not meeting the benchmark parameter. Data not available for Bharti – Haryana, Kerala and UP East, BSNL – UP East and Kerala, Shyam –Rajasthan.

Operator 60 Seconds



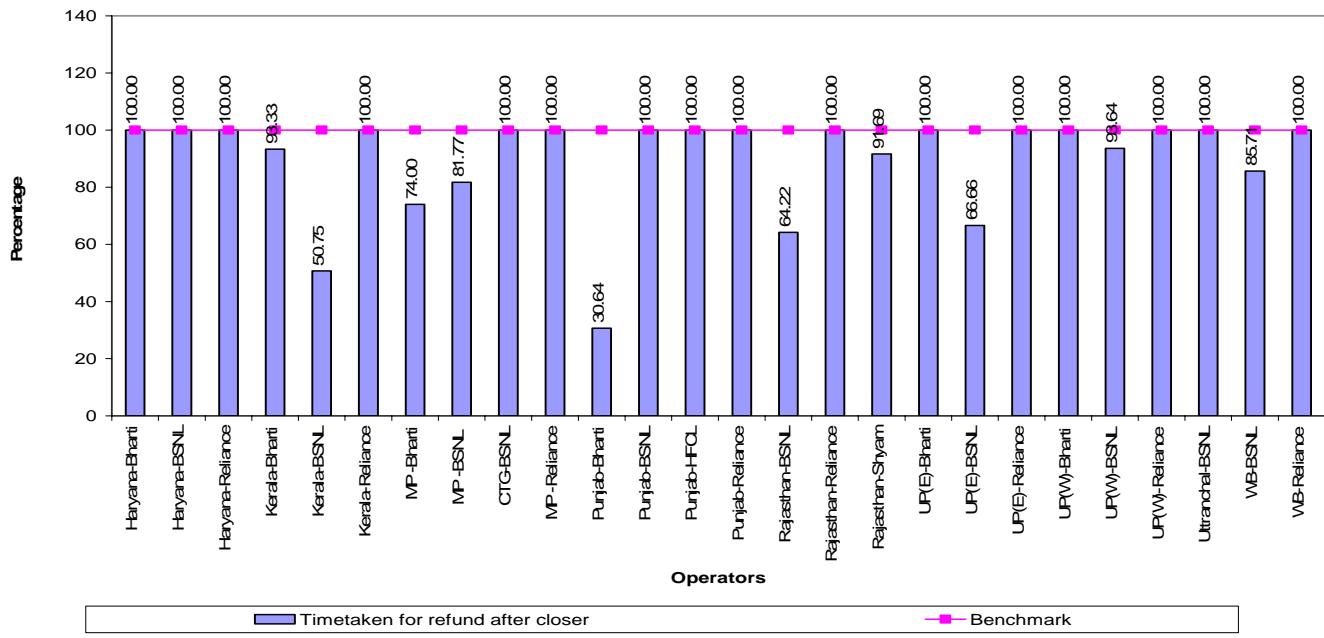
Audit was conducted for 26 operators. Two are not meeting the benchmark parameter. Data not available for BSNL – UP East and West Bengal.

Operator 90 Seconds



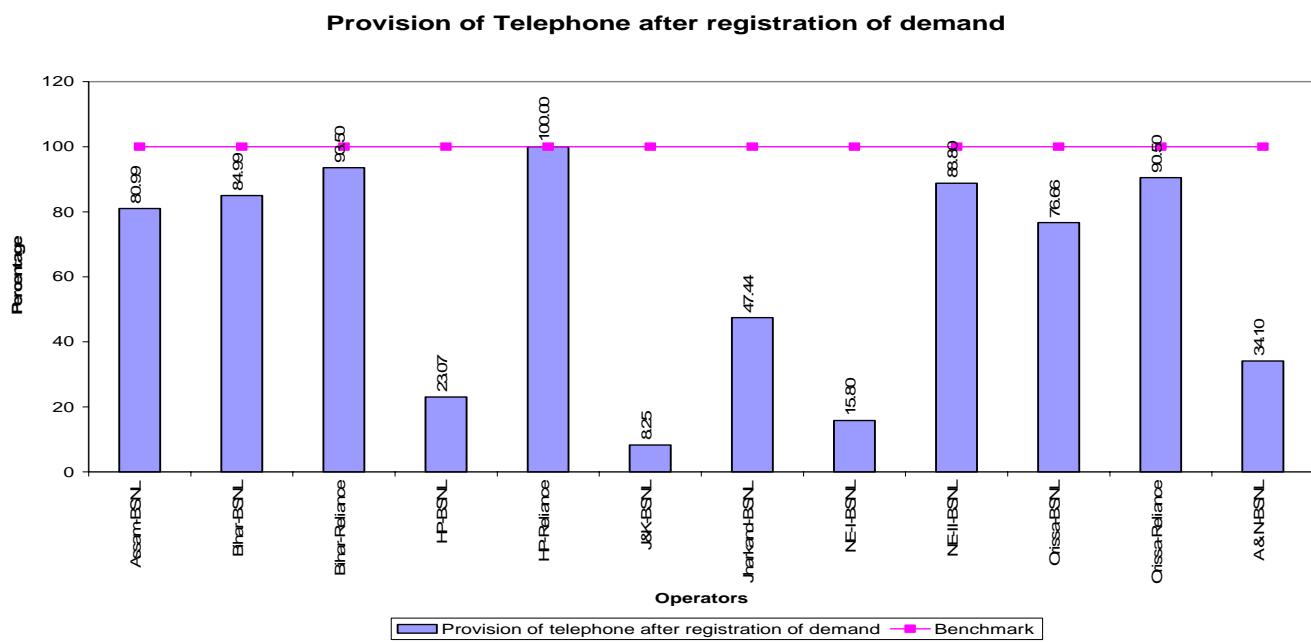
Audit was conducted for 26 operators. Four are not meeting the benchmark parameter. Data not available for BSNL – UP East and West Bengal and Shyam - Rajasthan.

Time taken for refund of deposits after closure

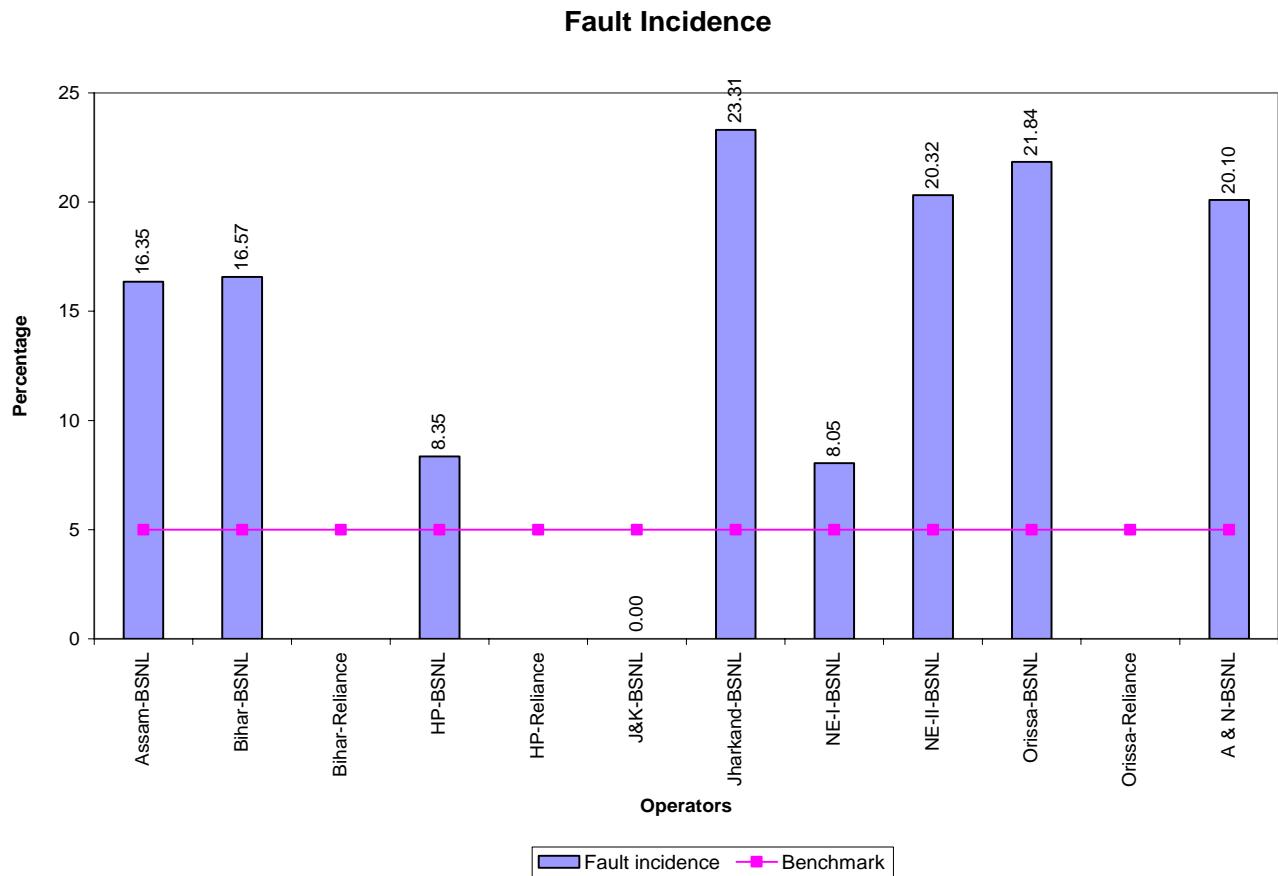


Audit was conducted for 26 operators. Ten operator(s) are not meeting the benchmark parameter.

4.2.4 C CIRCLES

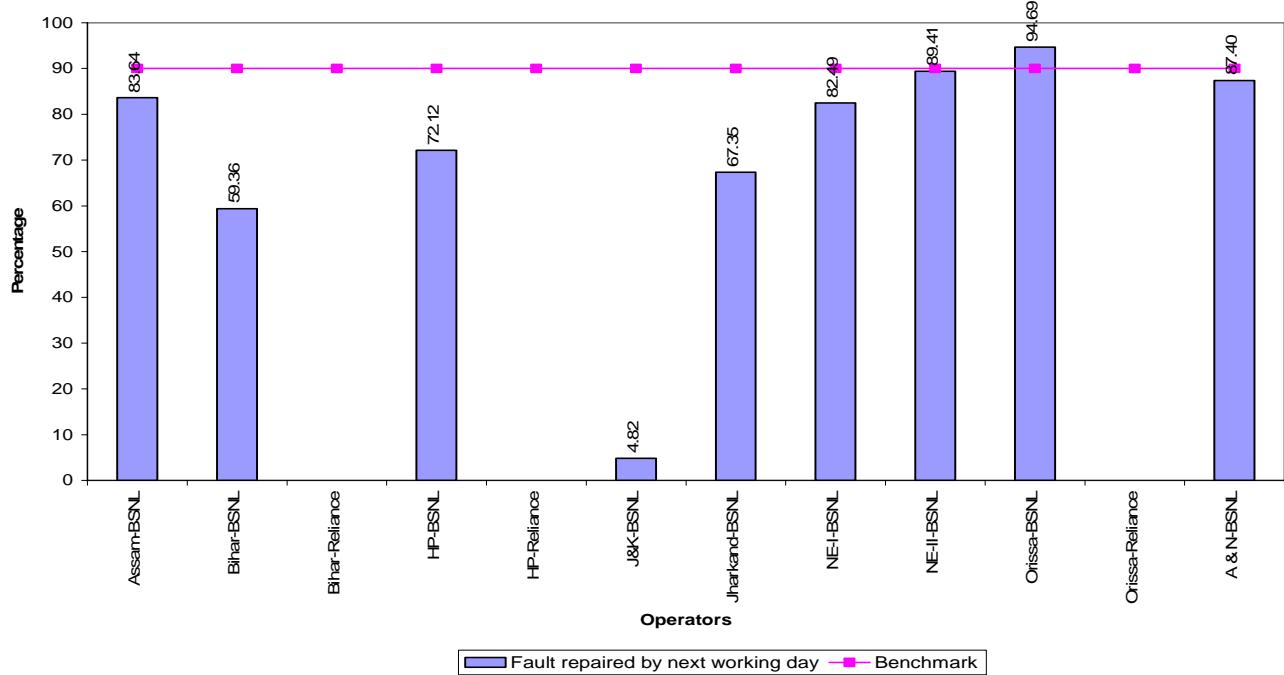


Audit was conducted for 12 operators. Eleven operator(s) are not meeting the benchmark parameter.



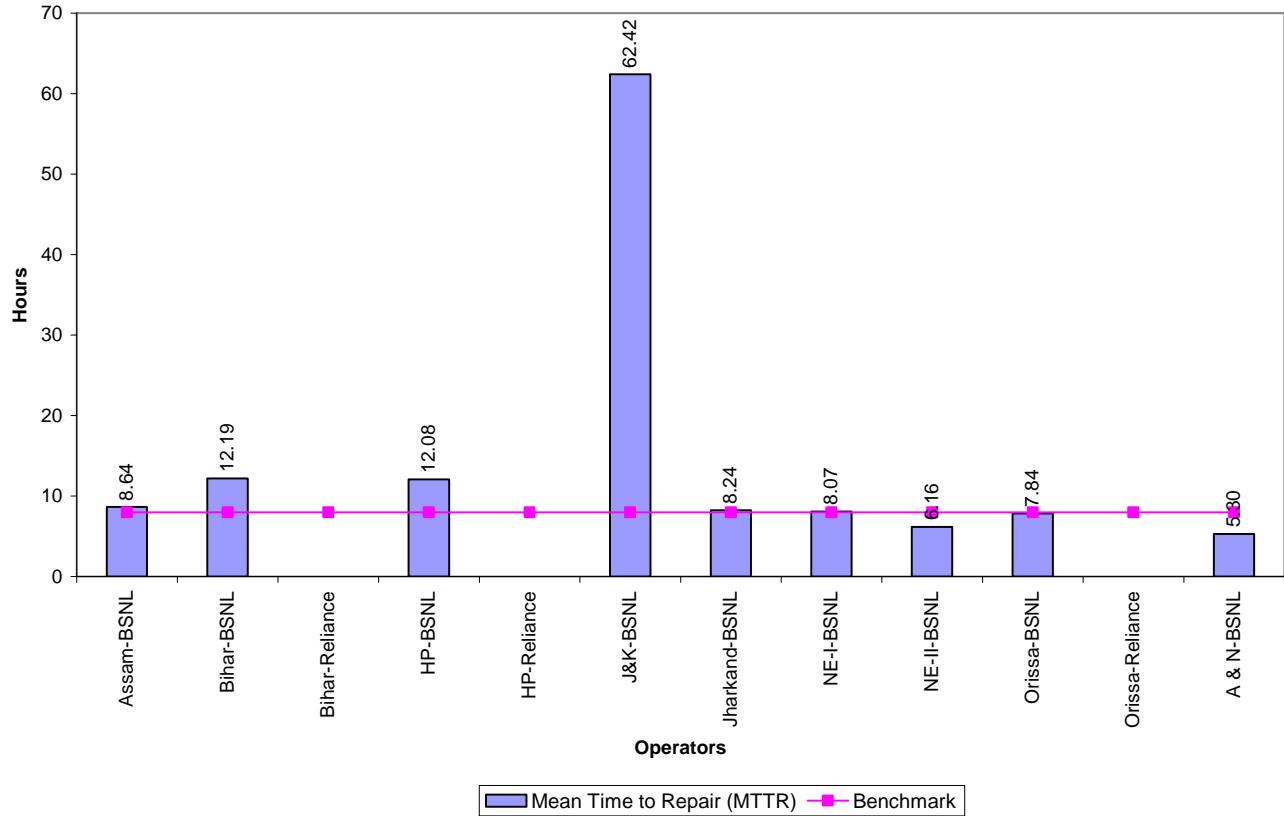
Audit was conducted for 12 operators. Eight operator(s) are not meeting the benchmark parameter. No incidences were observed for Rel Comm Bihar, HP, Orissa.

Fault Repair by next working day



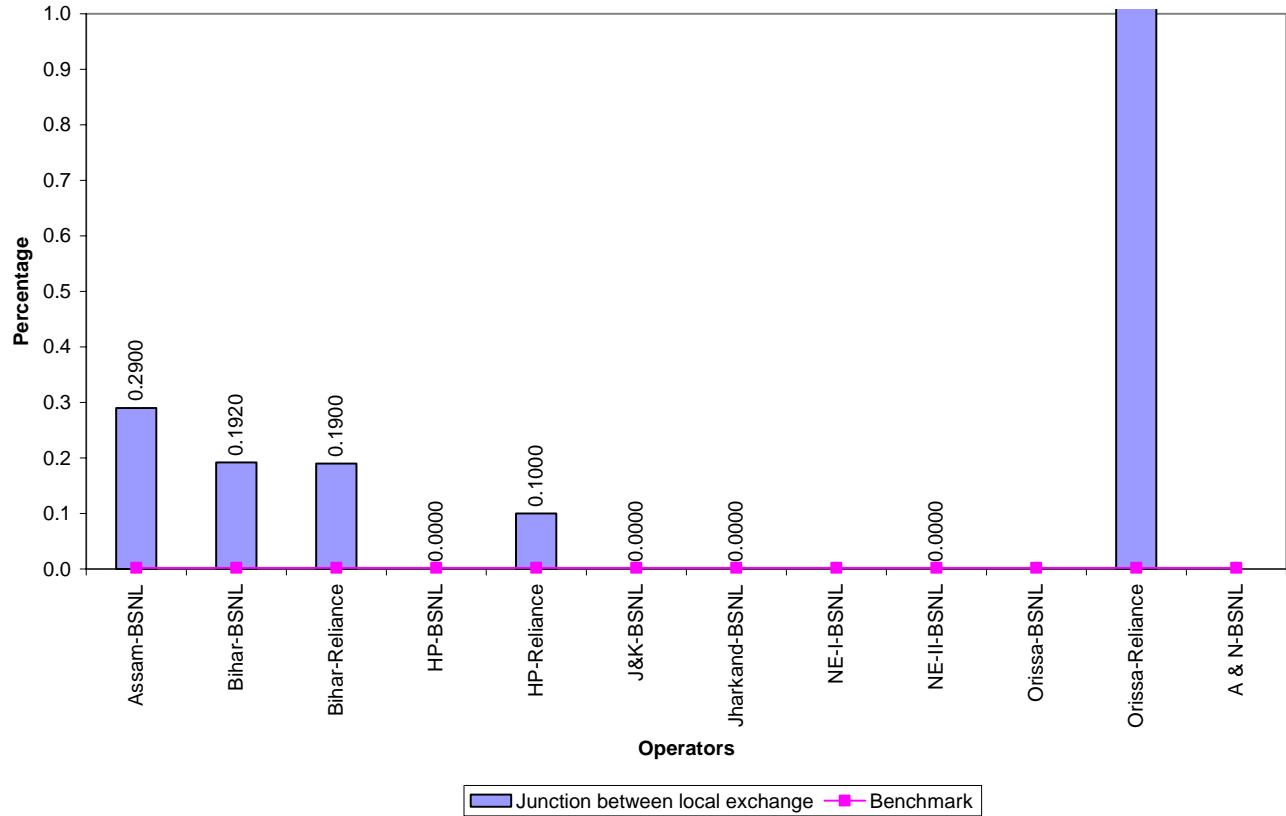
Audit was conducted for 12 operator(s). Eight operator(s) are not meeting the benchmark parameter. No incidences were observed for Rel Comm Bihar, HP, Orissa.

Mean Time for Repair



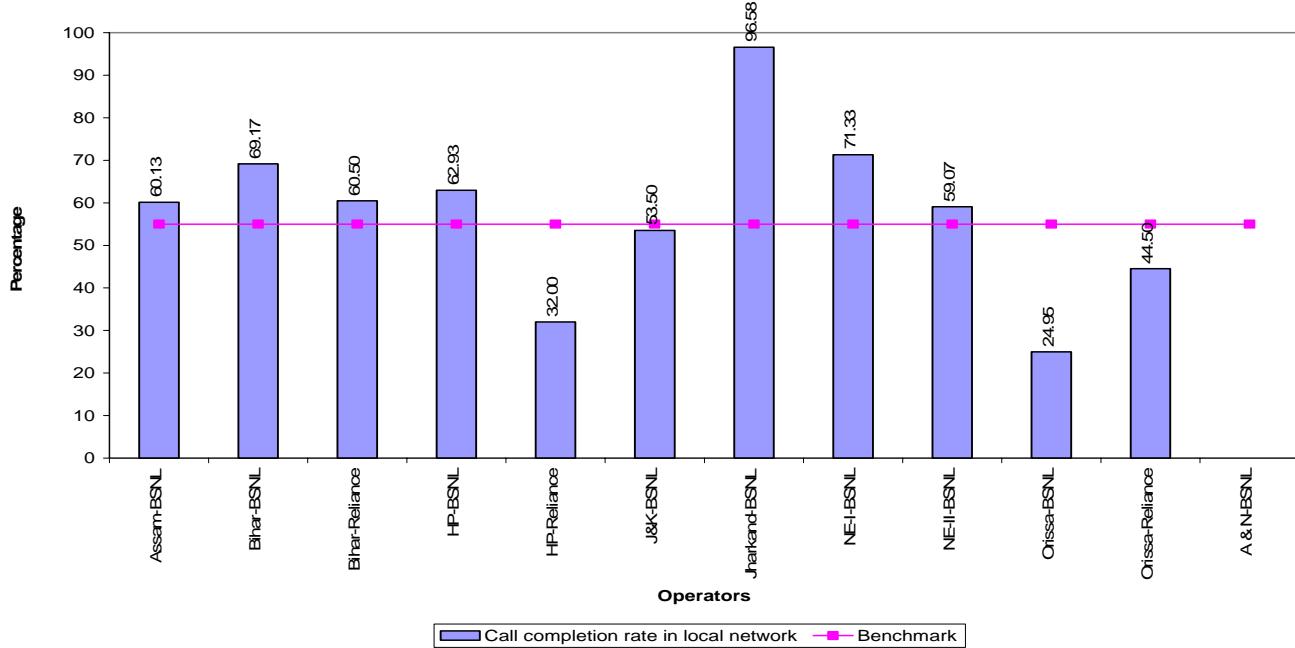
Audit was conducted for 12 operators. Six operator(s) are not meeting the benchmark parameter. No incidences were observed for Rel Comm Bihar, HP, Orissa are NI cases

Junction to Local Exchange



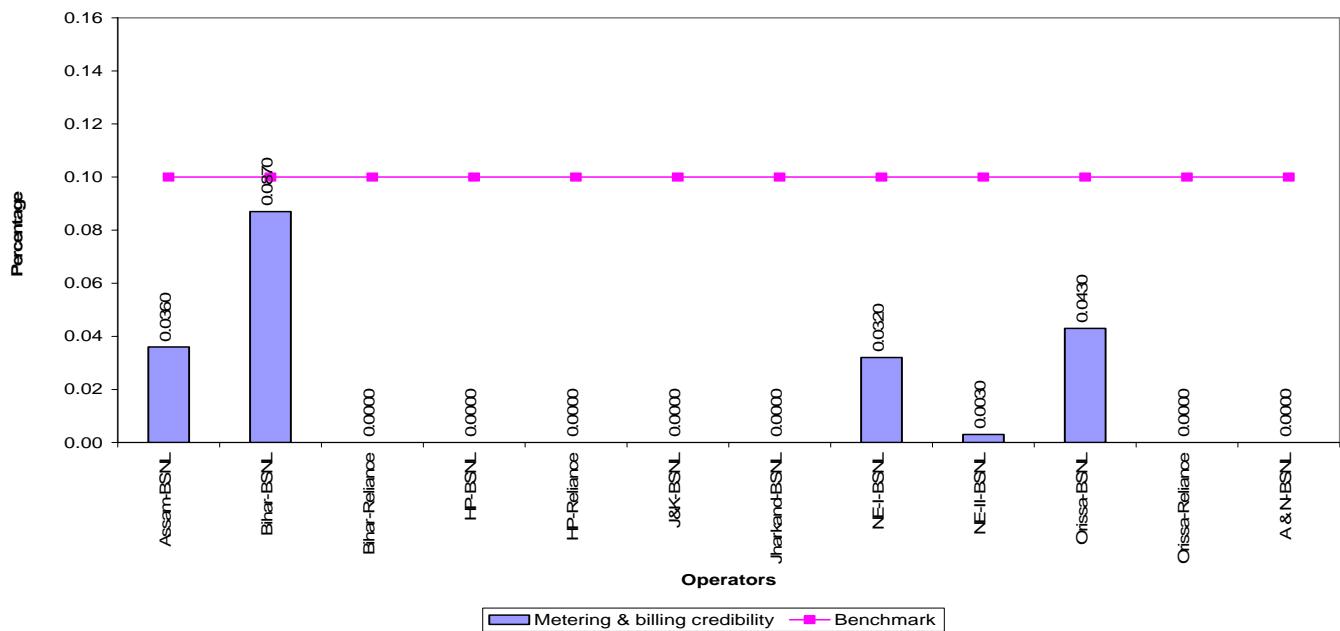
Audit was conducted for 12 operators. Five operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-NE1, BSNL-Orrisa & BSNL-A&N

Intra office

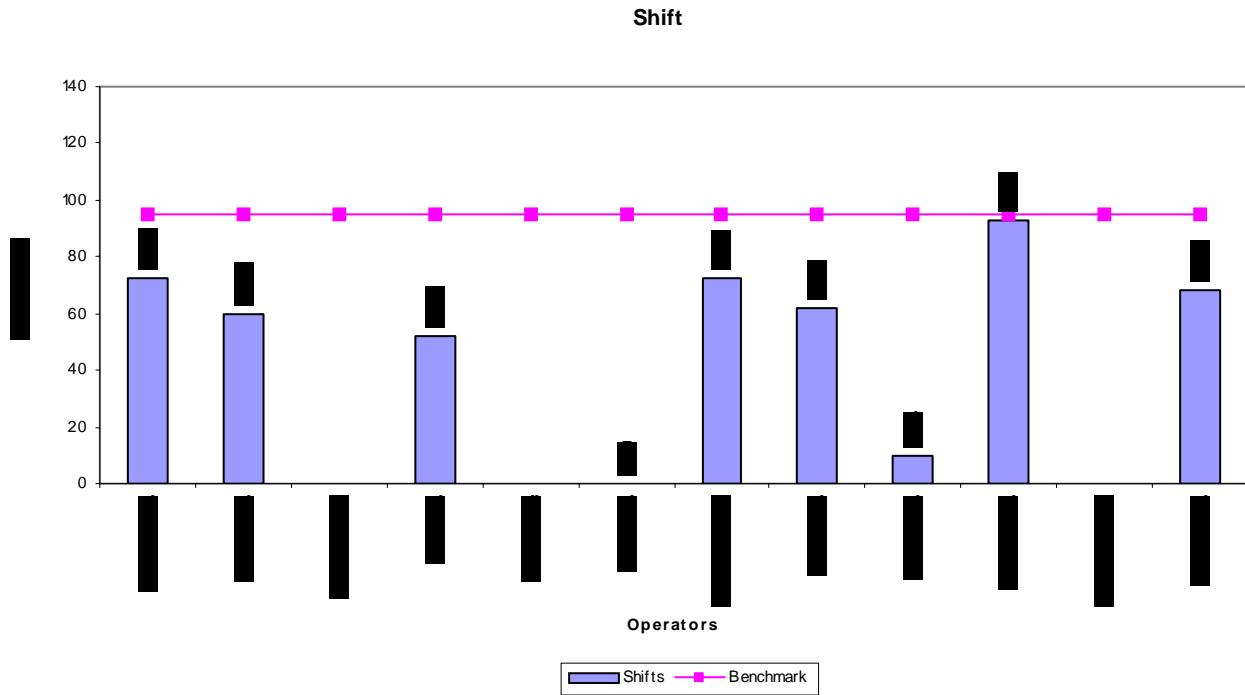


Audit was conducted for 12 operators. Four operator(s) are not meeting the benchmark parameter. Data not provided by BSNL-A&N

Metering & Billing Credibility

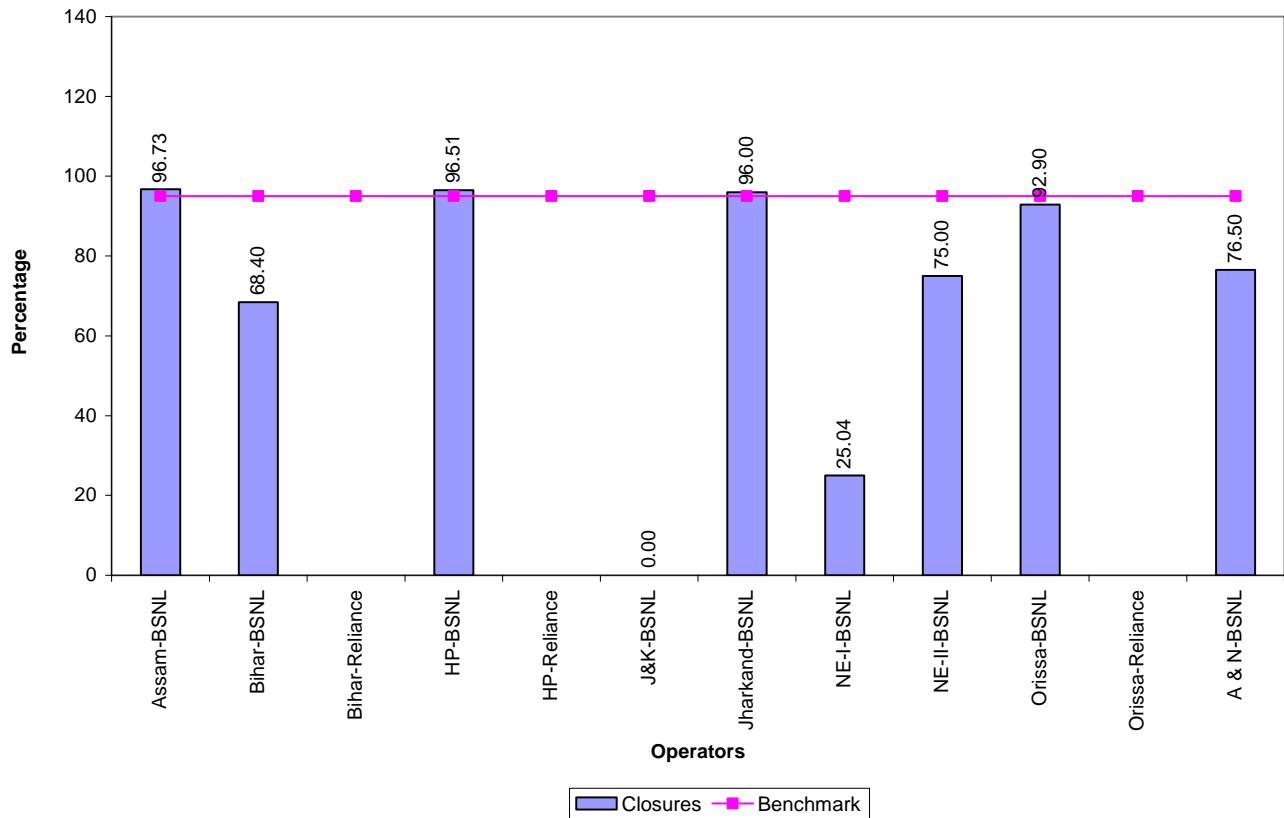


Audit was conducted for 12 operators. All operator(s) are meeting the benchmark parameter.



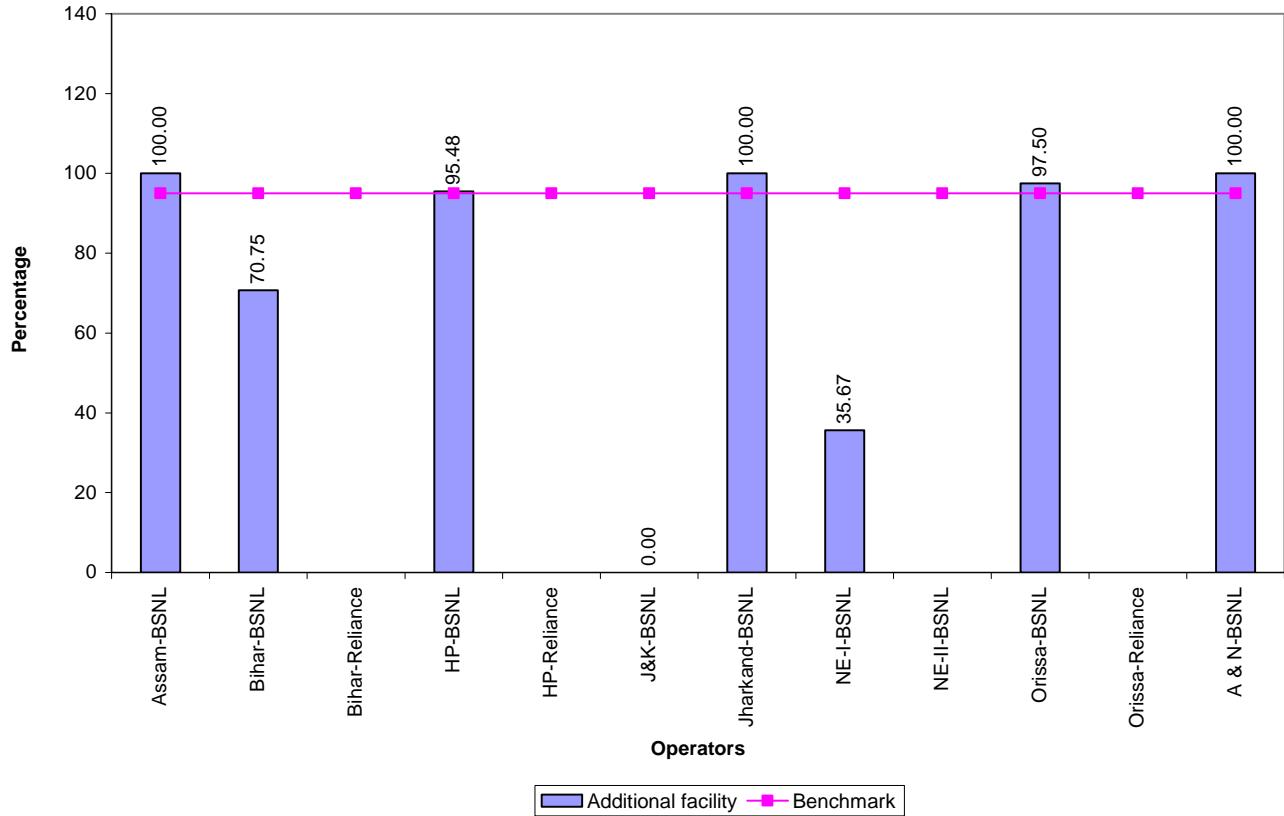
Audit was conducted for 12 operators. Nine operator(s) are not meeting the benchmark parameter. NI cases for Rel comm –Bihar, HP&Orissa

Closure

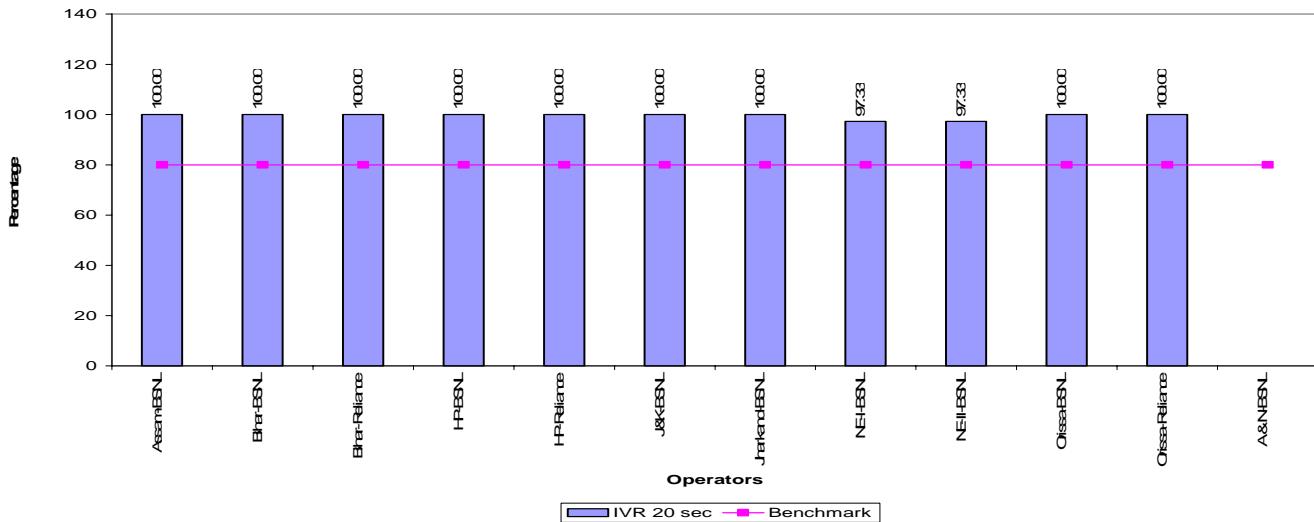


Audit was conducted for 12 operators. Three operator(s) are meeting the benchmark parameter. NI cases for Rel comm –Bihar,HP & Orissa .

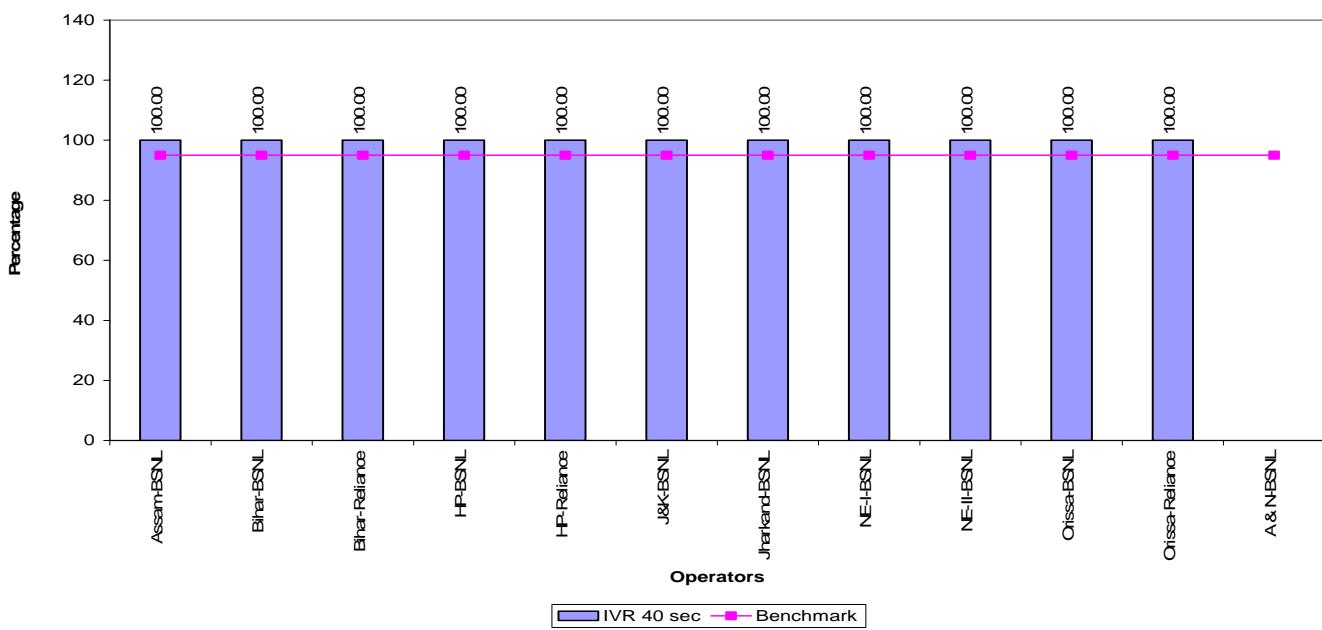
Additional Facility



Audit was conducted for 12 operators. Three operator(s) are not meeting the benchmark parameter. NI cases for Rel comm –Bihar, HP & Orissa and BSNL – NE II

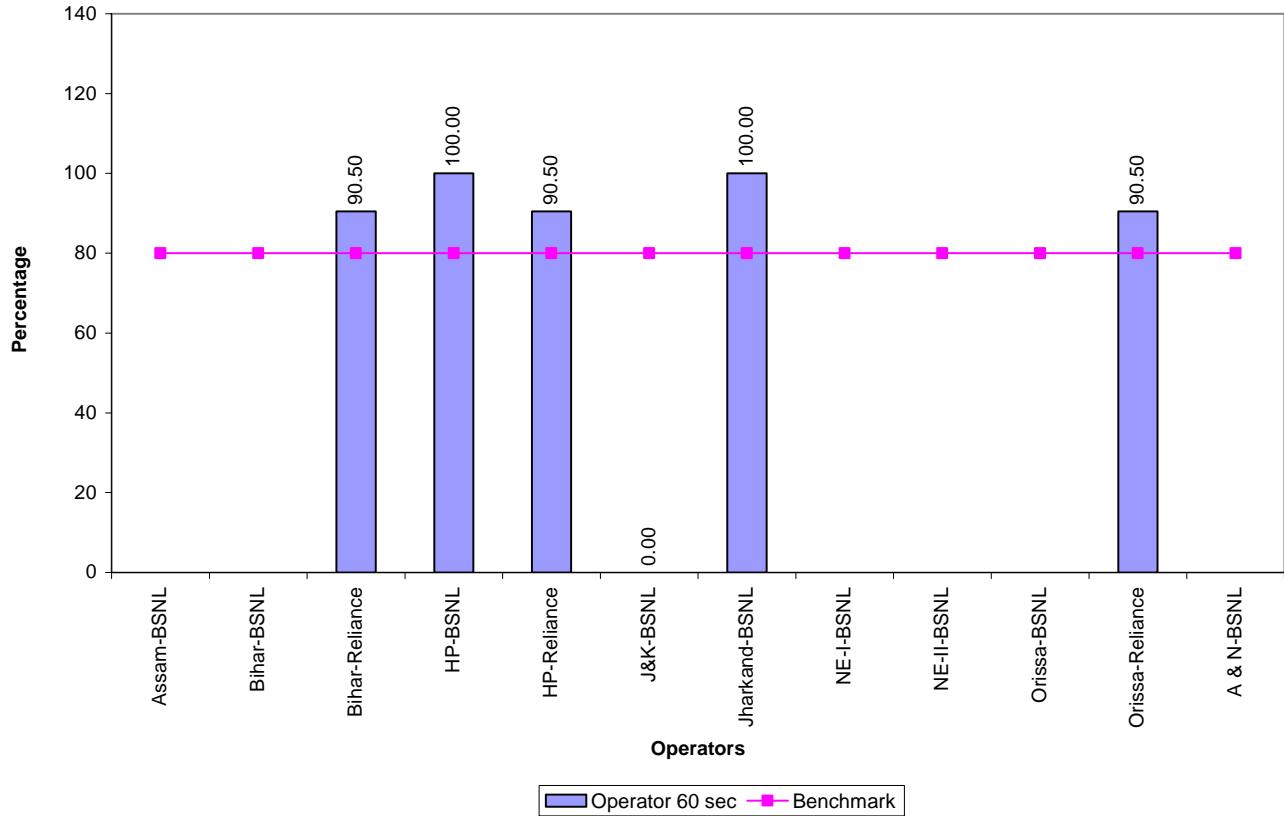
IVR 20 Seconds

Audit was conducted for 12 operators. All are meeting the benchmark parameter. Data not available for BSNL – A&N.

IVR 40 Seconds

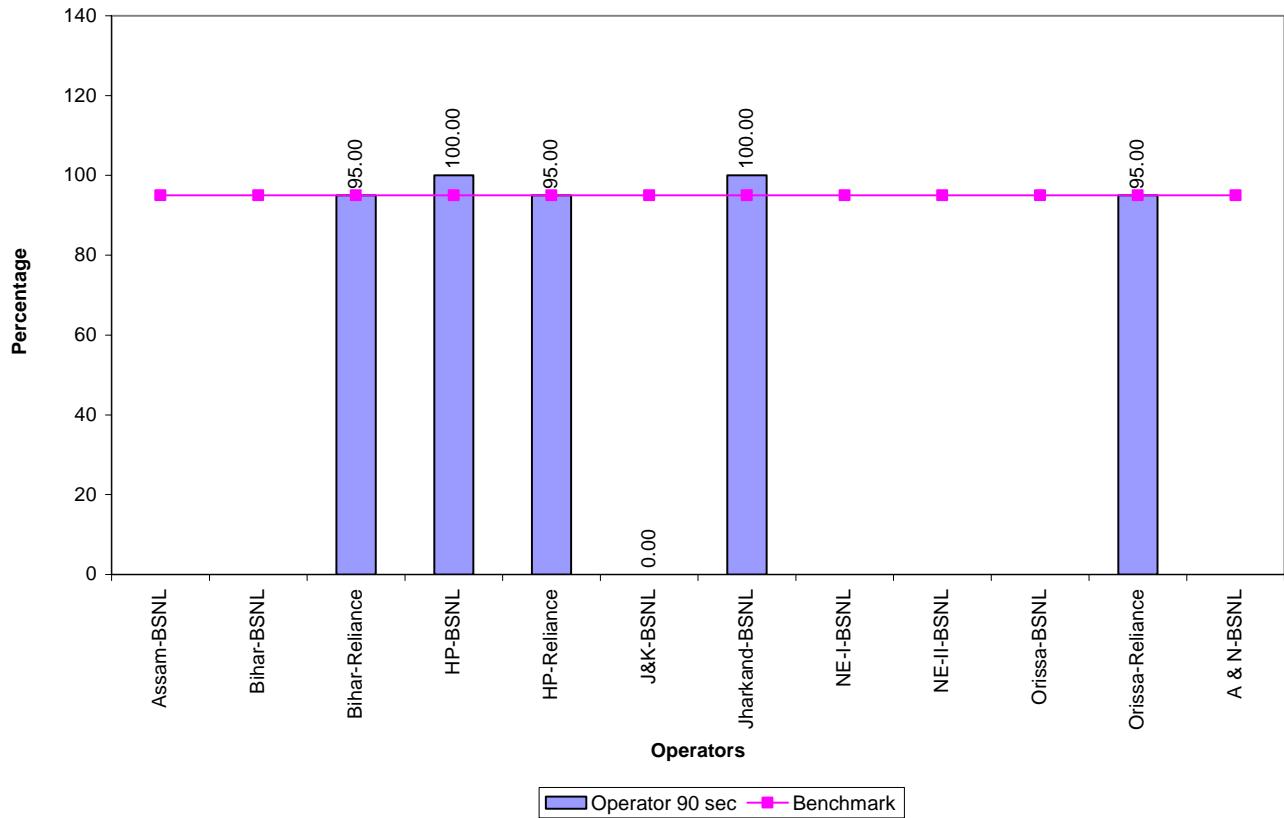
Audit was conducted for 12 operators. All are meeting the benchmark parameter. Data not available for BSNL – A&N.

Operator 60 Seconds



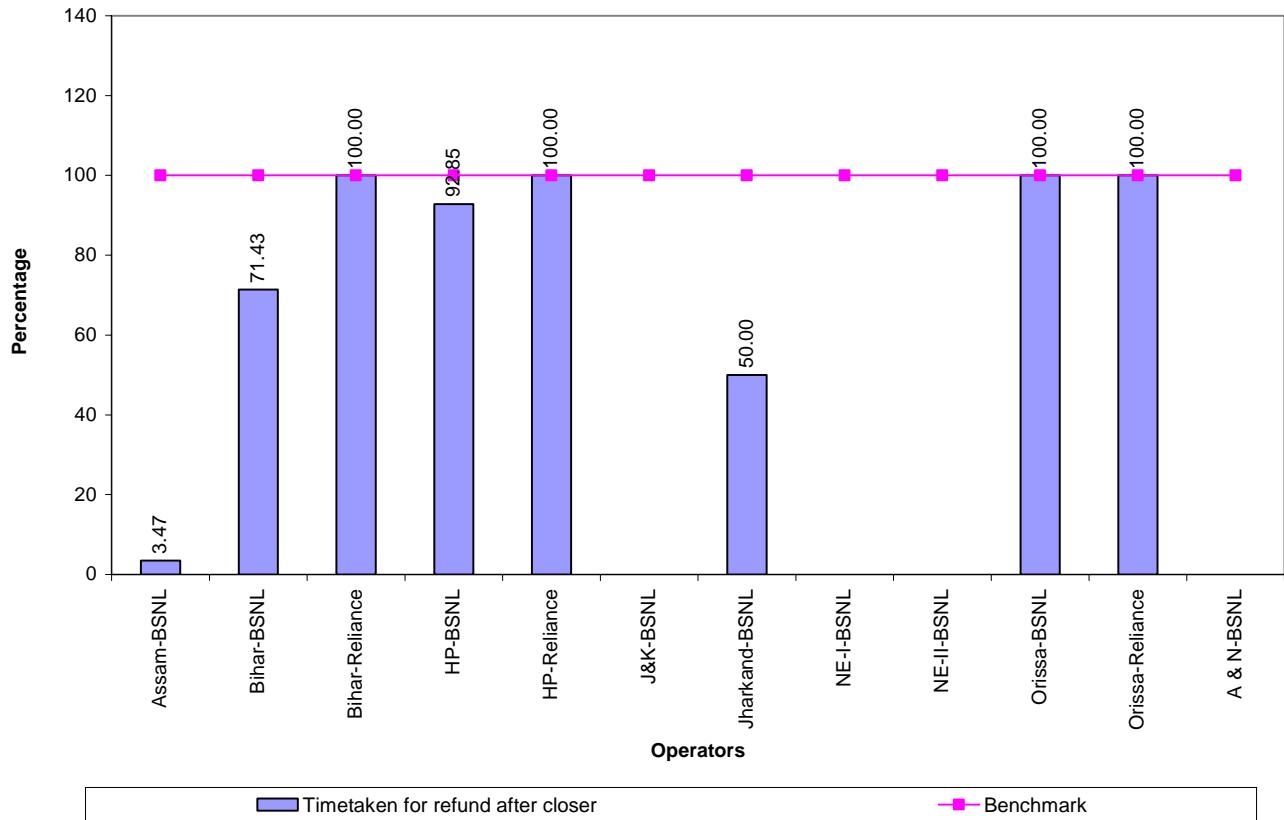
Audit was conducted for 12 operators. One operator is not meeting the benchmark parameter. Data not available for BSNL – Assam, Bihar, NE I, NE II, Orissa and A&N.

Operator 90 Seconds



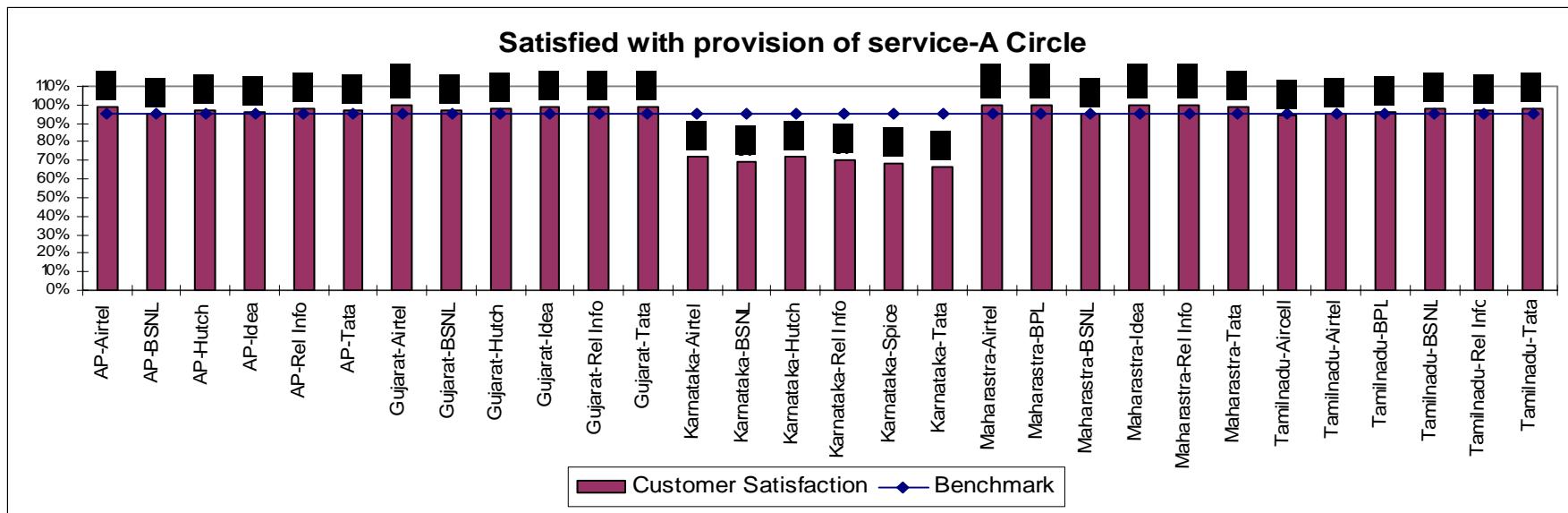
Audit was conducted for 12 operators. One operator is not meeting the benchmark parameter. Data not available for BSNL – Assam, Bihar, NE I, NE II, Orissa and A&N.

Time taken for refund of deposits after closure

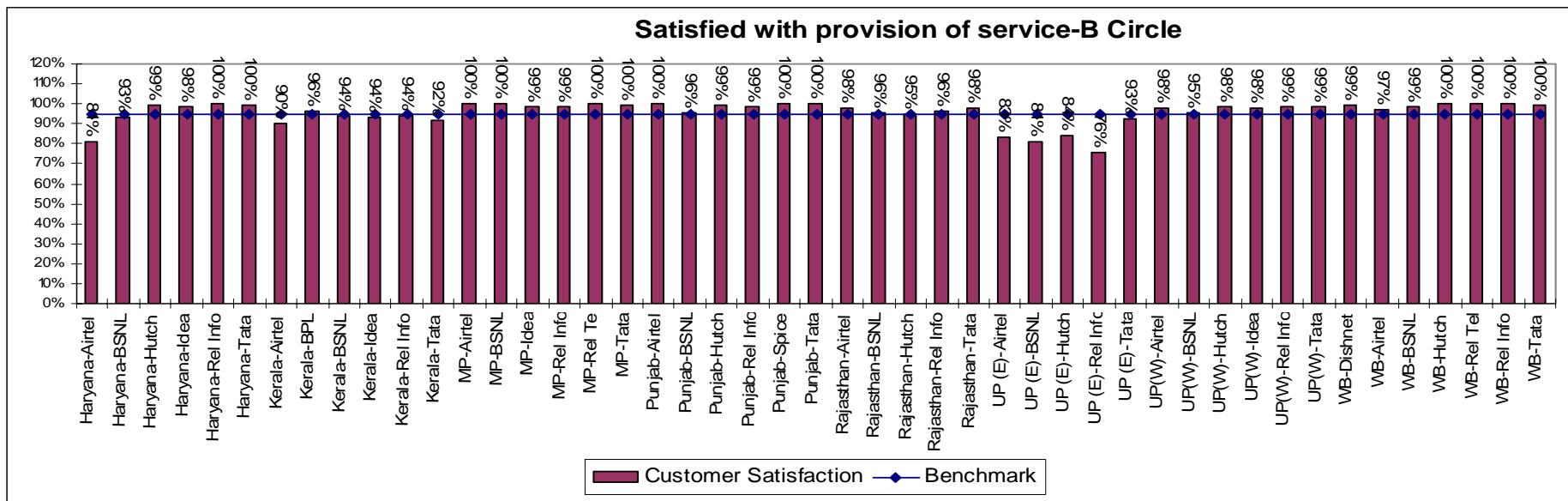


Audit was conducted for 12 operators. Four operator(s) are not meeting the benchmark parameter. Data not provided by BSNL- NE-1, NE-2 & A &N ,NI for BSNL-J&K.

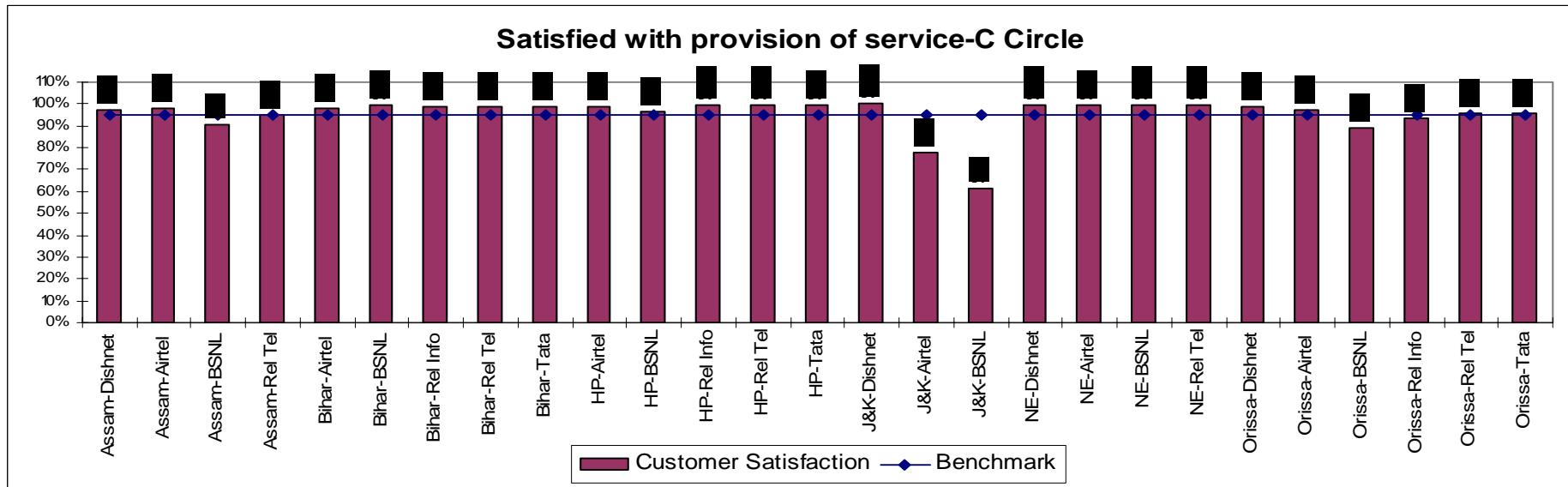
4.3 CSS – CELLULAR



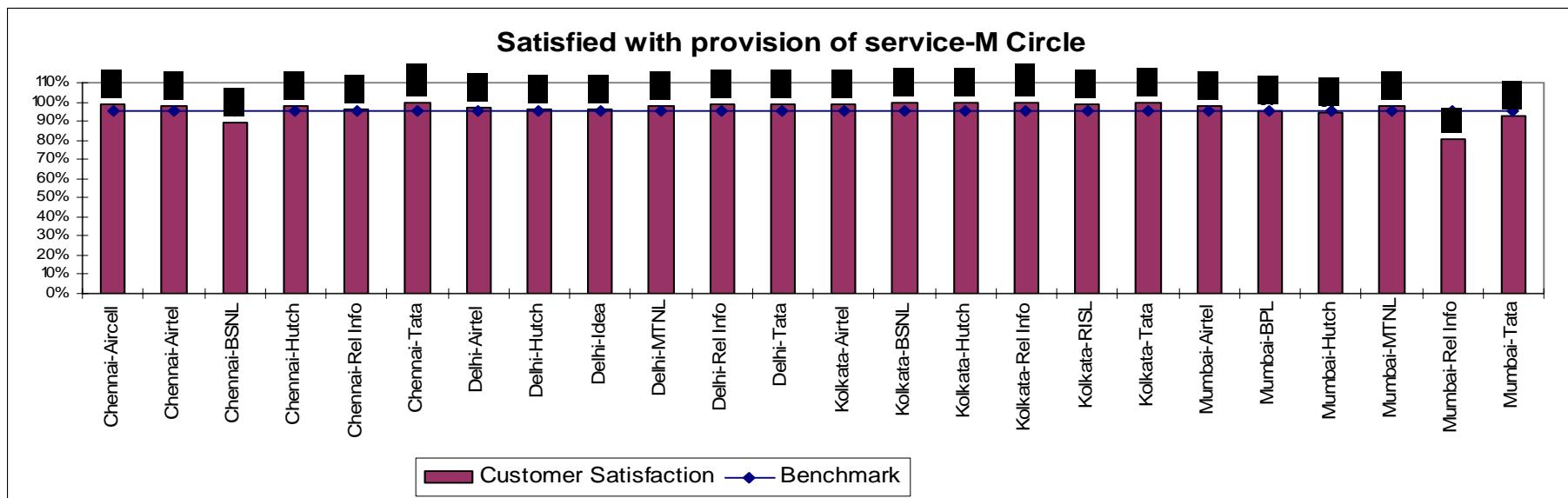
Audit Conducted for 30 Operators. 6 Operators are not meeting the benchmark.



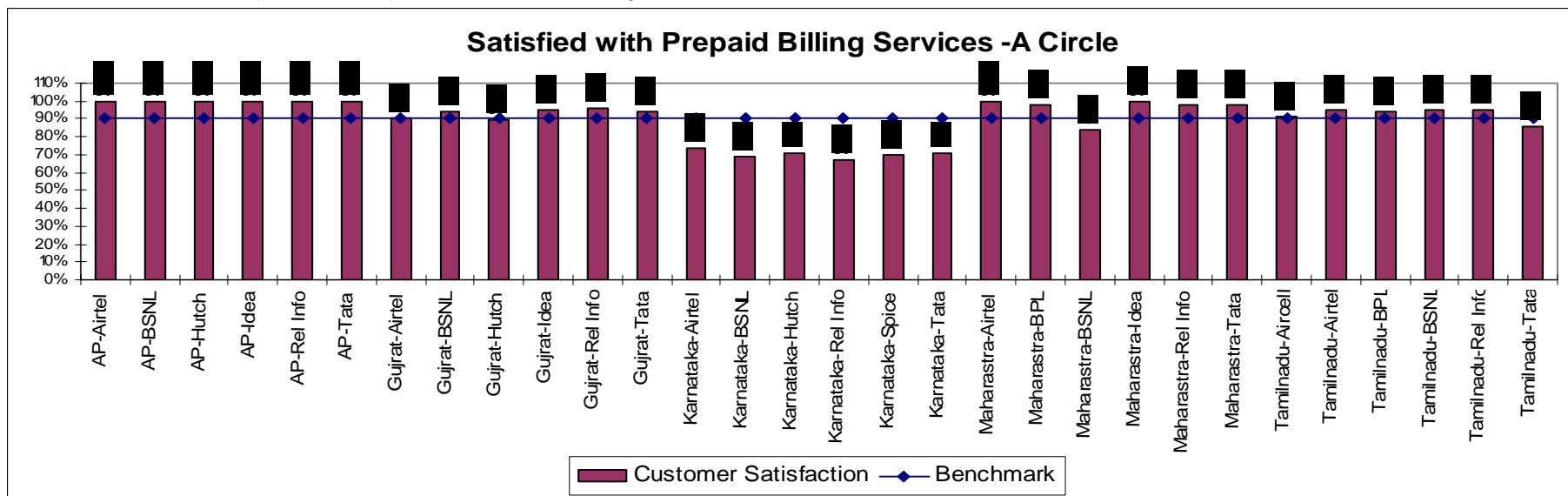
Audit Conducted for 47 Operators. 12 Operators are not meeting the benchmark.



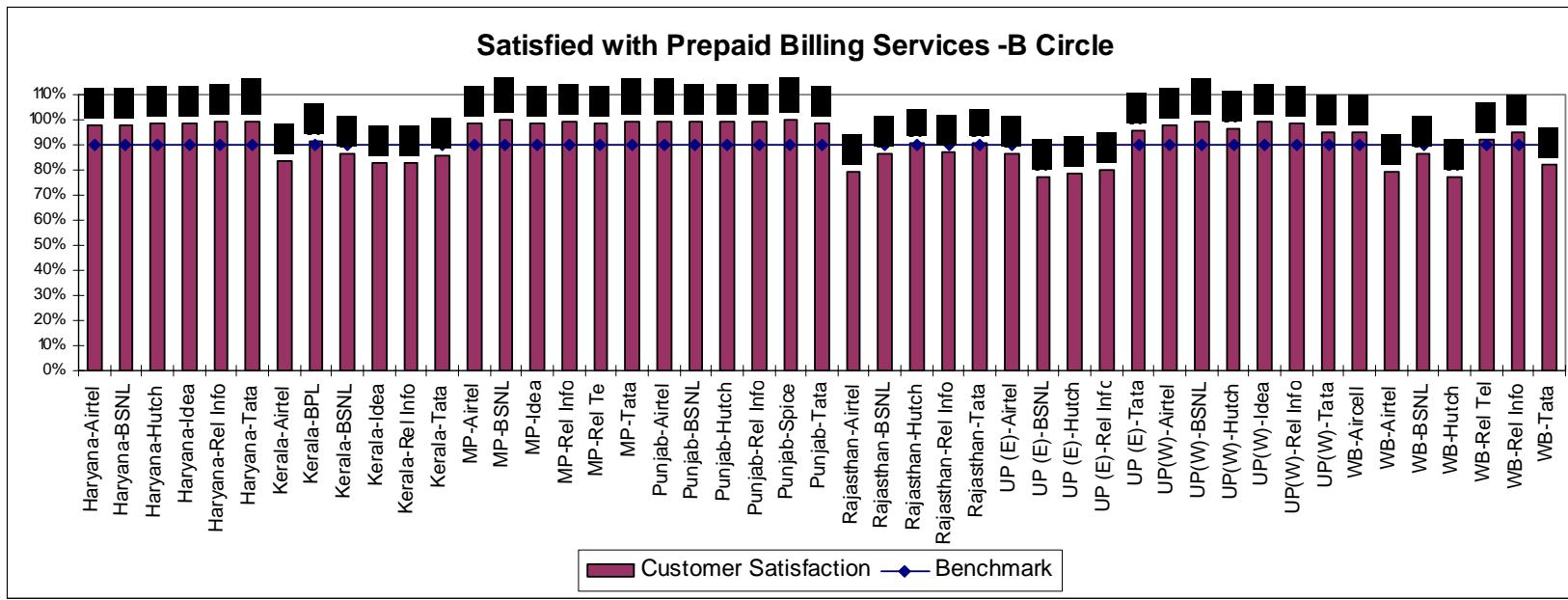
Audit Conducted for 27 Operators. 5 Operators are not meeting the benchmark.



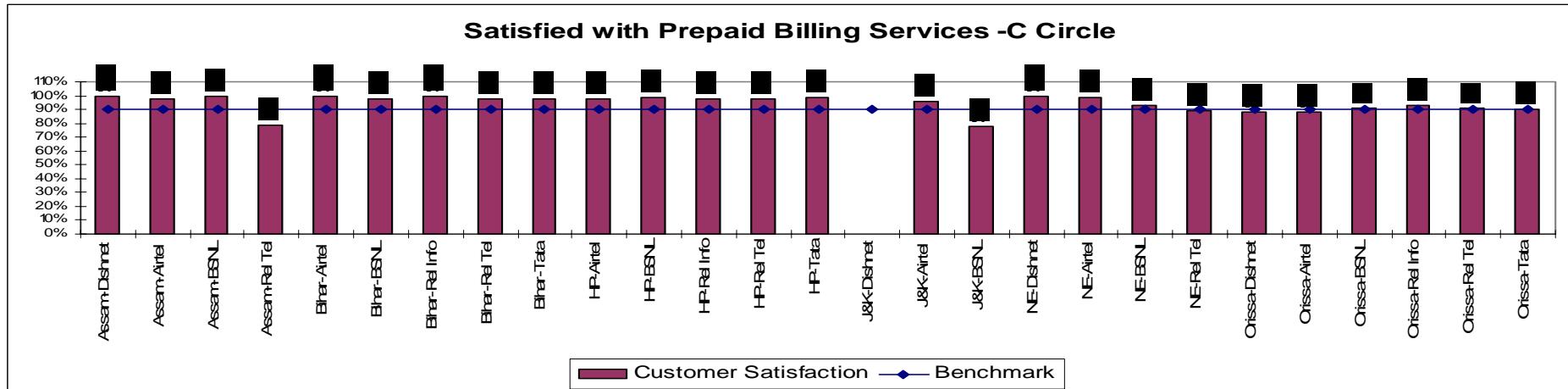
Audit Conducted for 24 Operators. 3 Operators are not meeting the benchmark



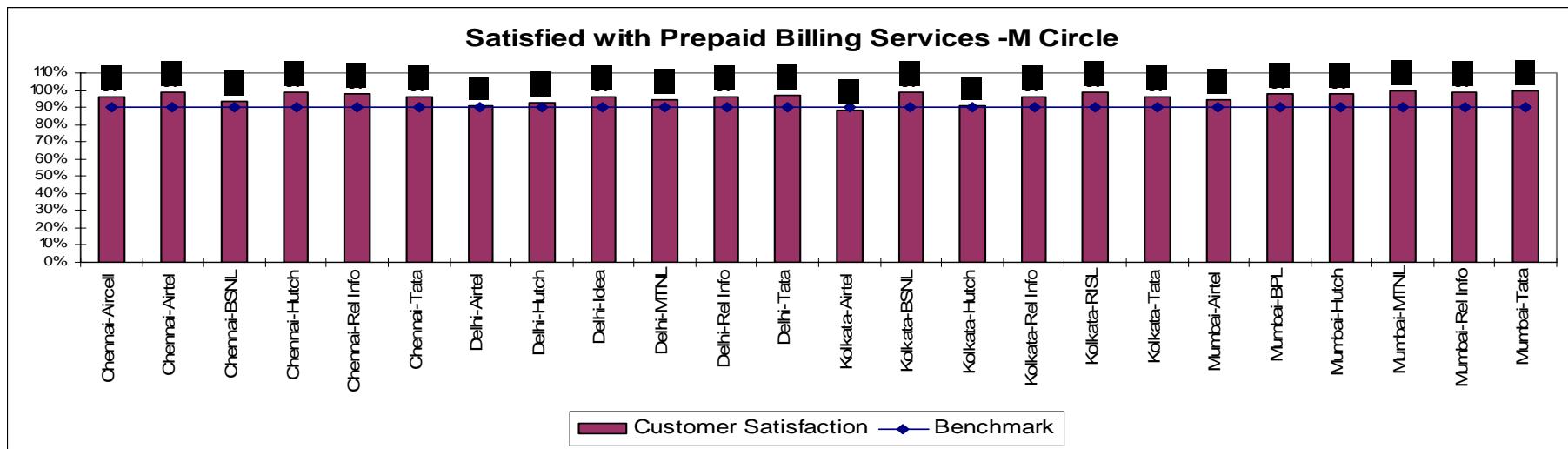
Audit Conducted for 30 Operators. 9 Operators are not meeting the benchmark



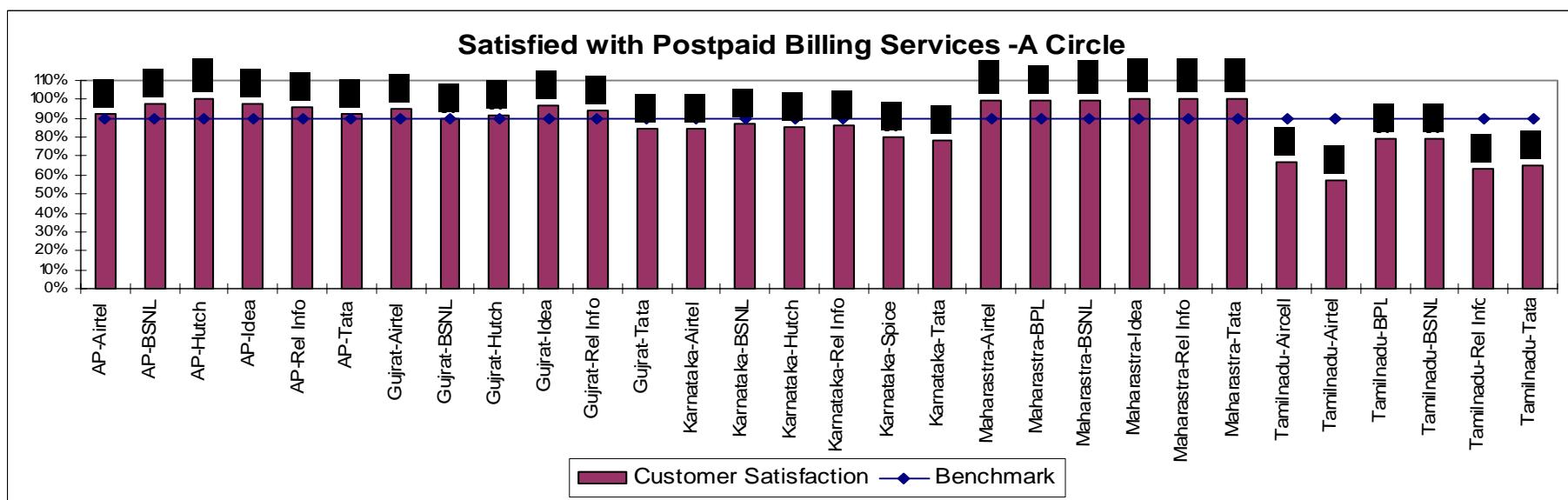
Audit Conducted for 47 Operators. 16 Operators are not meeting the benchmark



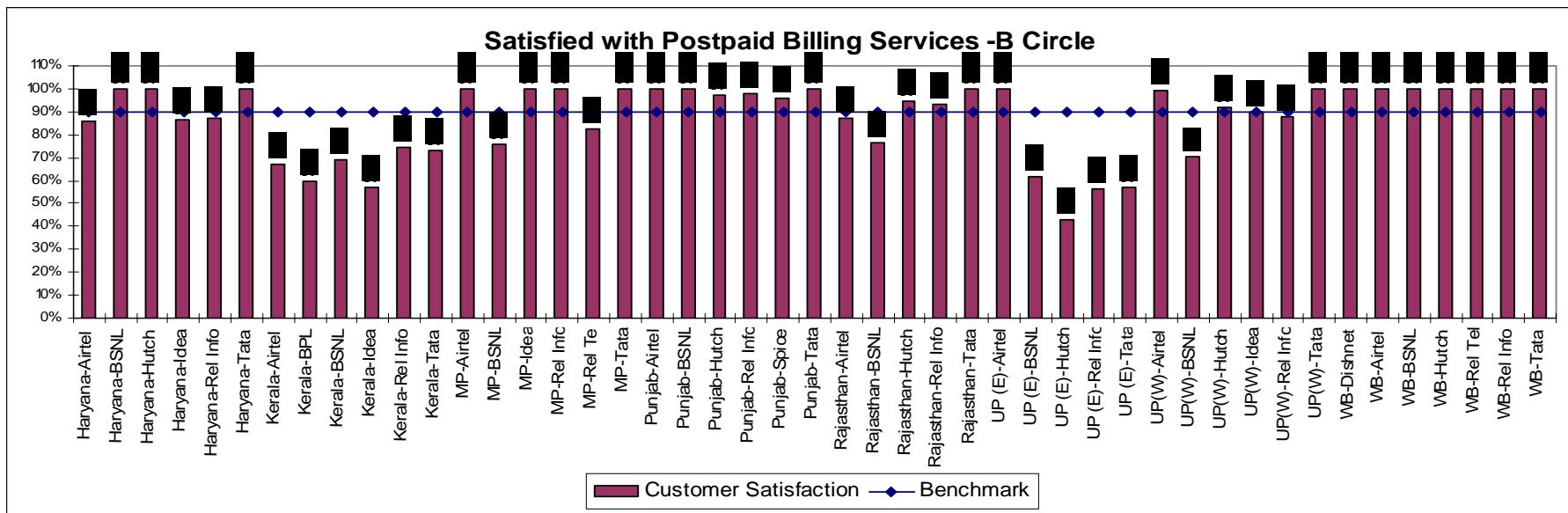
Audit Conducted for 27 Operators. 5 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table 3.6.2



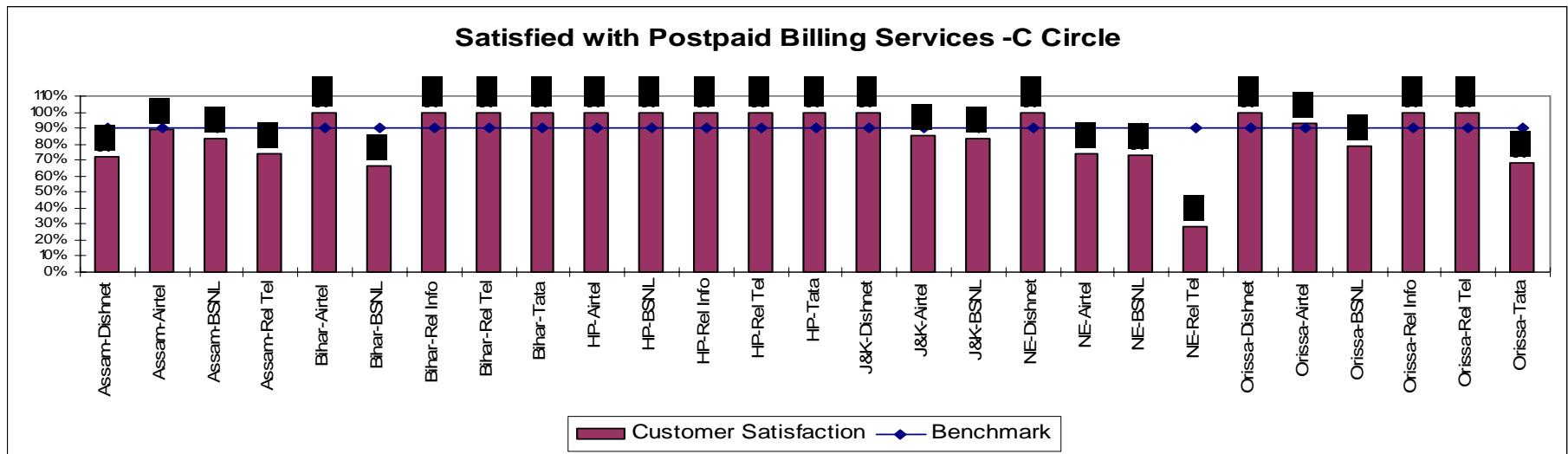
Audit Conducted for 24 Operators. 1 operator is not meeting the benchmark



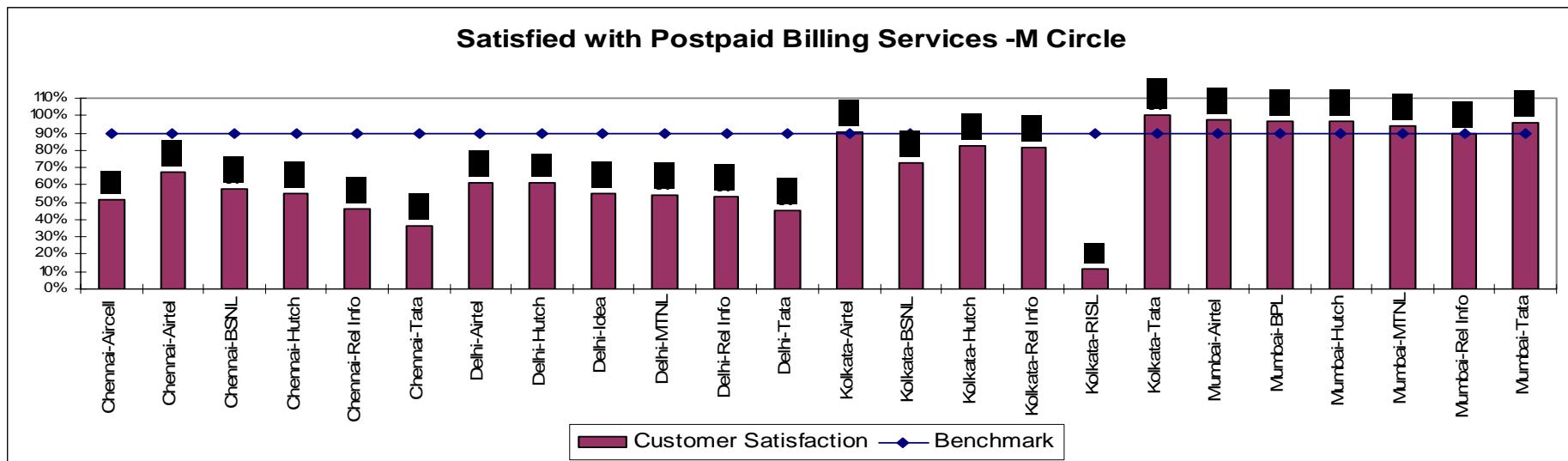
Audit Conducted for 30 Operators. 13 Operators are not meeting the benchmark



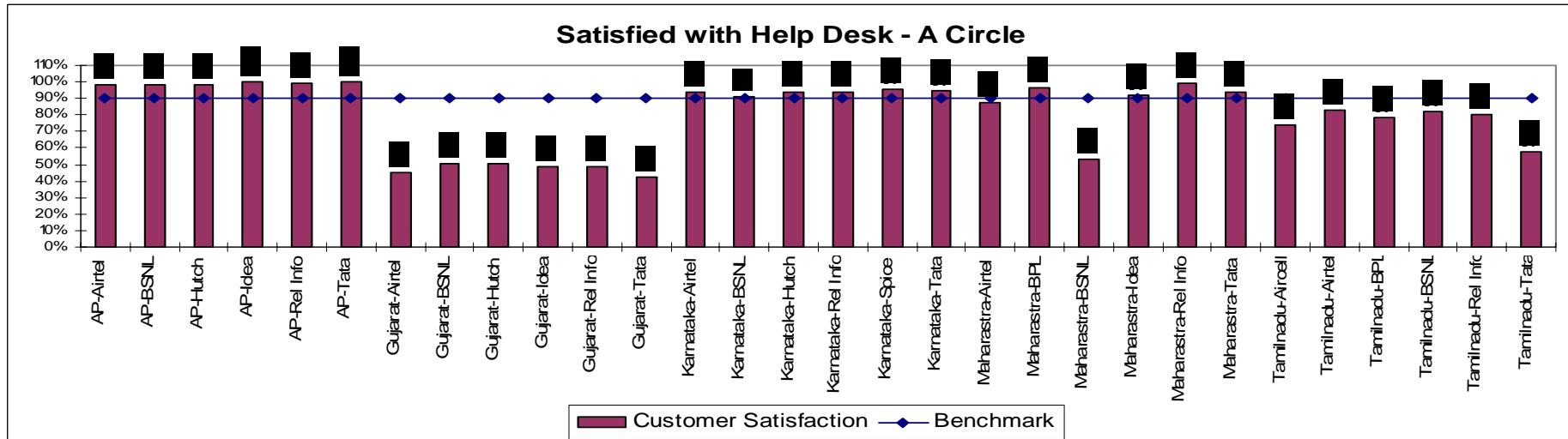
Audit Conducted for 47 Operators. 19 Operators are not meeting the benchmark



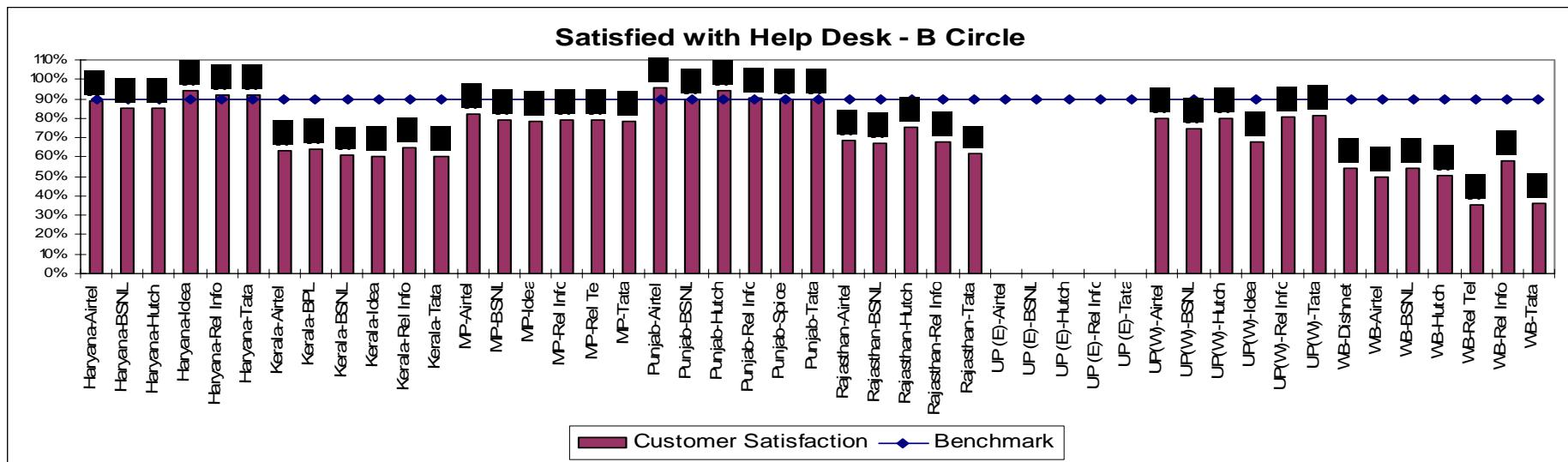
Audit Conducted for 27 Operators. 12 Operators are not meeting the benchmark



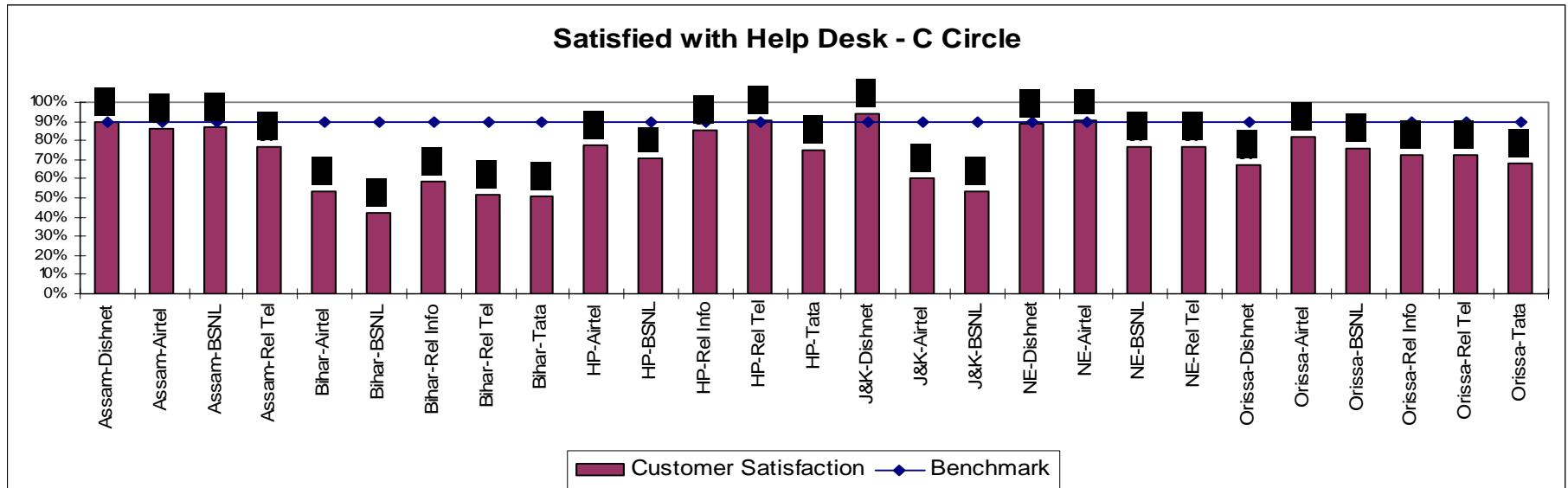
Audit Conducted for 24 Operators. 17 Operators are not meeting the benchmark



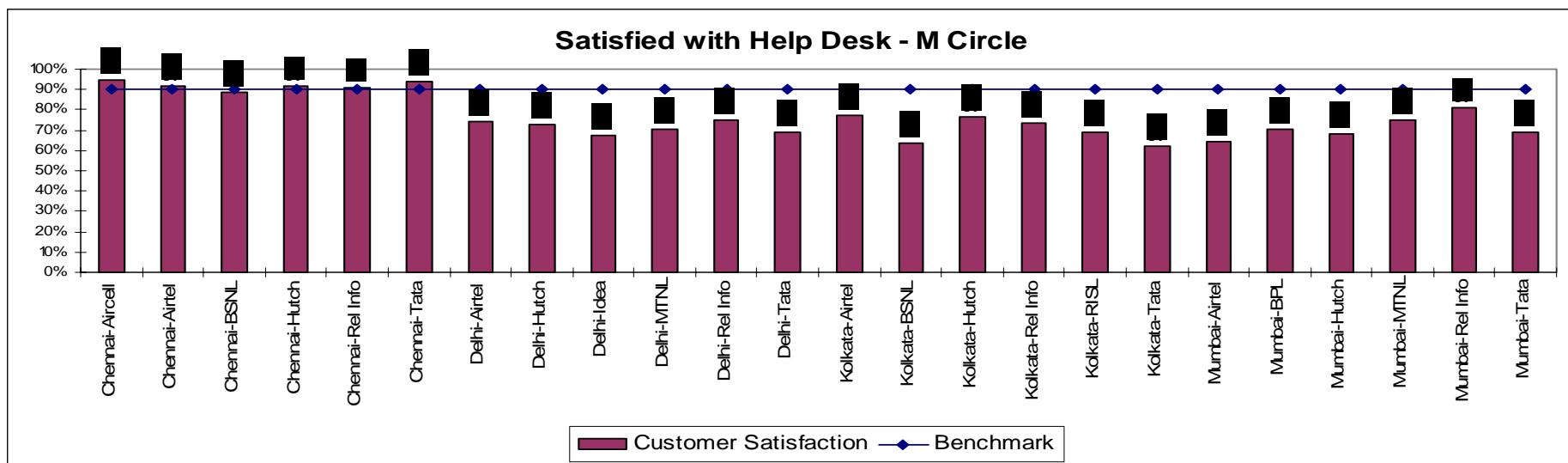
Audit Conducted for 30 Operators. 14 Operators are not meeting the benchmark



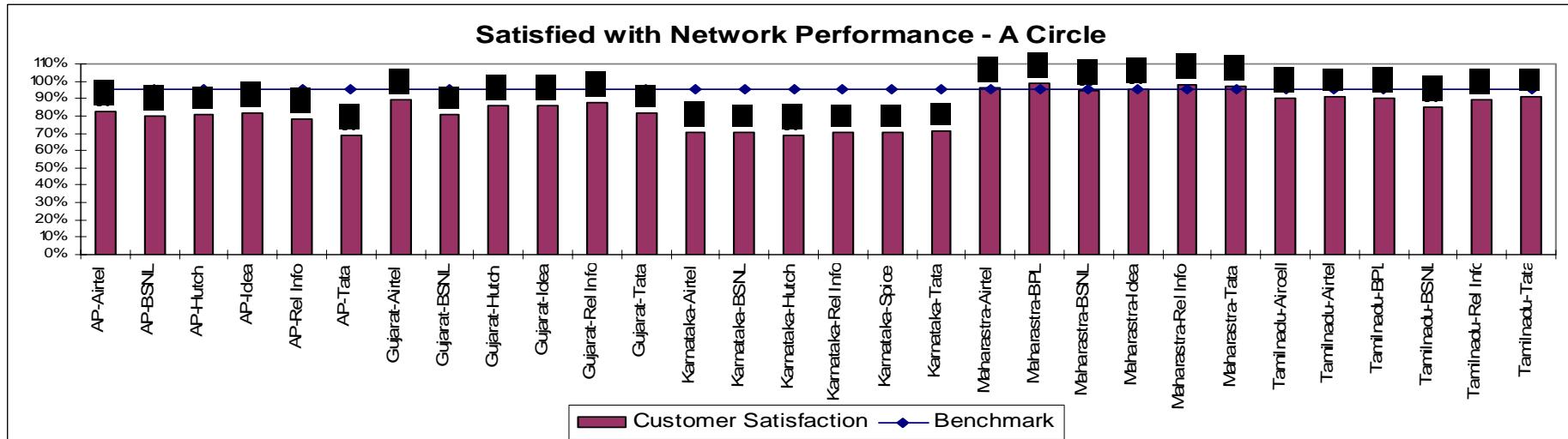
Audit Conducted for 47 Operators. 33 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



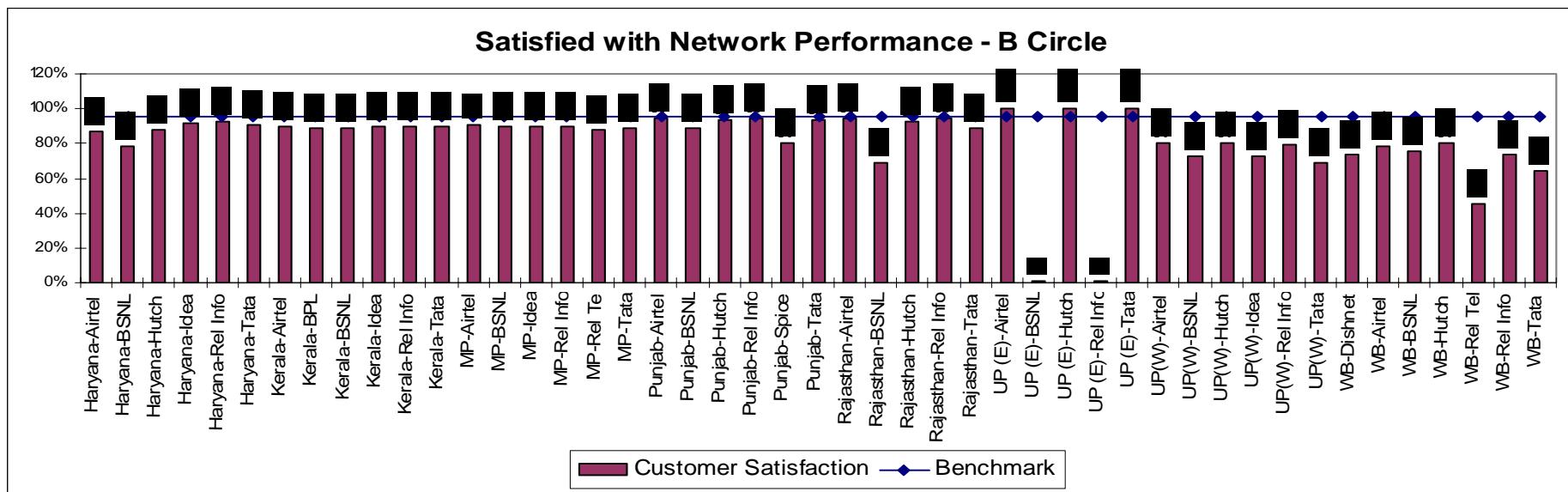
Audit Conducted for 27 Operators. 23 Operators are not meeting the benchmark



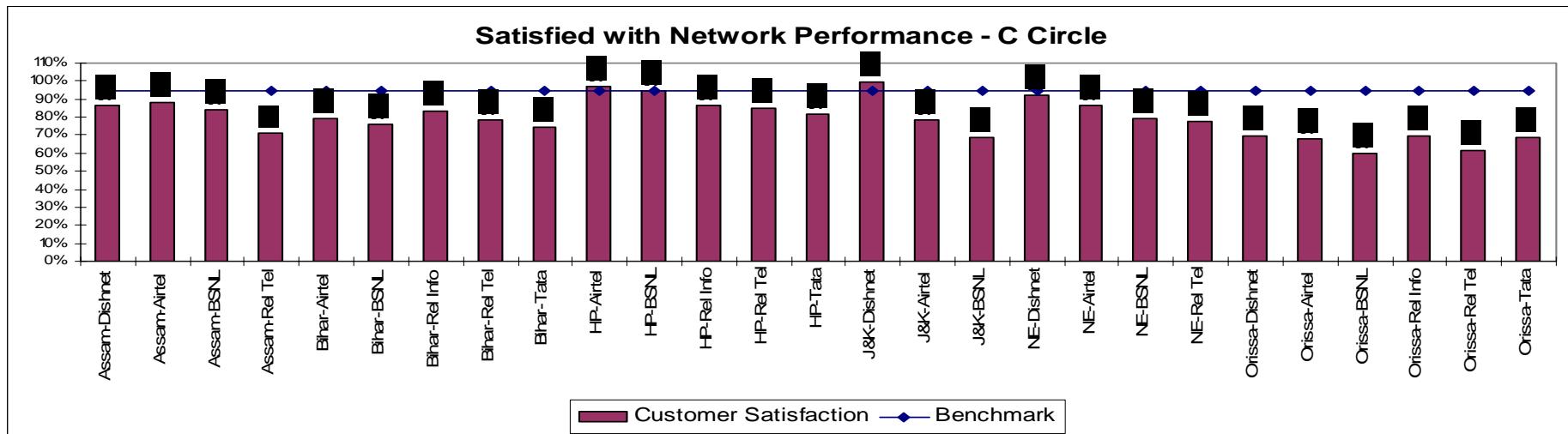
Audit Conducted for 24 Operators. 19 Operators are not meeting the benchmark



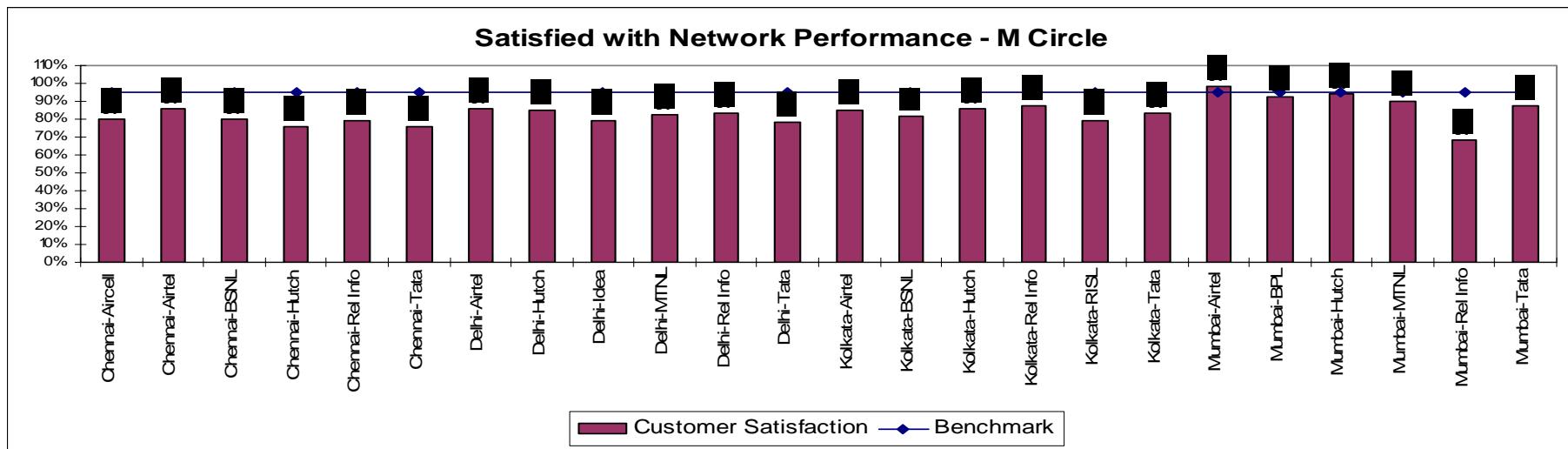
Audit Conducted for 30 Operators. 24 Operators are not meeting the benchmark



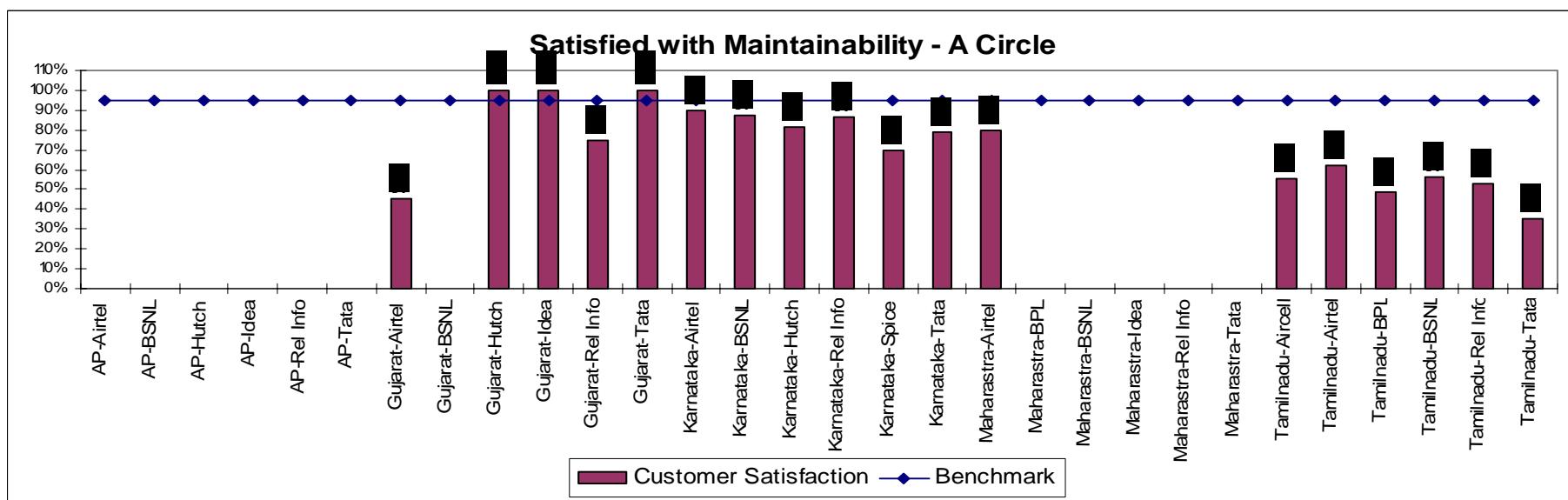
Audit Conducted for 47 Operators. 43 Operators are not meeting the benchmark



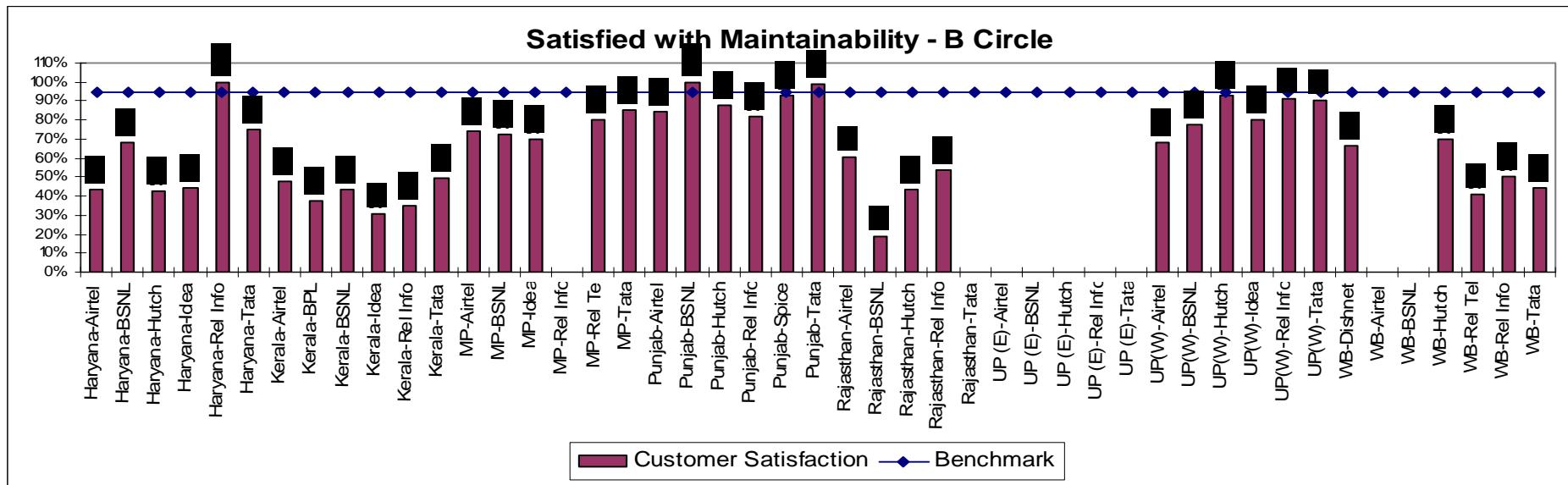
Audit Conducted for 27 Operators. 24 Operators are not meeting the benchmark



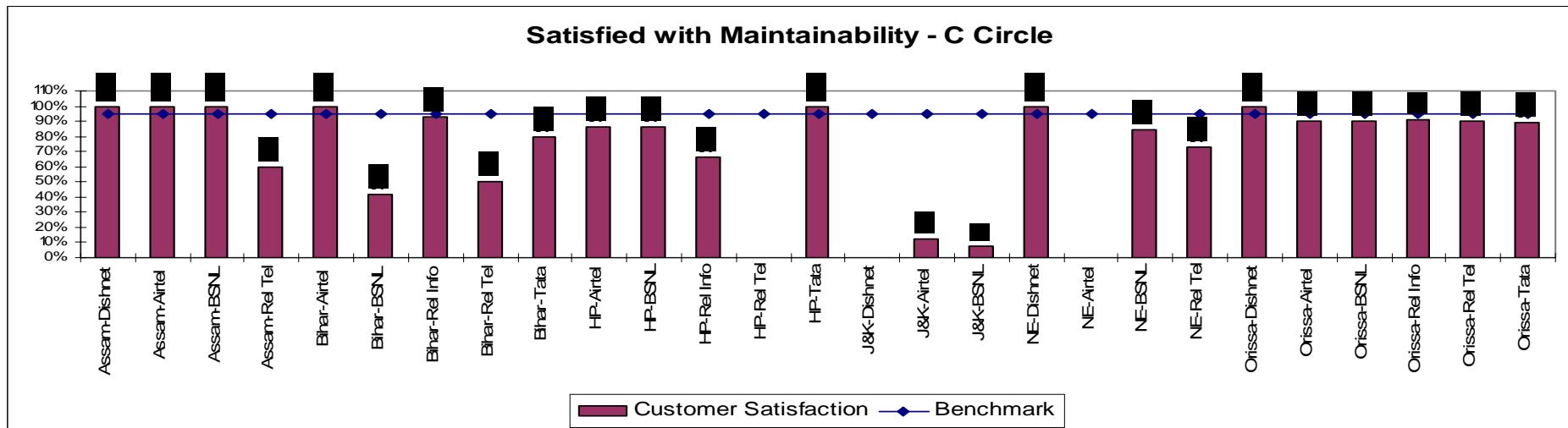
Audit Conducted for 24 Operators. 23 Operators are not meeting the benchmark



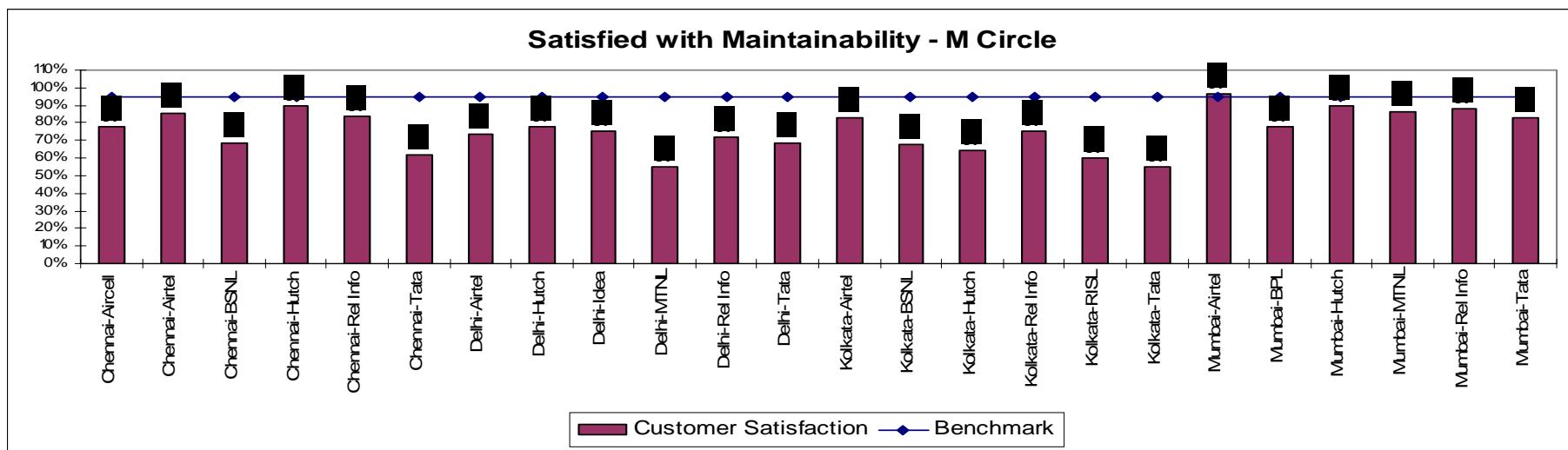
Audit Conducted for 30 Operators. 15 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



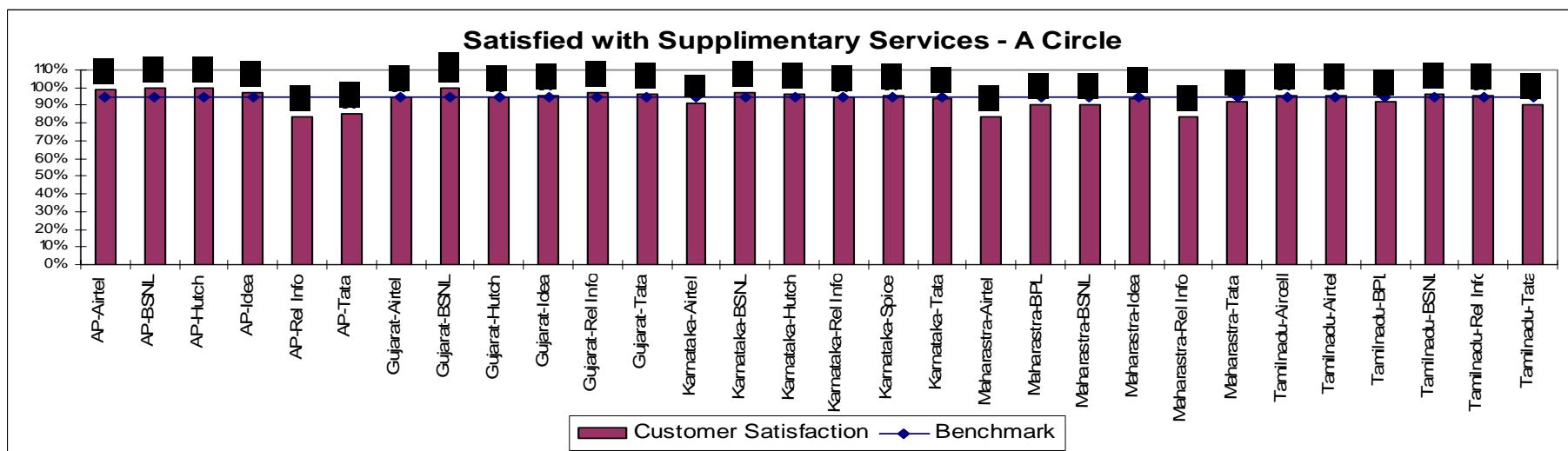
Audit Conducted for 47 Operators. 35 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



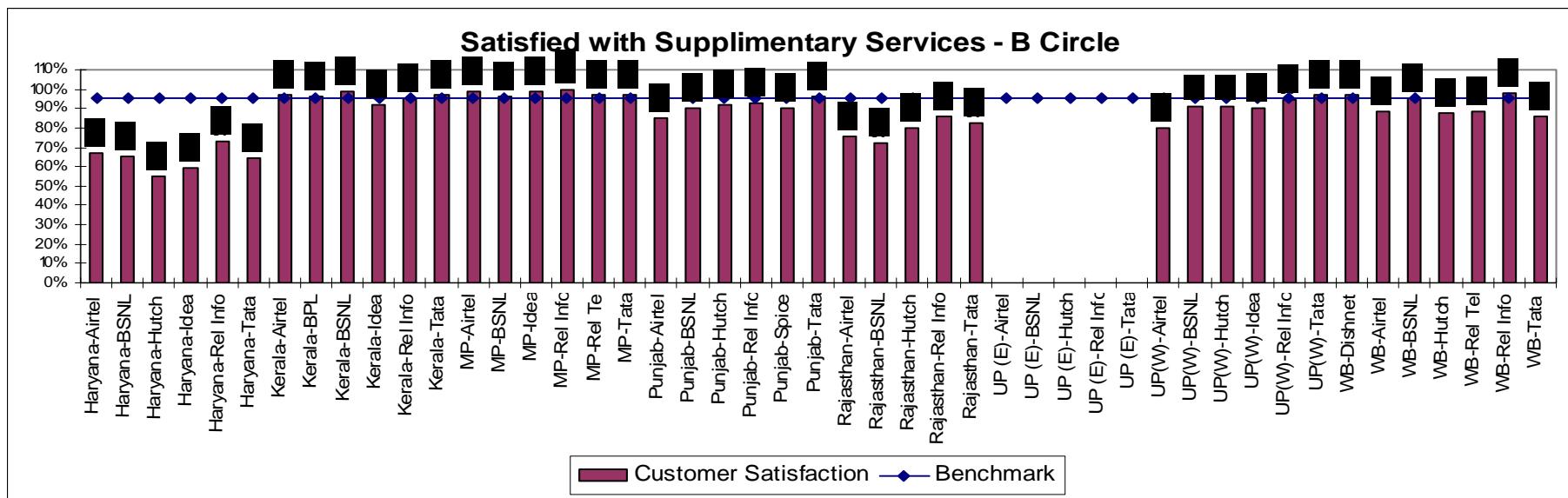
Audit Conducted for 27 Operators. 13 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



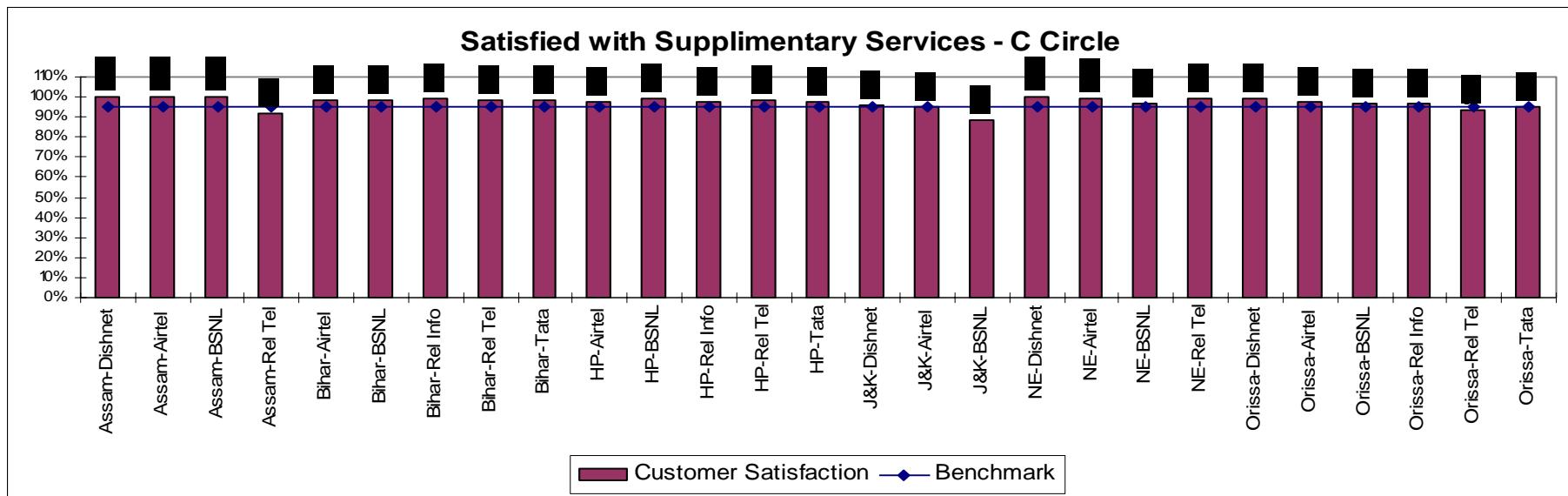
Audit Conducted for 24 Operators. 23 Operators are not meeting the benchmark



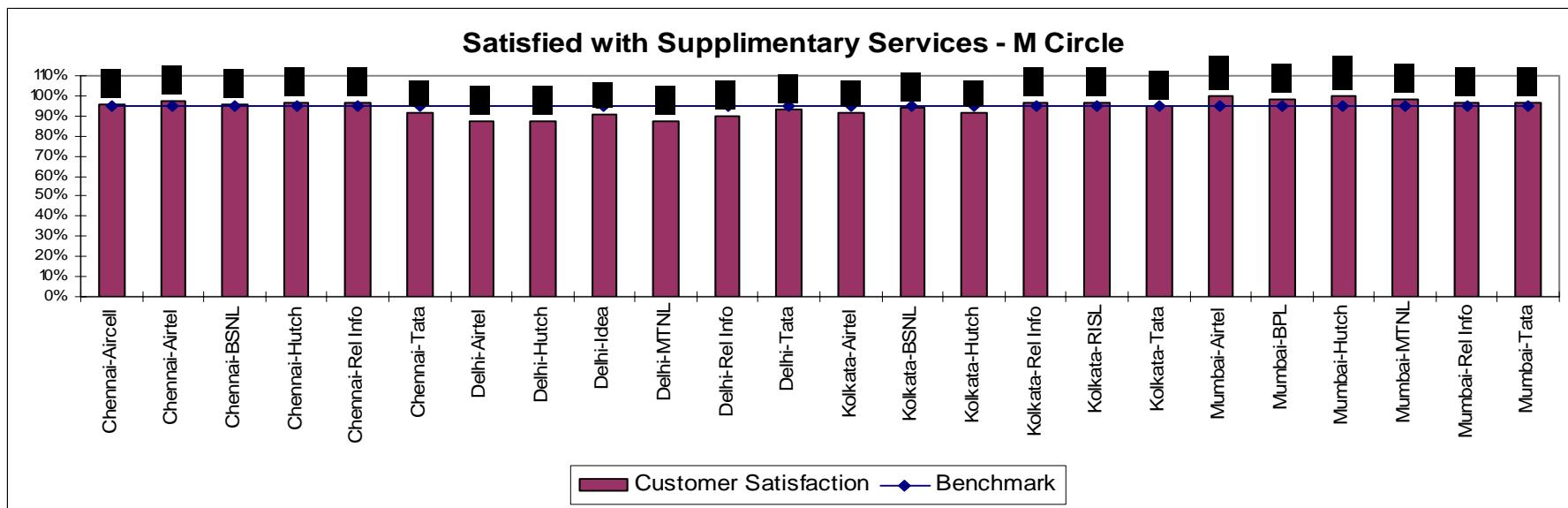
Audit Conducted for 30 Operators. 13 Operators are not meeting the benchmark



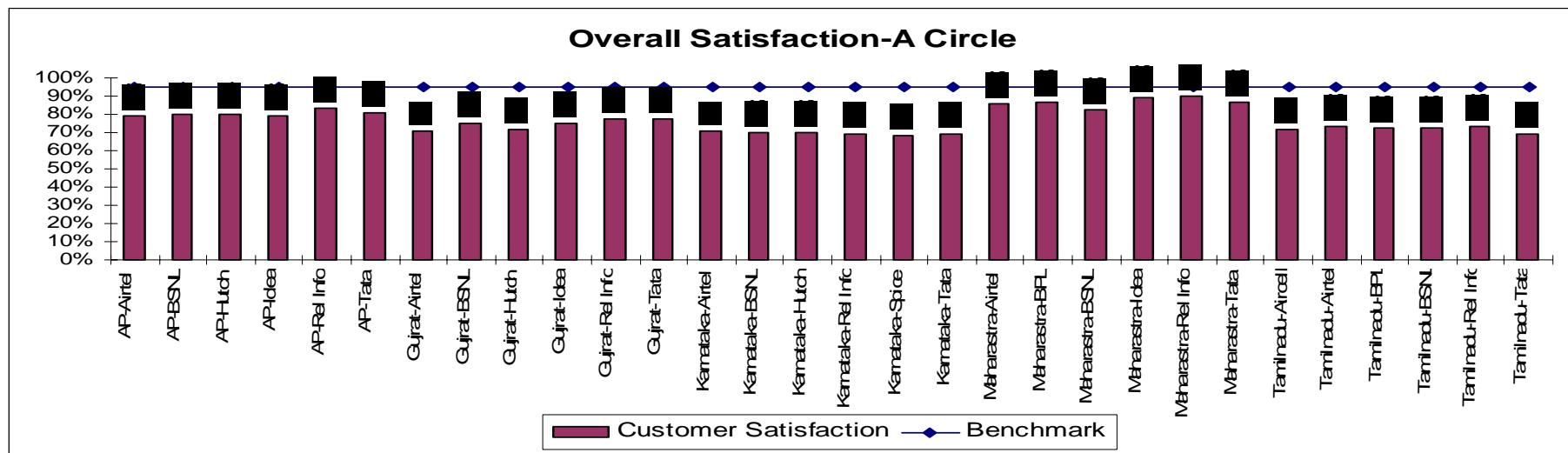
Audit Conducted for 47 Operators. 25 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



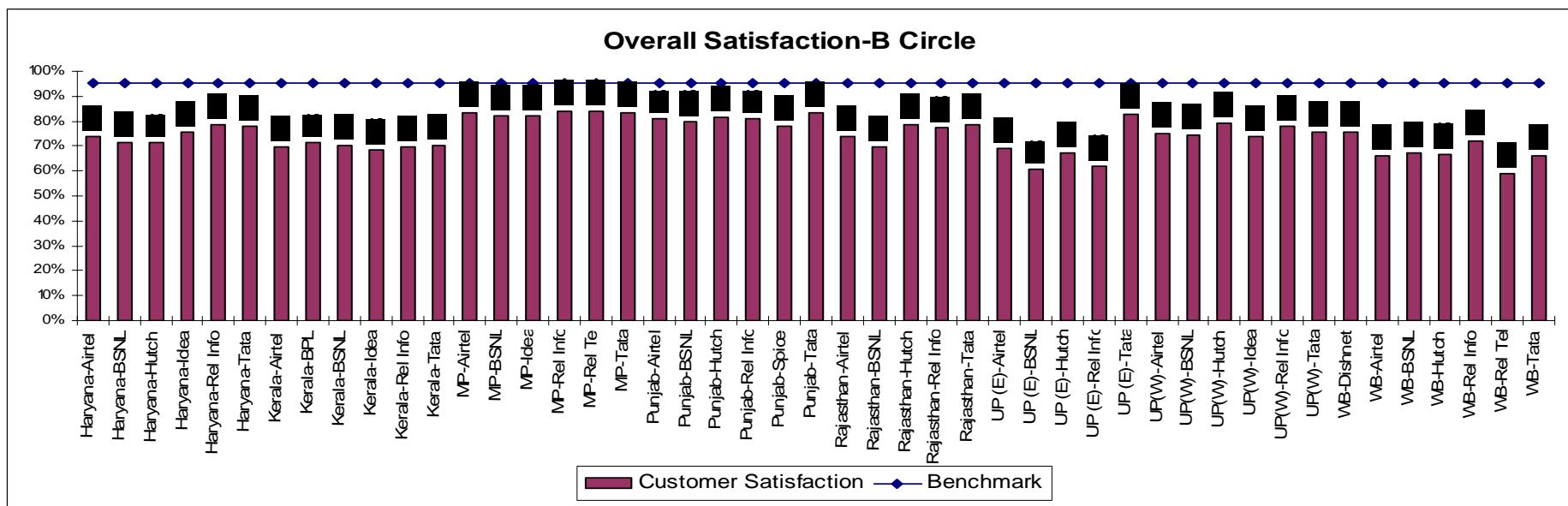
Audit Conducted for 27 Operators. 3 Operators are not meeting the benchmark



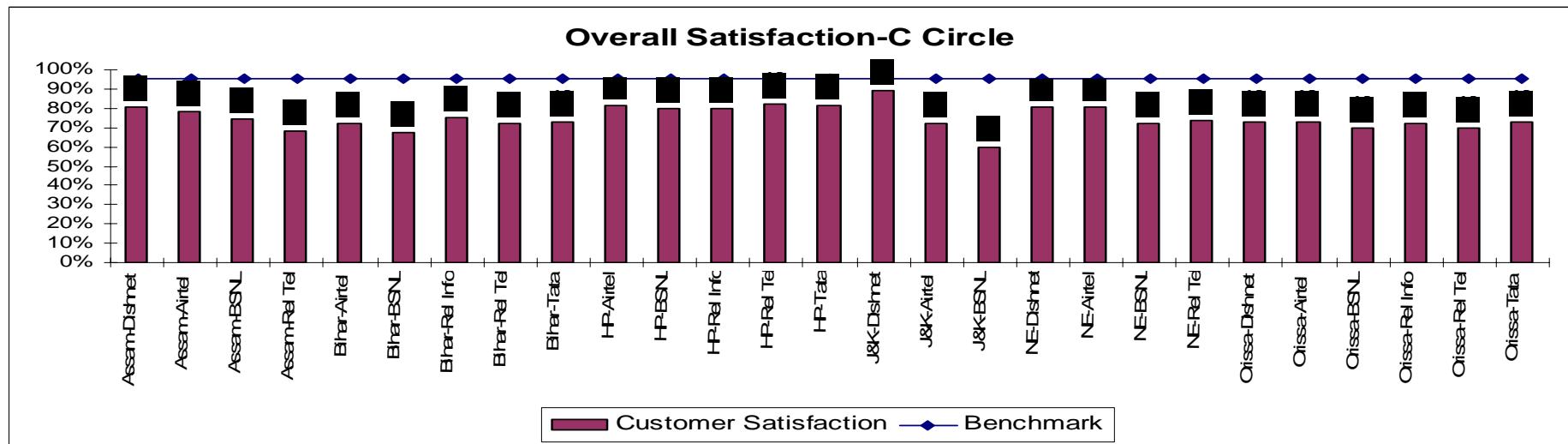
Audit Conducted for 24 Operators. 10 Operators are not meeting the benchmark



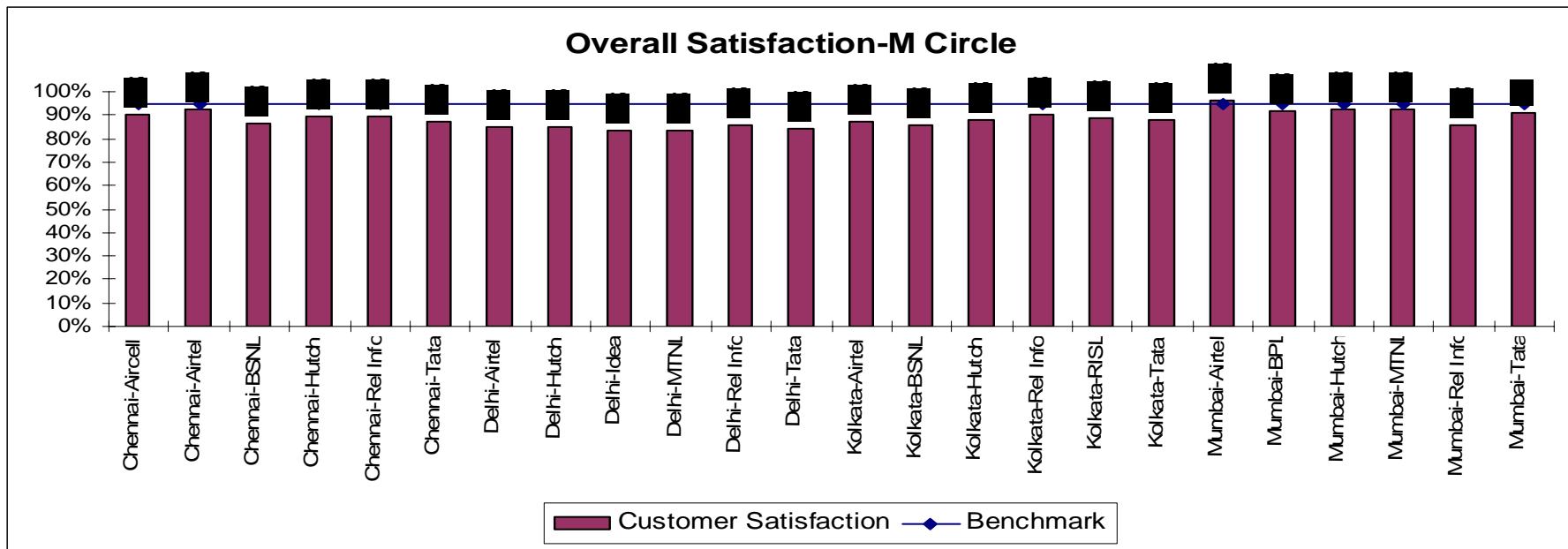
Audit Conducted for 30 Operators. 30 Operators are not meeting the benchmark



Audit Conducted for 47 Operators. 47 Operators are not meeting the benchmark

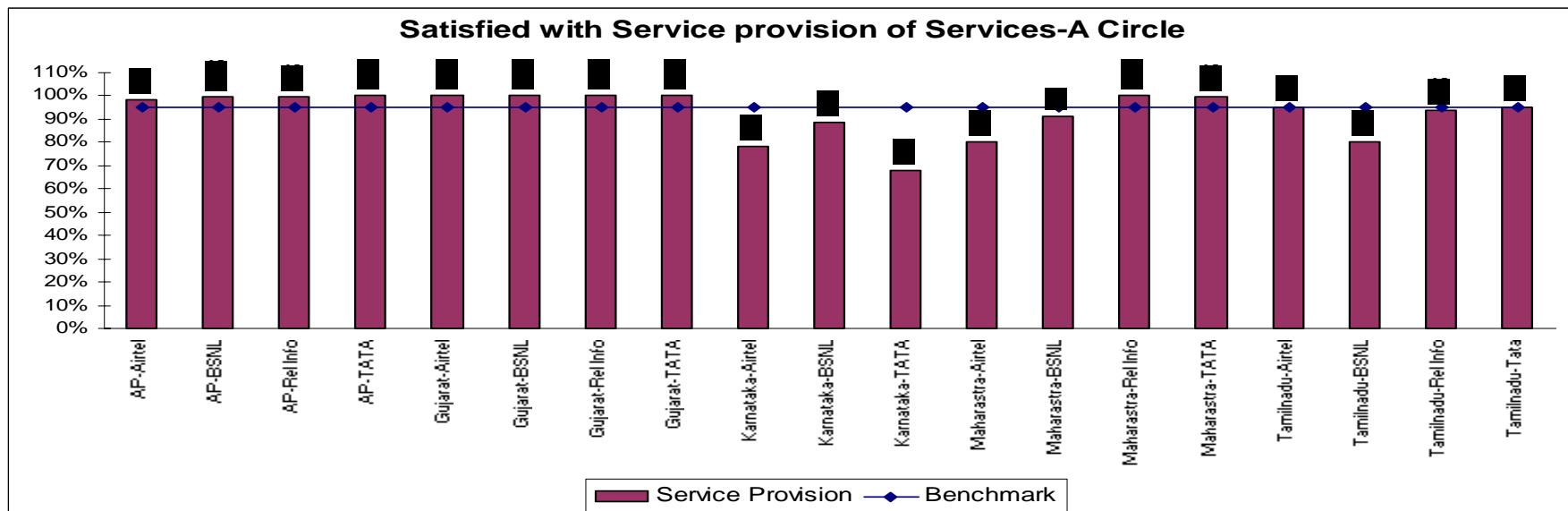


Audit Conducted for 27 Operators. 27 Operators are not meeting the benchmark

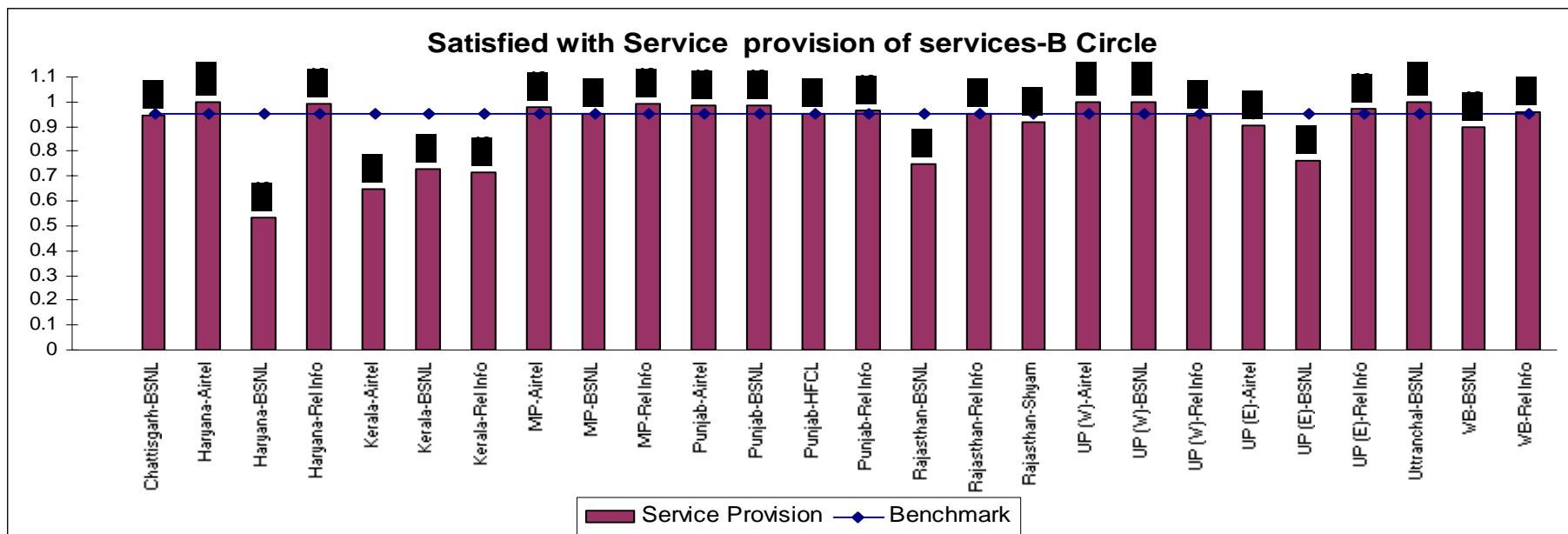


Audit Conducted for 24 Operators. 23 Operators are not meeting the benchmark

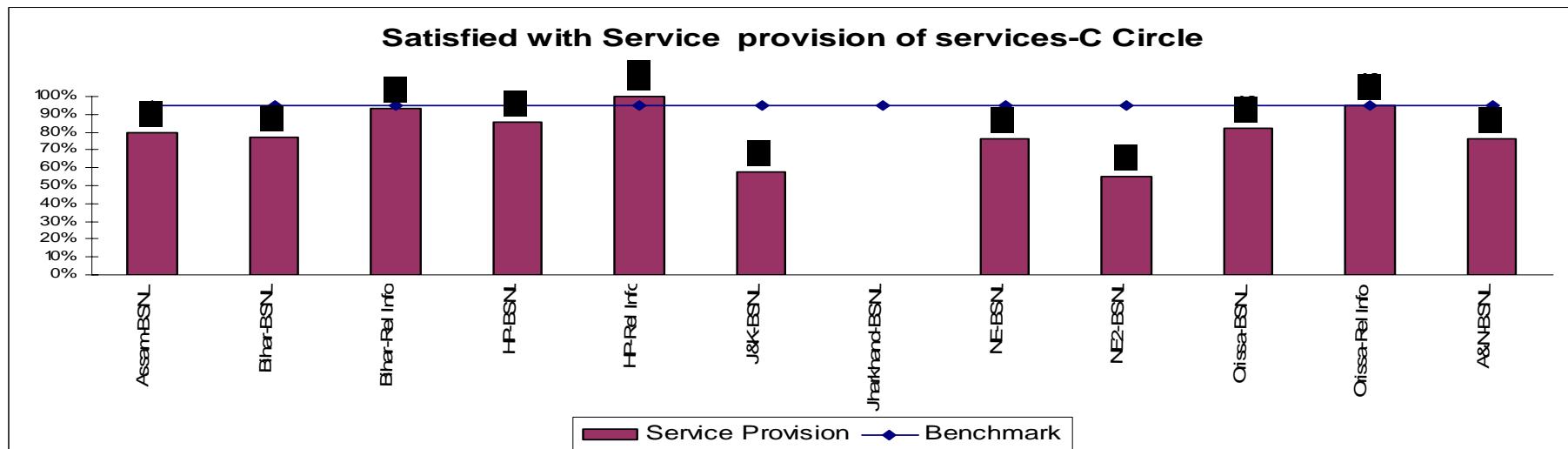
4.4 CSS – BASIC



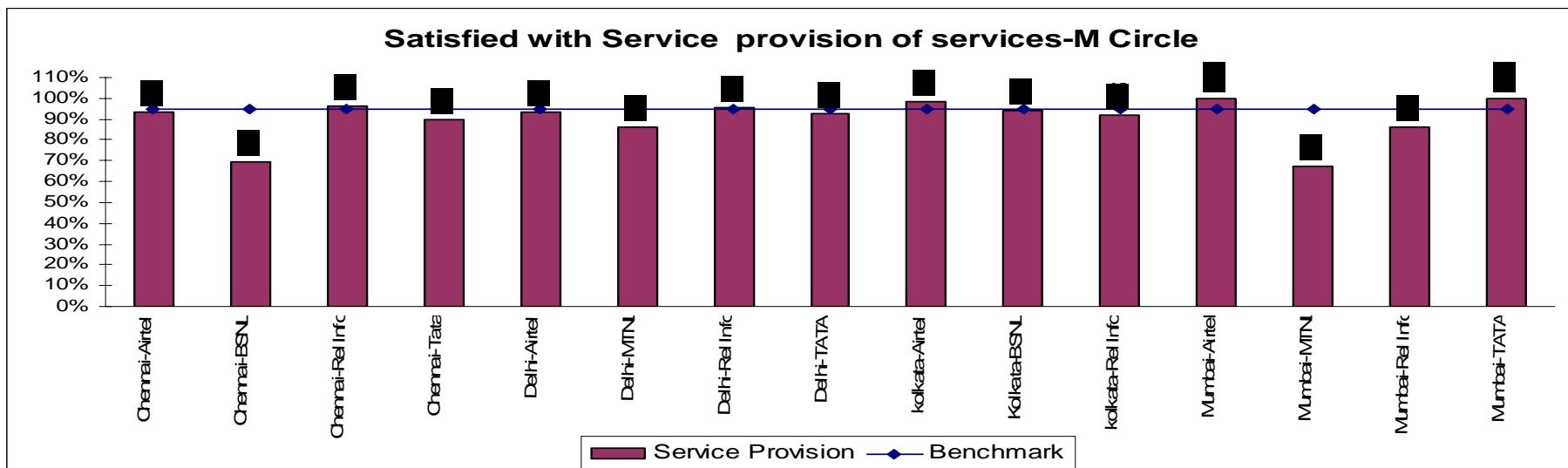
Audit Conducted for 19 Operators. 07 Operators are not meeting the benchmark



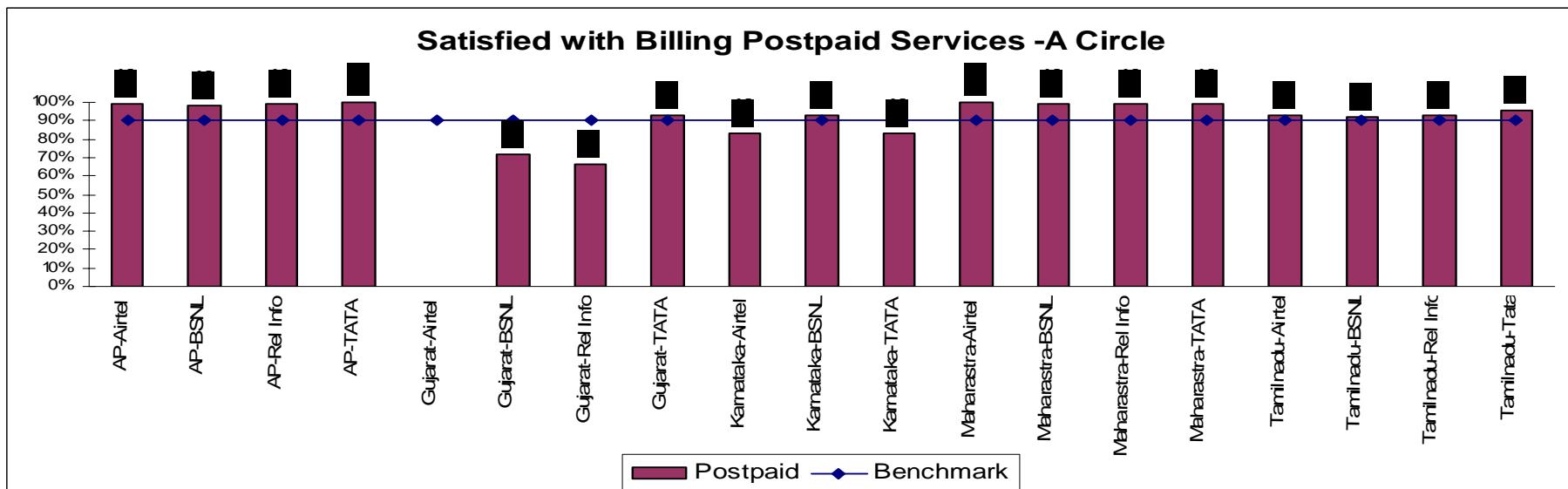
Audit Conducted for 26 Operators. 9 Operators are not meeting the benchmark



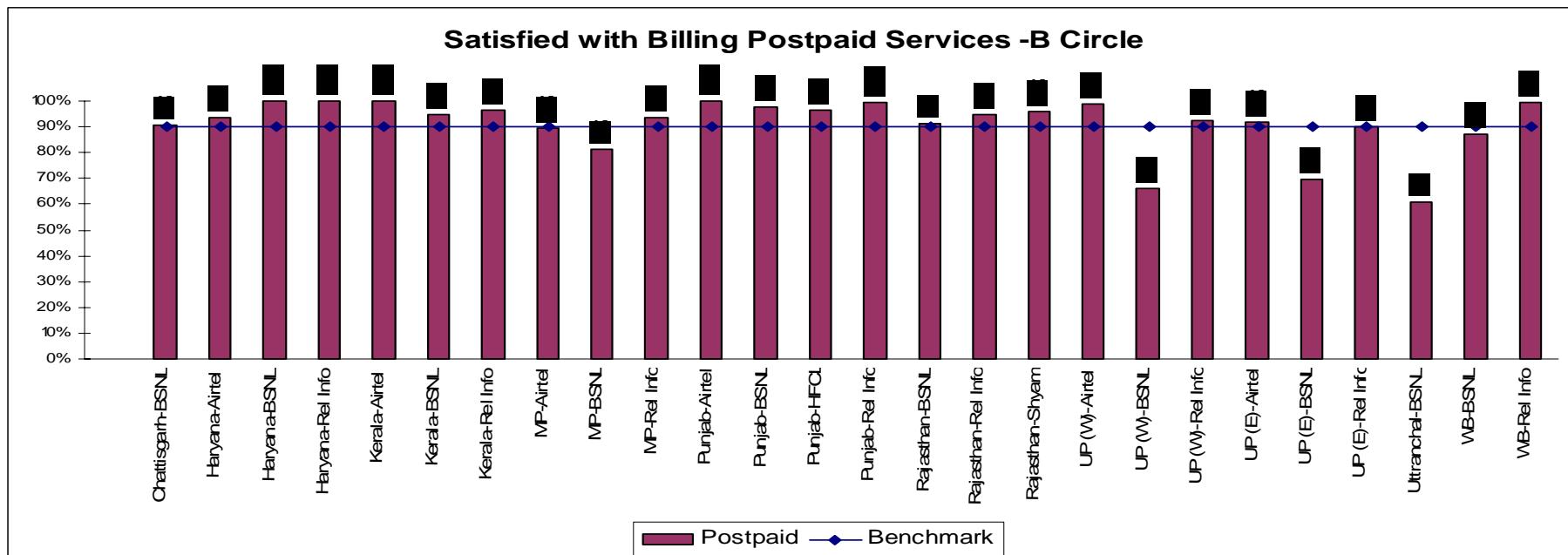
Audit Conducted for 12 Operators. 9 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



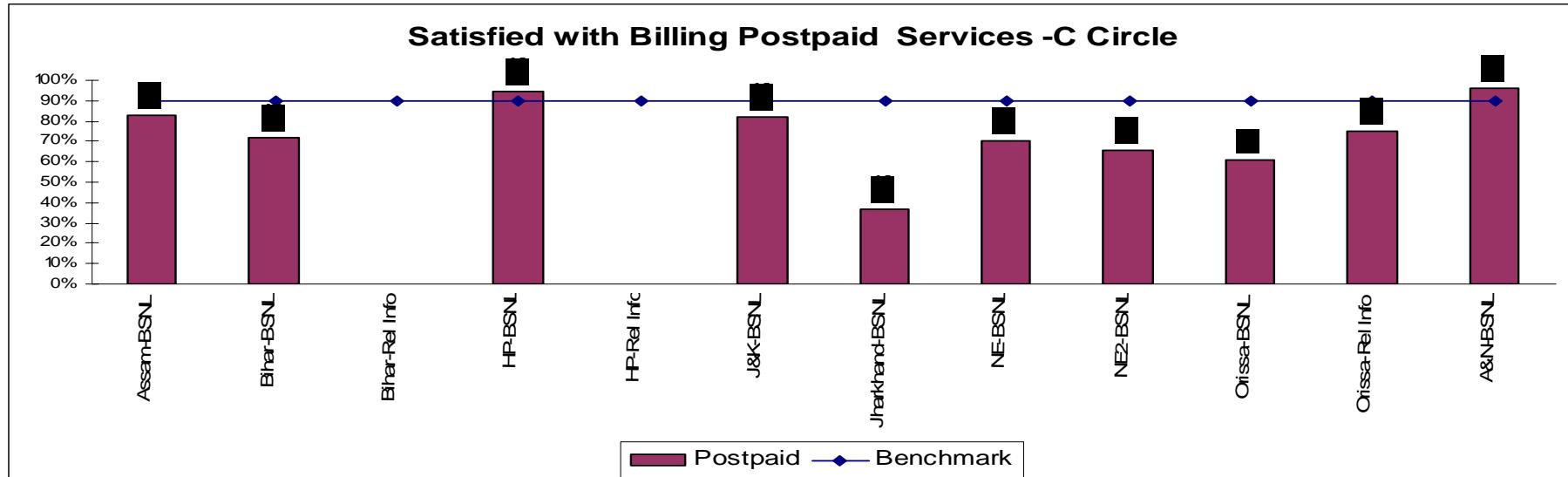
Audit Conducted for 15 Operators. 10 Operators are not meeting the benchmark



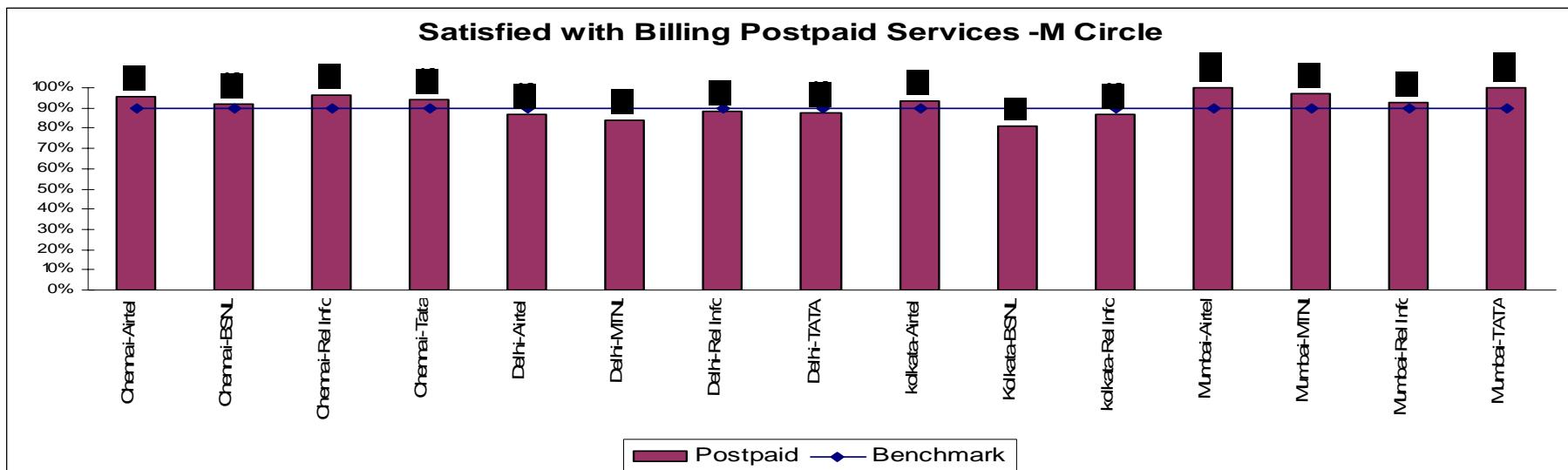
Audit Conducted for 19 Operators. 04 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



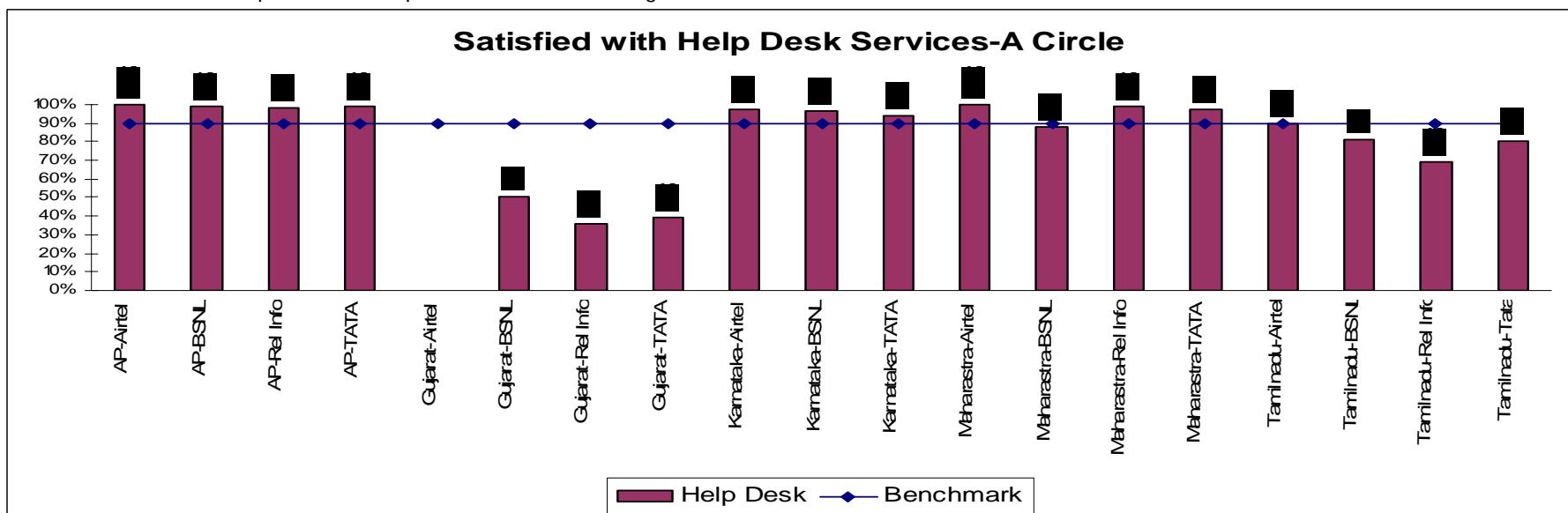
Audit Conducted for 26 Operators. 06 Operators are not meeting the benchmark



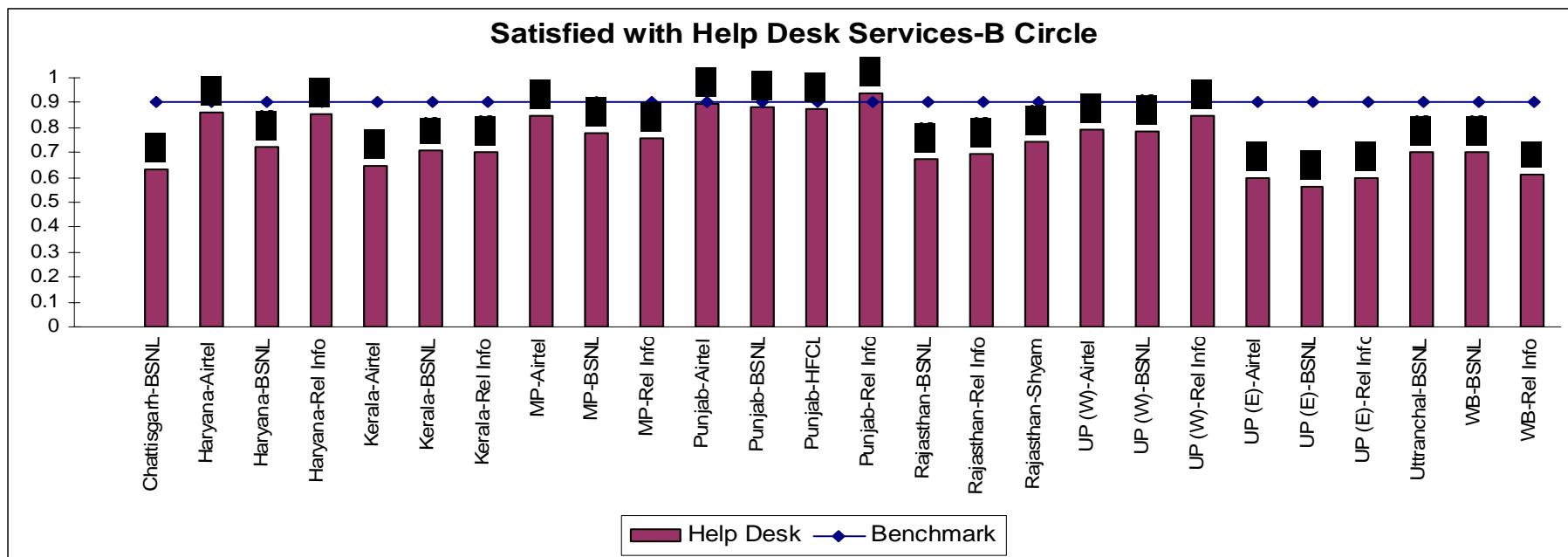
Audit Conducted for 12 Operators. 08 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



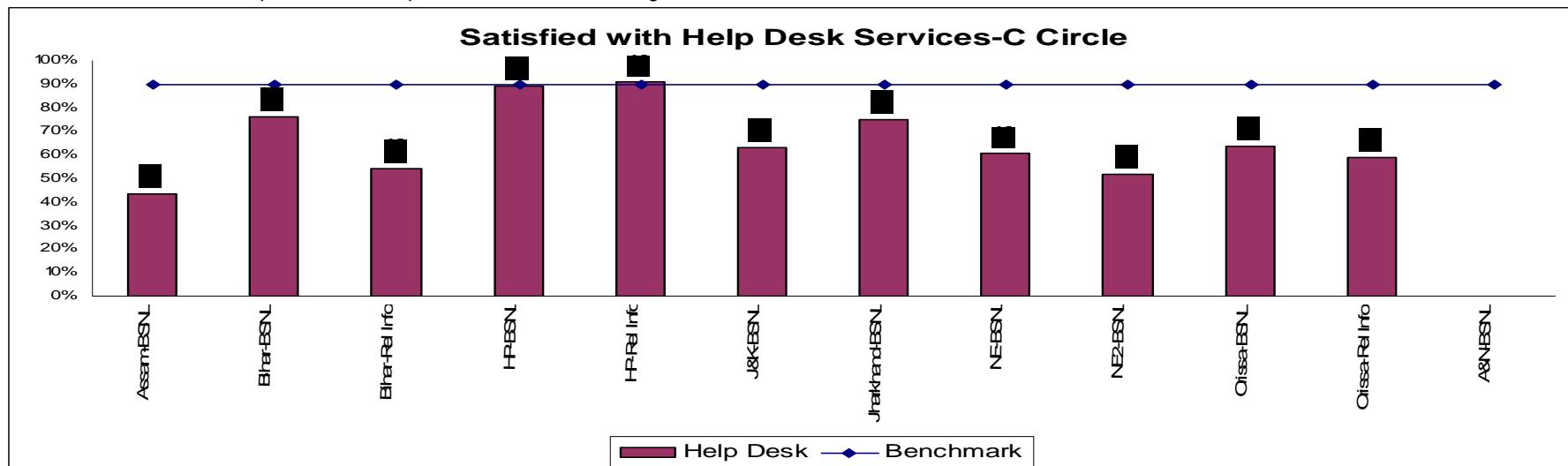
Audit Conducted for 15 Operators. 06 Operators are not meeting the benchmark



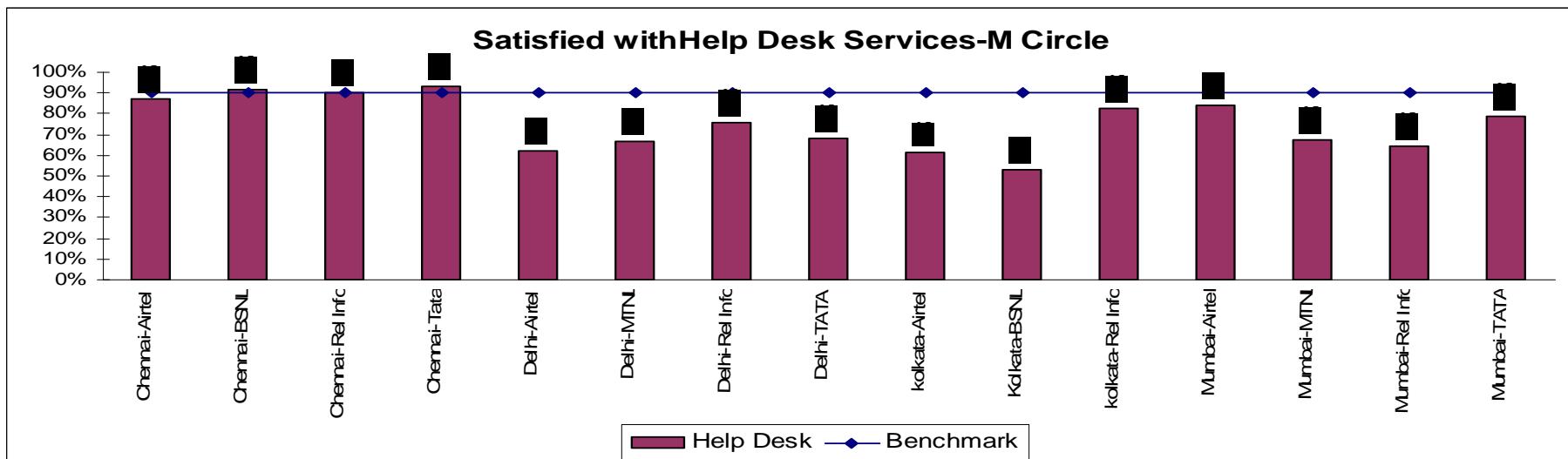
Audit Conducted for 19 Operators. 07 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



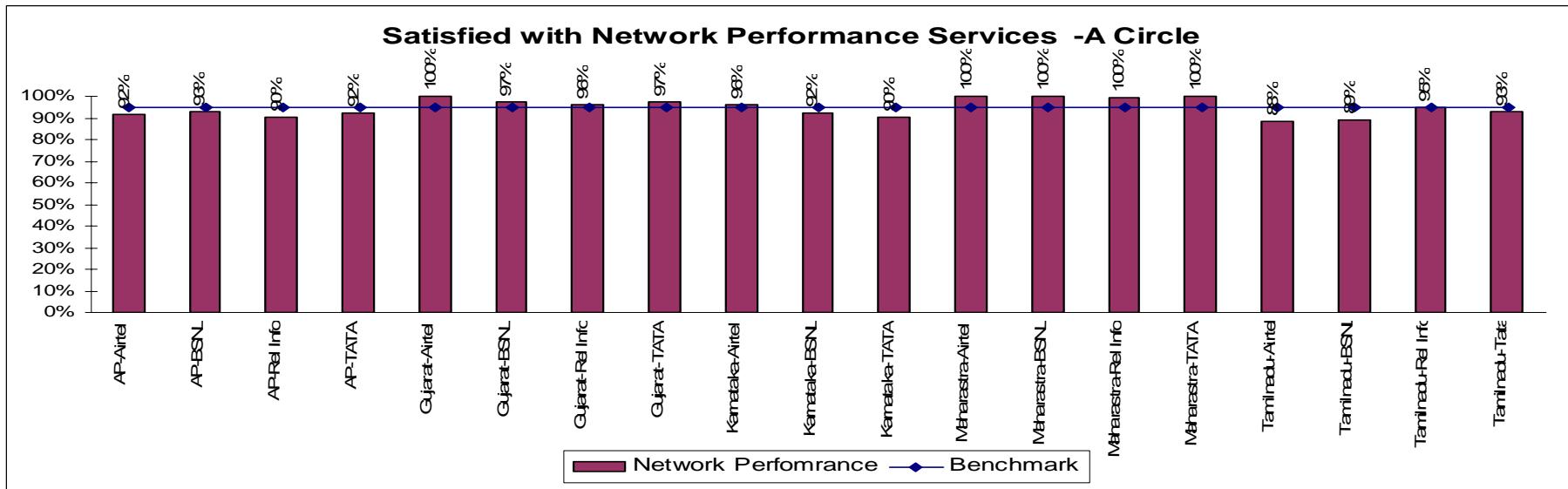
Audit Conducted for 26 Operators. 24 Operators are not meeting the benchmark



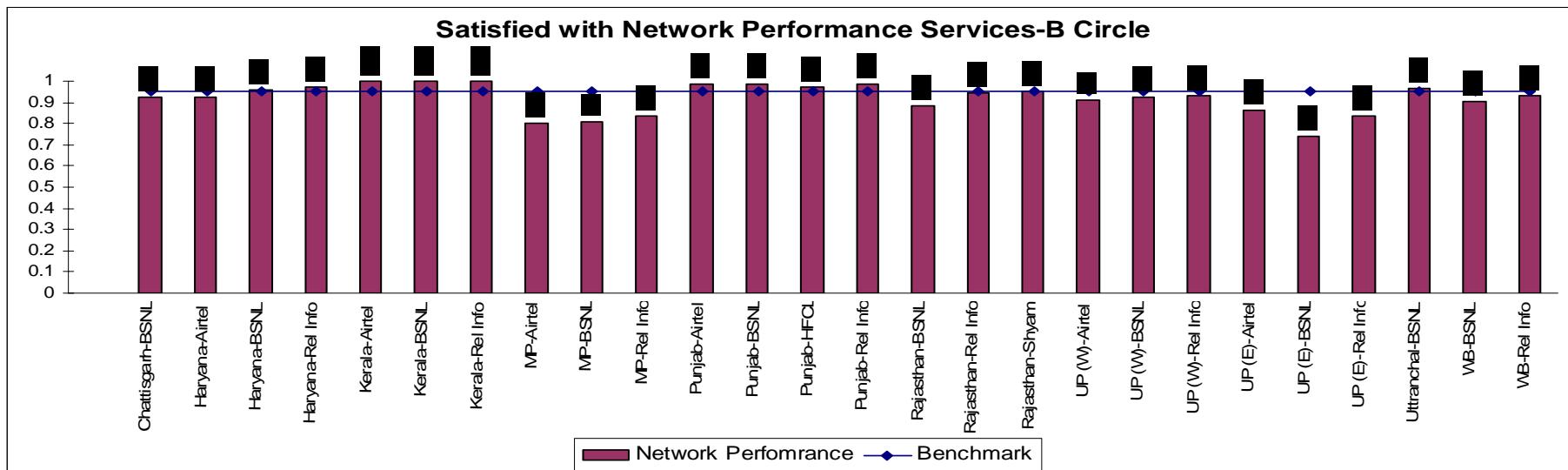
Audit Conducted for 12 Operators. 10 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



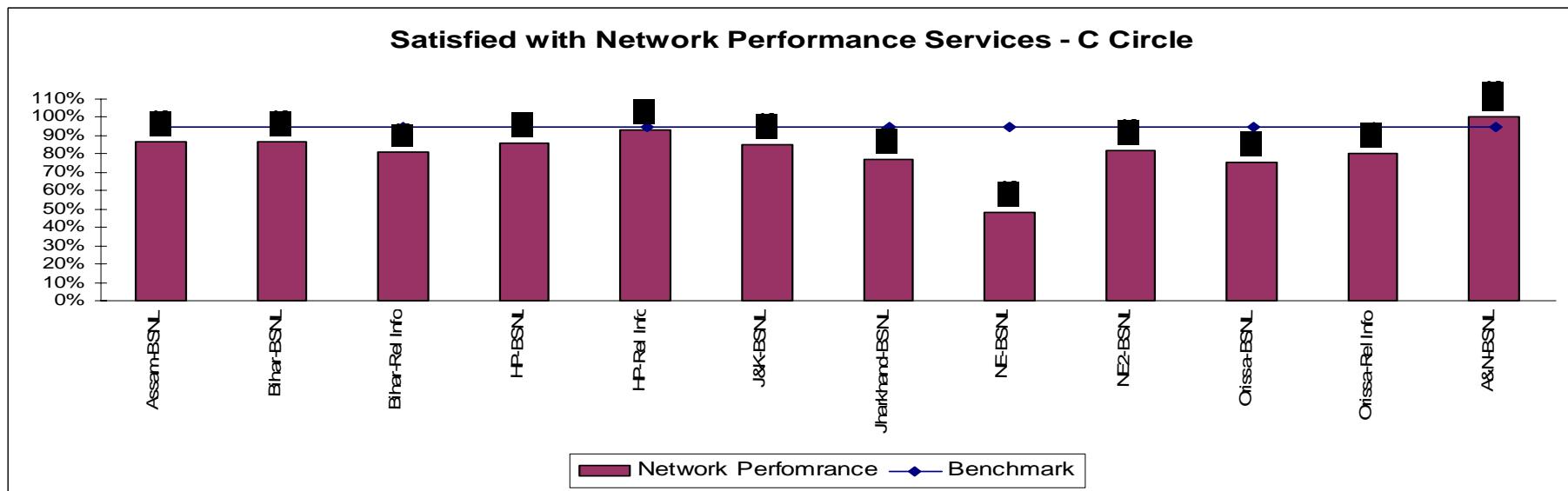
Audit Conducted for 15 Operators. 12 Operators are not meeting the benchmark



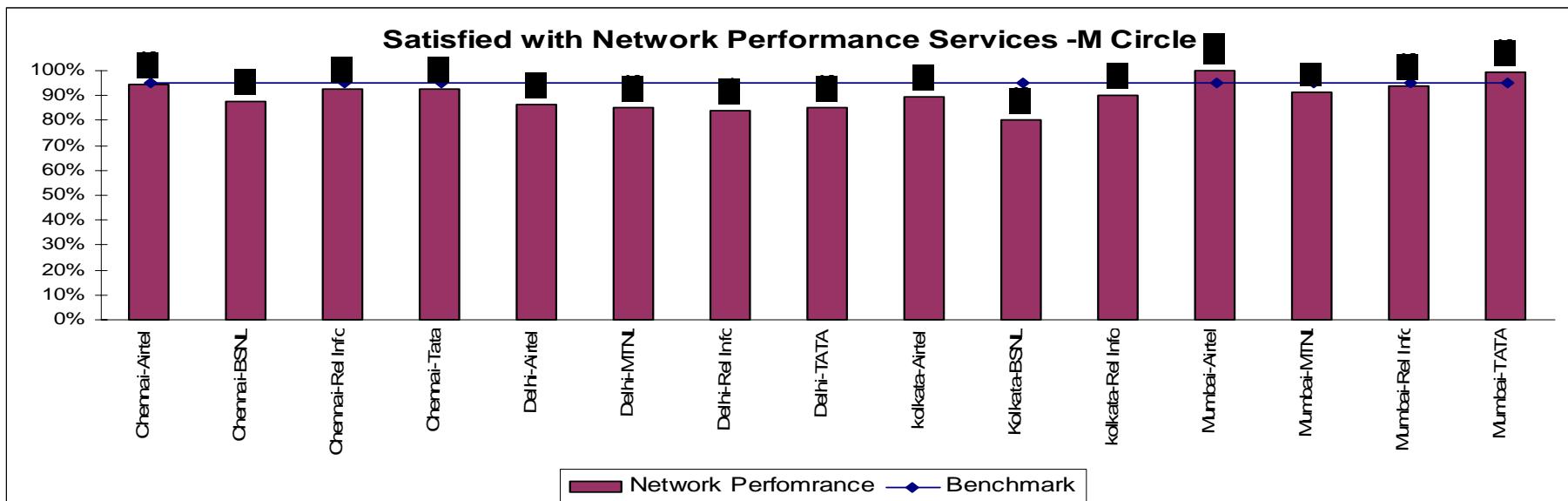
Audit Conducted for 19 Operators. 09 Operators are not meeting the benchmark



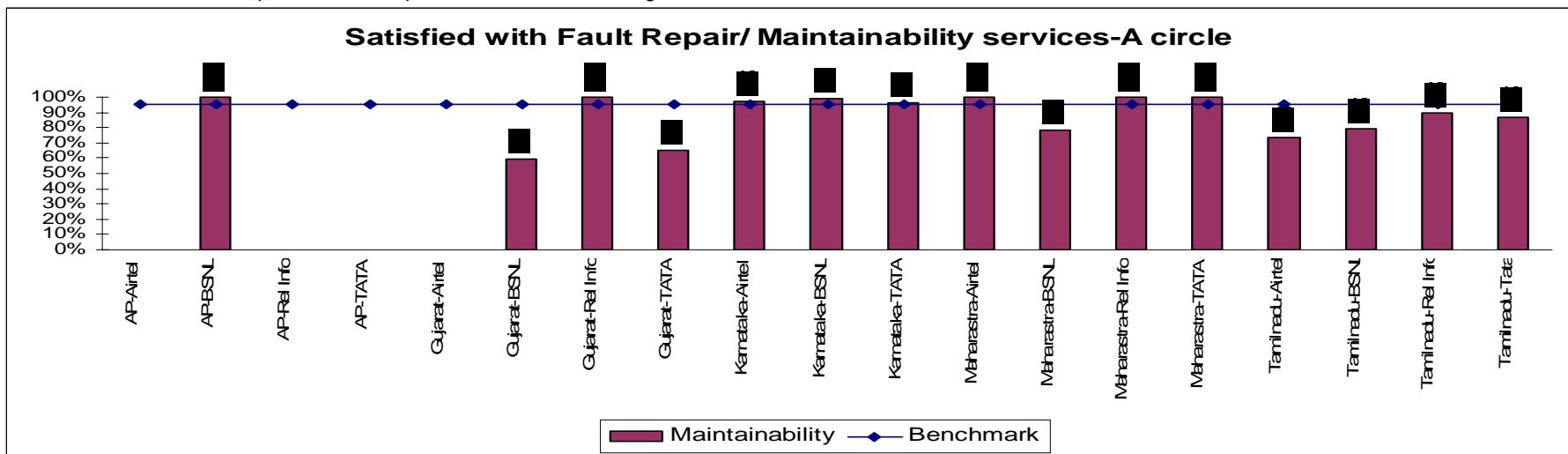
Audit Conducted for 26 Operators. 15 Operators are not meeting the benchmark



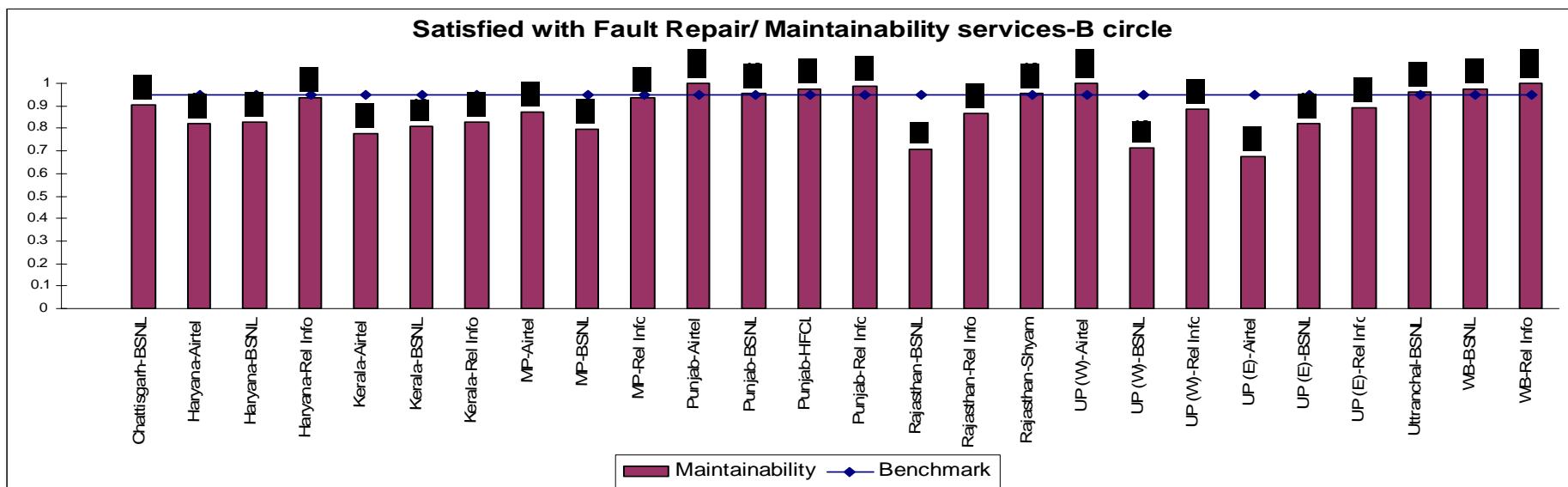
Audit Conducted for 12 Operators. 11 Operators are not meeting the benchmark



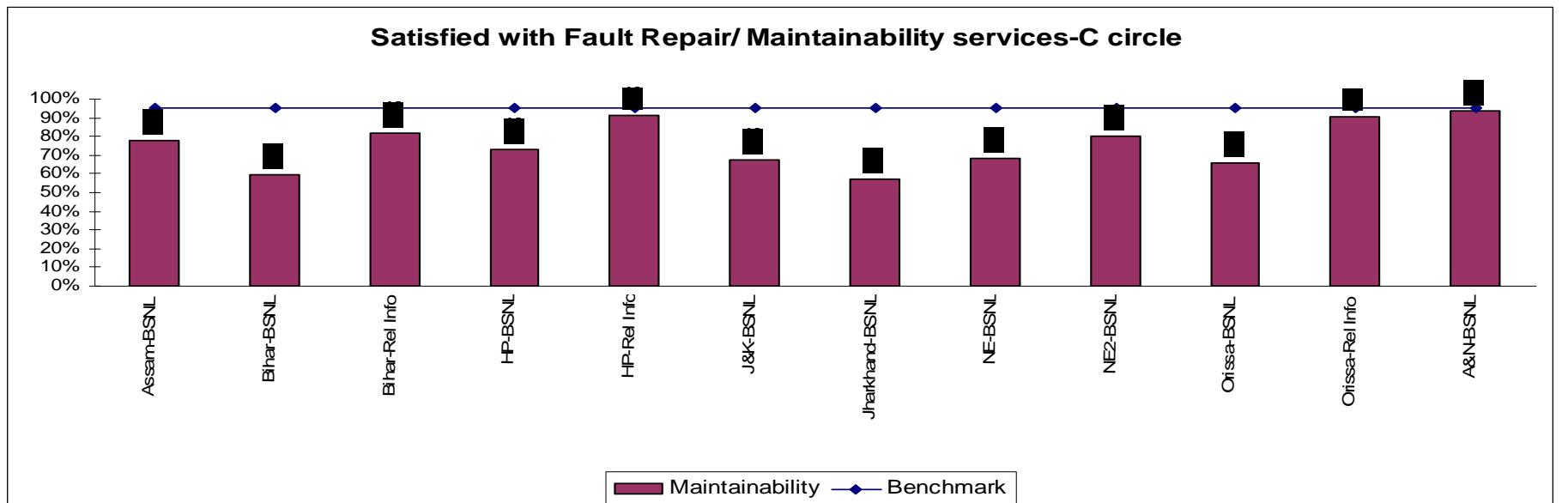
Audit Conducted for 15 Operators. 13 Operators are not meeting the benchmark



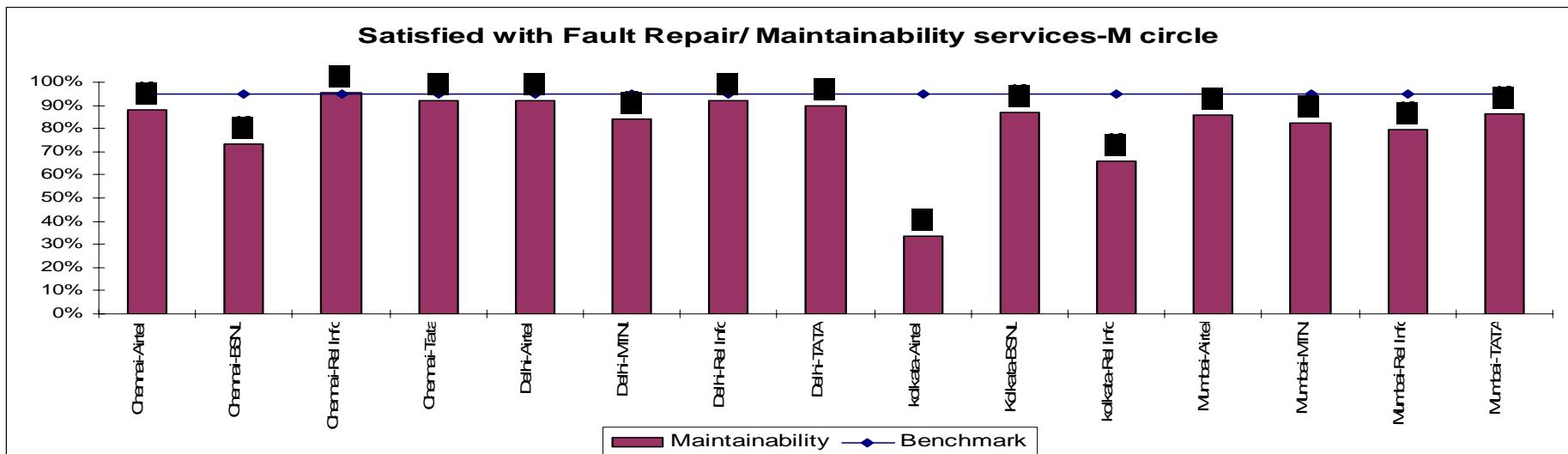
Audit Conducted for 19 Operators. 07 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



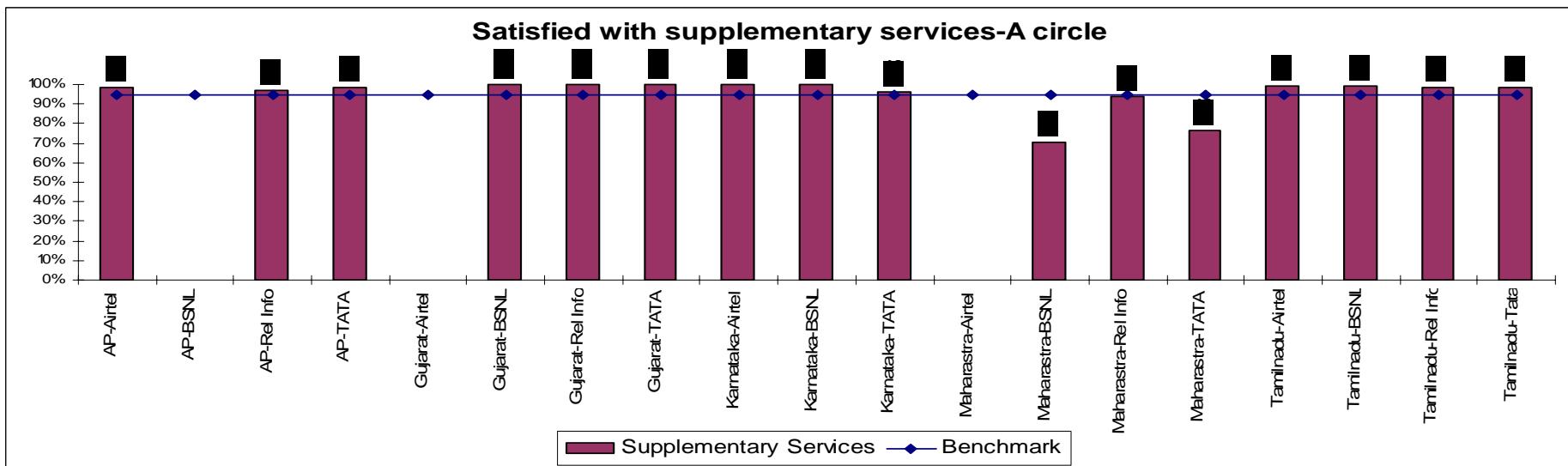
Audit Conducted for 26 Operators. 17 Operators are not meeting the benchmark



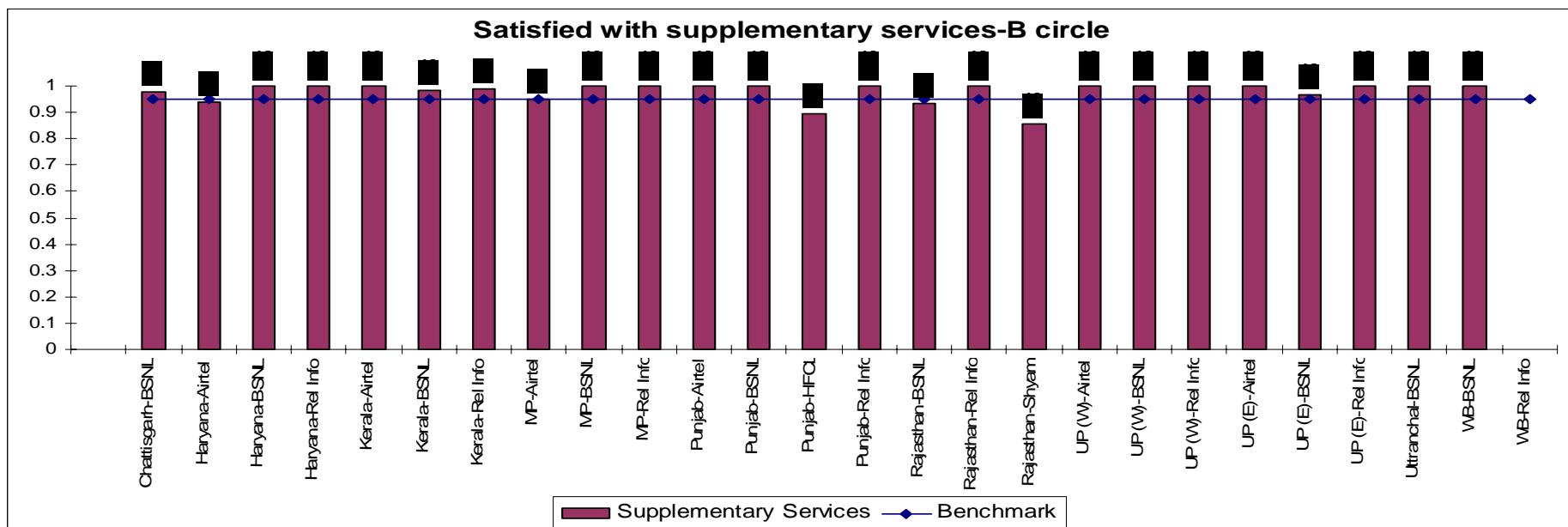
Audit Conducted for 12 Operators. 12 Operators are not meeting the benchmark



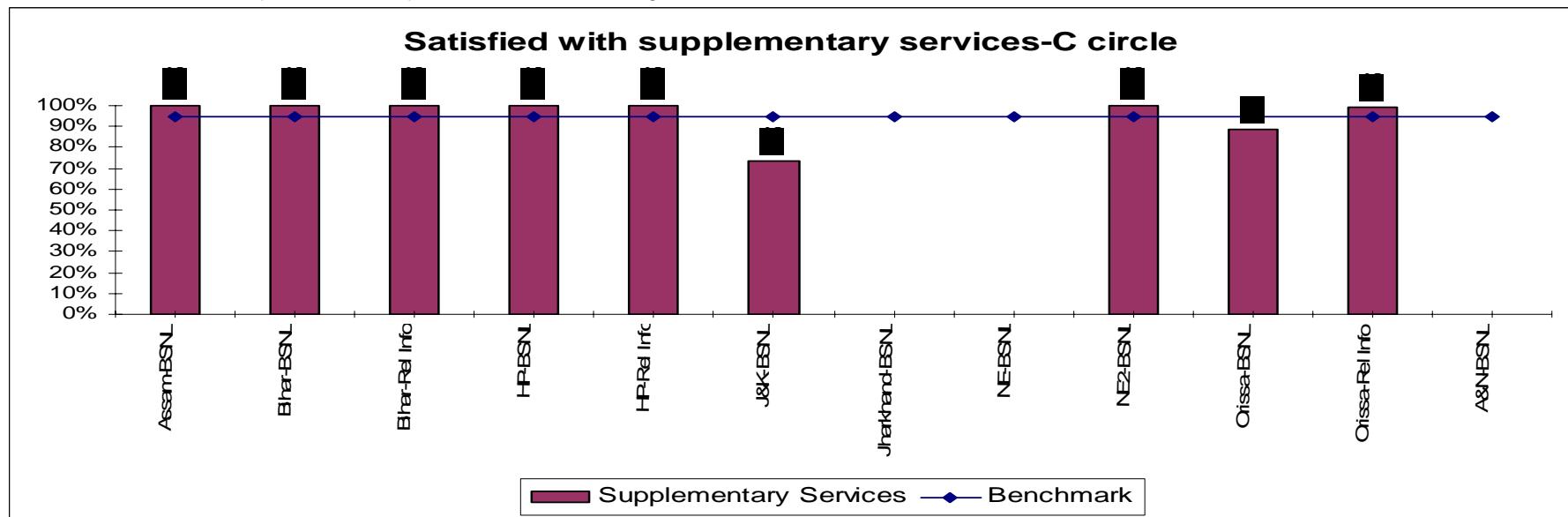
Audit Conducted for 15 Operators. 14 Operators are not meeting the benchmark



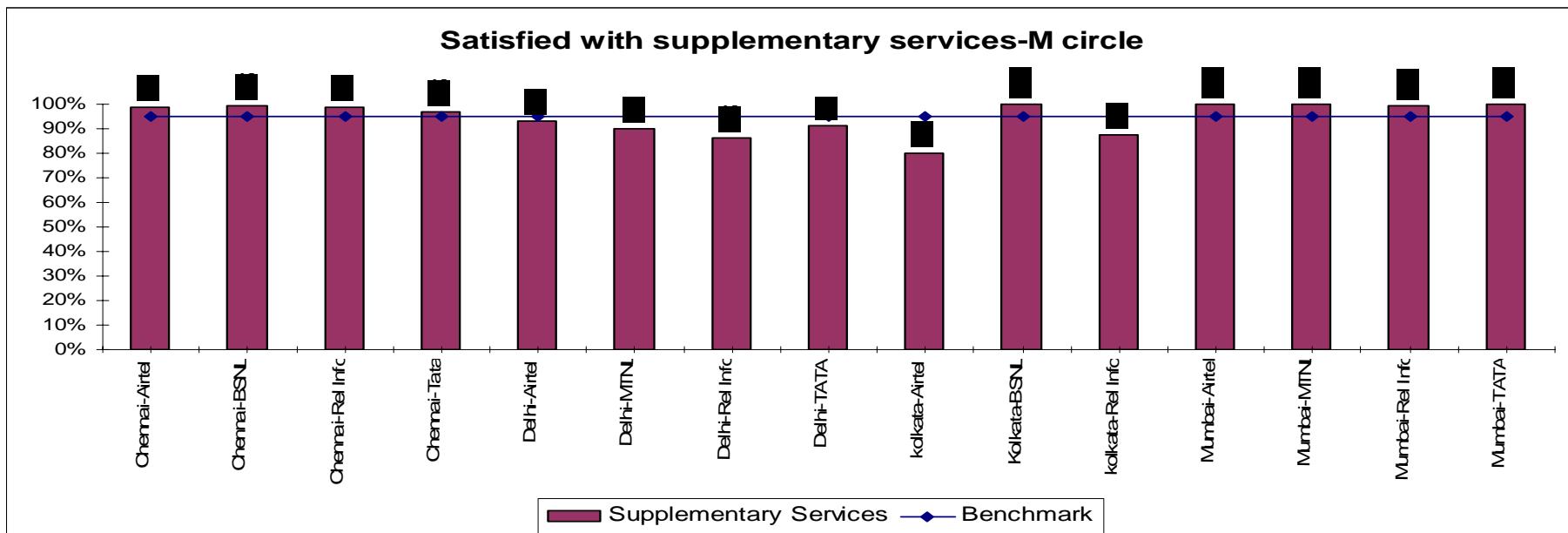
Audit Conducted for 19 Operators. 03 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



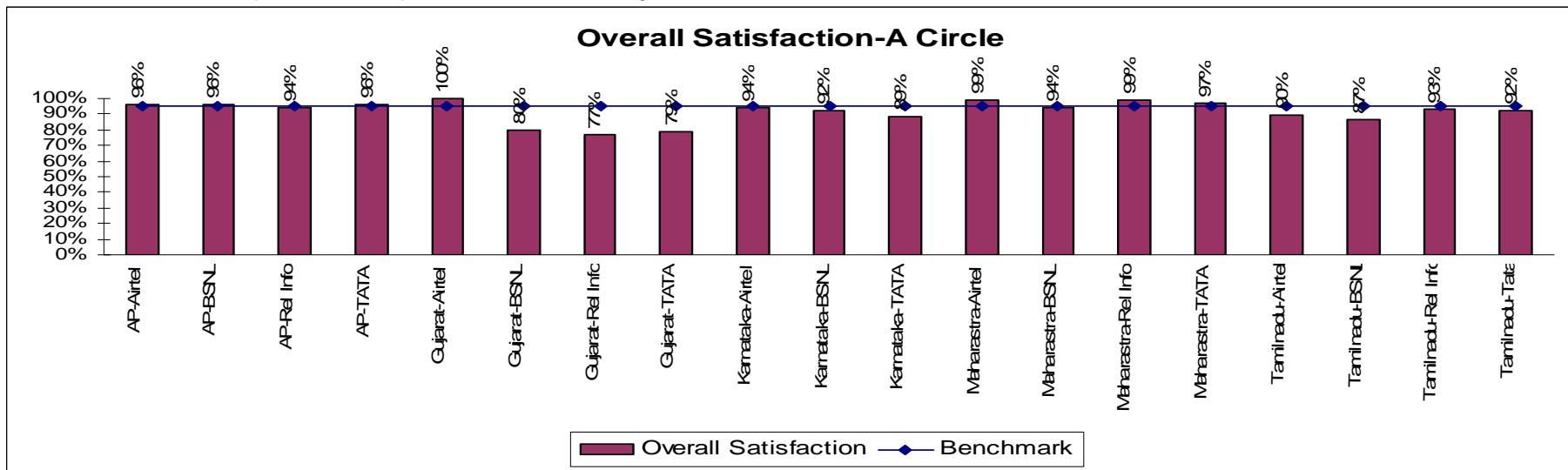
Audit Conducted for 26 Operators. 04 Operators are not meeting the benchmark



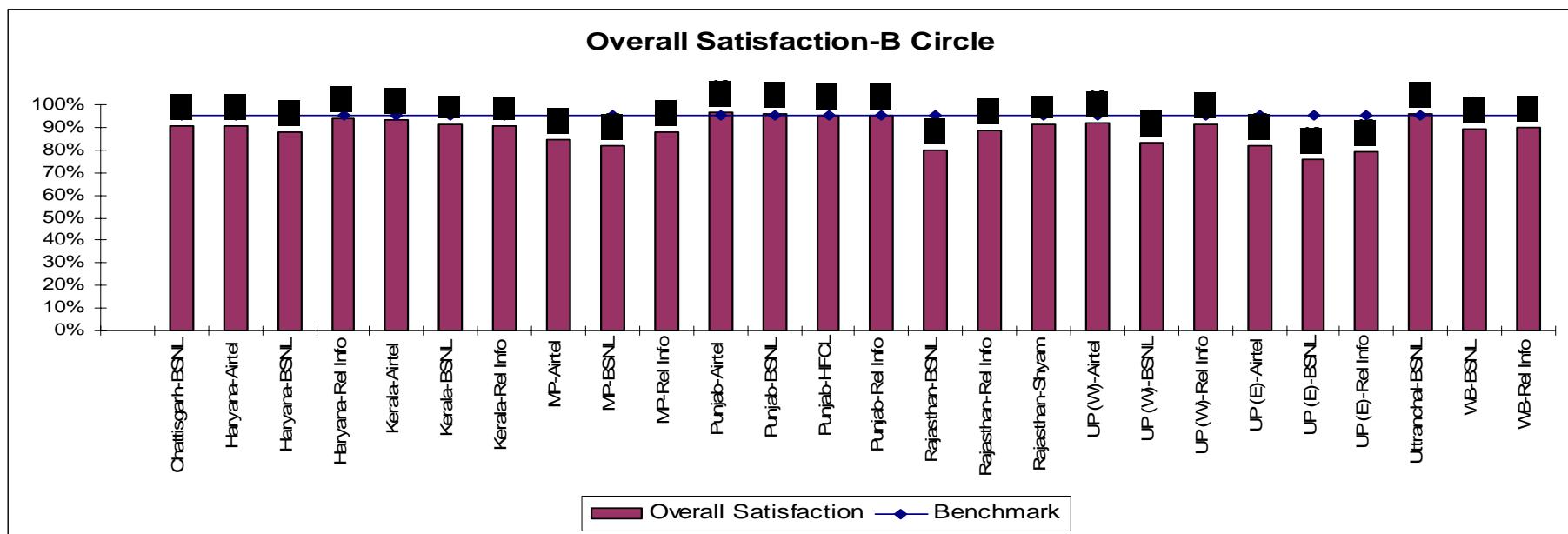
Audit Conducted for 12 Operators. 02 Operators are not meeting the benchmark. Graph without value has been described as *, **, or *** in main table



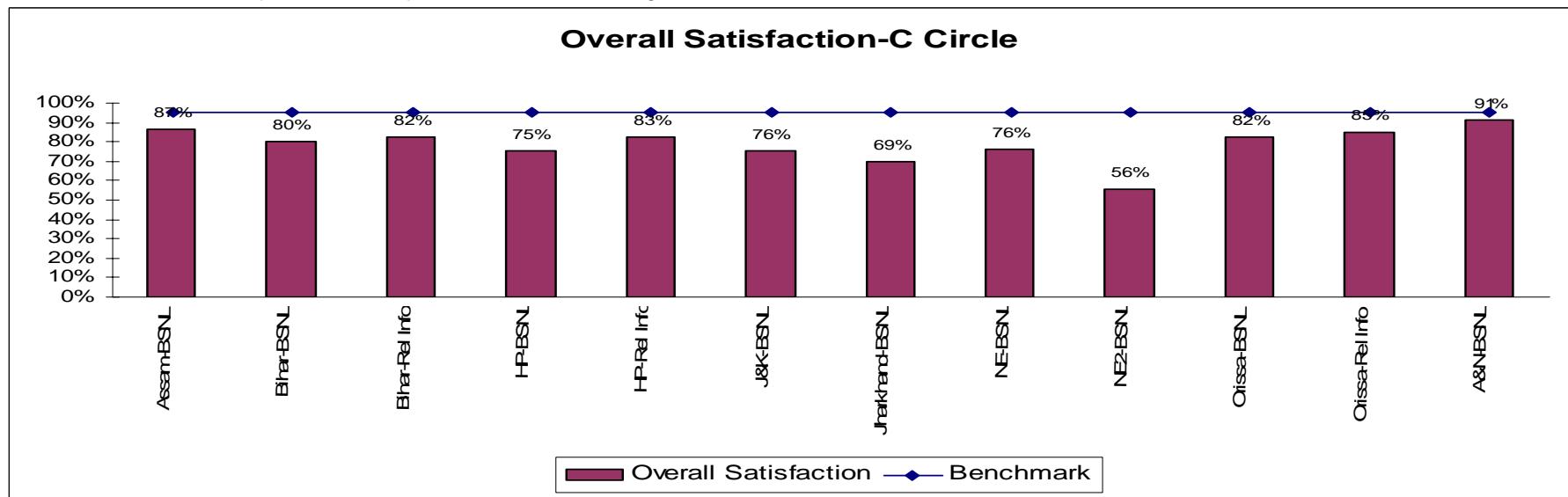
Audit Conducted for 15 Operators. 06 Operators are not meeting the benchmark



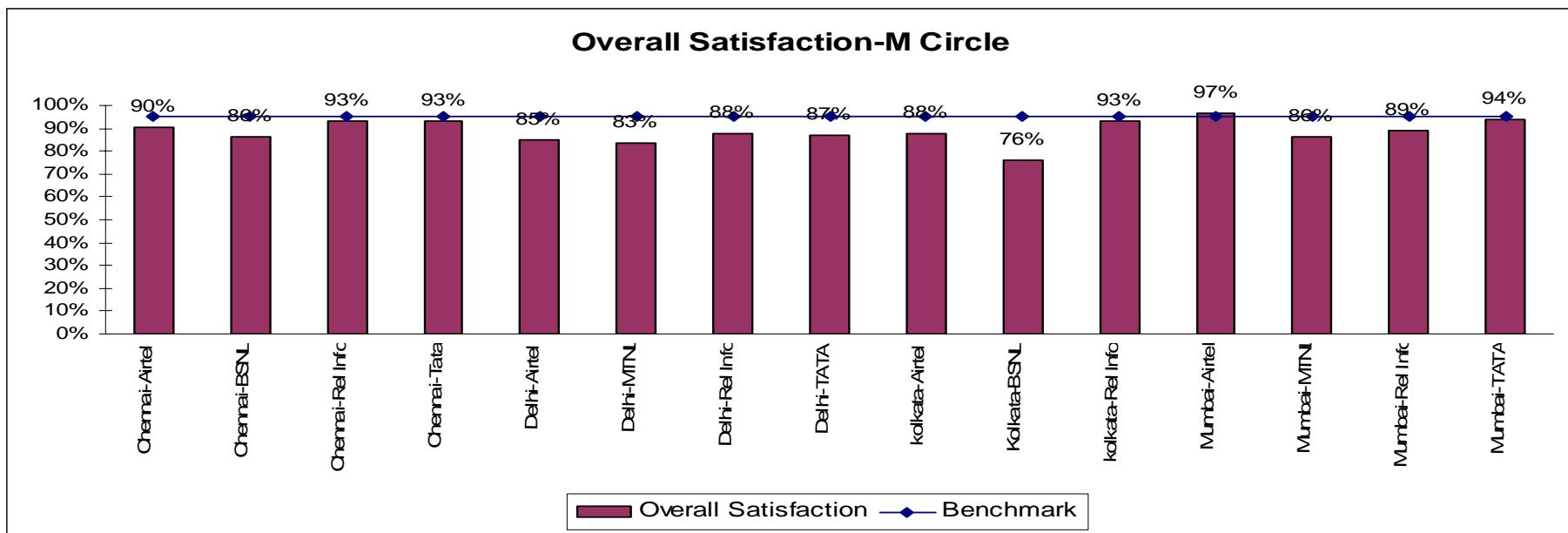
Audit Conducted for 19 Operators. 12 Operators are not meeting the benchmark



Audit Conducted for 26 Operators. 21 Operators are not meeting the benchmark



Audit Conducted for 12 Operators. 12 Operators are not meeting the benchmark



Audit Conducted for 15 Operators. 14 Operators are not meeting the benchmark

4.5 List of Exchanges Covered – Basic Services

Sl. No.	Service Area Category	Name of Service Area	Name of Service Provider	List of Exchanges audited in 3rd Quarter (July 06 to Sep 06)	Urban/Rural
1	Metro	Delhi	MTNL	Okhala, Nehru Palace, T.Bad, Dwarka	Urban
2	Metro	Delhi	Airtel	Okhla Phas-3, Delhi	Urban
3	Metro	Delhi	Rel comm	Delhi NCR	Urban
4	Metro	Mumbai	MTNL	Powai,Varsovo,Citi	Urban
5	Metro	Mumbai	Airtel	ABTS, Mumbai	Urban
6	Metro	Mumbai	Tata	NAR	Urban
7	Metro	Mumbai	Rel comm	Mumbai	Urban
8	Metro	Chennai	BSNL	Airport, Anna Nagar, JMC	Urban
9	Metro	Chennai	Airtel	Chennai	Urban
10	Metro	Chennai	Rel comm	Chennai	Urban
11	Metro	Kolkata	BSNL	Kalighat, Seerampore, Barasat, Dum Dum	Urban
12	Metro	Kolkata	Rel comm	Kolkata	Urban
13	A' Circle	Gujarat	BSNL	Elcis Bridge, Jodhpur, Navrankpura, Anand, Due, Deesa, Tharad, Danta, Dhral, Unjha, Junagah, Aliabada, Mehal Nagar, Uday Nagar, Veraval main, Gulbai Tekra, Info Tower, OCB-Tax Junagadh, Bhral, Balambha, Medi, Chandragadh, Matwa.	Urban
				Medi, Tex, Dwarka, Chandigarh, Ambooji, Kanodar, Wav, Kekshat, Sami, Deodhar, Matwa, dhral, Falla, visnagar Medi, OCB-Tajevadi, Junagah, Khadia, Bilkha, Vadal, Junagadh, Supasi, Laiyala, Latipur, Dhinoj, Rajpur, Satlasna, Kukarwada, Sami, BrahmanBada, Nardipur	Rural
14	A' Circle	Gujarat	Tata	Tata - Ahmedabad	Urban
15	A' Circle	Karnataka	BSNL	Devengere, Bellary, Hospet, Bangarpet, Chickballapur, Tumkur.	Urban
				Jagalaur, Bidarkere, turuvanur, Guttinadu, Basavanhalli, Hebbal, kallukama, Kammarchedu, Bhagewadi, Vidhyanagar, G.Nagalpur, Magala, Arsikere, Vemgal, Yaldur, Kiwar, Chikkathirupathi, Idagur, Cheemangala, Siddanahalli, Kadaba, Chelpur, CS Pura, gandalu, Mallansandara, Nonavinkere, Mangalwada	Rural
16	A' Circle	Karnataka	Rel comm	Rel commKarnataka	Urban
17	A' Circle	AP	BSNL	Ananthapur, Ananthapur Maruthinagar, Ananthapur JNTU, Mandapeta, Yanam, Nellore, kavali, Gudur	Urban



South Asia

Sl. No.	Service Area Category	Name of Service Area	Name of Service Provider	List of Exchanges audited in 3rd Quarter (July 06 to Sep 06)	Urban/Rural
				Atmakur, kuderu, narpala, Rapthadu, S.V.Puram, Gugudu, Venkatpuram, Maddalapalli, Kotanka, Oddupalli, Rayavaram, Korukonda, raghudevpuram, Dulla, Nandarada, Atreyapuram, Ryali, Kothapeta, Kajuluru, Gurajanapalli, Podalkuru, Atamakuru, Chennuru, Kurugonda, Kallurupalli, A.S.Peta, Sangam, Alluru, Kaluvoya, Tada, Vingamuru	Rural
18	A' Circle	AP	Tata	Tata - Hyderabad	Urban
19	A' Circle	AP	Airtel	Airtel - Hyderabad	Urban
20	A' Circle	AP	Rel comm	Hyderabad	Urban
21	A' Circle	TN	BSNL	Kumaran Nagar, MG Gate, MK Kottai, New T nagar, Ponomalai pattai, REC, Sankar Nagar, Ngo colony, Vannarupettei, Palayan kottai	Urban
				Samaypuram, Sangiliyandpuram, Sanjeevi Nagar, Shannug Nagar, Somanasam pettei, Shreerangam, T Nagar, TV Koil, Varangeneri, Barkat Managram, Shantinagar, GongaiKondan, Ukkaran kottai, Sengulan, Melapalayan, Manurmaranthal, VM chalram	Rural
22	A' Circle	T.N	Rel comm	Rel commTN	Urban
23	A' Circle	Maharashtra	BSNL	Panchvati, Malegaon, Goa, SgyediKafad, Mohabaleshwar, Mide Satara, Miraj, Rajwada, Marketyard	Urban
				Dalaj, Kalaj, Shinde, Girnare, Mohadi, Y.C., Sakhid, Chetgaon, Pasten, Lakmapur, JanoRel Comm, Vani, Jath Sangli, Shendi, MIDC Ahmadnagar,Ozarde, Nagthane, Sonai, Bhilar, Surar, Bhuinj, Mide Taswade, Tambave, Chimangan Knegaon, Amnapur Sangli, Dalanal, Kole, Ahmadnagar, Khanderajuri, Karathepiran	Rural
24	A' Circle	Maharastra	Tata	Nasik	Urban
25	A' Circle	Maharastra	Rel comm	Maharastra	Urban
26	B' Circle	WB	BSNL	habra-1,canning	Urban
27				champahati, gua, bira, shantipur, barjora, beliatore, mejia, mtps, jagatballavpu, deulti, khanyan, puinan, bankadaha,sabrakone, taldi	
28	B' Circle	A&N	BSNL	mini bay	Urban
29				wandoor, guptapara, chouldari	Rural



South Asia

Sl. No.	Service Area Category	Name of Service Area	Name of Service Provider	List of Exchanges audited in 3rd Quarter (July 06 to Sep 06)	Urban/ Rural
30	B' Circle	Kerla	BSNL	Palayam, Panniyankara, Badagara, Nellikode, Manachira, Ashokapuram, Feroke, Beypore	Urban
				Thamarasseri, Omasseri, kodencheri, Maikavu, REC, Koduvally, Kakkodi.	Rural
31	B' Circle	Kerala	Rel comm	Kerala	Urban
32	B' Circle	MP	BSNL	Balaghat Main, Seoni Main, Chindwara Main, Shajapur MBM, Dewas, Navaratan Bagh, Khargone, Raisen, Khandawa	Urban
				Rajegaon, Khara, Saleteka, Kirnarpur, Bhoma, Ari, Karirat, Umaranala, Makhed, Linga, Bharad, Abhyapur, Biklakhedi, Nagda, Bamger, Bhorsa Ghandinagar, Manavtanagar, Jawaharteki, Banner, Pipal jhopa, Bistan, Nakatara, Narwar, Narbai, Singot, Chhewgaon Makhan, Dulhar Pheeta	Rural
33	B' Circle	Chhattisgarh	BSNL	Jagdalpur, Adawal	Urban
				Baster, Nagar Nar, Bakawand, Kilepal, Bhanipuri, Lohandiguda	Rural
34	B' Circle	Haryana	BSNL	Yamuna Nagar, Kurukshetra, Karnal	Urban
				Lawana, Talakaur, Saran, Sirsala, Gazlana, Ishalgash, Kutail, Chochara, Samora	Rural
35	B' Circle	Haryana	Airtel	Gurgaon, Faridabad	Urban
36	B' Circle	Punjab	BSNL	Hoshiarpur, Focal Point (Jalandhar), OCB Ferozepur	Urban
				Baddon, Pejewal, Khudda, Panjora, Nadala, Apra, Lambra, Pragpur, Talhan, Malwal Qadim, Palla Megha, Lakho ke Beharam, Sherkhan, Khai Pheme Ke	Rural
37	B' Circle	Punjab	Airtel	Chandigarh	Urban
38	B' Circle	Punjab	Rel comm	Punjab	Urban
39	B' Circle	Punjab	HFCL	Mohali	Urban
40	B' Circle	Rajasthan	BSNL	Kota, Rajamandi, Pali, Kuchera, Ajmer(E-10B) , Ajmer(EWSD)	Urban
				Nandana, Suket, AranKhera, Rangpur, Chechat, Mandanpuria, Khedrudha, Undwa, Dara, Alania, Morak, Kaitham, Dhasook, Deedwana, Funia, Barana, Arain, Rupagandh, Bhaghera, Kekri, Sarawar, Rajghad, srinagar, Narirabad, Ramsar, Agwa, Ranwas, Deal, BalRai, Chanchori, Dhanla, Bhadwari, Khinksar, Gogdav, Alay, Jhodhiyari, Sribalfi	Urban
41	B' Circle	Rajasthan	Rel comm	Rajasthan	Urban



South Asia

Sl. No.	Service Area Category	Name of Service Area	Name of Service Provider	List of Exchanges audited in 3rd Quarter (July 06 to Sep 06)	Urban/Rural
42	B' Circle	U.P East	BSNL	Mainpuri, Sandila, BHEL(Jhansi), Orai, Transport Nagar, Karwi, Anapara	Urban
				Bhogauwan, Kurawali, Makhhanpur, Kothawan, SubhanKhera, Gausganj, Madhogarh, Konch, maharauni, bansi, Talbehat, Manauri, Manjhanpur, Muratganj, C.R.O, Manikpur, Mau, Renusagar, Rihandnagar, Shaktinagr,	Rural
43	B' Circle	UP (East)	Rel comm	UP East	Urban
44	B' Circle	U.P(W)	BSNL	Khurja Jn., Bhoor, Bijnor MBM, Najibabad	Urban
				Ganthala, Aurangabad, Agouta, BSR Moti Bagh, Nagina, Dhampur, Chandpur	Rural
45	B' Circle	UP (West)	Rel comm	UP West	Urban
46	B' Circle	UP (West)	Airtel	Noida	Urban
47	B' Circle	Uttranchal	BSNL	Nainital	Urban
				Haldwani, Motahaldo, Ranibaag, Lamachore	Rural
48	C' Circle	H.P.	BSNL	Dharamshala,	Urban
				Maclodganj, Khanyara,, Lunj, Masrehar, Gagul, Shahpur, Daultpur, Chari, Ranital, Sunhi, Rajiana	Rural
49	C' Circle	J&K	BSNL	Anant Nag, Pehalgaon, Maslan	Urban
50	C' Circle	Bihar		hajipur, sasaram	Urban
				harpurbelowwa, bidhupur, desari, lakshmanpur, shadai buzurg, nasrigung, sanjhauli, nokha, jamuhar, kochas	Rural
51	C' Circle	Assam	BSNL	Jorhat, Shivsagar	Urban
				Bokahat, Maraini, Nazira, NRL Colony	Rural
52	C' Circle	NE-1	BSNL	OCB-Shillong, Nompoh	Urban
				Umsning, Barapani, Umroy	Rural
53	C' Circle	NE-2	BSNL	Dimapur	Urban
				Dhansiripar, Chumukdema, Medziphema	Rural
54	C' Circle	Orissa	BSNL	balasore,baripoda	Urban
				homkaper, bampora, remuna, kururda, sonapur, rajnilgiri, uhala, betaneti,joshipur, royrangapur	Rural
55	C' Circle	Jharkhand	BSNL	Bariyat,Shyamali	Urban
				Bero,Itki,Nayasari,Nagli	Rural

4.6 List of MSCs Audited – Cellular Services

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in third Quarter
1	Metro	Delhi	MTNL	karolbagh
2	Metro	Delhi	Idea	Delhi MSC - 2
3	Metro	Delhi	Hutch	Delhi MSC - 1
4	Metro	Delhi	Bharti	Delhi MSC - 2
5	Metro	Delhi	Tata	Delhi MSC - 3
6	Metro	Delhi	Rel comm	Ghaziabad-1
7	Metro	Mumbai	MTNL	MSC Mumbai
8	Metro	Mumbai	Hutch	Sahas Prabhadevi Mumbai
9	Metro	Mumbai	Bharti	Malad Mumbai
10	Metro	Mumbai	BPL	Mahin MSC-1
11	Metro	Mumbai	Tata	Andhari Mumbai
12	Metro	Mumbai	Rel comm	Kalyan-1
13	Metro	Chennai	Hutch	Msc-1 Arikant Tower,Anna Salai
14	Metro	Chennai	Bharti	Msc-Santhome
15	Metro	Chennai	Aircel	Annasalai-Chennai
16	Metro	Chennai	Tata	Chennai Msc-2
17	Metro	Chennai	Rel comm	Chennai Msc-3
18	Metro	Chennai	Bsnl	Chennai Msc-2
19	Metro	Kolkata	Bsnl	Kolkata Msc-2
20	Metro	Kolkata	Hutch	Kolkata Msc-2
21	Metro	Kolkata	Bharti	Kolkata Msc-2
22	Metro	Kolkata	Tata	Kolkata Msc-2
23	Metro	Kolkata	RISL	Kolkata Msc-1
24	Metro	Kolkata	Rel comm	Kolkata Msc-2
25	A 'Circle	A.P.	Bsnl	Msc-2 A.P.
26	A 'Circle	A.P.	Hutch	Msc-Hydrabad
27	A 'Circle	A.P.	Bharti	Msc-2 A.P.
28	A 'Circle	A.P.	Idea	Msc-Vijayawada
29	A 'Circle	A.P.	Tata	Msc-2 A.P.
30	A 'Circle	A.P.	Rel comm	Msc-Hydrabad-1
31	A 'Circle	Tamail Nadu	Bharti	Msc-2 Coimbator
32	A 'Circle	Tamail Nadu	Rel comm	Msc-2 Madurai
33	A 'Circle	Tamail Nadu	Hutch	Msc- Madurai
3	A 'Circle	Tamail Nadu	Tata	Msc- Chennai
35	A 'Circle	Tamail Nadu	Bsnl	Msc-Trichi
36	A 'Circle	Tamail Nadu	Aircel	Msc- Coimbatore
37	A 'Circle	Karnataka	Spice	Msc-Bangalore
38	A 'Circle	Karnataka	Hutch	banglore



South Asia

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in third Quarter
39	A 'Circle	Karnataka	Bsnl	banglore
40	A 'Circle	Karnataka	Tata	banglore
41	A 'Circle	Karnataka	Bharti	banglore
42	A 'Circle	Karnataka	Rel comm	Msc2 -Bangalore
43	A 'Circle	Gujarat	Bsnl	Msc-2 Gujarat
44	A 'Circle	Gujarat	Hutch	Msc-Surat
45	A 'Circle	Gujarat	Idea	Msc-Ghandinagar
46	A 'Circle	Gujarat	Bharti	Msc-Ahmedabad
47	A 'Circle	Gujarat	Tata	Msc-Surat
48	A 'Circle	Gujarat	Rel comm	Msc-Surat-2
49	A 'Circle	Maharastra	Bsnl	Msc-2
50	A 'Circle	Maharastra	Bharti	Msc-Pune
51	A 'Circle	Maharastra	Idea	Msc-Pune
52	A 'Circle	Maharastra	BPL	Msc-2 Pune
53	A 'Circle	Maharastra	Rel Commience	Pune
54	A 'Circle	Maharastra	Tata	Msc-Pune
55	B'Circle	Haryana	Bsnl	Msc-2-Ambala
56	B'Circle	Haryana	Bharti	Msc- Ambala
57	B'Circle	Haryana	Hutch	Msc- Karnal
58	B'Circle	Haryana	Idea	Msc- Sonipat
59	B'Circle	Haryana	Tata	Msc-Ambala
60	B'Circle	Haryana	Rel comm	Msc-Ambala
61	B'Circle	Kerala	Bsnl	Msc-3
62	B'Circle	Kerala	Bharti	Msc-cochin
63	B'Circle	Kerala	Hutch	Msc-2 Cochin
64	B'Circle	Kerala	Idea	Msc-Calicut
65	B'Circle	Kerala	Tata	Msc-Calicut
66	B'Circle	Kerala	Rel comm	Msc-Tiruvananpuram
67	B'Circle	M.P.	Bsnl	Msc-2 Raipur
68	B'Circle	M.P.	Bharti	Msc- Indore
69	B'Circle	M.P.	Rel commtelecom	Msc-indore
70	B'Circle	M.P.	Idea	Msc-indore
71	B'Circle	M.P.	Tata	Msc-Raipur
72	B'Circle	M.P.	Rel comm	Msc-2 Bhopal
73	B'Circle	Punjab	Bsnl	Msc-3 Punjab
74	B'Circle	Punjab	Bharti	Msc-2 Mohali
75	B'Circle	Punjab	Hutch	Msc-2 Mohali
76	B'Circle	Punjab	Spice	Msc-2 Mohali



South Asia

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in third Quarter
77	B'Circle	Punjab	HFCL	Msc-2 Mohali
78	B'Circle	Punjab	Rel comm	Msc-Mohali
79	B'Circle	Punjab	Tata	Msc-Chandigarh
80	B'Circle	Rajasthan	Bharti	Msc-2 Jaipur
81	B'Circle	Rajasthan	Hutch	Msc- Gaurav Tower,Jaipur
82	B'Circle	Rajasthan	Bsnl	Msc-3
83	B'Circle	Rajasthan	Tata	Jaipur
84	B'Circle	Rajasthan	Shyam	Msc-Jaipur
85	B'Circle	Rajasthan	Rel comm	Msc-2 Jaipur
86	B'Circle	U.P.(East)	Tata	Msc- Lucknow
87	B'Circle	U.P.(East)	Bsnl	Msc -Lucknow
88	B'Circle	U.P.(East)	Bharti	Msc-2-Lucknow
89	B'Circle	U.P.(East)	Hutch	Msc-2-Lucknow
90	B'Circle	U.P.(East)	Rel comm	Msc-2 Kanpur
91	B'Circle	U.P(West)	Bsnl	Msc-2 Agra
92	B'Circle	U.P(West)	Bharti	Msc-2 Meerut
93	B'Circle	U.P(West)	Hutch	Msc-2 Meerut
94	B'Circle	U.P(West)	Idea	Msc-2 Meerut
95	B'Circle	U.P(West)	Rel comm	Msc-2 Meerut
96	B'Circle	West Bangal	Bsnl	siliguri
97	B'Circle	West Bangal	Bharti	Msc,Asansol
98	B'Circle	West Bangal	Hutch	Msc-Asansol
99	B'Circle	West Bangal	Tata	Kolkata
100	B'Circle	West Bangal	Dishnet	Msc-Silliguri
101	B'Circle	West Bangal	REL COMM(info)	kharagpur
102	B'Circle	West Bangal	Rel Tel	siliguri
103	C' Circle	Assam	Bsnl	guwahati
104	C' Circle	Assam	Dishnet	guwahati
105	C' Circle	Assam	Bharti	Nsc-Gawhati
106	C' Circle	Assam	Rel comm	Msc-2 Assam
107	C' Circle	Bihar	Bharti	Msc-Patna
108	C' Circle	Bihar	Rel Tel	Msc-Rachi
109	C' Circle	Bihar	Tata	jamsedpur
110	C' Circle	Bihar	Bsnl	Msc-3
111	C' Circle	Bihar	Rel comm	Msc-patna



South Asia

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in third Quarter
112	C' Circle	H.P	Bsnl	shimla
113	C' Circle	H.P	Bharti	Shimla
114	C' Circle	H.P	Rel Tel	shimla
115	C' Circle	H.P	Rel comm	Shimla
116	C' Circle	H.P	Tata	Msc-Shimla
117	C' Circle	NE	Bharti	Msc-shillong
118	C' Circle	NE	Rel Tel	Msc-Shillong
119	C' Circle	NE	Bsnl	Shillong
120	C' Circle	NE	Aircel	Shillong
121	C' Circle	J & K	Bsnl	jammu
122	C' Circle	J & K	Bharti	Msc-jammu
123	C' Circle	J & K	Dishnet	Msc-Jammu
124	C' Circle	Orrisa	Bsnl	berhampur
125	C' Circle	Orrisa	Bharti	Msc-Bhubaneswar
126	C' Circle	Orrisa	Dishnet	Msc-Bhubaneswar
127	C' Circle	Orrisa	Tata	Bhubneswar
128	C' Circle	Orrisa	Rel Tel	Bhubneswar
129	C' Circle	Orrisa	Rel comm	Msc-Bhubaneswar

Annexure 1
INDEPENDENT DRIVE TEST

As a part of the Quality of Service Audit for TRAI, Independent drive tests were carried out for the Six Cellular service operators in the Delhi Circle by TUV South Asia.

The data obtained from the drive test is as under:

Parameters / Benchmark	Delhi					
	Bharti	Hutch	Tata	Idea	MTNL	Rel Info
% Connections with Good Voice Quality	>95%	73.9	51.62	86.3	90.83	68.46
Call Drop Rate	<3%	58.33	66.96	2.43	50.73	64.95
Call Success Rate	>95%	88.88	92.3	85.86	93.45	83.33
Blocked Calls	< 3	0	0	0	0	0

From the above, it can be derived that only Reliance Info is meeting the benchmark for all the parameters. Rest all are significantly below the benchmark. The call drop rate is more in case of Bharti, Hutch , Idea and MTNL as Long Calls were made for drive test, as directed by TRAI Official Mr. R K Mishra. The route was also decided in consultation with Mr. Mishra.

Route:

Mehrauli ----- Adhchini ----- RK Puram Sector II ----- Bhikaji Cama Place ----- SN Depot – Nausena Bagh ----- Nehru Park ----- Embassy Area ----- Trimurti --- --- RML Hospital ---- CP Police Station ----- Shanker Marg ----- Gole Market ----- -- Karol Bagh ----- Dev Nagar ----- Raigharpura ----- Paharganj ----- Daryganj -- ---- Lal Quila ----- Chandni Chowk ----- Delhi Railway Station ----- Raj Ghat ----- Connaught Place ----- Hanuman Mandir ----- Karol Bagh ----- Rajender Nagar ----- Tri Nagar ----- Janak Puri ----- Dwarka ----- Dwarka Sector 7 --- - Palam Village ---- Dabri ----- Janak puri ----- Outer Ring Road ----- Rohini ---- Madhuban Chowk ----- Azadpur ---- KArnal Bye Pass ----- Nirankari Colony ---- ISBT ----- ITO ----- Sarai Kalen Khan ----- Maharani Bagh ----- South Ex ----- -- AIIMS ---- Moti Bagh ---- Daula Kuan ----- Delhi Cantt Rly Stn ----- Dabri.

Annexure 2

APPROACH AND METHODOLOGY

OBJECTIVE ASSESSMENT OF QOS (BASIC SERVICE)

TUV South Asia is entrusted to verify the accuracy and authenticity of QOS performance Monitoring reports submitted to TRAI by the various operators. This is to be carried out at quarterly intervals for the year 2006 (July–Sep).

All the parameters are divided into

- Network Parameter
- Customer Care Parameter

Following operator circles of Basic Service Operator (BSO) were to be covered in this quarter as per PMR July 2006.

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
01	BSNL	Chennai	AP	MP	Bihar
		Kolkata	Gujarat	Chattisgarh	A & N
			Maharashtra	Punjab	Assam
			TN	Rajasthan	HP
			Karnataka	Haryana	Jharkhand
					J&K
				Kerala	NE1
				UP(E)	NE2
				UP(W)	Orissa
				WB	Uttaranchal
02	MTNL	Delhi	Not Operating	Not Operating	Not Operating
		Mumbai			
03	Reliance	Delhi	AP	MP	Bihar
		Mumbai	Gujarat	Punjab	Orissa
		Chennai	Maharashtra	Rajasthan	
		Kolkata	TN	Haryana	
			Karnataka	Kerala	
				UP(E)	



South Asia

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
				UP(W)	
				WB	
04	TATA	Delhi	AP		
		Mumbai	Gujarat		
		Chennai	Maharashtra		
			TN		
			Karnataka		
05	Bharti	Delhi	AP	MP	
		Mumbai	TN	Punjab	
		Kolkata	Karnataka	Haryana	
				UP(E)	
				UP(W)	
06	Shyam	Not Operating		Rajasthan	
07	HFCL	Not Operating		Punjab	

NETWORK PARAMETERS

The parameters are as below:

- Provision of Telephone
- Fault Incidences
- Fault repair by Next Working Day
- Mean time for Repair
- Grade of Service
- Call completion rate

The method of calculation and the reporting formats for each of the above parameters are described below:

PROVISION OF TELEPHONE:

The following data will be verified at the exchange.

- a) Date of Registration for a Telephone
- b) Exact date of installation

$$\% \text{ Telephone Connected} = \frac{\text{No. of Telephones provided within 7 days}}{\text{No. of registrations made during that quarter}} \times 100$$

In case where the connection has been delayed, or cancelled by the customer himself, that will be omitted from calculation.

Benchmark Data: 100% cases in Less than 7 working days subject to Technical Feasibility.

Format for collection of data are annexed at TUV/TRAI/FM/02

FAULT INCIDENCES:

The following data will be verified at the exchange from consumer complain log data

- a) No. of Subscribers
- b) No. of Faults

$$\frac{\text{No. of Faults}}{\text{Subscribers / Month}} / 100 = \frac{\text{No. of Faults per month}}{\text{No. of Subscribers in that month}} \times 100$$

From the total complains five customers will be called back to verify the authenticity.

Benchmark Data: Less than 5 faults per 100 subscribers per month till 31st March 2007 and Less than 3 Faults per 100 subscribers per month till 31st March 2008.

Format for collection of data are annexed at TUV/TRAI/FM/02

FAULT REPAIR BY NEXT WORKING DAY:

The following data will be verified at the exchange from the customer complain log data

- a) No. of faults received in a month
- b) No. of faults rectified by next working day

$$\% \text{ Fault Repaired by Next Working Day} = \frac{\text{No. of Faults Rectified by next working day}}{\text{No. of Faults received}} \times 100$$

$$\% \text{ Fault Repaired within 3 Working Days} = \frac{\text{No. of Faults Rectified by next working day}}{\text{No. of Faults received}} \times 100$$

From the total complains five customer will be called back to verify the authenticity.

Benchmark Data: More than 90% rectification by next working day and 100% by 3 working days averaged over one month. Rent rebate of 7 days to be given if fault repaired after 3 working days but before 7 working days. Rent rebate of 15 days to be given if fault repaired after 7 working days but before 15 working days. Rent rebate of 1 month to be given if fault repaired after 15 working days.

Format for collection of data are annexed at TUV/TRAI/FM/02

MEAN TIME FOR REPAIR:

The following data will be verified at the exchange.

- a) No. of Faults reported in a months period
- b) No. of Faults rectified on the same day
- c) No. of Faults rectified on the second day
- d) No. of Faults rectified on the third day
- e) No. of Faults rectified on the fourth day
- f) No. of Faults rectified on the Fifth day

Since the result is required in terms of hours, not in terms of day(s), hence the following assumption has been taken:

Same day = 4 hours, Second day = 12 hours, Third day = 20 hours, Fourth day = 28 hours

Fifth day = 36 hours

$$\% \text{ Mean Time for Repair} = \frac{(bx4 + cx12 + dx20 + ex28 + fx36)}{a} \times 100$$

Format for collection of data are annexed at TUV/TRAI/FM/02

Note: While calculating the days, off days will not be counted

GRADE OF SERVICE:

The following data will be verified at the exchange.

- a) Total calls made to Local Exchange junction
- b) Lost calls (busy) from Junction to Local exchange
- c) Total calls from TAX to local Exchange
- d) Lost calls (busy) from TAX to local Exchange
- e) Total calls from Local Exchange to TAX
- f) Lost calls (busy) from Local Exchange to TAX
- g) Total calls between TAX
- h) Lost calls (busy) between TAX to TAX

Two intervals each of duration 1 hour will be selected from the Time Consistent Busy Hour (TCBH) in the 1st and 3rd week of every month for all combinations.

$$\text{Grade of Service} = \frac{\text{Lost Calls}}{\text{Total Calls}}$$

Benchmark Data: a) Junction between local exchange -0.002, b) Outgoing junctions from TAX to local exchanges -0.005, c) Incoming junctions from local exchange to TAX -0.005, d) Incoming or outgoing junctions between TAX's 0.005, averaged over one quarter.

Format for collection of data are annexed at TUV/TRAI/FM/02

CALL COMPLETION RATE:

The following data will be verified at the exchange.

- a) Total Intra office calls handled during the period
- b) Intra office calls answered during the period
- c) Total Incoming calls handled during the period
- d) Incoming calls answered during the period
- e) Total Outgoing calls handled during the period
- f) Outgoing calls answered during the period
- g) Total outgoing TAX calls handled during the period
- h) Outgoing TAX calls answered during the period

Two intervals each of duration 1 hour will be selected from the Time Consistent Busy Hour (TCBH) in the 1st and 3rd week of every month for all combinations

$$\% \text{ Call Completion Rate} = \frac{\text{Total Calls answered}}{\text{Total calls Established}} \times 100$$

Benchmark Data: Greater than 55% within local network.

Format for collection of data are annexed at TUV/TRAI/FM/02

CUSTOMER CARE PARAMETERS

The objective of the study is to assess the various QOS indicators for Basic Service Operators as notified by TRAI. The parameters are as below:

- Metering & Billing Credibility
- Customer Care Promptness
- Time taken for refund of deposits after closures

The method of calculation and the reporting formats for each of the above parameters are described below:

METERING & BILLING CREDIBILITY:

The following data will be verified at the Call centers/ exchanges.

- a) Total No. of Bills raised
- b) Total no. of Complaints registered

$$\% \text{ of Disputed bills over a } = \frac{\text{Total no. of Complaints registered}}{\text{Total no. of Bills raised}} \times 100$$

billing cycle period

Same billing cycle for every month will be selected

Benchmark Data: Should be Less than 0.1% of the bills raised in a cycle

Format for collection of data are annexed at TUV/TRAI/FM/03

CUSTOMER CARE PROMPTNESS:

The following data will be verified at the Call Centres/ Exchanges

- a) Total no. of Shift Requests registered
- b) No. of Shift Requests handled within 3 days
- c) Total no. of Closure Requests registered
- d) No. of Closure Requests handled within 24 Hrs
- e) Total no. of Additional Service Requests registered
- f) No. of Additional Service Requests handled within 24 Hrs

$$\% \text{ Customer requests attended for Shifting} = \frac{\text{No of request handled within 3 days}}{\text{Total No of Request}} \times 100$$

$$\% \text{ Customer requests attended for Closures} = \frac{\text{No of request handled within 24 hours}}{\text{Total No of Request}} \times 100$$

$$\% \text{ Customer requests attended for Additional Facilities} = \frac{\text{No of request handled within 24 hours}}{\text{Total No of Request}} \times 100$$

Benchmark Data: a) 95% of the customer requests for Shifting should be attended within 3 days. b) 95% of the customer requests for Closures should be

attended within 24 hours. c) 95% of the customer requests for Additional Facility should be attended within 24 hours. All the above will be averaged over a month.

Format for collection of data are annexed at TUV/TRAI/FM/03

TIME TAKEN FOR REFUND OF DEPOSITS AFTER CLOSURES

100 cases of closure will be selected during the audit and percentage of refunds made within 60 days will be calculated.

Benchmark Data: 100 % of the refunds to be given within 60 days.
 Format for collection of data are annexed at TUV/TRAI/FM/03

OBJECTIVE ASSESSMENT OF QOS (CELLULAR)

All MSCs for each of the Cellular Mobile Service Provider (CMSP) are required to be covered. TUV had submitted sample design and reporting formats to be followed for carrying out this activity.

Operators required to be audited in quarter 3 as per PMR Sep. 2005.

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
01	Bharti	Delhi	AP	Haryana	Assam
		Mumbai	Gujarat	Kerala	
		Chennai	Karnataka	MP	Bihar
		Kolkata	Maharashtra	Punjab	
			TN	Rajasthan	HP
				UP (E)	NE
				UP(W)	J&K
			WB		Orissa
02	Hutch	Delhi	AP	Haryana	Not Operating
		Mumbai		Punjab	
		Chennai	Gujarat	Rajasthan	
		Kolkata	Karnataka	UP(E)	
				UP(W)	
				Kerala	
03	TATA- CDMA	Delhi	AP	Haryana	Bihar
		Mumbai	Gujarat	Kerala	



South Asia

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
		Chennai	Karnataka	MP	HP
		Kolkata	Maharashtra	Punjab	
			TN	Rajasthan	Orissa
				UP (E)	
				UP(W)	
				WB	
04	Idea	Delhi	AP	Haryana	Not Operating
			Gujarat	Kerala	
			Maharashtra	MP	
				UP(W)	
05	MTNL	Mumbai	Not Operating	Not Operating	Not Operating
		Delhi			
06	Relinace CDMA	Delhi	AP	Haryana	Bihar
		Mumbai	Gujarat	Kerala	
		Chennai	Karnataka	MP	
			Maharashtra	Punjab	
				Rajasthan	HP
				UP (E)	
				UP(W)	Orissa
		Kolkata	TN	WB	
07	BPL	Mumbai	Maharashtra	Kerala	Not Operating
			TN		
08	Aircel	Chennai	TN	Not Operating	Not Operating
09	Reliable Internet Services	Kolkata	Not operating	Not Operating	Not Operating
10	Reliance GSM	Not operating	Not operating	WB	Assam
					Bihar
				MP	HP
					NE
					Orissa
11	Spice Communications	Not Operating	Karnataka	Punjab	Not Operating
12	BSNL	Chennai	AP	Haryana	Assam
			Gujarat	Kerala	
		Kolkata	Karnataka	MP	
				Bihar	

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
			Maharashtra	Punjab	
			TN	Rajasthan	HP
				UP (E)	NE
				UP(W)	J&K
				WB	Orissa
13	HFCL	Not Operating	Not Operating	Punjab	Not Operating
14	Dishnet	Not Operating	Not Operating	WB	Assam
					NE
					J&K
					Orissa

NETWORK PARAMETERS

The following Network Parameter data are audited to check its accuracy:

- Accumulated Down Time of Community Isolation
- Call Setup Success Rate
- Service Access Delay
- Call Drop rate
- % Connections with Good Voice Quality
- Congestion data

ACCUMULATED DOWN TIME OF COMMUNITY ISOLATION

Data submitted by operator to TRAI on the above parameter will be collected by TUV. From the fault alarm tracking details at MSC the outage duration will be calculated and compared with the same provided in the report.

Benchmark Data: Less than 24 hours averaged over a period of one quarter.

Format for collection of data are annexed at TUV/TRAI/FM/01 & 05

Note: Failure of the entire exchange area for more than one hour is defined as Accumulated Down Time of Community Isolation

CALL SETUP SUCCESS RATE

Call setup success rate is defined as % of call attempts made from a mobile set is successfully signalled to the called network (same network) within the specified time.

Cell wise data for the above parameter is available at MSC. During the audit data for three cells each month will be verified

Benchmark Data: Greater than 95% averaged over a period of one quarter.

SERVICE ACCESS DELAY

Individual drive test log files conducted by the operator themselves will be used for collecting the data

Benchmark Data: Between 9 to 20 Seconds averaged over a period of one quarter.

Format for collection of data are annexed at TUV/TRAI/FM/01 & 05

BLOCKED CALL RATE

This data is collected from MSC. The authenticity of data is verified by randomly checking samples from the switch.

CALL DROP RATE

This parameter is to be measured by the system generated (defined counters are available in the system for traffic measurement) cell wise dropped call data and total calls established figures to arrive at the authenticity and accuracy of the benchmark reported to TRAI.

During the audit randomly two cells will be selected per month

Benchmark Data: Less than 3% averaged over a period of one quarter.

Format for collection of data are annexed at TUV/TRAI/FM/01 & 05

% CONNECTIONS WITH GOOD VOICE QUALITY

The data will be collected from the relevant city wise drive log files for all drive tests conducted during the busy hours. Total number of Rx Qual sample generated during the various long calls made during the drive along with the number of such samples with the quality values 0-4 on the scale of 7 for GSM & 0-5 for network where Hopping Frequency is used. In case of CDMA, the performance measure of voice quality is FRAME ERROR RATE (FER). Good voice quality in case of CDMA is 0-4% of FER value.

Benchmark Data: Greater than 95% averaged over a period of one quarter.

Format for collection of data are annexed at TUV/TRAI/FM/01 & 05

CONGESTION DATA

All the service providers have been asked to measure the 9 parameters given below averaged over a month and measure during the Time Consistent Busy Hour (TCBH). These parameters reported by all service providers and their findings shall be included in the Reports

- SDCCH Attempts
- SDCCH Congestion (%)
- SDCCH Establishment Success rate (%)
- TCH Attempts
- TCH Congestion (%)
- TCH Establishment Success rate (%)
- Traffic Offered on all individual POI's
- Served Traffic for all individual POIs
- Traffic Failed
- % Congestion on individual POI's

Benchmark Data: Less than 0.5% hours averaged over a period of one quarter.

CUSTOMER CARE PARAMETERS

Objective: The objective of the study is to assess the various QOS indicators for Cellular Service Operators as notified by TRAI. The parameters are as below:

- Billing complain per 100 bills issued
- % of Billing complains resolved within 4 weeks
- Period of all payments/refunds due to customer from the date of resolution of complains above

The method of calculation and the reporting formats for each of the above parameters are described below:

BILLING COMPLAIN PER 100 BILLS ISSUED

The following data will be verified at the Call centres.

- a) Total No. of Bills raised
- b) Total no. of Complaints registered

$$\% \text{ Billing Complaints} / 100 = \frac{\text{Total no. of Complaints registered}}{\text{Total no. of Bills raised}} \times 100$$

Same billing cycle for every month will be selected

Benchmark Data: a) Less than 0.1% averaged over a period of one quarter

Format for collection of data are annexed at TUV/TRAI/FM/04

% OF BILLING COMPLAINTS RESOLVED WITHIN 4 WEEKS

The detail of Daily complaint redressal records will be verified.

The following data will be collected

- a) No. of billing complain in a month
- b) No. of disputes resolved within 4 weeks

$$\% \text{ Billing complain resolved} = \frac{\text{No. of billing complaints resolved within 4 weeks}}{\text{No. of complaints received}} \times 100$$

The audit Executive will calculate the figures from the individual complaint details for the period and also verify the accuracy of the figures reported to TRAI

From the total complains five customer will be called back to verify the authenticity.

Benchmark Data: a) 100% average over a period of one quarter

Format for collection of data are annexed at TUV/TRAI/FM/04

PERIOD OF ALL PAYMENTS/REFUNDS DUE TO CUSTOMER FROM THE DATE OF RESOLUTION OF COMPLAINS ABOVE

Randomly, 100 cases of refund will be picked up for the period and the time taken for payment of refunds from the date of resolution of complaints will be evaluated.

Benchmark Data: a) 100% within a period of 4 weeks from the date of resolution of complaints

OPERATOR ASSISTED DRIVE TEST

The drive tests were done to check the following parameters:

- a. Coverage-Signal strength
- b. Voice quality
- c. Call success rate
- d. Blocked calls
- e. Call drop rate

The drive test covered four outdoor routes and one indoor sites. Out of the four outdoor routes, the two covered the periphery of the city, the third covered the congested area in the city and the fourth covered area across the city.

Herein, cities within a telecom circle were divided into 3 clusters based on the population residing in those cities. One city from each of these three clusters would be selected for conducting drive tests. These cities were proposed by TUV and finalised by TRAI. However, in case of Metro Circle service areas, 2 (two) no. of drive test for each operator was done.

There following conditions were adhered to during the above mentioned drive tests:-

- The speed of the vehicle should be kept at around 30-50 km/hr. (around 30 km/hr in case of geographically small cities)
- Measurement using engineering handsets would not be acceptable
- Each area where the tests are conducted should not cover less than 200 km or 5 hours driving time
- Drive Test would be conducted between 10 AM to 8 PM on weekdays.
- The Vehicle to be used in the drive tests will be equipped with the test tool that automatically generates calls on the mobile telephone networks. The holding period of each test call will be 120 seconds. A test call will be generated 10 seconds after the previous test call is completed.
- The dedicated originating and terminating mobile unit's antenna shall be placed at the same height and in the same vehicle. Moreover, the height of the antenna should be uniform in case of all operators

Drive test was conducted at the following cities

	Q-3		Cities
	Region	Circle	Cities
1	North	H.P	Una,Kangra,Dalhousie
2	North	Punjab	Bhatinda,Chandigarh,Patiala
3	North	Haryana	Yamuna Nagar,Sirsia,Bhiwani
4	North	UP-W	Alligarh,Barely,Dehradun
5	North	UP-E	Allahbad,Mirzapur,Fatehpur
6	North	Rajasthan	Nagour,Bikaner,Jodhpur
7	North	M.P.+ CG	Chhatrapur,Sivpuri,Bhilai
8	North	Delhi	Delhi
9	North	J&K	Pahalgam, Leh,Gadarwal,
10	East	W.B	Silliguri,Jalpaiguri,Coochbehar
11	East	Kolkata	Kolkata

12	East	Bihar	Begusarai,Lakhasarai,Munger
13	East	Jharkhand	Bokaro,Hazaribag,Deogarh
14	East	Orissa	Dhenkanal,Bhadrak,Bhubaneswar
15	East	Assam	Jorhat,Dibrugarh,Tinsukia
16	East	NE	Imphal,Senapati,Tamamglong
17	East	A & N	
18	South	Chennai	Chennai
19	South	AP	Mehboobnagar,Nalgonda,Khammam
20	South	Karnataka	Belgam,Billary,Chikmaglur
21	South	Karela	Trichur,Panghat,Kasargod
22	South	TN	Pondicherry,Errod,Mettor
23	West	Maharastra	Aurangabad,Jalgaon,Solapur
24	West	Gujrat	Surat,Navsari,Bhavnagar
25	West	Mumbai	Mumbai

Format followed for the activity TUV/TRAI/FM/08

INDEPENDENT DRIVE TESTS:

Out of 25 independent drive test TUV has been conducted 6 drive test as per TRAI request in Q3

method of conducting these drive tests would be same as that of Operator Assisted Drive Test.

Format followed for the activity TUV/TRAI/FM/08

INTRA & INTER-OPERATOR CALL ASSESSMENT

An inter-operator calls exercise was carried out for measurement of operators' performance on the following key parameter: -

- Network and Point of Interconnect (POIs) Congestion

Herein, calls were made from one operator's connection to that of another's. Presence of an answer ring tone indicates absence of any congestion in the link.

Basic Operator

25 Calls from Operator A to Operator B during 1000hrs to 1300 hrs

25 Calls from Operator B to Operator A during 1000hrs to 1300 hrs

An average percentage of successful attempts made from each operator's connection were computed to indicate the operator's performance in terms of presence of Network and PoI Congestion

HELPLINE CONNECTIVITY ASSESSMENT

Response time to customers for assistance is assessed by making calls.

Following two parameters were measured as follows: -

1. Time to connect to IVR: This is the wait time before an automatic answer machine (IVR) message begins.
2. Time to connect to an agent : Wait time before a live person at the operator's end responds to a call

Both of these measures were obtained by making calls in the same way as for intra and inter-operator call assessment. Thus calls were made to the customer care numbers of different telecom operators and data pertaining to the above-mentioned areas were identified.

APPROACH AND METHODOLOGY - CSS

SAMPLING METHOD

The sampling methodology for selection of respondents from subscribers of Basic Telephone Services, Mobile and CDMA is given below:

Selection of Cities

SELECTION OF CITIES

Stage 1:

1. Three cities were selected in a telecom circle should be based on subscriber base of each service provider.
2. The approach was to arrange the cities in the telecom circle in descending order according to subscriber base. Select three cities such that:
 - a. Largest subscriber base – city1
 - b. Median value – city 2
 - c. Last in the list –city 3

Stage 2: Distribution of the total sample in the state in the three cities was done in the ratio of subscriber base of the respective service providers in these cities.

Stage 3: In each city, the determined sample of respondents (for each service and service provider) should be distributed into rural and urban sample in the ratio of number of subscribers in rural and urban areas.

SELECTION OF RESPONDENTS IN RURAL AREA OF THE SELECTED CITY

From the list of subscribers of landline in the rural area, one telephone number was randomly picked up and address noted. It was ensured that distance of the village is atleast 5 kms (preferably 10 kms) from the city limits. The rural survey started from the village of the first sampled telephone number and continued in

that village and adjoining villages till required number of respondents were interviewed. Along with survey of users of basic telephone services in rural area, information were collected for users of mobile telephone as well as CDMA in those villages which are visited for basic services.

SELECTION OF RESPONDENTS IN URBAN AREA

The total sample for each service provider of basic services in the city were divided into four. Adequate number of respondents were selected by dividing the city into four parts. Along with the survey for basic services, survey for mobile services and CDMA were also carried out of the same service provider till the sample required for in-person interview for all three types of services is completed. The telephonic interview of 25% urban users for all the 3 types of services were done based on random selection of subscribers of basic, mobile and CDMA of respective service providers.

AREA DISTRIBUTION

Area would be divided into two classifications i.e. Rural and Urban and the sample size would be 20:80 respectively..

GENDER DISTRIBUTION

After the size determination of rural and urban areas, 75% sample of subscribers would be male and 25% female.

AGE DISTRIBUTION

The respondents will then be divided on the basis of age with ratio 20:60:20 i.e. Student (up to 25 yrs), Middle (26-50) and Old (>50).

DISTRIBUTION ON BASE OF USAGE

Distribution on the base of Usage i.e. Residential and Commercial

Note: There will be a distribution of Post Paid & Pre Paid Subscribers also in case of Cellular / Mobile Network.

No. of samples Covered during Customer satisfaction survey are given below :

SAMPLE SIZE

STATE	Basic	Mobile	Total	STATE	Basic	Mobile	Total
AP	1465	2403	3868	Maharastra	1192	2198	3390
Assam	250	1013	1263	MP	893	1519	2412
Bihar	451	1265	1716	Mumbai	2461	3452	5913
Chennai	2966	3116	6082	NE	749	1012	1761
Delhi	3041	3595	6636	Orissa	449	1516	1965
Gujrat	1041	2208	3249	Punjab	1059	1627	2686
Haryana	720	1529	2249	Rajasthan	939	1287	2226
HP	422	1007	1429	TN	1426	2298	3724
J & K	193	579	772	UP (E)	646	1492	2138
Karnataka	1411	2401	3812	UP (W)	400	1774	2174
Kerala	688	1804	2492	WB	501	1518	2019
Kolkata	1100	3600	4700				
Grand Total	24463	44213	68676				



Annexure 3



South Asia

PERFORMANCE MONITORING REPORT (PMR) COMPARISION OF MOBILE (GSM & CDMA) & BASIC (Quarter-I, II & III)



South Asia

**PERFORMANCE MONITORING REPORT (PMR)
COMPARISION OF
MOBILE (GSM & CDMA)
(Quarter-I, II & III)**



South Asia

QUALITY OF SERVICE PERFORMANCE FOR MOBILE (GSM & CDMA) SERVICES																
Performance of QoS Parameters for cellular Mobile Services as reported by CMSPs for the quarter ending 31st March, 2006 , 30th June2006 & 30Sep2006																
Legends Used : NA : Not Available ND : Not Done, DNP : Data Not Provided, N/App : Not Applicable, NI : No Incidence		Time Segment	Parameters													
			(A) Network Performance						(B) Customer Help Lines			(C) Billing Complaints				
			(i)	(II)	(III)	(IV)		(V)	(VI)	(I)			(I)	(II)	(III)	
			Accumulated down time of community isolation (in hrs)	Call Setup Success Rate (within licenses own network) [in %]	Service Access Delay (in sec.)	Blocked Calls (in %)		Call Drop Rate (in%)	% of connections with good voice quality	Response time to the customer for assistance			Complaints per 100 bills issued	% of complaints resolved within 4 weeks	Period of all refunds/payment due to customers from the date of resolution of complaints as in (ii) above	
			Between 20 seconds depending upon no of paging attempts (avg. of 100 calls)	(I) SDCCH/ Paging Channel Congestion	(ii) TCH Congestion					(I) % of calls answered (electronically); within 20 sec	(II) % of calls answered (electronically); within 40 sec	(III) % of calls answered by operator (voice to voice); within 60 sec				
			Benchmarks													
Sr.No	Service Providers		<24 hrs	>95%	=<15 sec	<1%	<2%	<3%	>95%	80%	95%	80%	95%	<0.1%	100%	<4weeks
	A CIRCLE															
	Maharashtra															
1	BPL Cellular(Hutch)	TRAI Q1	21.48	98.03	14.00	1.26	1.93	1.24	98.51	100.00	N/A P	100.00	N/AP	0.80	100.00	100.00
		TUV Q1	64.15	98.00	14.00	1.21	1.90	1.24	97.80	ND	ND	ND	ND	0.07	100.00	100.00
		TRAI Q2	6.47	98.23	15.56	1.26	0.02	0.01	99.86	100.00	100.00	99.98	99.98	0.01	100.00	100.00
		TUV Q2	20.32	98.18	15.57	1.40	1.86	1.24	99.86	100.00	100.00	50.80	50.80	0.01	100.00	100.00
		TRAI Q3	5.45	99.62	14.57	0.77	1.17	1.23	97.80	99.96	99.96	99.93	99.90	0.80	100.00	100.00
		TUV Q3	1.91	99.62	15.12	0.77	1.10	1.22	97.78	100.00	100.00	87.74	87.74	0.00	100.00	100.00
2	IDEA Cellular	TRAI Q1	2.05	98.40	10.60	1.28	1.51	1.45	99.09	100.00	N/A P	76.00	86.00	0.13	100.00	100.00
		TUV Q1	2.08	99.60	10.20	0.48	0.12	1.38	97.70	ND	ND	ND	ND	0.18	100.00	100.00



South Asia

		TRAI Q2	4.15	98.68	9.92	0.79	1.53	1.44	98.04	100.00	Nil	67.00	76.00	0.80	100.00	100.00
		TUV Q2	3.42	98.75	9.78	0.69	1.51	1.46	97.03	100.00	100.00	84.63	91.08	0.52	100.00	100.00
		TRAI Q3	3.17	99.71	9.71	0.62	0.61	1.32	99.16	99.99	99.99	74.12	78.46	0.10	100.00	100.00
		TUV Q3	2.50	99.21	9.71	0.53	0.53	1.35	98.11	99.99	99.99	79.58	84.14	0.06	100.00	100.00
3	BSNL	TRAI Q1	21.00	97.00	10.00	0.90	1.80	1.10	98.00	100.00	N/A P	100.00	99.00	0.10	100.00	100.00
		TUV Q1	15.00	96.00	10.00	0.85	1.75	1.32	92.30	100.00	100.00	99.91	99.94	0.05	100.00	100.00
		TRAI Q2	20.00	98.74	8.30	0.93	1.77	1.50	98.00	100.00	100.00	99.41	99.92	0.04	100.00	100.00
		TUV Q2	0.00	99.54	7.90	N/A	N/A	N/A	N/A	100.00	100.00	99.54	99.90	0.04	100.00	100.00
		TRAI Q3	0.00	98.96	8.40	0.70	1.20	1.60	97.84	100.00	100.00	99.54	99.86	0.03	100.00	100.00
		TUV Q3	8.00	99.33	6.82	0.70	0.92	0.95	99.10	98.00	98.00	39.68	39.69	0.30	100.00	100.00
4	Bharti Televenture	TRAI Q1	23.06	97.26	8.46	0.23	0.33	0.99	95.20	99.00	99.00	94.00	95.00	0.10	100.00	100.00
		TUV Q1	25.50	97.70	5.95	0.26	0.23	0.98	97.70	ND	ND	ND	ND	0.02	100.00	100.00
		TRAI Q2	23.45	98.14	8.34	0.47	0.65	1.01	97.20	96.65	96.83	93.77	95.00	0.10	100.00	100.00
		TUV Q2	7.63	99.35	11.42	0.48	0.64	0.47	97.56	84.00	84.00	56.00	96.00	0.04	100.00	100.00
		TRAI Q3	18.00	96.30	8.74	0.43	0.82	1.30	96.50	95.64	95.80	90.72	91.13	0.08	100.00	100.00
		TUV Q3	5.43	99.81	12.59	0.44	0.55	1.12	96.03	100.00	100.00	40.70	40.83	0.20	100.00	100.00
5	Reliance-CDMA	TRAI Q1	0.84	99.33	4.00	0.00	0.43	0.90	99.40	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	1.93	99.59	ND	1.92	0.43	0.76	99.50	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	1.09	99.44	4.30	0.00	0.50	0.85	99.08	99.50	99.50	79.46	86.24	0.08	100.00	100.00
		TUV Q2	1.99	99.50	DNP	0.00	0.51	0.81	DNP	99.50	99.50	37.57	45.99	0.07	100.00	100.00
		TRAI Q3	0.66	99.45	4.32	0.00	0.57	0.90	99.36	99.50	99.50	69.67	76.95	0.06	100.00	100.00
		TUV Q3	1.56	99.40	1.00	0.00	0.00	0.85	97.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00



South Asia

6	Tata, MH-CDMA	TRAI Q1	7.72	96.97	13.50	0.00	0.71	0.46	96.65	0.00	100.00	0.00	0.00	0.60	100.00	NA
		TUV Q1	3.70	95.67	4.40	0.00	0.055	0.35	95.46	ND	ND	ND	ND	1.99	90.30	100.00
		TRAI Q2	8.42	97.85	18.00	0.00	0.13	0.61	96.24	100.00	Nil	89.00	93.67	0.50	100.00	NA
		TUV Q2	0.00	98.31	9.80	0.00	.91	0.54	96.05	100.00	100.00	88.00	96.00	0.99	100.00	100.00
		TRAI Q3	13.64	98.06	18.00	0.00	0.01	0.01	97.29	100.00	100.00	84.33	88.67	0.00	100.00	NA
		TUV Q3	0.00	97.97	15.40	0.00	1.34	0.46	97.29	100.00	100.00	76.94	81.85	0.07	100.00	100.00
II	Gujarat															
7	Hutch - Essar	TRAI Q1	25.54	97.75	9.49	0.19	0.98	1.23	97.93	100.00	N/A P	76.48	92.03	0.09	100.00	100.00
		TUV Q1	22.00	96.90	9.49	0.20	0.98	1.55	97.90	ND	ND	ND	ND	0.03	100.00	100.00
		TRAI Q2	19.43	98.03	9.57	0.18	0.85	0.01	98.40	99.12	100.00	86.17	95.52	0.00	100.00	100.00
		TUV Q2	19.40	98.00	DNP	0.28	0.94	1.33	DNP	37.00	50.00	50.00	90.00	0.03	100.00	100.00
		TRAI Q3	NA	NA	NA	0.85	NA	NA	NA	80.00	95.00	80.00	95.00	0.00	100.00	100.00
		TUV Q3	7.80	92.58	DNP	0.19	1.20	1.08	97.93	97.17	97.17	70.48	83.00	0.04	100.00	100.00
8	IDEA Cellular	TRAI Q1	1.04	98.66	12.34	0.97	0.45	1.53	65.00	95.00	93.33	53.00	61.67	0.08	100.00	100.00
		TUV Q1	DNA	DNA	3.02	1.18	0.30	0.51	98.05	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	1.59	98.67	11.97	0.96	0.62	0.01	97.82	64.00	93.00	85.00	94.00	0.00	100.00	100.00
		TUV Q2	72.57	98.25	3.88	0.99	0.80	1.00	97.87	49.00	56.00	58.00	74.00	0.04	100.00	100.00
		TRAI Q3	3.53	98.29	12.75	0.96	0.57	0.02	98.00	50.00	91.00	69.00	80.00	0.00	100.00	100.00
		TUV Q3	6.18	97.05	13.37	0.75	0.41	1.87	98.50	44.64	82.59	61.98	65.40	0.04	100.00	100.00
9	BSNL	TRAI Q1	0.00	97.37	10.00	0.77	1.77	0.86	98.00	99.00	99.00	99.00	99.00	NA	100.00	Nil
		TUV Q1	2.00	53.60	10.00	0.13	DNC	2.63	83.30	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	99.50	2.38	0.53	1.53	0.01	98.00	99.00	99.00	99.00	99.00	0.00	100.00	Nil
		TUV Q2	1048.41	99.80	DNP	0.64	1.44	0.85	99.64	37.40	50.00	62.00	71.00	0.01	100.00	100.00



South Asia

		TRAI Q3	0.00	0.98	9.00	0.50	1.20	0.01	95.25	100.00	100.00	87.00	95.00	0.00	100.00	100.00
		TUV Q3	59.80	99.51	2.25	0.76	0.95	1.01	DNP	99.00	99.00	99.00	99.00	0.01	DNP	DNP
10	Bharti Televenture	TRAI Q1	0.00	99.95	12.47	0.12	0.21	1.12	97.23	82.25	89.02	92.70	93.18	0.16	100.00	100.00
		TUV Q1	31.60	DNC	DNC	0.20	0.17	0.89	97.00	ND	ND	ND	ND	0.11	100.00	100.00
		TRAI Q2	0.00	98.52	11.85	0.14	0.18	0.01	98.15	100.00	100.00	93.90	96.90	0.00	100.00	100.00
		TUV Q2	20.60	98.73	4.84	0.13	0.22	0.67	98.28	88.67	51.00	88.85	90.87	0.10	100.00	100.00
		TRAI Q3	0.00	98.34	11.85	0.12	0.24	0.01	98.11	99.99	99.99	90.93	93.63	0.00	100.00	100.00
		TUV Q3	5.00	DNP	4.55	1.06	2.37	DNP	DNP	80.13	80.14	73.46	99.50	0.11	100.00	100.00
11	Reliance-CDMA	TRAI Q1	0.02	99.33	4.67	0.00	0.44	0.73	99.53	52.30	49.10	54.30	65.30	0.06	100.00	100.00
		TUV Q1	0.50	99.51	0.77	1.74	0.49	0.77	99.52	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	0.59	99.47	4.06	0.00	0.43	0.01	99.16	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	1.07	99.53	DNP	0.00	0.47	0.75	DNP	99.50	99.50	51.42	60.17	0.07	100.00	100.00
		TRAI Q3	0.50	99.54	4.07	0.00	0.44	0.01	99.15	99.50	99.50	63.58	71.62	0.00	100.00	100.00
		TUV Q3	1.00	99.50	1.60	0.00	0.00	0.79	98.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00
12	Tata-CDMA	TRAI Q1	9.33	98.50	4.65	0.00	0.60	0.50	97.30	100.00	N/A P	94.00	95.00	0.12	100.00	100.00
		TUV Q1	10.80	98.49	4.65	5.45	0.01	0.41	97.43	ND	ND	ND	ND	0.03	100.00	100.00
		TRAI Q2	17.46	98.59	5.00	0.00	0.00	0.00	98.05	100.00	100.00	95.00	98.00	0.00	100.00	100.00
		TUV Q2	13.68	98.60	4.60	0.00	0.04	0.54	96.39	44.90	48.00	59.00	65.00	0.59	100.00	100.00
		TRAI Q3	22.12	98.51	5.00	0.00	0.00	0.00	98.02	100.00	100.00	83.00	87.00	0.00	100.00	100.00
		TUV Q3	4.15	98.44	5.23	0.00	0.12	0.45	97.89	100.00	100.00	88.00	91.00	0.84	100.00	100.00
III	Andhra Pradesh															
13	IDEA Cellular	TRAI Q1	4.14	99.99	6.00	0.25	1.64	0.60	99.51	100.00	N/A P	89.00	89.00	0.03	100.00	100.00
		TUV Q1	27.90	97.70	DNC	0.20	0.13	0.89	DNC	ND	ND	ND	ND	0.25	100.00	100.00



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		TRAI Q2	0.00	99.98	7.00	0.22	1.22	0.01	98.42	100.00	Nil	92.00	8.00	0.00	100.00	100.00
		TUV Q2	9.67	99.98	1.40	0.22	1.23	0.60	99.50	100.00	100.00	91.00	100.00	0.04	100.00	100.00
		TRAI Q3	1.60	99.99	6.20	0.22	1.19	0.01	99.45	100.00	100.00	78.66	80.66	0.00	100.00	100.00
		TUV Q3	9.00	99.99	1.00	0.21	1.20	0.62	99.50	100.00	100.00	100.00	100.00	0.00	100.00	100.00
14	Bharti Televenture	TRAI Q1	158.93	98.25	10.50	0.58	0.12	0.83	99.26	99.00	99.00	94.00	96.00	0.03	100.00	100.00
		TUV Q1	0.00	DNC	DNC	0.28	0.65	DNC	97.00	ND	ND	ND	ND	0.00	100.00	100.00
		TRAI Q2	42.00	98.16	11.70	0.82	1.84	0.01	99.77	99.00	99.00	94.00	97.00	0.00	100.00	100.00
		TUV Q2	177.60	98.18	2.28	0.81	1.81	0.89	97.89	100.00	100.00	90.00	96.00	0.01	100.00	100.00
		TRAI Q3	22.00	97.50	12.00	0.90	0.16	0.01	99.00	98.00	99.00	94.00	96.00	0.00	100.00	100.00
		TUV Q3	3.20	98.24	2.24	0.03	1.70	0.94	99.42	100.00	100.00	100.00	100.00	0.00	100.00	100.00
15	BSNL, AP	TRAI Q1	0.00	98.50	6.00	0.89	2.56	1.61	99.00	82.00	94.00	81.00	88.00	0.01	100.00	100.00
		TUV Q1	7.65	98.40	7.00	0.86	1.96	1.54	78.00	ND	ND	ND	ND	0.01	95.50	100.00
		TRAI Q2	0.00	98.50	6.00	0.77	1.90	0.02	99.00	100.00	100.00	65.50	83.30	0.00	100.00	100.00
		TUV Q2	127.70	98.00	7.12	0.98	3.39	1.53	89.40	99.77	100.00	23.11	61.00	0.04	100.00	100.00
		TRAI Q3	0.00	96.50	7.10	0.20	1.90	0.01	99.00	99.99	100.00	66.00	74.60	0.00	100.00	100.00
		TUV Q3	2.16	95.71	7.12	0.23	2.80	1.41	93.00	64.00	72.00	14.00	20.00	0.02	100.00	100.00
16	Hutchison-Essar	TRAI Q1	16.00	99.57	5.00	0.44	0.42	0.92	98.00	100.00	N/A P	95.60	98.64	0.06	100.00	100.00
		TUV Q1	9.60	99.10	5.00	0.31	0.41	0.89	97.20	ND	ND	ND	ND	0.07	DNA	99.30
		TRAI Q2	18.00	99.64	10.00	0.38	0.40	0.01	98.00	100.00	100.00	97.67	99.00	0.00	100.00	100.00
		TUV Q2	14.07	99.62	5.00	0.37	0.38	1.59	98.29	100.00	100.00	100.00	100.00	0.07	100.00	100.00
		TRAI Q3	18.00	99.31	9.00	0.30	0.00	0.01	98.00	100.00	100.00	95.81	98.39	0.00	100.00	100.00
		TUV Q3	6.24	99.00	9.00	0.27	0.46	0.76	98.26	100.00	100.00	100.00	100.00	0.00	100.00	100.00



South Asia

17	Reliance-CDMA	TRAI Q1	1.22	99.34	4.33	0.00	0.58	0.69	99.95	42.30	49.10	94.30	65.30	0.09	100.00	100.00
		TUV Q1	2.26	99.43	DNC	2.40	0.57	0.71	99.95	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	0.66	99.49	4.12	0.00	0.40	0.01	99.86	99.50	99.50	76.46	86.24	0.00	100.00	100.00
		TUV Q2	2.10	99.56	DNP	0.00	0.44	0.72	DNP	99.50	99.50	52.12	59.15	0.07	100.00	100.00
		TRAI Q3	0.60	99.64	4.17	0.00	0.49	0.01	99.92	99.50	99.50	53.72	60.02	0.00	100.00	100.00
		TUV Q3	1.56	99.70	1.50	0.00	0.00	0.74	99.60	99.50	99.50	76.00	82.00	0.06	100.00	100.00
18		TRAI Q1	12.02	97.24	5.60	0.00	0.03	0.52	97.22	100.00	N/A P	82.00	86.00	0.10	100.00	100.00
	Tata-CDMA	TUV Q1	12.00	97.00	5.60	0.00	0.09	0.38	99.90	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	17.14	98.14	6.10	0.00	0.60	0.00	96.04	100.00	100.00	79.00	86.00	0.00	100.00	100.00
		TUV Q2	36.00	98.10	5.40	0.00	0.18	0.44	99.61	100.00	100.00	100.00	100.00	0.14	100.00	100.00
		TRAI Q3	9.70	98.13	5.86	0.00	0.18	0.00	96.00	100.00	100.00	80.00	87.00	0.00	100.00	100.00
		TUV Q3	6.00	98.20	5.60	0.00	0.08	0.49	98.89	100.00	100.00	100.00	100.00	0.40	100.00	100.00
IV		Karnataka														
	Bharti Televenture	TRAI Q1	21.22	98.86	13.27	0.64	0.81	1.14	98.79	97.66	97.71	81.10	87.00	0.00	100.00	100.00
19		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	21.78	99.11	7.30	0.76	1.40	0.01	98.86	95.87	95.88	75.40	79.17	0.00	100.00	100.00
		TUV Q2	20.02	99.58	7.30	0.86	1.80	1.18	99.35	98.39	98.40	74.83	78.26	0.50	99.52	100.00
		TRAI Q3	13.81	98.26	4.59	0.60	1.00	0.01	96.34	95.74	95.74	86.72	90.52	0.00	100.00	100.00
		TUV Q3	9.76	98.15	4.60	0.60	1.34	1.32	94.69	96.64	96.65	85.24	88.87	0.68	100.00	100.00
20		Spice Comm.	TRAI Q1	4.11	97.79	8.38	1.44	9.15	1.54	98.45	NA	NA	89.00	97.00	0.02	100.00
		TUV Q1	2.18	97.90	8.09	1.66	17.45	1.39	99.10	100.00	100.00	88.33	97.33	ND	ND	ND
		TRAI Q2	20.67	98.16	8.46	1.61	13.45	0.02	98.93	NA	NA	91.80	99.20	0.00	100.00	100.00
		TUV Q2	18.05	98.05	8.33	2.82	17.14	0.91	99.05	99.99	100.00	91.10	99.16	0.01	100.00	100.00



South Asia

		TRAI Q3	19.20	98.61	8.42	1.22	12.71	0.02	99.22	100.00	100.00	92.30	98.79	0.00	100.00	100.00
		TUV Q3	11.90	98.64	8.44	1.08	15.43	1.89	99.22	100.00	100.00	92.10	99.20	0.02	100.00	100.00
21	BSNL	TRAI Q1	18.00	97.00	14.00	0.69	3.35	1.15	99.00	82.00	94.00	81.00	88.00	0.07	100.00	Nil
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	23.00	97.60	13.00	0.70	2.07	0.01	97.60	100.00	100.00	65.50	83.30	0.00	100.00	100.00
		TUV Q2	523.83	97.43	9.37	0.62	1.54	1.00	77.33	100.00	100.00	63.00	81.00	0.05	100.00	50.00
		TRAI Q3	19.00	98.16	10.17	0.60	1.30	0.01	97.92	100.00	100.00	62.66	74.66	0.00	100.00	100.00
		TUV Q3	6.50	97.81	5.20	0.44	1.53	1.10	97.99	100.00	100.00	88.00	95.00	0.06	100.00	100.00
22	Hutchison-Essar	TRAI Q1	14.08	98.21	10.00	0.44	1.79	1.82	96.25	98.67	100.00	95.00	98.33	0.06	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	4.10	98.38	10.25	0.17	1.63	0.02	98.49	97.33	99.00	97.67	97.67	0.00	100.00	100.00
		TUV Q2	23.62	98.38	10.25	0.18	1.61	1.63	98.67	97.00	100.00	36.55	37.31	0.03	100.00	100.00
		TRAI Q3	22.80	98.34	10.28	0.17	1.66	0.02	98.37	97.00	98.00	96.67	97.67	0.00	100.00	100.00
		TUV Q3	15.29	98.29	10.29	0.19	1.70	1.60	98.19	96.00	97.00	97.00	98.00	0.03	100.00	100.00
23	Reliance-CDMA	TRAI Q1	0.39	99.34	4.00	0.00	0.58	0.63	99.32	42.30	49.10	54.30	65.30	0.07	100.00	100.00
		TUV Q1	0.53	99.38	DNC	1.60	0.62	0.59	99.62	ND	ND	ND	ND	0.07	100.00	100.00
		TRAI Q2	0.57	99.53	4.04	0.00	0.48	0.01	99.57	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	2.18	99.62	DNP	0.00	0.38	0.58	99.94	99.50	99.50	38.72	45.18	0.06	100.00	100.00
		TRAI Q3	0.33	99.63	4.02	0.00	0.55	0.01	99.67	99.50	99.50	47.52	55.45	0.00	100.00	100.00
		TUV Q3	0.66	99.62	1.50	0.00	0.00	0.64	99.50	99.50	99.50	76.00	82.00	0.06	100.00	100.00
24	Tata-CDMA	TRAI Q1	21.22	99.61	9.58	0.00	0.56	1.28	96.00	100.00	N/A P	92.00	93.30	0.20	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND



South Asia

		TRAI Q2	23.10	97.14	2.70	0.00	0.24	0.01	97.59	100.00	100.00	91.00	95.00	0.00	100.00	100.00
		TUV Q2	23.30	94.54	2.68	0.00	1.00	1.12	97.39	100.00	100.00	96.00	100.00	0.53	100.00	100.00
		TRAI Q3	22.52	97.13	2.69	0.00	0.01	0.01	96.99	100.00	100.00	92.00	96.00	0.00	100.00	100.00
		TUV Q3	16.19	96.98	2.69	0.00	0.63	0.86	99.81	100.00	100.00	96.00	98.00	0.65	92.10	98.45
V	Tamil Nadu															
25	BPL Cellular(Hutch)	TRAI Q1	20.90	99.25	8.90	2.89	1.73	0.70		100.00	N/A P	100.00	N/AP	0.10	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	17.92	99.52	11.84	0.94	1.70	0.01	99.95	100.00	100.00	100.00	100.00	0.01	100.00	100.00
		TUV Q2	62.83	99.21	2.60	0.97	1.72	0.70	99.39	89.00	92.0 0	58.00	69.00	0.01	100.00	100.00
		TRAI Q3	17.33	99.31	11.82	0.27	1.66	0.01	99.56	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TUV Q3	0.83	99.94	3.00	0.07	0.32	0.72	98.17	84.00	100.00	82.00	100.00	0.90	100.00	100.00
26	Aircel	TRAI Q1	18.10	99.10	11.09	1.31	2.57	1.52	95.98	NA	NA	NA	NA	0.09	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	21.51	98.12	11.09	1.58	1.42	0.01	96.12	NA	NA	NA	NA	0.00	100.00	100.00
		TUV Q2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q3	23.10	99.20	11.07	0.06	1.61	0.01	95.89	NA	NA	NA	NA	0.00	100.00	100.00
		TUV Q3	0.00	99.10	8.10	0.43	0.78	0.88	95.66	96.00	100.00	88.00	100.00	0.67	100.00	100.00
27	BSNL	TRAI Q1	0.00	95.51	8.41	0.98	1.98	1.29	95.10	85.00	97.0 0	85.00	96.00	0.00	100.00	Nil
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	95.66	8.86	0.01	2.00	0.01	96.25	86.00	98.0 0	85.00	95.00	0.00	100.00	Nil
		TUV Q2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q3	0.00	95.77	9.19	0.80	1.70	0.01	96.43	85.00	97.0 0	86.00	96.00	0.00	100.00	Nil
		TUV Q3	0.00	87.31	2.00	3.82	22.25	1.00	DNP	76.00	100.00	74.00	100.00	0.19	100.00	69.61



South Asia

28	Bharti Televenture	TRAI Q1	20.00	99.47	13.40	0.08	1.00	0.86	98.47	95.00	100.00	99.95	95.00	0.07	100.00	100.00
		TUV Q1	298.04	99.45	3.22	0.79	0.44	0.77	97.74	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	20.00	99.29	13.80	0.63	0.86	0.01	95.40	99.95	100.00	95.00	95.00	0.00	100.00	100.00
		TUV Q2	0.00	99.34	DNP	0.66	0.68	0.77	DNP	95.00	100.00	94.00	95.00	0.97	100.00	100.00
		TRAI Q3	25.00	99.40	13.54	0.24	0.26	0.01	95.56	99.95	100.00	95.00	95.00	0.00	100.00	100.00
		TUV Q3	30.62	99.35	2.18	0.34	0.33	0.99	94.50	100.00	100.00	100.00	100.00	0.01	100.00	100.00
29		TRAI Q1	1.00	99.34	4.67	0.00	0.50	0.82	99.97	54.30	49.10	42.30	65.30	0.08	100.00	100.00
	Reliance-CDMA	TUV Q1	1.86	99.50	ND	2.70	0.54	0.83	ND	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	1.10	99.44	4.13	0.00	0.47	0.01	99.93	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	2.65	99.47	DNP	0.00	0.52	1.60	DNP	99.50	99.50	48.99	55.87	0.07	100.00	100.00
		TRAI Q3	0.30	99.57	4.14	0.00	0.42	0.01	99.76	99.50	99.50	38.85	48.64	0.00	100.00	100.00
		TUV Q3	0.60	95.80	1.40	0.00	0.00	0.83	99.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00
30		TRAI Q1	10.36	99.00	9.52	0.00	0.25	0.92	96.50	92.80	N/A P	100.00	93.60	0.04	100.00	100.00
	Tata-CDMA	TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	4.50	99.15	10.36	0.00	0.27	0.01	97.69	100.00	100.00	98.00	99.00	0.00	100.00	100.00
		TUV Q2	0.00	99.42	10.04	0.00	0.21	0.01	96.78	100.00	100.00	95.95	97.00	0.41	100.00	74.00
		TRAI Q3	15.50	97.98	10.73	0.00	0.93	0.01	97.30	100.00	100.00	94.00	97.00	0.00	100.00	100.00
		TUV Q3	0.00	98.26	10.38	0.00	0.53	0.77	94.82	100.00	100.00	100.00	100.00	0.14	100.00	57.14



South Asia

	B CIRCLE															
VI	Kerala															
31	IDEA-Escotel Mobile	TRAI Q1	21.31	97.67	13.83	0.31	1.72	0.91	98.87	90.00	100.00	85.00	95.00	0.15	100.00	100.00
		TUV Q1	15.89	99.94	13.83	0.36	1.69	0.94	98.43	ND	ND	ND	ND	0.16	100.00	100.00
		TRAI Q2	20.45	99.66	14.20	0.45	1.37	0.01	98.50	95.00	100.00	90.00	95.00	0.00	100.00	100.00
		TUV Q2	65.30	99.03	14.16	0.47	1.46	0.72	98.20	100.00	100.00	85.00	95.00	0.08	100.00	100.00
		TRAI Q3	22.14	96.01	14.77	0.45	1.82	0.01	96.67	95.00	98.00	90.00	95.00	0.00	100.00	100.00
		TUV Q3	7.85	97.50	14.75	0.44	1.84	0.82	97.70	95.00	98.00	90.00	95.00	0.10	100.00	100.00
32	BPL Cellular (Hutch)	TRAI Q1	23.70	95.56	13.28	0.46	1.75	1.17	96.80	100.00	N/AP	100.00	N/AP	0.03	100.00	100.00
		TUV Q1	23.70	95.60	7.44	1.33	1.18	1.22	96.80	ND	ND	ND	ND	0.03	100.00	100.00
		TRAI Q2	21.31	95.94	16.81	0.46	0.80	0.02	98.47	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TUV Q2	14.80	95.76	7.79	0.56	1.07	1.64	98.48	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TRAI Q3	12.58	96.90	14.69	0.96	1.96	0.02	98.75	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TUV Q3	5.75	95.92	7.07	0.52	0.77	1.47	98.75	100.00	100.00	99.99	99.99	0.01	100.00	100.00
33	BSNL	TRAI Q1	36.53	98.00	10.18	0.32	1.53	1.12	95.80	83.00	96.00	81.00	95.00	0.00	100.00	100.00
		TUV Q1	37.10	98.40	5.12	0.35	1.55	1.32	89.00	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	87.47	99.08	11.20	0.37	1.80	0.01	95.20	94.91	100.00	90.00	100.00	0.00	100.00	100.00
		TUV Q2	43.35	97.76	N/A	0.37	1.70	1.48	DNP	93.50	100.00	84.00	95.00	nd	ND	nd
		TRAI Q3	22.00	99.55	5.94	0.20	1.60	0.01	97.86	99.30	99.90	62.60	81.40	0.00	100.00	100.00
		TUV Q3	0.75	99.36	3.95	0.17	1.25	0.75	98.48	100.00	100.00	93.23	95.51	0.24	82.83	85.17
34	Bharti Televenture	TRAI	7.65	99.36	12.10	0.26	0.16	1.24	99.17	99.91	99.97	100.00	N/AP	0.02	100.00	100.00



South Asia

		Q1												
	Tata-CDMA	TUV Q1	23.00	99.30	7.76	0.12	0.16	1.14	99.20	ND	ND	ND	ND	ND
		TRAQ Q2	10.28	99.42	12.33	0.34	0.35	0.02	98.64	98.04	98.05	82.00	86.00	0.00
		TUV Q2	24.95	99.45	8.06	0.31	0.30	1.55	nd	96.50	100.00	89.00	95.00	ND
		TRAQ Q3	12.86	99.48	12.27	0.16	0.18	0.02	98.67	99.46	99.50	91.42	94.16	0.00
		TUV Q3	10.53	99.44	12.12	0.33	0.24	1.78	98.54	100.00	100.00	100.00	100.00	100.00
35		TRAQ Q1	1.00	99.84	17.80	0.00	0.00	0.54	99.79	100.00	N/AP	94.00	95.00	0.20
	Reliance-CDMA	TUV Q1	1.00	99.70	17.50	0.00	0.00	0.54	99.67	ND	ND	ND	ND	ND
		TRAQ Q2	0.00	.99.93	18.00	0.00	0.00	0.01	97.67	100.00	100.00	92.00	95.00	0.00
		TUV Q2	67.63	99.85	17.40	0.00	0.74	0.51	98.66	97.00	100.00	93.00	95.00	ND
		TRAQ Q3	0.00	99.93	18.03	0.00	0.00	0.01	96.00	100.00	100.00	87.00	91.00	0.00
		TUV Q3	0.00	98.68	18.38	0.00	0.00	0.55	98.02	100.00	100.00	93.00	96.00	0.08
36		TRAQ Q1	0.22	99.33	4.00	0.00	0.51	0.65	99.48	42.30	49.10	54.30	65.30	0.06
	Spice Comm.	TUV Q1	0.00	99.47	DNC	2.70	0.52	0.64	100.00	ND	ND	ND	0.09	100.00
		TRAQ Q2	0.37	99.49	3.98	0.00	0.41	0.01	99.83	99.50	99.50	79.46	86.24	0.00
		TUV Q2	1.18	99.58	DNP	0.00	0.43	0.85	DNP	95.50	95.50	46.44	53.32	0.08
		TRAQ Q3	0.00	99.57	4.00	0.00	0.24	0.01	99.90	99.50	99.50	55.56	63.13	0.00
		TUV Q3	0.00	99.60	1.40	0.00	0.00	0.85	99.80	99.50	99.50	76.00	82.00	0.06
VII		Punjab												
37	Spice Comm.	TRAQ Q1	2.14	95.39	9.82	0.68	2.81	1.54	98.15	97.00	97.00	92.00	95.00	0.03
		TUV Q1	0.00	96.90	4.80	0.68	3.28	1.70	95.00	100.00	100.00	86.00	94.00	0.15
		TRAQ Q2	20.50	96.44	12.00	0.41	2.59	0.01	97.00	100.00	100.00	90.00	96.00	0.00
		TUV Q2	14.00	95.67	5.98	0.42	2.82	1.43	98.23	100.00	100.00	74.00	84.00	0.04



South Asia

		TRAI Q3	6.50	97.27	10.20	0.31	1.85	0.02	97.20	100.00	100.00	90.00	95.00	0.00	100.00	100.00
		TUV Q3	4.67	97.02	9.35	0.36	1.97	1.27	96.40	100.00	100.00	90.00	95.00	0.01	100.00	100.00
38	HFCL-CDMA	TRAI Q1	6.35	97.50	13.60	0.00	0.00	0.66	98.99	100.00	N/AP	76.00	98.00	0.07	100.00	100.00
		TUV Q1	11.40	97.50	10.30	0.00	0.01	0.68	DNC	100.00	100.00	93.00	100.00	0.74	100.00	100.00
		TRAI Q2	9.13	97.63	13.20	0.00	0.04	0.01	98.86	100.00	100.00	98.00	98.00	0.00	NA	100.00
		TUV Q2	0.00	97.65	10.00	0.00	0.00	0.68	n/app	100.00	100.00	96.00	100.00	0.04	100.00	100.00
		TRAI Q3	5.03	97.92	13.10	0.00	0.00	0.01	98.02	100.00	100.00	98.00	98.00	0.00	100.00	100.00
		TUV Q3	1.22	97.90	10.00	0.00	0.02	0.64	DNP	100.00	100.00	90.00	97.00	0.05	99.30	100.00
39	Bharti Televenture	TRAI Q1	10.08	97.91	6.20	0.55	0.01	1.54	99.15	99.79	99.97	99.77	99.97	0.10	100.00	100.00
		TUV Q1	20.10	99.20	2.99	0.35	0.23	1.82	99.90	100.00	100.00	65.30	92.30	0.13	100.00	100.00
		TRAI Q2	16.13	99.15	3.44	0.34	0.32	0.02	98.70	99.98	99.99	95.20	97.08	0.00	100.00	100.00
		TUV Q2	0.00	99.12	3.50	0.41	0.35	1.70	98.67	100.00	100.00	86.00	100.00	0.08	100.00	100.00
		TRAI Q3	14.65	99.13	3.52	0.17	0.32	0.02	98.42	99.85	99.98	96.00	96.94	0.00	100.00	100.00
		TUV Q3	4.83	99.13	3.52	0.15	0.27	1.84	98.42	98.69	99.00	97.32	98.00	0.08	100.00	100.00
40	Hutchission Essar	TRAI Q1	0.00	99.02	10.00	0.12	0.33	1.49	98.58	99.30	99.31	94.12	98.70	0.08	100.00	100.00
		TUV Q1	23.71	95.57	7.44	1.33	1.18	1.22	96.84	ND	ND	ND	ND	0.03	100.00	100.00
		TRAI Q2	3.10	99.31	10.00	0.07	0.20	0.02	98.87	96.97	97.20	96.00	99.10	0.00	100.00	100.00
		TUV Q2	0.00	99.31	4.90	0.08	0.24	1.42	99.16	100.00	100.00	92.00	100.00	0.08	100.00	100.00
		TRAI Q3	20.24	99.10	10.00	0.07	0.12	0.01	98.23	98.10	98.30	90.00	97.30	0.00	100.00	100.00
		TUV Q3	6.80	99.14	8.56	0.06	0.15	1.42	99.06	98.16	98.32	90.25	97.65	0.06	100.00	100.00
41	BSNL	TRAI Q1	3.46	99.67	4.02	0.04	0.58	0.61		NA	NA	NA	NA	0.01	100.00	100.00
		TUV Q1	1.42	99.60	4.16	0.00	0.09	0.59	89.10	98.00	100.00	0.00	0.00	0.01	100.00	86.80



South Asia

		TRAI Q2	1.25	99.60	3.82	0.00	0.30	0.02	100.00	84.50	97.00	84.00	96.50	0.00	100.00	100.00
		TUV Q2	0.00	99.70	3.20	0.05	0.45	1.21	95.32	100.00	100.00	80.00	100.00	0.01	100.00	100.00
		TRAI Q3	3.08	99.07	3.70	0.20	0.40	0.02	100.00	93.00	98.60	91.30	96.60	0.00	100.00	100.00
		TUV Q3	10.22	98.84	4.60	0.08	0.72	2.01	100.00	93.00	97.66	90.66	97.33	0.07	100.00	100.00
42	Reliance-CDMA	TRAI Q1	0.14	99.32	4.67	0.00	0.58	0.82	99.56	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	0.43	99.40	DNC	2.09	0.55	0.79	99.50	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	0.71	99.58	4.28	0.00	0.34	0.01	99.71	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	2.22	99.71	DNP	0.00	0.29	0.82	DNP	99.50	99.50	69.57	78.04	0.07	100.00	100.00
		TRAI Q3	0.38	99.75	4.27	0.00	0.27	0.01	99.62	99.50	99.50	78.31	84.31	0.00	100.00	100.00
		TUV Q3	0.65	99.80	1.50	0.00	0.00	1.06	99.50	99.50	99.50	76.00	82.00	0.05	100.00	100.00
43	Tata-CDMA	TRAI Q1	0.16	99.47	6.00	0.00	0.00	0.70	95.92	100.00	N/AP	71.00	75.00	0.50	100.00	100.00
		TUV Q1	3.70	99.30	8.55	0.00	0.27	0.63	98.10	100.00	100.00	85.00	93.00	1.00	100.00	100.00
		TRAI Q2	1.43	99.86	7.83	0.00	0.00	0.01	96.99	100.00	100.00	62.00	76.00	0.00	100.00	100.00
		TUV Q2	0.00	98.25	1.41	0.00	0.30	0.74	96.08	74.00	100.00	26.00	62.00	2.10	100.00	100.00
		TRAI Q3	0.00	98.44	8.00	0.00	0.00	0.00	81.00	100.00	100.00	55.00	64.00	0.00	100.00	100.00
		TUV Q3	0.00	98.34	8.09	0.00	0.00	0.82	97.31	100.00	100.00	67.87	74.87	0.77	99.24	99.48
VIII	Haryana															
44	IDEA-Escotel Mobile	TRAI Q1	11.31	99.98	12.10	0.28	1.11	0.95	99.44	74.00	NA	NA	NA	0.03	100.00	100.00
		TUV Q1	10.13	99.97	2.79	0.23	1.13	0.89	99.44	96.00	100.00	80.00	96.00	0.08	100.00	100.00
		TRAI Q2	9.10	99.97	11.40	0.40	1.50	0.01	99.44	100.00	Nil	69.00	NA	0.00	100.00	100.00
		TUV Q2	7.17	99.97	2.77	0.39	1.05	0.71	99.46	98.00	100.00	94.00	100.00	0.16	100.00	100.00
		TRAI Q3	10.40	99.97	10.86	0.77	1.04	0.01	99.37	100.00	100.00	93.00	98.00	0.00	100.00	100.00



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		TUV Q3	7.10	99.97	2.72	0.62	1.17	1.86	99.69	85.00	100.00	69.50	100.00	0.05	100.00	100.00
45	Hutch-Aircel Digilink	TRAI Q1	5.57	99.96	9.40	0.04	0.19	1.23	97.00	100.00	N/AP	94.73	98.16	0.09	100.00	100.00
		TUV Q1	11.00	100.00	3.65	0.40	0.17	1.24	96.50	75.00	86.00	88.00	88.00	0.13	100.00	100.00
		TRAI Q2	3.63	99.95	9.40	0.02	0.23	0.02	97.11	100.00	100.00	82.55	96.26	0.00	100.00	100.00
		TUV Q2	7.58	99.60	3.08	0.02	0.20	1.64	97.32	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TRAI Q3	2.83	99.95	10.00	0.09	1.85	0.02	96.10	100.00	100.00	85.68	96.63	0.00	100.00	100.00
		TUV Q3	4.16	99.96	4.92	0.03	0.65	1.77	97.03	88.89	100.00	84.26	100.00	0.08	100.00	100.00
46	BSNL	TRAI Q1	11.12	95.82	9.38	0.98	1.80	2.80	95.60	100.00	N/AP	72.00	90.00	0.00	100.00	100.00
		TUV Q1	7.20	95.80	2.25	0.40	1.60	19.30	98.90	96.00	96.00	0.00	0.00	0.18	100.00	DNA
		TRAI Q2	8.43	97.30	10.00	0.17	1.50	0.03	100.00	100.00	100.00	72.00	88.00	0.00	100.00	100.00
		TUV Q2	7.10	97.40	2.80	0.14	1.40	2.75	97.07	96.00	100.00	70.00	100.00	0.00	100.00	100.00
		TRAI Q3	3.25	97.50	4.41	0.40	1.90	0.03	96.50	100.00	100.00	72.00	88.00	0.00	100.00	100.00
		TUV Q3	0.00	97.24	3.78	0.62	0.50	2.53	96.74	99.76	99.95	12.00	20.11	0.17	100.00	DNP
47	Bharti Televenture	TRAI Q1	7.66	98.18	7.00	0.21	0.19	1.36	99.14	99.00	99.00	96.00	98.00	0.08	100.00	100.00
		TUV Q1	5.44	99.30	3.42	0.23	0.31	1.48	99.30	92.00	100.00	92.00	100.00	0.10	100.00	95.00
		TRAI Q2	18.76	99.33	3.72	0.18	0.28	0.01	98.14	99.00	99.00	90.00	94.00	0.00	100.00	100.00
		TUV Q2	45.00	99.29	3.73	0.19	0.28	1.31	96.20	100.00	100.00	10.00	100.00	0.09	100.00	100.00
		TRAI Q3	16.00	99.18	3.40	0.35	0.37	0.02	98.10	99.30	99.40	94.00	96.00	0.00	100.00	100.00
		TUV Q3	5.31	99.13	3.40	0.38	0.38	1.54	98.10	99.30	99.40	94.00	96.00	0.07	100.00	100.00
48	Reliance-CDMA	TRAI Q1	0.84	99.30	4.33	0.00	0.54	0.93	99.52	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	1.15	99.40	1.34	5.20	0.58	0.80	99.70	100.00	100.00	96.00	100.00	0.08	100.00	100.00
		TRAI Q2	0.51	99.58	4.40	0.00	0.70	0.01	99.84	99.50	99.50	79.46	86.24	0.00	100.00	100.00



South Asia

		TUV Q2	1.87	99.70	DNP	0.00	0.31	0.98	DNP	99.50	99.50	69.57	78.04	0.07	100.00	100.00
		TRAI Q3	0.36	99.36	4.45	0.00	0.76	0.01	99.91	99.50	99.50	78.31	84.31	0.00	100.00	100.00
		TUV Q3	0.66	99.30	1.60	0.00	0.00	1.03	99.50	99.50	99.50	76.00	82.00	0.06	100.00	100.00
49	Tata-CDMA	TRAI Q1	13.08	99.60	1.77	0.00	2.69	1.00	98.42	100.00	N/AP	71.00	77.00	0.30	100.00	100.00
		TUV Q1	17.90	99.60	DNC	14.30	0.10	1.77	98.40	100.00	100.00	85.00	95.00	1.56	100.00	100.00
		TRAI Q2	23.50	99.87	8.00	0.00	1.61	0.01	97.81	100.00	100.00	57.00	73.00	0.00	100.00	100.00
		TUV Q2	54.00	97.56	1.40	17.00	0.69	0.78	97.97	86.00	100.00	52.00	68.00	1.75	100.00	100.00
		TRAI Q3	4.45	99.96	8.00	0.00	0.02	0.01	97.81	100.00	100.00	45.00	53.00	0.00	100.00	100.00
		TUV Q3	6.25	99.99	1.40	0.00	3.07	1.29	99.76	100.00	100.00	60.00	72.50	0.99	99.83	99.84
IX	UP - W															
50	Hutchission Essar	TRAI Q1	0.00	97.20	9.00	0.18	0.18	1.98	95.50	100.00	N/AP	80.40	95.40	0.05	100.00	100.00
		TUV Q1	3.18	99.60	7.95	0.45	0.25	1.97	95.00	50.00	75.00	50.00	75.00	0.11	100.00	100.00
		TRAI Q2	0.00	99.89	9.00	0.43	0.70	0.02	95.80	98.75	98.82	95.18	98.25	0.00	100.00	100.00
		TUV Q2	31.93	99.86	2.74	0.43	0.70	1.98	96.72	99.98	100.00	34.72	83.30	0.09	100.00	100.00
		TRAI Q3	0.00	99.85	9.50	0.51	0.50	0.02	96.00	98.83	99.85	98.01	98.05	0.00	100.00	100.00
		TUV Q3	3.50	99.85	2.86	0.55	0.62	1.96	96.89	98.36	99.87	97.93	98.30	0.08	100.00	100.00
51	IDEA	TRAI Q1	4.56	99.66	11.75	0.49	1.64	1.36	97.10	NA	NA	NA	NA	0.06	100.00	100.00
		TUV Q1	1.07	99.64	11.05	0.50	1.98	0.86	97.79	92.00	100.00	92.00	100.00	0.58	100.00	100.00
		TRAI Q2	4.56	98.83	11.40	0.98	2.39	0.01	97.74	36.00	NA	65.00	NA	0.00	100.00	100.00
		TUV Q2	15.75	99.67	11.37	0.98	2.34	0.90	97.68	36.00	66.00	65.00	69.00	0.07	100.00	100.00
		TRAI Q3	14.47	99.16	11.37	0.97	1.89	0.02	97.49	100.00	100.00	65.00	96.00	0.00	100.00	100.00
		TUV	2.16	99.07	11.05	0.95	2.44	1.21	97.20	NA	NA	NA	NA	0.08	100.00	100.00



South Asia

		Q3														
52	BSNL	TRAI Q1	0.00	99.00	13.00	0.50	1.98	2.80	97.00	90.00	97.00	80.00	97.00	0.00	100.00	Nil
		TUV Q1	0.52	98.80	5.43	0.70	0.25	1.88	94.11	66.00	66.00	12.00	32.00	DNC	100.00	DNC
		TRAI Q2	0.00	99.00	14.00	0.90	1.90	0.03	98.00	90.00	97.00	80.00	97.00	0.00	100.00	100.00
		TUV Q2	892.00	98.36	4.78	0.56	0.14	1.76	92.77	99.87	99.98	7.17	11.42	ni	ni	ni
		TRAI Q3	20.00	98.60	14.00	0.80	1.50	0.02	98.00	85.00	95.00	85.00	98.00	0.00	100.00	100.00
		TUV Q3	10.00	98.25	2.72	1.03	1.71	1.17	97.99	99.76	99.95	9.94	16.85	2.11	92.44	DNP
53	Bharti Televenture	TRAI Q1	23.25	97.10	14.00	0.27	0.81	1.39	95.91	97.00	99.00	99.52	99.76	0.09	100.00	100.00
		TUV Q1	16.50	97.20	2.63	0.31	1.96	1.33	97.30	ND	ND	ND	ND	0.09	100.00	100.00
		TRAI Q2	23.43	96.38	14.30	0.71	1.26	0.02	95.88	99.95	99.97	93.00	95.00	0.00	100.00	100.00
		TUV Q2	18.75	96.30	4.36	0.76	1.32	1.56	95.13	99.98	99.99	96.00	97.00	0.10	100.00	100.00
		TRAI Q3	23.52	96.19	14.30	0.40	0.63	0.02	96.07	99.83	99.88	96.00	97.00	0.00	100.00	100.00
		TUV Q3	14.80	97.27	1.21	0.53	1.32	1.57	98.52	99.82	99.86	97.00	98.00	0.10	100.00	100.00
54	Reliance-CDMA	TRAI Q1	1.28	99.31	4.00	0.00	0.59	0.76	99.58	42.30	49.10	54.30	65.30	0.09	100.00	100.00
		TUV Q1	2.15	99.40	DNC	3.60	0.58	0.84	ND	ND	ND	ND	ND	0.09	100.00	100.00
		TRAI Q2	0.96	99.42	4.19	0.00	0.46	0.01	98.96	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	2.86	99.46	DNP	0.00	0.53	2.28	DNP	99.50	99.50	13.85	18.47	0.08	100.00	100.00
		TRAI Q3	0.54	99.47	4.07	0.00	0.54	0.01	99.00	99.50	99.50	34.40	43.79	0.00	100.00	100.00
		TUV Q3	1.08	99.50	1.50	0.00	0.00	0.95	96.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00
55	Tata-CDMA	TRAI Q1	0.12	100.00	18.80	0.00	0.67	0.96	97.00	100.00	N/AP	64.00	68.00	0.03	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	22.28	97.93	18.33	0.00	0.47	0.01	96.50	100.00	100.00	67.00	82.00	0.00	100.00	100.00
		TUV	20.55	97.56	8.70	0.00	0.69	0.83	97.60	99.99	100.00	87.00	96.00	0.19	100.00	35.29



South Asia

		Q2												
		TRAI Q3	9.11	97.89	14.71	0.00	0.01	0.01	98.31	100.00	100.00	88.00	93.00	0.00
		TUV Q3	11.04	96.80	9.00	0.00	2.05	1.31	98.30	83.28	83.28	77.89	82.81	0.36
X	UP - E													
56	Bharti Televenture	TRAI Q1	24.00	99.05	11.00	0.32	1.17	1.75	97.00	80.00	95.00	80.00	95.00	0.05
		TUV Q1	17.40	95.30	3.40	0.97	1.76	1.63	97.40	100.00	100.00	100.00	100.00	0.20
		TRAI Q2	16.67	96.13	14.30	0.67	1.21	0.02	98.29	99.77	99.98	91.56	94.13	0.00
		TUV Q2	14.27	99.01	3.63	1.15	1.19	1.65	97.88	98.00	100.00	95.00	100.00	0.20
		TRAI Q3	8.00	99.00	9.77	0.65	0.91	0.02	99.00	99.36	99.96	74.33	79.33	0.00
		TUV Q3	5.92	99.10	3.43	0.65	0.89	2.13	97.65	99.80	99.90	92.20	94.60	0.20
57	Hutch - ADIL	TRAI Q1	0.00	95.93	8.50	0.47	1.84	1.80	95.79	99.99	100.00	80.36	95.47	0.08
		TUV Q1	2.94	95.90	8.66	0.43	1.81	1.47	88.10	58.00	60.00	84.00	100.00	0.06
		TRAI Q2	11.00	95.35	9.00	0.72	1.78	0.02	96.23	98.75	99.63	84.93	95.54	0.00
		TUV Q2	0.00	99.60	9.00	0.47	1.90	1.60	85.12	100.00	100.00	80.00	100.00	0.05
		TRAI Q3	9.00	96.20	9.00	0.40	1.90	0.02	96.36	100.00	100.00	83.07	95.50	0.00
		TUV Q3	0.00	98.08	9.33	1.27	1.80	1.64	97.64	99.00	99.90	81.28	94.90	0.02
58	BSNL	TRAI Q1	13.00	96.00	14.00	1.00	1.90	2.10	97.00	82.00	96.00	80.00	96.00	0.10
		TUV Q1	13.00	97.00	2.59	1.76	2.56	2.92	97.37	ND	ND	ND	DNP	ND
		TRAI Q2	21.00	98.00	14.00	1.50	2.43	0.02	97.00	90.00	97.00	80.00	97.00	0.00
		TUV Q2	989.00	97.15	7.00	1.22	0.34	2.84	97.80	99.92	99.97	3.97	5.99	0.39
		TRAI Q3	18.00	96.00	15.00	1.00	1.70	0.03	97.00	85.00	96.00	84.00	97.00	0.00
		TUV Q3	5.12	98.21	6.92	1.30	2.00	2.26	91.50	99.76	99.95	6.39	9.69	0.18



South Asia

59	Reliance-CDMA	TRAI Q1	0.66	99.31	3.67	0.00	0.53	1.10	98.28	42.00	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	1.74	99.48	DNC	5.05	0.52	1.12	99.15	96.00	100.00	70.00	100.00	0.09	100.00	100.00
		TRAI Q2	0.74	99.39	4.33	0.00	0.53	0.01	97.81	99.50	99.50	79.46	86.00	0.00	100.00	100.00
		TUV Q2	2.38	99.44	DNP	0.00	0.57	0.98	DNP	99.50	99.50	13.85	18.47	0.07	100.00	100.00
		TRAI Q3	0.75	99.50	4.33	0.00	0.36	0.01	98.55	99.50	99.50	34.40	43.79	0.00	100.00	100.00
		TUV Q3	1.41	99.55	1.50	0.00	0.00	0.99	97.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00
60	Tata-CDMA	TRAI Q1	15.58	99.00	16.24	0.00	0.11	0.77	99.00	100.00	N/AP	83.30	84.00	0.03	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	4.59	97.62	10.60	0.00	0.36	0.01	99.20	100.00	100.00	60.00	73.00	0.00	100.00	100.00
		TUV Q2	7.28	97.40	11.05	0.00	0.18	0.88	99.52	75.00	DNP	25.00	28.88	0.19	100.00	100.00
		TRAI Q3	23.30	99.89	9.60	0.00	0.00	0.00	98.81	100.00	100.00	88.00	93.00	0.00	100.00	100.00
		TUV Q3	7.10	97.70	18.28	0.00	0.05	1.03	98.48	100.00	100.00	87.00	92.00	0.37	100.00	99.00
XI	Rajasthan															
61	Hutch-Aircel Digilink	TRAI Q1	16.00	95.47	9.82	0.67	0.56	2.05	97.18	99.73	99.75	81.73	95.57	0.05	100.00	100.00
		TUV Q1	11.70	96.20	7.95	0.43	0.42	1.80	92.90	ND	ND	ND	ND	0.04	100.00	100.00
		TRAI Q2	13.67	96.49	9.78	1.05	1.64	0.03	96.93	99.51	99.57	81.10	96.39	0.00	100.00	100.00
		TUV Q2	15.17	98.50	5.60	1.41	1.57	1.76	95.10	98.75	98.80	47.39	100.00	0.09	100.00	100.00
		TRAI Q3	22.10	98.42	9.78	0.95	1.91	0.03	96.65	89.29	95.70	81.87	95.84	0.00	100.00	100.00
		TUV Q3	7.30	98.45	6.00	0.95	1.87	1.64	84.00	94.97	100.00	85.05	100.00	0.10	100.00	100.00
62	BSNL	TRAI Q1	26.00	96.00	6.00	0.30	7.40	2.40	98.00	100.00	N/AP	82.00	90.00	0.00	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNC	100.00	DNC
		TRAI Q2	19.28	96.50	6.10	0.43	5.80	0.03	97.50	89.00	97.00	82.00	96.00	0.00	100.00	100.00



South Asia

		TUV Q2	21.66	97.60	DNP	0.45	1.45	2.40	85.70	68.50	69.10	86.20	88.00	0.01	100.00	100.00
		TRAI Q3	22.55	97.00	6.10	0.40	1.70	0.03	97.40	99.80	100.00	84.10	96.90	0.00	100.00	100.00
		TUV Q3	7.51	97.60	DNP	0.25	2.50	2.40	94.00	99.96	99.95	12.71	18.13	0.13	100.00	100.00
63	Bharti Hexacom	TRAI Q1	21.98	97.68	8.00	0.04	0.18	1.27	95.43	99.98	99.99	90.61	94.00	0.04	100.00	100.00
		TUV Q1	0.00	98.00	5.50	0.70	0.30	1.30	100.00	95.00	95.00	67.00	70.00	0.20	100.00	100.00
		TRAI Q2	22.23	97.42	8.00	0.60	0.41	0.01	95.57	99.98	100.00	94.57	96.79	0.00	100.00	100.00
		TUV Q2	68.16	97.42	8.00	0.59	0.40	1.48	95.53	DNP	DNP	DNP	DNP	DNP	DNP	DNP
		TRAI Q3	24.20	98.70	8.00	0.99	1.29	0.02	95.01	99.98	99.99	90.72	93.57	0.00	100.00	100.00
		TUV Q3	7.80	98.70	8.60	0.81	1.25	1.60	95.00	99.97	100.00	95.05	100.00	0.02	100.00	100.00
64	Reliance-CDMA	TRAI Q1	0.76	99.32	4.00	0.00	0.57	1.25	99.59	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	2.78	99.46	ND	4.63	0.54	1.19	ND	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	0.82	99.44	4.05	0.00	0.49	0.01	99.67	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	1.96	99.50	DNP	0.00	0.50	0.94	DNP	99.50	99.50	56.47	65.74	0.07	100.00	100.00
		TRAI Q3	0.70	99.42	4.08	0.00	0.60	0.01	100.00	99.50	99.50	51.07	60.40	0.00	100.00	100.00
		TUV Q3	1.50	99.44	3.00	0.00	0.00	0.99	95.00	99.50	99.50	76.00	82.00	0.05	100.00	100.00
65	Tata-CDMA	TRAI Q1	20.32	98.33	5.00	0.00	0.27	0.81	98.47	100.00	N/AP	90.00	92.00	0.03	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	19.20	97.73	4.90	0.00	0.12	0.01	97.72	100.00	100.00	91.00	95.00	0.00	100.00	100.00
		TUV Q2	17.27	97.42	1.38	0.00	0.32	0.79	96.50	DNP	NA	89.56	93.91	0.07	100.00	100.00
		TRAI Q3	16.08	97.47	2.00	0.00	0.92	0.01	96.87	100.00	100.00	92.00	95.00	0.00	100.00	100.00
		TUV Q3	7.13	97.60	2.20	0.00	0.36	0.88	96.90	100.00	100.00	94.00	100.00	0.32	100.00	100.00
XII	Madhya Pradesh															



South Asia

66	IDEA Cellular	TRAI Q1	17.42	98.27	12.38	1.12	1.67	1.21	99.10	100.00	N/AP	96.61	99.07	0.06	100.00	100.00
		TUV Q1	17.70	98.30	12.40	0.99	1.66	1.21	99.10	96.00	99.10	96.40	99.00	0.05	100.00	100.00
		TRAI Q2	17.42	98.27	12.38	0.77	1.26	0.01	99.10	100.00	100.00	97.29	99.23	0.00	100.00	100.00
		TUV Q2	17.38	98.57	3.71	0.79	1.34	1.20	98.93	100.00	100.00	97.46	99.33	0.05	100.00	100.00
		TRAI Q3	22.59	98.55	8.19	0.72	1.33	0.01	99.22	100.00	100.00	97.89	99.36	0.00	100.00	100.00
		TUV Q3	7.18	98.44	3.78	0.77	1.36	1.20	99.22	100.00	100.00	97.89	99.36	0.05	100.00	100.00
67	Reliance GSM	TRAI Q1														
		TUV Q1	58.20	100.00	14.00	1.01	11.53	1.91	95.90	ND	ND	ND	ND	0.02	100.00	100.00
		TRAI Q2	18.29	100.00	7.80	0.47	19.00	0.02	96.50	NA	NA	100.00	100.00	0.00	100.00	100.00
		TUV Q2	18.66	100.00	14.00	0.47	19.37	1.66	96.55	NA	NA	96.00	100.00	0.00	100.00	100.00
		TRAI Q3	19.29	100.00	7.73	0.26	16.00	0.02	94.96	NA	NA	100.00	100.00	0.00	100.00	100.00
		TUV Q3	17.06	100.00	14.00	0.21	15.65	1.79	96.60	NA	NA	98.20	98.20	0.00	100.00	100.00
68	BSNL	TRAI Q1	10.00	98.95	3.10	0.25	1.20	0.95	97.80	100.00	N/AP	99.90	99.90	0.10	100.00	100.00
		TUV Q1	22.40	98.60	2.91	0.14	1.18	0.78	100.00	81.00	93.50	82.00	91.00	ND	ND	ND
		TRAI Q2	6.80	99.50	2.90	0.23	1.40	0.01	98.00	100.00	100.00	99.90	99.90	0.00	100.00	100.00
		TUV Q2	15.15	94.50	13.17	0.30	0.80	1.42	88.05	84.50	85.50	42.00	55.00	0.39	100.00	100.00
		TRAI Q3	9.10	98.86	3.00	0.30	0.90	0.01	98.59	100.00	100.00	99.94	99.96	0.00	100.00	100.00
		TUV Q3	1.00	92.76	8.34	0.95	2.00	1.85	95.79	87.35	87.35	58.20	58.21	0.00	100.00	100.00
69	Bharti Televenture	TRAI Q1	22.95	99.14	11.37	0.44	1.30	0.87	98.17	99.99	99.99	95.41	97.95	0.01	100.00	100.00
		TUV Q1	14.50	99.70	15.60	0.21	0.74	0.56	99.00	100.00	100.00	93.30	97.50	0.40	100.00	100.00
		TRAI Q2	23.06	98.78	12.76	0.22	0.69	0.01	96.12	99.99	99.99	96.46	98.55	0.00	100.00	100.00
		TUV Q2	16.23	98.93	11.36	0.25	1.08	0.93	96.12	99.90	99.99	97.08	98.76	0.40	100.00	100.00



South Asia

		TRAI Q3	22.35	97.75	14.97	0.38	1.77	0.01	97.67	99.99	99.99	97.03	98.79	0.00	100.00	100.00
		TUV Q3	8.58	97.96	7.04	0.47	1.39	1.35	97.08	99.99	99.99	97.06	98.85	0.44	100.00	100.00
70	Reliance-CDMA	TRAI Q1	0.69	99.34	4.00	0.00	0.49	1.04	99.39	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	1.46	99.50	0.05	4.17	0.51	0.98	99.00	91.00	99.50	99.50	100.00	0.08	100.00	100.00
		TRAI Q2	0.39	99.32	4.17	0.00	0.65	0.01	99.77	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	1.27	99.32	DNP	0.00	0.69	0.98	DNP	99.50	99.50	58.19	69.01	0.07	100.00	100.00
		TRAI Q3	0.65	99.34	4.18	0.00	0.49	0.01	99.43	99.50	99.50	54.31	66.64	0.00	100.00	100.00
		TUV Q3	1.24	99.30	1.00	0.00	0.00	1.15	98.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00
71	Tata-CDMA	TRAI Q1	2.35	98.54	3.60	0.00	0.00	0.63	99.31	100.00	N/AP	79.60	80.30	0.09	100.00	100.00
		TUV Q1	7.12	98.50	11.00	0.00	0.00	0.65	98.50	84.00	100.00	92.00	100.00	ND	ND	ND
		TRAI Q2	1.25	99.95	3.57	0.00	0.00	0.01	98.48	100.00	100.00	88.00	92.00	0.00	100.00	100.00
		TUV Q2	3.77	99.50	3.33	0.00	0.00	0.91	98.63	98.60	99.98	92.40	96.30	0.48	100.00	100.00
		TRAI Q3	1.32	97.34	4.64	0.00	0.00	0.01	99.00	100.00	100.00	68.00	70.00	0.00	100.00	100.00
		TUV Q3	1.53	97.33	4.64	0.00	0.00	1.03	98.99	100.00	100.00	76.66	79.66	0.66	100.00	100.00
XIII	West Bengal															
72	Bharti Televenture	TRAI Q1	0.00	89.00	10.00	0.01	0.07	1.84		98.00	97.00	91.00	97.00	0.03	100.00	100.00
		TUV Q1	21.69	98.59	18.50	0.63	0.35	1.98	92.54	100.00	100.00	100.00	100.00	0.03	100.00	100.00
		TRAI Q2	0.00	97.70	9.00	1.55	1.50	0.02	100.00	98.40	98.49	95.19	97.44	0.00	100.00	100.00
		TUV Q2	3.25	98.61	2.97	3.15	1.38	1.94	93.10	97.60	97.73	99.36	99.48	0.00	100.00	100.00
		TRAI Q3	0.00	97.85	9.00	2.32	0.81	0.02	100.00	98.40	98.68	90.02	95.74	0.00	100.00	100.00
		TUV Q3	7.62	99.85	2.99	0.77	0.43	1.92	96.72	97.10	100.00	90.01	99.99	0.17	100.00	100.00
73	Reliance-GSM	TRAI Q1	6.40	99.00	8.65	1.36	10.76	2.29	98.52	NA	NA	100.00	N/AP	0.00	100.00	100.00



South Asia

		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
		TRAI Q2	4.30	99.00	8.60	0.87	12.97	0.02	99.10	NA	NA	NA	100.00	Nil	N/Ap	N/Ap
		TUV Q2	4.50	95.31	15.81	0.96	13.06	2.59	N/A	NA	NA	DNP	DNP	N/Ap	N/Ap	N/Ap
		TRAI Q3	4.32	99.00	8.82	1.50	36.12	0.02	98.08	NA	NA	100.00	Nil	0.00	100.00	100.00
		TUV Q3	1.00	95.00	14.83	1.57	3.50	2.20	98.14	NA	NA	100.00	100.00	0.00	100.00	100.00
74	BSNL	TRAI Q1	0.00	98.40	5.60	0.20	1.20	1.60	99.70	84.00	99.00	84.00	96.00	0.00	100.00	100.00
		TUV Q1	0.00	98.90	1.68	0.22	1.22	2.42	88.70	ND	ND	ND	ND	0.00	100.00	100.00
		TRAI Q2	0.00	97.95	6.28	0.30	1.30	0.02	97.66	87.00	99.00	81.00	96.00	0.00	100.00	100.00
		TUV Q2	0.00	98.50	DNP	0.20	1.40	2.10	DNP	86.00	99.00	82.00	97.00	0.00	100.00	100.00
		TRAI Q3	0.00	98.40	5.94	0.70	1.70	0.03	98.74	91.00	99.00	81.00	96.00	0.00	100.00	100.00
		TUV Q3	0.00	98.38	3.50	1.39	1.44	0.18	DNP	95.00	99.00	82.00	95.00	0.00	100.00	100.00
75	Tata-CDMA	TRAI Q1	12.00	99.12	9.50	0.00	0.00	0.99	99.97	NA	NA	NA	NA	0.00	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	2.80	99.17	9.58	0.00	0.01	0.01	97.52	99.00	99.00	92.00	92.00	0.00	100.00	100.00
		TUV Q2	3.58	96.65	10.70	0.00	0.00	0.94	97.17	DNP	DNP	DNP	DNP	7.40	100.00	100.00
		TRAI Q3	4.56	96.54	9.98	0.00	0.01	0.01	98.49	98.00	99.00	89.00	89.00	0.00	100.00	100.00
		TUV Q3	0.00	96.90	15.56	0.00	0.00	0.91	94.60	99.31	100.00	100.00	100.00	0.06	99.00	100.00
76	Reliance-CDMA	TRAI Q1	0.80	99.33	4.00	0.00	0.33	1.13	99.37	42.30	49.10	54.30	65.30	0.05	100.00	100.00
		TUV Q1	12.00	99.00	1.30	4.90	0.40	0.40	100.00	ND	ND	ND	ND	0.10	100.00	100.00
		TRAI Q2	0.84	99.39	4.12	0.00	0.55	0.01	97.94	99.50	99.50	79.46	86.24	0.00	100.00	100.00
		TUV Q2	2.45	99.41	DNP	0.00	0.58	1.31	DNP	99.50	99.50	46.45	53.32	0.09	100.00	100.00
		TRAI Q3	0.44	99.43	4.14	0.00	0.75	0.01	98.58	99.50	99.50	69.48	73.28	0.00	100.00	100.00



South Asia

		TUV Q3	0.83	99.50	1.00	0.00	0.00	1.35	92.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00
77	Hutchission Essar South	TRAI Q1	15.70	96.91	10.00	0.39	1.07	1.81	96.78	100.00	N/AP	96.18	99.38	0.04	100.00	100.00
		TUV Q1	0.00	98.80	13.60	0.39	0.88	1.59	98.60	100.00	100.00	88.00	93.30	0.90	100.00	100.00
		TRAI Q2	11.19	99.14	10.00	0.49	0.83	0.02	98.12	100.00	100.00	94.50	98.75	0.00	100.00	100.00
		TUV Q2	0.00	98.60	15.50	0.40	1.40	1.85	98.10	100.00	100.00	97.00	96.90	0.09	100.00	100.00
		TRAI Q3	0.00	98.72	13.80	0.80	0.98	0.01	97.64	100.00	100.00	97.10	99.68	0.00	100.00	100.00
		TUV Q3	0.00	98.72	14.67	0.65	1.27	1.27	96.63	100.00	100.00	97.47	99.69	0.08	100.00	100.00
78	Dishnet	TRAI Q1	0.00	99.36	7.00	1.00	0.02	2.19	99.83	NA	NA	99.68		1.67	100.00	100.00
		TUV Q1	0.00	98.64	3.57	0.01	0.00	0.49	80.00	ND	ND	ND	ND	1.51	100.00	0.00
		TRAI Q2	0.00	99.42	8.00	0.97	0.96	0.01	99.70	95.00	98.00	82.00	95.00	0.01	100.00	100.00
		TUV Q2	0.00	99.90	15.53	.21	0.39	0.04	99.08	DNP	DNP	DNP	DNP	0.00	100.00	100.00
		TRAI Q3	2.00	97.56	8.00	0.97	0.87	0.01	99.70	10.00	10.33	97.00	97.00	0.00	100.00	100.00
		TUV Q3	1.30	99.86	16.53	0.17	0.40	0.50	99.02	100.00	100.00	100.00	100.00	0.00	100.00	100.00

	C CIRCLE															
XIV	Himachal Pradesh															
79	Bharti Televenture	TRAI Q1	12.50	97.84	7.00	0.40	0.41	1.33	98.86	99.98	99.99	99.97	99.99	0.01	100.00	100.00
		TUV Q1	15.80	99.40	8.10	0.24	0.25	1.33	96.40	100.00	100.00	80.00	90.00	0.03	100.00	100.00
		TRAI Q2	8.38	99.07	3.23	0.19	0.42	0.02	96.00	99.00	100.00	1.00	100.00	0.00	100.00	100.00
		TUV Q2	0.00	99.62	3.25	0.21	0.48	1.53	95.31	100.00	100.00	100.00	100.00	0.03	100.00	100.00
		TRAI Q3	15.30	99.03	3.61	0.32	0.26	0.02	97.32	94.20	96.50	0.94	95.50	0.00	100.00	100.00



South Asia

		TUV Q3	5.10	99.03	3.61	1.04	0.45	1.54	94.27	98.67	99.00	97.33	98.00	0.07	100.00	100.00
80	Reliance-GSM	TRAI Q1	7.42	98.70	8.93	0.10	0.32	2.47	96.19	NA	NA	98.00	100.00	Nil	Nil	Nil
		TUV Q1	21.73	98.68	8.93	0.11	6.20	2.46	100.00	N/Ap	N/Ap	96.00	96.00	0.00	NI	NI
		TRAI Q2	8.50	99.00	8.20	0.10	1.67	0.02	98.90	NA	NA	0.98	100.00	0.00	N/Ap	N/Ap
		TUV Q2	20.46	99.00	8.18	0.07	1.68	2.45	98.87	NA	NA	100.00	100.00	0.00	100.00	100.00
		TRAI Q3	13.58	99.00	8.16	0.73	6.72	0.03	97.32	NA	NA	0.98	100.00	0.00	NA	NA
		TUV Q3	8.14	99.60	8.03	0.35	3.50	2.43	97.34	NA	NA	100.00	100.00	0.00	100.00	100.00
81	BSNL	TRAI Q1	2.10	98.00	5.80	0.80	1.80	2.60	96.50	83.00	96.00	82.00	95.00	Nil	Nil	Nil
		TUV Q1	2.16	98.00	3.30	0.70	1.70	2.60	79.50	100.00	100.00	70.00	92.50	0.00	NI	NI
		TRAI Q2	2.00	97.50	5.60	0.50	1.73	0.02	97.50	99.80	99.90	0.81	95.00	0.00	Nil	Nil
		TUV Q2	0.00	97.64	5.75	0.70	1.80	2.09	97.70	99.80	99.94	4.13	6.92	0.00	100.00	100.00
		TRAI Q3	1.60	97.50	5.80	0.90	1.80	0.02	97.60	99.20	99.50	0.80	95.00	Nil	NA	NA
		TUV Q3	0.50	97.40	5.85	0.80	1.80	1.95	97.55	99.76	99.95	16.41	23.92	0.58	100.00	71.74
82	Reliance-CDMA	TRAI Q1	0.39	99.37	4.33	0.00	0.30	0.37	99.38	42.30	49.10	54.30	65.30	0.05	100.00	100.00
		TUV Q1	1.10	99.56	0.96	4.92	0.44	0.55	99.60	86.00	99.00	90.00	100.00	0.05	100.00	100.00
		TRAI Q2	0.71	99.56	4.13	0.00	0.31	0.01	99.43	99.50	99.50	0.79	86.24	0.00	100.00	100.00
		TUV Q2	2.47	99.66	DNP	0.00	0.34	0.61	DNP	99.50	99.50	69.57	78.04	0.06	100.00	100.00
		TRAI Q3	0.61	99.83	4.15	0.00	0.95	0.01	99.33	99.50	99.50	0.78	84.31	0.00	100.00	100.00
		TUV Q3	1.18	99.87	1.50	0.00	0.00	0.66	98.50	99.50	99.50	76.00	82.00	0.05	100.00	100.00
83	Tata-CDMA	TRAI Q1	18.27	98.73	8.00	0.00	0.41	0.66	95.00	100.00	N/AP	67.00	72.00	0.30	100.00	100.00
		TUV Q1	31.08	98.11	1.31	0.00	0.38	0.616	96.62	100.00	100.00	88.00	100.00	0.77	100.00	100.00
		TRAI Q2	14.10	98.38	12.00	0.00	0.00	0.01	97.58	100.00	100.00	0.63	76.00	0.00	100.00	100.00



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		TUV Q2	29.60	98.36	1.33	0.00	0.46	.77	96.94	100.00	100.00	86.00	98.00	1.36	100.00	100.00
		TRAI Q3	21.31	98.35	12.00	0.00	0.00	0.01	97.20	100.00	100.00	0.38	46.00	0.00	100.00	100.00
		TUV Q3	7.50	98.37	5.85	0.00	0.05	0.80	97.50	100.00	100.00	61.20	68.20	0.54	100.00	100.00
XV	Bihar															
84	Reliance-GSM	TRAI Q1	7.26	90.33	8.46	0.16	10.64	1.95	96.61	NA	NA	95.00	100.00	0.00	100.00	100.00
		TUV Q1	20.05	88.70	3.19	1.20	12.25	1.96	83.87	N/Ap	N/Ap	95.00	98.50	0.00	100.00	100.00
		TRAI Q2	7.28	97.00	8.20	1.77	13.57	0.02	95.20	NA	NA	NA	100.00	0.00	100.00	100.00
		TUV Q2	7.60	86.33	3.39	1.79	13.56	1.65	96.64	NA	NA	100.00	100.00	ni	NI	ni
		TRAI Q3	13.38	98.00	7.39	1.50	18.72	0.02	98.45	NA	NA	NA	NA	0.00	100.00	Nil
		TUV Q3	8.02	97.00	7.42	1.92	14.01	1.86	98.72	98.00	100.00	96.00	100	DNP	DNP	DNP
85	BSNL	TRAI Q1	0.00	96.00	7.00	1.10	1.50	1.90	97.00	85.00	96.00	84.00	95.00	0.00	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	6.30	98.10	11.50	1.10	2.23	0.02	97.00	88.00	97.00	0.86	96.00	0.00	100.00	100.00
		TUV Q2	9.50	96.31	11.99	0.83	1.69	1.61	90.00	86.00	99.00	82.00	97.00	0.00	100.00	100.00
		TRAI Q3	6.00	98.20	10.00	0.70	1.20	0.02	98.00	84.00	97.00	0.88	95.00	0.00	100.00	100.00
		TUV Q3	4.04	96.39	13.10	0.60	1.60	1.93	97.70	95.00	99.00	82.00	95.00	0.00	100.00	100.00
86	Reliance-CDMA	TRAI Q1	0.90	99.34	4.00	0.00	0.51	1.04	99.41	42.30	49.10	54.30	65.30	0.70	100.00	100.00
		TUV Q1	1.75	99.50	1.67	4.86	0.45	1.04	99.10	95.60	97.80	95.00	98.50	0.09	100.00	100.00
		TRAI Q2	1.17	99.35	4.32	0.00	0.40	0.01	99.17	99.50	99.50	0.79	86.24	0.00	100.00	100.00
		TUV Q2	1.00	99.36	DNP	0.00	0.64	1.04	DNP	99.50	99.50	56.45	53.32	0.08	100.00	100.00
		TRAI Q3	0.62	99.41	4.31	0.00	0.42	0.01	98.99	99.50	99.50	0.69	73.28	0.00	100.00	100.00
		TUV Q3	1.36	99.39	1.60	0.00	0.00	0.96	98.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00



South Asia

87	Bharti Televenture	TRAI Q1	2.00	97.00	8.60	0.45	0.87	1.75	97.18	96.00	99.50	97.00	98.00	0.50	100.00	100.00
		TUV Q1	2.05	98.91	6.05	6.45	4.34	DNC	DNC	98.60	97.80	93.20	97.90	0.07	100.00	100.00
		TRAI Q2	9.38	98.14	12.00	2.66	1.78	0.02	96.87	87.00	93.00	0.94	96.00	0.00	100.00	100.00
		TUV Q2	6.75	97.72	3.36	2.86	2.27	1.07	96.67	86.39	91.67	47.46	49.75	0.05	100.00	61.50
		TRAI Q3	9.25	98.20	13.00	4.25	2.99	0.02	98.23	91.00	99.00	0.92	98.00	0.00	100.00	100.00
		TUV Q3	1.05	97.63	3.24	4.19	2.37	1.93	98.16	91.89	94.70	96.26	100.00	0.09	100.00	100.00
88	Tata-CDMA	TRAI Q1	21.20	97.59	8.40	0.00	0.00	0.60	97.58	80.00	100.00	100.00	N/AP	0.10	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.38	96.72	9.40	0.00	0.01	0.01	95.57	99.00	99.00	0.90	90.00	0.00	100.00	100.00
		TUV Q2	0.00	96.62	9.31	0.00	0.00	0.74	95.40	99.61	100.00	36.17	DNP	0.29	100.00	100.00
		TRAI Q3	22.17	96.09	12.70	0.00	0.00	0.01	96.67	98.00	98.00	0.92	92.00	0.00	100.00	100.00
		TUV Q3	0.00	97.80	15.26	0.00	0.00	0.88	98.67	98.00	100.00	86.00	100.00	0.00	100.00	100.00
XVI	Orissa															
89	Reliance-GSM	TRAI Q1	11.05	98.89	7.29	0.16	2.00	1.73	98.71	NA	NA	90.33	100.00	0.00	100.00	NA
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	21.55	99.00	7.40	0.13	4.63	0.02	98.80	NA	NA	0.90	100.00	Nil	N/Ap	N/Ap
		TUV Q2	16.95	99.15	15.20	0.28	4.20	1.62	99.08	NA	NA	99.00	100.00	0.43	100.00	77.00
		TRAI Q3	11.31	99.17	7.28	1.05	16.84	0.02	98.97	NA	NA	0.91	100.00	0.00	100.00	NA
		TUV Q3	7.97	100.00	14.36	0.55	9.96	1.94	98.17	NA	NA	100.00	100.00	0.00	100.00	100.00
90	BSNL	TRAI Q1	10.15	97.00	9.30	0.78	1.85	1.77	98.00	84.00	98.00	90.00	98.00	0.02	100.00	Nil
		TUV Q1	48.40	95.60	3.34	DNC	1.78	1.78	98.10	ND	ND	ND	ND	0.66	100.00	100.00
		TRAI Q2	0.00	95.96	10.00	0.83	1.87	0.02	97.33	84.00	98.00	0.90	98.00	0.00	100.00	Nil



South Asia

		TUV Q2	0.00	97.45	2.91	0.85	1.85	1.42	DNP	DNP	DNP	DNP	DNP	DNP	DNP
		TRAI Q3	2.00	98.50	10.00	0.01	1.80	0.02	97.00	84.30	98.30	0.90	98.40	0.00	100.00
		TUV Q3	0.00	98.39	4.15	0.31	1.58	2.27	86.00	95.00	99.00	82.00	95.00	0.01	100.00
91	Bharti Televenture	TRAI Q1	0.00	99.58	6.50	0.26	0.33	1.08	95.01	99.00	98.00	96.00	98.00	0.02	100.00
		TUV Q1	0.00	99.80	2.67	0.63	0.51	0.00	95.40	ND	ND	ND	ND	0.03	100.00
		TRAI Q2	0.00	98.53	7.30	0.87	0.80	0.01	97.70	96.63	98.13	1.00	99.90	0.00	100.00
		TUV Q2	0.00	98.43	2.45	0.25	0.62	1.24	99.46	99.90	100.00	96.37	98.00	0.04	100.00
		TRAI Q3	0.00	98.62	7.40	1.38	1.48	0.01	96.89	98.74	100.00	0.96	97.99	0.00	100.00
		TUV Q3	0.00	98.78	14.59	1.20	0.96	0.94	98.08	100.00	100.00	100.00	100.00	0.10	100.00
92	Reliance-CDMA	TRAI Q1	0.52	99.32	4.00	0.00	0.34	0.76	99.97	42.30	49.10	54.30	65.30	0.08	100.00
		TUV Q1	1.31	99.51	ND	7.70	0.87	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.74	99.61	4.28	0.00	0.28	0.01	99.46	99.50	99.46	0.79	86.24	0.00	100.00
		TUV Q2	0.00	98.43	2.45	0.25	0.62	1.24	99.46	99.50	99.50	58.19	69.01	0.04	100.00
		TRAI Q3	0.80	99.62	4.37	0.00	0.27	0.01	99.86	99.50	99.50	0.54	66.64	0.00	100.00
		TUV Q3	1.41	99.57	1.50	0.00	0.00	0.87	98.50	99.50	99.50	76.00	82.00	0.05	100.00
93	Tata-CDMA	TRAI Q1	2.00	98.11	10.60	0.00	0.00	0.82	98.45	NA	NA	NA	NA	0.00	100.00
		TUV Q1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		TRAI Q2	0.00	97.67	18.00	0.00	0.00	0.01	97.77	99.00	99.00	0.94	94.00	0.00	100.00
		TUV Q2	0.00	97.87	10.20	0.00	0.00	0.89	98.50	99.60	100.00	36.17	DNP	0.10	100.00
		TRAI Q3	0.00	97.64	10.80	0.00	0.63	0.01	98.33	98.00	99.00	0.90	90.00	0.00	100.00
		TUV Q3	0.00	97.69	14.35	0.00	0.38	0.99	99.37	98.00	100.00	89.00	100.00	0.23	100.00
94	Dishnet	TRAI Q1	0.00	99.39	7.00	0.18	0.00	1.25	99.81	100.00	N/AP	100.00	N/AP	1.00	100.00



South Asia

		TUV Q1	13.22	99.92	2.61	0.40	0.09	0.91	98.18	ND	ND	ND	ND	1.02	100.00	100.00
		TRAI Q2	0.00	99.56	8.00	0.99	1.04	0.01	99.70	93.00	96.00	0.86	94.00	0.00	100.00	100.00
		TUV Q2	4.50	98.79	2.62	0.45	0.25	.88	98.99	100.00	100.00	89.76	DNP	0.39	100.00	100.00
		TRAI Q3	0.00	97.59	8.00	0.97	0.97	0.01	99.70	100.00	100.00	1.00	100.00	0.00	100.00	100.00
		TUV Q3	0.50	99.70	2.40	0.00	0.05	1.17	97.31	100.00	100.00	100.00	100.00	0.04	100.00	100.00
XVII	Assam															
95	Bharti Televenture	TRAI Q1	16.75	97.96	8.50	0.72	1.22	1.21	95.73	95.00	97.00	92.00	96.00	0.09	100.00	100.00
		TUV Q1	0.00	98.20	5.50	0.25	0.52	1.25	100.00	95.00	95.00	67.00	70.00	0.19	100.00	100.00
		TRAI Q2	31.00	95.85	10.00	0.56	0.87	0.01	95.62	99.30	99.00	1.00	100.00	0.00	100.00	100.00
		TUV Q2	0.00	98.00	8.20	1.53	2.80	2.80	DNP	98.00	98.40	100.00	100.00	0.00	66.29	100.00
		TRAI Q3	2.86	95.67	8.00	0.82	0.90	0.02	96.45	100.00	100.00	0.87	95.00	0.00	98.00	100.00
		TUV Q3	8.70	99.50	DNP	1.14	1.05	0.50	90.80	NA	NA	47.10	48.80	0.00	96.20	100.00
96	BSNL	TRAI Q1	3.00	98.00	12.00	0.09	1.60	2.40	96.00	81.00	97.00	81.00	95.00	0.01	100.00	100.00
		TUV Q1	0.00	98.20	3.60	0.70	1.80	2.40	99.20	53.00	54.00	40.00	45.00	0.60	75.00	100.00
		TRAI Q2	1.00	98.00	12.00	0.80	1.67	0.02	96.00	81.00	97.00	0.81	95.00	0.00	100.00	100.00
		TUV Q2	0.00	99.90	2.63	0.83	1.71	1.72	96.44	87.00	99.00	84.00	96.00	0.01	100.00	100.00
		TRAI Q3	3.30	96.67	12.00	0.90	1.70	0.02	96.67	82.00	97.00	0.81	95.00	0.00	100.00	100.00
		TUV Q3	2.33	97.00	DNP	0.90	0.00	2.43	94.01	16.60	31.81	79.66	79.66	0.00	100.00	100.00
97	Reliance-GSM	TRAI Q1	35.50	97.70	7.40	0.91	5.03	1.11	97.75	80.00	NA	NA	95.00	0.02	100.00	NA
		TUV Q1	0.00	98.28	3.32	0.57	5.02	1.11	97.40	N/Ap	N/Ap	78.73	NA	0.02	100.00	100.00
		TRAI Q2	26.58	96.00	7.40	0.83	5.20	0.01	96.10	NA	NA	0.80	95.00	0.00	100.00	100.00
		TUV Q2	0.00	96.50	15.04	0.84	5.15	1.06	96.94	NA	NA	100.00	100.00	0.03	100.00	100.00



South Asia

		TRAI Q3	16.42	97.30	8.43	0.90	4.90	0.01	95.80	NA	NA	0.80	95.00	0.00	100.00	NA
		TUV Q3	13.13	97.60	8.42	0.83	4.92	0.96	95.80	93.60	100.00	100.00	100.00	0.02	100.00	100.00
98	Dishnet	TRAI Q1	0.00	99.58	8.00	0.72	0.51	2.70	99.86	97.02		99.00		0.05	100.00	100.00
		TUV Q1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		TRAI Q2	0.00	99.32	8.00	0.85	0.83	0.01	99.75	94.00	97.00	0.86	92.00	0.00	99.00	100.00
		TUV Q2	43.43	98.02	14.06	1.32	1.99	1.97	99.83	100.00	100.00	92.49	100.00	0.01	100.00	55.50
		TRAI Q3	0.00	98.24	8.00	0.87	0.86	0.01	99.75	94.00	97.00	0.86	92.00	0.00	100.00	100.00
		TUV Q3	0.00	96.77	14.05	2.23	1.98	1.70	98.23	100.00	100.00	95.11	100.00	0.01	100.00	100.00
XVIII	J&K															
99	BSNL	TRAI Q1	0.00	99.20	11.00	0.86	1.90	1.60	99.00	89.00	97.00	84.00	96.00	0.01	100.00	100.00
		TUV Q1	0.00	99.10	2.20	3.36	4.33	0.82	99.30	100.00	100.00	100.00	100.00	1.10	100.00	DNC
		TRAI Q2	0.00	99.00	10.00	0.87	1.73	0.02	98.80	91.00	95.00	0.86	96.00	0.00	100.00	100.00
		TUV Q2	0.00	91.10	0.00	0.85	2.00	0.18	92.83	100.00	100.00	50.00	100.00	NI	NI	NI
		TRAI Q3	0.00	98.00	10.00	0.80	1.90	0.02	98.00	82.00	92.00	0.81	96.00	0.00	100.00	100.00
		TUV Q3	5.37	32.60	4.57	0.90	1.80	2.10	96.13	99.76	99.95	10.85	16.07	0.66	100.00	DNP
100	Bharti Televenture	TRAI Q1	15.83	96.60	6.30	0.48	0.36	1.57	97.51	95.38	99.99	95.32	94.14	0.01	100.00	100.00
		TUV Q1	0.00	100.00	2.67	ND	ND	0.76	97.80	100.00	100.00	100.00	100.00	ND	100.00	100.00
		TRAI Q2	8.48	99.10	3.45	0.47	0.45	0.02	97.00	99.99	100.00	1.00	100.00	0.00	100.00	100.00
		TUV Q2	0.00	99.19	21.01	0.49	0.39	1.45	96.05	100.00	100.00	100.00	100.00	0.01	100.00	100.00
		TRAI Q3	14.50	98.41	3.43	0.48	0.60	0.02	96.42	94.00	100.00	0.89	99.00	0.00	100.00	100.00
		TUV Q3	4.91	98.51	3.43	0.47	0.75	1.52	97.60	94.00	100.00	89.00	99.00	0.60	100.00	100.00
101	Dishnet	TRAI Q1	0.00	98.81	7.00	1.53	0.02	2.93	99.72	NA	NA	89.00	99.00	0.05	100.00	NA



South Asia

		TUV Q1	0.00	98.67	2.67	0.72	0.01	0.00	99.30	100.00	100.00	100.00	100.00	0.00	DNC	100.00
		TRAI Q2	0.00	99.42	8.00	0.97	0.97	0.01	99.90	100.00	100.00	1.00	100.00	0.00	100.00	100.00
		TUV Q2	0.00	98.61	DNP	1.17	.13	0.71	99.55	100.00	100.00	100.00	100.00	NI	NI	NI
		TRAI Q3	0.00	96.42	8.00	0.97	0.97	0.01	99.90	100.00	100.00	1.00	100.00	0.00	100.00	100.00
		TUV Q3	0.00	97.20	5.27	0.51	0.12	1.20	99.36	75.00	100.00	100.00	100.00	0.05	100.00	100.00
XIX	NE															
102	BSNL	TRAI Q1	12.00	96.00	14.00	0.60	0.90	2.50	97.00	85.00	99.00	81.00	96.00	0.00	100.00	NA
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	15.00	95.20	14.00	0.70	1.57	0.02	96.00	85.00	97.00	0.82	96.00	0.00	100.00	100.00
		TUV Q2	0.00	99.00	8.05	0.53	1.40	1.45	DNP	87.00	99.00	82.00	97.00	0.00	100.00	100.00
		TRAI Q3	12.00	95.70	12.00	0.70	1.60	0.02	97.00	81.00	96.00	0.85	97.00	0.00	100.00	100.00
		TUV Q3	2.02	98.44	DNP	0.70	1.50	DNP	DNP	92.50	99.00	81.00	88.50	DNP	98.00	DNP
103	Bharti Televenture	TRAI Q1	0.00	99.15	10.00	0.15	0.09	1.14	96.88	94.00	96.00	90.00	97.00	0.10	100.00	100.00
		TUV Q1	0.00	99.30	5.00	0.08	0.25	1.06	100.00	ND	ND	ND	ND	0.02	100.00	100.00
		TRAI Q2	15.00	98.91	9.00	0.44	0.85	0.01	95.62	99.00	99.00	1.00	100.00	0.00	98.00	100.00
		TUV Q2	2.97	99.15	8.50	0.28	0.85	0.85	DNP	99.00	99.60	100.00	100.00	0.21	74.00	100.00
		TRAI Q3	2.00	97.73	7.00	0.90	0.82	0.01	96.45	98.00	99.00	1.00	100.00	0.00	69.00	100.00
		TUV Q3	14.28	98.00	6.08	1.16	0.81	2.04	63.60	29.00	29.00	0.00	6.00	0.01	100.00	100.00
104	Reliance-GSM	TRAI Q1	0.00	98.00	8.07	1.41	6.46	2.56	96.14	100.00	N/AP	NA	NA	1.00	100.00	NA
		TUV Q1	0.00	98.00	3.47	1.49	6.46	2.56	95.47	ND	ND	ND	ND	0.13	100.00	NA
		TRAI Q2	0.00	98.00	7.60	2.40	8.03	0.03	97.70	NA	NA	0.95	100.00	0.00	100.00	100.00
		TUV Q2	0.00	97.50	14.22	2.36	7.53	2.58	98.28	NA	NA	100.00	100.00	0.01	100.00	100.00



South Asia

		TRAI Q3	0.00	98.30	7.60	1.68	9.55	0.02	98.43	NA	NA	0.80	95.00	0.06	100.00	NA
		TUV Q3	0.00	98.30	8.48	2.62	11.50	2.25	98.40	75.40	100.00	100.00	100.00	0.07	100.00	100.00
105	Dishnet	TRAI Q1	0.00	97.54	7.00	3.29	1.59	0.37	99.53	100.00	N/AP	100.00	N/AP	0.00	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	98.76	8.00	0.82	0.79	0.01	99.00	93.00	95.00	0.81	93.00	0.00	100.00	100.00
		TUV Q2	5.25	97.95	14.05	1.13	2.06	2.18	99.83	100.00	100.00	96.62	100.00	1.45	100.00	100.00
		TRAI Q3	1.00	97.71	8.00	0.69	0.66	0.01	99.30	100.00	100.00	1.00	100.00	0.00	100.00	Nil
		TUV Q3	0.00	99.98	14.05	42.04	14.45	1.55	97.59	100.00	100.00	100.00	100.00	0.00	100.00	100.00

	METRO CIRCLE															
XX	Delhi															
106	Bharti Televenture	TRAI Q1	0.00	98.84	14.80	0.11	0.10	1.32	97.24	99.22	99.74	99.51	99.87	0.07	100.00	100.00
		TUV Q1	0.00	98.87	3.76	0.10	0.12	1.30	97.45	100.00	100.00	100.00	100.00	0.06	100.00	100.00
		TRAI Q2	0.00	98.95	14.80	0.00	0.09	0.01	97.08	99.96	99.90	0.97	98.13	0.00	100.00	100.00
		TUV Q2	0.00	98.94	3.50	0.13	0.11	1.21	96.60	99.58	99.88	97.60	98.58	0.06	100.00	100.00
		TRAI Q3	0.00	98.89	15.20	0.00	0.05	0.01	96.02	99.84	99.93	0.96	97.44	0.00	100.00	100.00
		TUV Q3	0.00	98.94	3.40	0.15	0.07	1.33	97.33	99.88	99.95	96.72	97.88	0.06	100.00	100.00
107	Hutchission Essar M serv	TRAI Q1	0.00	99.21	7.38	0.01	0.04	1.11	98.01	98.92	98.92	86.65	96.47	0.01	100.00	100.00
		TUV Q1	11.50	99.21	7.88	0.01	0.04	1.13	97.99	100.00	100.00	100.00	100.00	0.01	100.00	100.00
		TRAI Q2	0.00	98.81	8.12	0.00	0.04	0.01	97.79	99.54	99.23	0.90	95.63	0.00	100.00	100.00
		TUV Q2	0.00	99.09	7.98	0.01	0.04	1.07	100.00	100.00	100.00	74.00	100.00	0.07	100.00	97.99
		TRAI	0.00	98.50	8.29	0.00	0.03	0.01	97.73	99.93	99.97	0.83	87.40	0.00	100.00	100.00



South Asia

		Q3														
		TUV Q3	0.00	98.19	8.25	0.01	0.03	1.24	100.00	99.88	99.99	79.34	83.34	0.07	100.00	100.00
108	MTNL	TRAI Q1	0.00	95.25	14.20	0.33	1.99	1.71	95.55	96.00	98.00	82.10	90.60	0.09	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	95.25	14.80	0.11	3.30	0.02	95.43	93.00	95.00	0.90	95.20	0.00	100.00	100.00
		TUV Q2	0.00	98.83	8.49	10.50	4.92	DNP	DNP	92.50	95.00	90.00	95.20	0.12	98.26	99.73
		TRAI Q3	0.00	95.45	14.80	0.07	1.50	0.02	95.47	92.67	95.67	0.95	91.40	0.00	100.00	100.00
		TUV Q3	0.00	85.20	DNP	8.18	2.74	1.79	DNP	99.99	99.99	97.76	98.89	0.02	98.92	50.00
109	IDEA Cellular	TRAI Q1	0.00	99.98	7.00	0.84	1.26	0.54	98.47	95.00	98.00	68.00	81.00	0.01	100.00	100.00
		TUV Q1	0.00	100.00	7.00	0.79	1.31	0.55	98.50	100.00	100.00	100.00	100.00	0.48	100.00	100.00
		TRAI Q2	0.00	99.98	7.00	0.01	1.45	0.01	98.42	100.00	Nil	0.92	8.00	0.00	100.00	100.00
		TUV Q2	0.00	99.98	3.11	0.87	1.44	0.50	96.02	100.00	100.00	100.00	100.00	0.00	100.00	100.00
		TRAI Q3	0.00	99.98	7.00	0.00	1.97	0.01	98.22	100.00	100.00	0.92	100.00	0.00	100.00	100.00
		TUV Q3	0.00	99.98	8.65	0.47	1.94	0.66	97.25	100.00	100.00	60.00	DNP	0.05	100.00	100.00
110	Tata-CDMA	TRAI Q1	0.00	97.54	10.20	0.00	0.60	0.67	96.00	100.00	N/AP	88.00	90.00	0.10	100.00	100.00
		TUV Q1	0.00	97.60	11.10	0.00	0.48	0.71	96.30	100.00	100.00	100.00	100.00	ND	ND	ND
		TRAI Q2	0.73	98.02	10.90	0.00	1.30	0.01	96.60	100.00	100.00	0.70	77.00	0.00	100.00	100.00
		TUV Q2	1.08	98.11	11.20	0.00	0.31	0.66	96.67	100.00	100.00	98.00	100.00	0.01	100.00	100.00
		TRAI Q3	0.00	97.93	10.97	0.00	0.00	0.01	96.51	100.00	100.00	0.77	83.00	0.00	100.00	100.00
		TUV Q3	0.00	97.93	10.50	0.00	0.24	0.76	96.60	100.00	100.00	91.00	94.00	0.01	100.00	95.67
111	Reliance-CDMA	TRAI Q1	0.00	99.32	4.00	0.00	0.64	0.70	98.77	42.30	48.10	54.30	65.30	0.07	100.00	100.00
		TUV Q1	0.00	99.40	DNC	1.48	0.58	0.71	98.25	60.00	95.00	50.00	50.00	0.06	100.00	100.00
		TRAI	0.00	99.43	4.40	0.00	0.51	0.01	99.08	99.50	99.50	0.79	86.24	0.00	100.00	100.00



South Asia

		Q2														
	Mumbai	TUV Q2	0.00	99.47	DNP	0.00	0.53	0.57	DNP	99.50	99.50	37.50	44.96	0.07	100.00	100.00
		TRAI Q3	0.00	99.63	4.25	0.00	3.80	0.01	99.08	99.50	99.50	0.44	50.36	0.00	100.00	100.00
		TUV Q3	0.00	99.45	1.35	0.00	0.00	0.70	97.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00
XXI	Mumbai															
112	BPL Mobile	TRAI Q1	7.31	99.50	11.24	0.21	1.52	1.39	97.48	69.73	NA	97.63	99.42	0.08	100.00	100.00
		TUV Q1	2.90	99.50	11.20	0.22	1.51	1.36	95.50	84.00	84.00	50.00	52.00	0.07	100.00	100.00
		TRAI Q2	30.42	99.41	10.81	0.00	1.31	0.01	99.16	65.51	NA	0.93	95.21	0.00	100.00	100.00
		TUV Q2	18.18	99.40	10.81	0.21	1.42	1.43	98.85	82.00	85.00	88.00	89.00	0.10	100.00	100.00
		TRAI Q3	30.00	99.38	10.38	0.00	1.67	0.02	99.08	90.07	NA	0.93	95.75	0.00	100.00	100.00
		TUV Q3	7.00	99.38	10.38	0.13	1.61	1.47	98.52	17.00	NA	91.60	94.00	0.01	100.00	100.00
113	Hutchission Max tel	TRAI Q1	0.00	99.62	8.50	0.37	1.67	1.86	95.60	99.27	99.27	86.49	97.20	0.01	100.00	100.00
		TUV Q1	0.00	99.62	10.05	0.14	1.74	1.96	95.60	100.00	100.00	83.00	90.00	0.01	100.00	100.00
		TRAI Q2	0.00	99.59	10.00	0.00	1.49	0.02	95.60	99.65	99.68	0.88	95.15	0.00	100.00	100.00
		TUV Q2	0.00	99.59	10.50	0.44	1.52	1.86	95.60	99.59	99.59	88.40	93.28	0.01	100.00	100.00
		TRAI Q3	0.00	99.00	10.00	0.01	1.64	0.02	95.42	99.24	99.24	0.84	96.30	0.00	100.00	100.00
		TUV Q3	0.00	99.00	10.50	0.69	1.42	2.00	95.42	99.20	99.30	82.90	96.90	0.03	100.00	100.00
114	MTNL	TRAI Q1	0.00	97.86	13.46	0.91	1.80	1.36	90.00	84.00	96.00	85.00	99.00	0.03	100.00	100.00
		TUV Q1	286.00	95.87	NA	NA	NA	1.67	NA	82.00	82.00	56.00	66.00	0.17	100.00	100.00
		TRAI Q2	0.00	96.21	15.55	0.01	1.78	0.01	96.04	83.00	96.00	0.86	97.00	0.00	100.00	100.00
		TUV Q2	71.05	98.82	DNP	0.93	1.69	DNP	DNP	84.00	97.00	85.00	97.00	0.57	100.00	ni
		TRAI Q3	0.00	96.34	15.31	0.01	1.84	0.02	96.05	83.00	97.00	0.85	97.00	0.00	100.00	100.00



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		TUV Q3	0.00	96.33	4.39	10.98	1.94	2.04	95.18	83.00	99.32	NA	NA	0.05	95.00	99.51
115	Bharti Televenture	TRAI Q1	0.05	99.47	3.17	0.31	0.49	1.04	99.29	99.91	99.94	98.82	99.61	0.01	100.00	100.00
		TUV Q1	0.00	99.30	3.17	0.28	0.09	0.41	98.65	99.62	99.92	99.70	99.76	0.01	100.00	100.00
		TRAI Q2	0.00	97.00	3.16	0.00	0.70	0.01	96.00	99.91	99.97	1.00	99.81	0.00	100.00	100.00
		TUV Q2	0.00	99.29	3.18	0.45	0.70	1.20	96.91	97.00	97.33	95.00	96.00	0.10	100.00	100.00
		TRAI Q3	0.00	99.35	3.42	0.00	0.73	0.01	95.03	99.93	99.97	0.99	99.97	0.00	100.00	100.00
		TUV Q3	0.00	99.30	3.42	0.34	0.66	1.19	94.00	80.00	95.00	80.00	95.00	0.02	100.00	100.00
116	Reliance-CDMA	TRAI Q1	0.00	99.32	4.00	0.00	0.59	0.83	99.43	42.30	49.10	54.30	65.30	0.07	100.00	100.00
		TUV Q1	0.00	99.47	DNC	1.09	0.67	0.85	99.25	58.00	60.00	46.00	52.00	0.07	100.00	100.00
		TRAI Q2	0.00	99.44	3.84	0.00	0.54	0.01	99.36	99.50	99.50	0.79	86.24	0.00	100.00	100.00
		TUV Q2	0.00	99.49	DNP	0.00	0.52	0.78	DNP	99.50	99.50	37.57	45.99	0.07	100.00	100.00
		TRAI Q3	0.00	99.54	3.86	0.00	0.41	0.01	99.02	99.50	99.50	0.53	63.64	0.00	100.00	100.00
		TUV Q3	0.00	96.33	4.39	0.89	1.94	2.04	95.18	99.50	99.50	76.00	82.00	0.01	95.00	99.51
117	Tata-CDMA	TRAI Q1	19.27	96.99	13.20	0.00	0.50	0.40	96.24	100.00	N/AP	90.00	93.00	0.50	100.00	100.00
		TUV Q1	0.00	97.00	8.40	0.00	0.82	0.41	96.20	96.00	96.00	84.00	84.00	0.84	93.90	82.40
		TRAI Q2	0.00	98.19	18.00	0.00	0.16	0.00	95.14	100.00	Nil	0.87	89.50	0.00	99.00	NA
		TUV Q2	0.00	98.32	8.90	0.00	0.36	0.33	95.14	100.00	100.00	75.00	79.00	0.57	93.97	96.45
		TRAI Q3	12.98	98.49	18.00	0.00	0.00	0.00	96.16	100.00	100.00	0.79	83.41	0.00	99.00	100.00
		TUV Q3	0.00	99.47	8.30	0.00	0.57	0.30	95.68	100.00	100.00	74.00	79.00	0.05	98.99	40.16
XXII	Chennai															
118	Aircel Cellular Ltd.	TRAI Q1	NA	98.00	11.00	0.77	2.43	0.79	95.30	95.00	100.00	86.00	100.00	0.10	100.00	100.00
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND



South Asia

		TRAI Q2	0.00	99.00	10.00	0.01	2.33	0.01	96.20	95.00	100.00	0.95	100.00	0.00	100.00	100.00
		TUV Q2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q3	NA	99.00	13.50	0.00	2.10	0.01	95.20	95.00	100.00	0.88	100.00	0.00	100.00	100.00
		TUV Q3	0.00	99.10	10.30	0.26	1.50	0.73	95.16	80.00	100.00	88.00	100.00	0.13	99.29	100.00
119	Bharti Televenture	TRAI Q1	0.00	99.54	14.37	0.10	0.63	0.64	97.01	99.96	99.99	92.00	98.00	0.09	100.00	100.00
		TUV Q1	0.00	99.55	8.00	0.01	0.08	0.64	DNC	93.50	100.00	ND	ND	0.09	100.00	100.00
		TRAI Q2	0.00	99.39	13.73	0.00	0.19	0.01	96.20	99.96	99.99	0.92	98.00	0.00	100.00	100.00
		TUV Q2	0.00	99.43	3.65	0.12	0.20	0.56	98.61	DNP	DNP	DNP	DNP	0.09	100.00	100.00
		TRAI Q3	0.00	99.18	14.23	0.00	0.13	0.01	95.67	99.96	99.99	0.92	98.00	0.00	100.00	100.00
		TUV Q3	0.00	99.36	3.44	0.20	0.11	0.60	95.78	78.00	100.00	88.00	100.00	0.34	100.00	100.00
120	Hutchission Essar South	TRAI Q1	0.00	99.20	9.30	0.08	1.14	1.13	98.40	100.00	N/AP	97.91	99.91	0.02	100.00	100.00
		TUV Q1	0.00	99.22	DNC	0.09	0.76	1.14	88.97	ND	ND	ND	ND	0.01	100.00	100.00
		TRAI Q2	0.00	99.40	11.34	0.00	1.04	0.01	98.40	100.00	100.00	0.96	98.79	0.00	100.00	100.00
		TUV Q2	0.00	99.96	2.60	0.97	1.67	0.70	99.39	100.00	100.00	74.00	100.00	0.01	100.00	100.00
		TRAI Q3	0.00	99.50	11.21	0.00	1.10	0.01	99.10	100.00	100.00	0.94	96.57	0.00	100.00	100.00
		TUV Q3	2.19	99.38	2.50	0.37	1.78	0.83	100.00	96.00	100.00	88.00	100.00	0.03	100.00	100.00
121	BSNL	TRAI Q1	0.00	98.72	9.98	0.14	1.28	0.71		82.00	94.00	81.00	88.00	0.02	100.00	100.00
		TUV Q1	0.00	99.02	6.60	0.23	0.71	0.69	85.20	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	98.00	10.60	0.00	0.87	0.01	100.00	100.00	100.00	0.96	100.00	0.00	100.00	100.00
		TUV Q2	0.00	97.81	DNP	0.19	0.61	0.71	DNP	85.00	96.00	89.00	100.00	ND	ND	ND
		TRAI Q3	0.00	97.90	9.90	0.00	1.10	0.01	100.00	100.00	100.00	0.60	67.00	0.00	100.00	100.00
		TUV Q3	0.00	98.83	10.40	0.20	0.78	5.30	94.70	80.00	100.00	76.00	100.00	0.08	100.00	100.00



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122	Reliance-CDMA	TRAI Q1	0.00	99.37	4.00	0.00	0.53	0.49	99.89	42.30	49.10	54.30	65.30	0.08	100.00	100.00
		TUV Q1	0.00	99.43	1.36	0.78	0.57	0.50	99.60	ND	ND	ND	ND	0.07	100.00	100.00
		TRAI Q2	0.00	99.53	4.25	0.00	0.38	0.00	99.90	99.50	99.50	0.79	86.24	0.00	100.00	100.00
		TUV Q2	0.00	98.80	1.31	5.39	0.20	0.50	99.61	99.50	100.00	48.99	55.87	0.07	100.00	100.00
		TRAI Q3	0.00	99.49	4.22	0.00	0.41	0.00	99.89	99.50	99.50	0.39	48.64	0.00	100.00	100.00
		TUV Q3	0.00	99.50	0.30	0.00	0.00	0.58	97.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00
123	Tata-CDMA	TRAI Q1	0.00	99.94	13.29	0.00	0.00	0.60	97.00	100.00	N/AP	92.80	93.60	0.10	100.00	100.00
		TUV Q1	28.10	98.50	13.70	3.37	0.13	0.56	97.00	100.00	100.00	DNC	DNC	ND	ND	ND
		TRAI Q2	0.00	99.93	13.28	0.00	0.02	0.01	96.33	100.00	100.00	0.98	99.00	0.00	100.00	100.00
		TUV Q2	0.00	99.93	13.13	0.00	0.80	0.01	96.93	100.00	100.00	85.00	90.00	0.00	100.00	100.00
		TRAI Q3	0.00	99.96	13.52	0.00	0.02	0.01	96.15	100.00	100.00	0.94	97.00	0.00	100.00	100.00
		TUV Q3	0.00	99.96	13.47	3.94	0.04	0.57	96.50	100.00	100.00	96.00	100.00	0.09	100.00	100.00
XXIII	Kolkata															
124	Bharti Televenture	TRAI Q1	0.00	97.18	17.80	0.24	0.38	1.40	98.09	99.42	99.47	85.85	85.41	0.10	100.00	100.00
		TUV Q1	0.00	97.54	17.78	0.02	0.25	1.26	97.42	98.00	99.00	64.00	65.00	0.04	100.00	100.00
		TRAI Q2	0.00	97.22	7.00	0.00	0.74	0.02	98.09	89.13	92.39	0.98	90.42	NA	100.00	NA
		TUV Q2	0.00	96.83	17.48	0.75	0.74	1.31	96.10	95.35	98.58	98.13	99.19	0.04	100.00	100.00
		TRAI Q3	0.00	96.00	7.00	0.01	0.33	0.01	97.19	97.47	99.54	0.85	88.16	0.00	100.00	100.00
		TUV Q3	0.00	97.02	17.85	0.79	0.37	1.47	96.90	97.01	97.43	67.42	71.11	0.02	100.00	100.00
125	Hutchission Essar South	TRAI Q1	0.00	99.93	15.00	0.30	1.41	0.72	96.56	100.00	N/AP	81.84	96.26	0.02	100.00	100.00
		TUV Q1	0.00	99.82	18.00	0.14	1.20	0.724	96.44	100.00	100.00	80.00	96.00	0.07	100.00	100.00
		TRAI	0.00	99.66	16.00	0.00	0.71	0.01	96.65	100.00	100.00	0.95	98.22	0.00	100.00	100.00



South Asia

		Q2												
		TUV Q2	0.00	99.92	19.00	0.25	0.80	.7	95.73	DNP	DNP	DNP	DNP	0.04
		TRAI Q3	0.00	99.79	14.50	0.00	0.79	0.01	96.01	100.00	100.00	0.93	98.15	0.00
		TUV Q3	0.00	99.00	19.00	0.22	0.48	0.78	96.29	100.00	100.00	95.50	98.98	0.00
126	BSNL	TRAI Q1	0.00	98.10	8.00	0.90	1.70	1.10	97.70	85.00	99.00	81.00	96.00	0.10
		TUV Q1	11.00	94.30	15.80	0.74	5.40	0.57	88.19	ND	ND	ND	ND	0.27
		TRAI Q2	0.00	97.92	10.00	0.01	1.33	0.01	98.69	86.70	99.00	0.82	96.00	0.00
		TUV Q2	0.00	82.50	16.60	0.74	1.32	0.73	DNP	84.00	99.00	81.00	96.00	0.01
		TRAI Q3	0.00	97.23	11.20	0.01	1.80	0.00	97.95	89.00	99.00	0.81	91.00	0.00
		TUV Q3	8.70	96.28	9.18	0.68	1.65	0.61	96.00	95.00	99.00	82.00	95.00	0.01
127	Reliable Internet Serv.	TRAI Q1	0.00	99.67	8.31	0.01	0.10	1.28	97.51	NA	87.33	95.33	NA	NA
		TUV Q1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TRAI Q2	0.00	99.00	8.30	0.04	0.43	0.01	98.44	NA	87.00	0.98	NA	0.00
		TUV Q2	50.47	99.19	17.40	0.01	0.13	0.99	98.79	NA	NA	100.00	100.00	N/AP
		TRAI Q3	0.00	97.66	8.28	0.40	5.30	0.01	98.33	NA	NA	0.93	99.30	Nil
		TUV Q3	7.84	95.77	8.36	0.52	4.30	1.03	99.62	NA	NA	100.00	100.00	DNP
128	Tata-CDMA	TRAI Q1	4.29	97.27	9.12	0.00	0.75	0.63	96.00	NA	NA	NA	NA	0.20
		TUV Q1	9.40	97.30	4.64	10.60	0.46	0.63	97.60	74.20	100.00	32.10	100.00	0.30
		TRAI Q2	0.00	97.11	9.40	0.00	0.86	0.01	96.17	99.00	99.00	0.92	92.00	0.00
		TUV Q2	0.00	97.23	9.10	0.00	0.62	0.69	95.80	99.50	100.00	100.00	100.00	0.27
		TRAI Q3	18.00	96.70	8.23	0.00	1.47	0.01	97.26	98.00	99.00	0.89	89.00	0.00
		TUV Q3	0.00	96.95	8.90	0.00	1.60	0.79	97.54	NA	NA	NA	NA	0.06



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129	Reliance-CDMA	TRAI Q1	0.00	99.32	4.00	0.00	0.49	0.73	98.36	42.00	49.10	54.30	65.30	0.09	100.00	100.00
		TUV Q1	0.00	99.40	1.27	1.79	0.59	0.78	99.61	ND	ND	ND	ND	0.08	100.00	100.00
		TRAI Q2	0.00	99.41	3.87	0.00	0.56	0.01	98.30	99.50	99.50	0.79	86.24	0.00	100.00	100.00
		TUV Q2	0.00	99.44	DNP	0.00	0.56	0.67	DNP	99.50	99.50	46.45	53.32	0.07	100.00	100.00
		TRAI Q3	0.00	99.51	3.88	0.00	0.38	0.01	99.49	99.50	99.50	0.69	73.28	0.00	100.00	100.00
		TUV Q3	0.00	99.45	1.00	0.00	0.00	0.70	85.00	99.50	99.50	76.00	82.00	0.06	100.00	100.00





South Asia

**PERFORMANCE MONITORING REPORT (PMR)
COMPARISION OF
BASIC
(Quarter-I, II & III)**



South Asia

QUALITY OF SERVICE (QOS) PERFORMANCE FOR BASIC SERVICES																		
Legends Used : NA : Not Available ND : Not Done, DNP : Data Not Provided, N/App : Not Applicable, NI : No Incidence				New Connection after registration of demand (in %)	Fault incidence per 100/sub /month (in %)	Fault repaired by next working day (in %)	Mean Time to Repair (MTTR) (in Hours)	Grade of service (calls per thousand) [Junction between local exchange (2/1000)]	Call completion rate in local network (in %)	Metering & billing credibility	Shifts (in %)	Closures (in %)	Additional facility (in %)	Response Time to the Customer for Assistance (in%)			Time taken for RefUND of deposit after closure (in %)	
Sr. No	Service Area	Service Provider	Time segment							95% of requests			% age of calls answered (electronically)		% age of calls answered by Operator (voice to voice)			
Bench Mark				100% in < 7 days	<5 %	>90%	<8 hrs	<0.002	>55%	<0.1%	<3 days	<24 hours	<24 hours	within 20 sec=80 %	within 40 sec=95 %	within 60 sec=80 %	within 90 sec = 95% = 100% in 60 Days	
1	Andhra Pradesh	BSNL	PMR Q1	83.69	NA	NA	16.00	NA	55.00	0.02	75.26	79.03	76.12	NA	NA	NA	100.00	
			TUVQ1	72.20	2.14	75.70	9.14	0.38	47.5	0.03	73.20	68.80	86.40	ND	ND	ND	70.20	
			PMRQ2	87.73	5.00	86.00	13.80	NA	NA	0.02	82.46	78.12	73.01	NA	NA	NA	100.00	
			TUVQ2	60.02	4.43	63.70	6.96	0.06	51.25	0.00	67.28	48.48	61.56	DNP	DNP	DNP	100.00	
			PMRQ3	89.87	4.70	86.00	14.90	NA	54	0.02	81.57	78.76	73.72	100.00	100.00	NA	100.00	
			TUVQ3	70.00	2.06	85.00	5.90	0.01	53.00	0.00	77.35	82.60	92.70	NA	NA	100.00	100.00	
	Reliance	Reliance	PMR Q1	69.98	2.64	93.81	5.40	4.88	NA	0.09	81.93	57.26	99.78	NA	NA	91.50	100.00	
			TUVQ1	57.04	2.56	100.00	4.00	6.00	54.50	0.079	79.01	48.22	99.89	ND	ND	ND	NI	
			PMRQ2	60.49	2.78	97.33	5.19	12.32	69.01	0.06	81.94	98.32	99.77	100.00	100.00	94.50	100.00	
			TUVQ2	99.64	2.36	100.00	7.60	4.10	63.64	.04	82.00	97.00	100.00	DNP	DNP	DNP	100.00	
			PMRQ3	84.43	2.94	99.21	1.65	9.17	NA	0.07	NA	95.04	99.45	100.00	100.00	91.50	95.50	100.00
	Bharti	Bharti	TUVQ3	99.00	2.80	98.75	2.50	0.01	68.00	0.00	90.00	91.70	99.30	100.00	100.00	90.50	95.00	100.00
			PMR Q1	34.27	9.20	NA	2.40	0.00	52.72	0.18	74.13	80.57	76.04	90.88	93.00	90.88	93.00	100.00
			TUVQ1	82.30	8.02	97.50	5.21	DNC	68.30	1.89	19.30	0.00	99.60	100.00	100.00	100.00	100.00	0.00
			PMRQ2	88.77	8.79	97.90	2.93	0.00	52.00	0.33	100.00	100.00	91.66	82.33	85.67	86.33	91.67	100.00
			TUVQ2	80.50	8.50	93.80	5.04	0.00	65.92	0.37	26.79	DNP	98.71	DNP	DNP	DNP	DNP	
			PMRQ3	86.58	8.75	92.82	3.00	0.00	53.00	0.16	62.45	0.00	94.69	NA	NA	96.00	97.00	4.67



South Asia

		TUVQ3	84.00	9.60	94.00	5.65	0.00	33.00	0.34	56.00	0.00	89.00	NA	NA	95.95	97.50	100.00	
2	Bihar	BSNL	PMR Q1	91.43	2.70	82.51	12.51	0.02	51.96	0.20	57.82	NA	95.06	NA	NA	NA	NA	100.00
			TUVQ1	90.39	2.35	83.45	21.10	0.00	80.00	0.535	50.72	0.00	95.00	ND	ND	ND	ND	99.36
			PMRQ2	85.26	3.72	97.77	7.80	0.00	51.05	0.20	99.65	99.66	95.18	100.00	100.00	79.00	86.00	100.00
			TUVQ2	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNP	DNP	DNP	DNP	ND	
			PMRQ3	85.99	4.50	88.28	11.13	0.00	47.31	0.20	99.21	100.00	88.89	100.00	100.00	80.00	87.00	100.00
			TUVQ3	84.50	4.70	76.20	10.69	0.00	79.00	0.15	99.00	100.00	96.00	100.00	100.00	100.00	100.00	100.00
3	Delhi	MTNL	PMR Q1	37.63	NA	NA	12.00	NA	NA	37.00	0.03	100.00	90.33	97.82	NA	NA	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	41.61	6.00	82.00	10.00	NA	NA	0.03	100.00	90.54	95.28	NA	NA	NA	NA	100.00
			TUVQ2	3.80	18.35	48.63	14.80	0.62	50.95	0.85	100.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	25.97	7.00	64.00	10.00	NA	41.00	0.02	100.00	99.26	94.84	NA	NA	NA	NA	100.00
			TUVQ3	84.99	16.57	59.36	12.19	0.19	69.17	0.09	60.00	68.40	70.75	100.00	100.00	NA	NA	71.43
		Reliance	PMR Q1	48.10	NIL	NIL	NA	0.16	NA	0.00	Nil	Nil	100.00	NA	NA	91.50	100.00	100.00
			TUVQ1	0.00	0.00	100.00	2.50	0.21	40.57	0.00	100.00	100.00	100.00	ND	ND	ND	ND	NI
			PMRQ2	78.95	Nil	Nil	0.00	0.42	53.33	Nil	Nil	Nil	100.00	100.00	100.00	94.33	100.00	100.00
			TUVQ2	80.00	0.00	100.00	0.00	0.06	100.00	0.00	ni	100.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	77.84	Nil	Nil	Nil	0.10	NA	Nil	Nil	Nil	100.00	100.00	100.00	91.50	95.50	Nil
			TUVQ3	93.50	NI	NI	NI	0.19	60.50	0.00	NI	NI	NI	100.00	100.00	90.50	95.00	100.00
4	Bharti	MTNL	PMR Q1	98.00	15.90	88.56	10.24	0.00	48.00	0.06	88.33	79.91	59.25	100.00	100.00	88.00	88.00	100.00
			TUVQ1	97.00	6.90	96.00	4.80	0.00	70.15	0.011	99.00	82.00	100.00	ND	ND	ND	ND	97.96
			PMRQ2	70.54	15.37	49.14	11.93	0.00	48.00	0.06	72.72	80.88	64.97	100.00	100.00	97.00	88.00	100.00
			TUVQ2	77.98	12.22	86.50	7.13	0.00	64.21	.06	53.74	93.61	77.70	DNP	DNP	DNP	DNP	100.00
			PMRQ3	92.77	17.93	91.12	10.75	0.00	47.00	0.09	78.05	73.93	49.39	100.00	100.00	85.00	97.00	100.00
		Reliance	TUVQ3	97.46	14.16	90.05	7.44	0.00	61.97	0.00	78.32	89.38	92.14	97.51	99.27	81.27	90.36	100.00
			PMR Q1	41.10	1.35	96.29	4.33	0.00	NA	0.12	82.64	62.05	99.41	NA	NA	91.50	100.00	100.00
			TUVQ1	58.12	1.58	99.79	4.10	0.00	49.81	0.15	81.91	65.72	99.79	ND	ND	ND	ND	100.00
			PMRQ2	83.86	0.92	97.27	4.40	0.00	65.34	0.07	81.33	94.33	99.48	100.00	100.00	93.13	100.00	100.00
			TUVQ2	84.50	0.84	99.65	5.26	0.00	65.14	0.06	75.00	94.00	99.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	91.08	0.94	99.15	3.16	0.00	NA	0.05	87.14	96.65	99.02	100.00	100.00	91.50	95.50	100.00
			TUVQ3	96.00	1.00	99.00	1.50	0.00	50.50	0.00	84.20	96.50	99.00	100.00	100.00	90.50	95.00	100.00
		Bharti	PMR Q1	85.52	3.13	NA	3.36	0.00	53.30	0.05	32.94	50.21	19.84	NA	NA	100.00	N/AP	100.00
			TUVQ1	90.10	3.44	92.00	7.28	0.00	55.30	0.33	34.30	99.60	87.30	80.00	96.00	80.00	96.00	100.00
			PMRQ2	92.19	3.39	2.94	5.01	0.00	60.71	0.06	29.04	60.00	89.89	NA	NA	74.00	NA	100.00



South Asia

			TUVQ2	88.79	3.42	2.97	DNP	0.01	60.71	1.09	30.20	DNP	90.86	DNP	DNP	DNP	DNP	22.09
			PMRQ3	90.92	4.61	99.22	7.58	0.00	57.00	0.07	80.18	60.02	70.80	NA	NA	100.00	100.00	47.67
			TUVQ3	89.77	3.93	98.90	DNP	0.02	61.00	0.01	43.98	54.09	68.26	100.00	100.00	100.00	100.00	19.75
		Tata	PMR Q1	92.61	0.02	100.00	2.63	NA	52.10	0.28	99.01	34.48	96.17	NA	NA	NA	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			PMRQ2	96.76	0.73	100.00	1.70	0.00	51.36	0.46	100.00	99.68	98.89	100.00	100.00	70.00	77.00	100.00
			TUVQ2	100.00	0.06	100.00	4.00	0.00	53.92	0.02	100.00	99.68	99.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	97.89	1.60	100.00	7.30	0.00	51.00	0.72	100.00	98.86	97.62	100.00	100.00	77.00	83.00	100.00
			TUVQ3	97.00	0.86	100.00	4.00	0.00	50.90	0.01	100.00	98.90	97.20	100.00	100.00	91.00	94.00	100.00
4	Gujarat	BSNL	PMR Q1	85.79	NA	NA	9.00	NA	62.00	0.07	96.09	NA	78.43	NA	NA	NA	NA	100.00
			TUVQ1	62.40	3.78	85.60	10.60	0.36	63.50	0.20	87.40	72.50	DNC	100.00	100.00	78.00	85.00	73.80
			PMRQ2	89.86	6.33	94.00	8.00	NA	NA	0.07	98.12	98.98	91.71	NA	NA	NA	NA	100.00
			TUVQ2	68.50	5.28	57.00	6.66	0.39	48.14	0.00	74.63	87.10	75.17	DNP	DNP	DNP	DNP	DNP
			PMRQ3	95.58	8.00	90.00	11.10	NA	64.00	0.05	99.15	84.78	97.76	100.00	100.00	100.00	100.00	100.00
			TUVQ3	34.56	7.08	59.39	28.52	0.00	51.47	0.04	43.79	69.50	63.54	NA	NA	NA	NA	78.07
		Reliance	PMR Q1	93.02	5.42	95.71	5.31	0.27	NA	0.11	79.69	63.76	99.67	NA	NA	NA	NA	100.00
			TUVQ1	69.64	5.65	99.38	4.00	0.04	51.42	0.13	79.89	63.98	99.73	ND	ND	ND	ND	NI
			PMRQ2	84.86	4.91	96.84	5.61	0.32	43.58	0.05	77.74	92.90	99.44	100.00	100.00	94.33	100.00	100.00
			TUVQ2	92.5	4.82	99.8	6.69	0.32	41.25	0.05	70.00	99.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	91.09	4.87	91.53	6.45	0.25	NA	0.06	79.64	94.98	98.81	100.00	100.00	91.50	95.50	100.00
			TUVQ3	100.00	4.95	87.83	9.00	0.00	43.00	0.00	81.00	92.00	98.50	100.00	100.00	90.50	95.00	100.00
		Bharti	PMR Q1	95.26	17.10	53.00	3.27	0.00	52.00	1.98	50.00	NA	83.34	N/AP	N/AP	82.21	86.91	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			PMRQ2	83.77	7.28	96.93	6.20	0.00	54.41	0.14	32.26	NA	72.03	NA	NA	100.00	Nil	100.00
			TUVQ2	DNP	DNP	DNP	DNP	0.17	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
			PMRQ3	88.72	7.17	93.89	5.40	0.00	52.00	0.18	52.70	100.00	86.78	NA	NA	66.00	72.00	92.00
			TUVQ3	86.86	10.38	90.61	9.85	0.00	63.50	DNP	53.73	NI	NI	NA	NA	56.80	63.20	100.00
		Tata	PMR Q1	98.05	0.01	91.09	7.80	0.00	56.25	0.13	100.00	100.00	99.27	NA	NA	NA	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			PMRQ2	96.33	0.44	91.15	7.30	0.00	56.43	0.03	100.00	100.00	96.86	100.00	100.00	95.00	98.00	100.00
			TUVQ2	94.57	1.18	90.85	7.17	0.00	65.00	DNP	94.15	NI	98.71	DNP	DNP	DNP	DNP	100.00
			PMRQ3	86.60	1.90	61.40	31.70	0.09	74.44	0.10	84.52	100.00	97.16	100.00	100.00	83.00	87.00	100.00
			TUVQ3	93.60	1.67	67.55	15.91	0.00	81.85	0.09	86.67	100.00	99.36	100.00	100.00	71.77	76.92	100.00
5	MP & Chattisgarh	BSNL(M P)	PMR Q1	85.53	NA	NA	6.00	NA	71.00	0.05	99.00	83.99	99.49	NA	NA	NA	NA	100.00



South Asia

		TUVQ1	68.50	3.94	55.60	5.57	0.09	67.50	0.03	98.70	100.00	100.00	75.00	100.00	60.00	80.00	DNP	
		PMRQ2	89.63	5.00	97.00	7.00	NA	NA	0.08	99.81	99.88	99.77	NA	NA	NA	NA	100.00	
		TUVQ2	95.91	4.92	98.06	4.95	0.00	54.17	0.06	96.45	96.13	99.98	DNP	DNP	DNP	DNP	54.10	
		PMRQ3	91.47	5.20	96.00	6.20	NA	68.00	0.05	99.00	100.00	100.00	90.00	95.00	99.00	99.10	100.00	
		TUVQ3	90.36	3.80	66.13	4.65	0.00	57.10	0.06	84.02	94.74	97.42	100.00	100.00	100.00	100.00	81.77	
	BSNL (Chattisgarh)	PMR Q1	70.89	NA	NA	15.00	NA	63.00	0.03	87.09	72.92	100.00	NA	NA	NA	NA	100.00	
		TUVQ1	73.20	8.53	84.80	11.20	0.11	75.20	0.01	95.00	100.00	100.00	67.00	80.00	41.00	76.00	100.00	
		PMRQ2	73.05	10.33	89.00	7.00	NA	NA	0.02	81.22	63.94	98.35	NA	NA	NA	NA	100.00	
		TUVQ2	96.40	23.38	72.39	10.32	0.00	47.91	0.00	93.10	91.35	87.30	DNP	DNP	DNP	DNP	95.67	
		PMRQ3	85.67	10.20	95.00	12.00	NA	62.00	0.02	95.62	73.23	100.00	100.00	100.00	90.00	95.00	100.00	
		TUVQ3	60.00	11.87	92.46	9.05	0.00	55.40	DNP	50.00	78.10	97.05	95.00	95.00	88.00	88.00	100.00	
	Reliance	PMR Q1	72.58	2.69	98.92	2.43	0.00	NA	0.08	23.19	NA	NA	NA	NA	91.50	100.00	100.00	
		TUVQ1	67.19	2.35	97.50	4.80	0.04	53.50	0.96	85.90	69.61	95.52	ND	ND	ND	ND	NI	
		PMRQ2	82.32	8.62	97.54	5.24	2.82	34.60	0.06	59.26	NA	NA	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	94.00	4.25	99.65	4.88	0.03	55.52	0.65	57.00	81.00	98.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	85.72	9.44	95.70	7.15	0.00	NA	0.06	61.54	NA	NA	100.00	100.00	91.50	95.50	100.00	
		TUVQ3	89.00	3.87	95.66	4.50	0.00	47.00	0.00	62.50	96.00	98.50	100.00	100.00	90.50	95.00	100.00	
	Bharti	PMR Q1	94.00	3.18	96.56	5.94	0.00	67.60	0.01	51.75	100.00	NA	99.98	99.99	83.50	100.00	100.00	
		TUVQ1	74.60	3.19	96.40	7.11	0.00	66.70	0.01	50.90	100.00	90.60	94.00	100.00	78.00	100.00	68.30	
		PMRQ2	97.35	4.24	96.40	6.10	0.00	67.38	0.04	54.14	96.61	83.91	100.00	Nil	94.26	98.31	100.00	
		TUVQ2	97.34	3.92	96.91	6.16	0.00	66.37	0.04	51.63	96.61	83.91	DNP	DNP	DNP	DNP	20.00	
		PMRQ3	96.95	5.89	95.38	8.50	0.00	48.70	0.03	46.84	97.33	93.64	100.00	100.00	86.45	100.00	17.08	
		TUVQ3	94.38	5.26	96.10	6.33	0.00	65.87	0.03	45.64	98.40	94.76	100.00	100.00	85.13	100.00	74.00	
6	Maharastra	BSNL	PMR Q1	66.89	NA	NA	11.00	NA	55.00	0.03	74.08	76.66	92.24	NA	NA	NA	NA	100.00
			TUVQ1	50.60	8.49	85.00	14.40	0.31	61.00	0.01	72.30	83.30	99.60	100.00	100.00	94.00	100.00	78.30
			PMRQ2	62.96	7.30	91.00	10.30	NA	NA	0.02	79.84	90.73	93.20	NA	NA	NA	NA	100.00
			TUVQ2	25.29	7.91	63.95	6.60	0.10	51.00	0.01	98.00	100.00	100.00	DNP	DNP	DNP	DNP	88.43
			PMRQ3	76.34	9.10	88.00	10.90	NA	54.00	0.02	82.00	90.00	93.00	100.00	100.00	100.00	100.00	100.00
			TUVQ3	35.31	5.63	17.22	17.08	0.00	54.09	0.04	36.68	23.64	66.44	NA	NA	NA	NA	44.86
	Reliance	PMR Q1	53.38	0.63	91.71	2.12	1.49	NA	0.07	95.79	21.98	97.88	NA	NA	91.50	100.00	100.00	
		TUVQ1	51.96	0.55	98.42	2.45	1.59	54.26	0.13	95.20	21.29	98.86	ND	ND	ND	ND	NI	
		PMRQ2	85.02	0.64	94.56	3.72	0.51	42.56	0.07	84.52	94.44	98.47	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	93.50	0.50	99.02	5.32	0.51	42.98	0.07	93.00	91.00	98.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	87.35	0.67	98.73	4.22	0.08	NA	0.06	83.33	95.07	98.51	100.00	100.00	91.50	95.50	100.00	



South Asia

		TUVQ3	92.50	0.75	99.69	2.00	0.00	39.50	0.00	75.00	92.60	98.60	100.00	100.00	90.50	95.00	100.00	
7	Punjab	Bharti	PMR Q1	49.02	25.25	16.00	6.61	0.00	32.00	5.63	12.50	NA	79.35	NAPP	NAPP	84.39	88.76	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	70.22	5.04	80.83	7.07	0.00	42.28	0.04	30.43	NA	92.24	NA	NA	100.00	Nil	100.00
			TUVQ2	91.55	4.68	90.00	8.74	ni	26.80	0.02	94.50	91.78	96.16	DNP	DNP	DNP	DNP	100.00
			PMRQ3	66.50	3.52	89.09	5.80	0.00	55.38	0.16	70.21	100.00	88.99	NA	NA	65.86	72.02	100.00
			TUVQ3	91.00	4.50	81.80	8.92	0.00	62.00	0.18	68.52	NI	86.11	100.00	100.00	62.36	67.22	27.09
		Tata	PMR Q1	NA	4.60	97.31	4.25	0.00	60.56	0.44	98.86	100.00	96.72	NA	NA	NA	NA	100.00
			TUVQ1	NA	3.995	100.00	3.43	0.00	90.60	0.90	77.60	75.21	60.80	100.00	100.00	98.00	100.00	74.57
			PMRQ2	3.32	1.54	97.40	3.39	0.00	61.00	0.66	80.23	NA	90.58	100.00	Nil	89.00	94.00	100.00
			TUVQ2	63.33	3.89	96.98	3.62	0.20	63.00	1.22	100.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	56.15	4.59	93.41	4.07	0.00	61.00	0.18	73.88	73.88	49.44	100.00	Nil	84.00	89.00	97.00
			TUVQ3	100.00	4.00	100.00	4.00	0.00	67.00	0.13	100.00	100.00	100.00	100.00	100.00	76.94	81.85	100.00
		BSNL	PMR Q1	99.10	NA	NA	11.00	NA	66.00	0.04	99.29	99.72	100.00	NA	NA	NA	NA	100.00
			TUVQ1	99.50	5.01	82.00	4.69	0.22	78.60	0.00	100.00	100.00	100.00	ND	ND	ND	ND	90.30
			PMRQ2	98.58	9.00	91.00	12.30	NA	NA	0.02	98.36	57.05	99.01	NA	NA	NA	NA	100.00
			TUVQ2	65.32	10.43	70.35	11.26	0.52	55.00	0.01	52.99	98.39	78.16	DNP	DNP	DNP	DNP	100.00
			PMRQ3	99.82	11.00	88.00	16.90	NA	62.00	0.02	99.00	100.00	100.00	100.00	100.00	61.33	76.67	100.00
			TUVQ3	78.03	4.98	77.11	10.87	0.00	56.80	0.00	83.56	99.78	98.06	100.00	100.00	97.00	100.00	100.00
		Reliance	PMR Q1	58.87	4.57	96.92	3.93	0.16	NA	0.04	88.64	63.44	99.22	NA	NA	91.50	100.00	100.00
			TUVQ1	68.65	4.49	99.61	4.33	0.16	51.23	0.029	81.08	78.02	99.10	ND	ND	ND	ND	NI
			PMRQ2	90.29	3.80	95.70	4.87	0.02	55.12	0.03	78.00	100.00	99.77	100.00	100.00	94.33	100.00	100.00
			TUVQ2	92.00	3.95	99.13	5.78	0.03	55.21	.02	67	98.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	NA	4.60	97.03	3.16	0.02	NA	0.02	91.18	73.60	99.28	100.00	100.00	91.50	95.50	100.00
			TUVQ3	94.00	4.67	97.00	4.50	0.00	55.50	0.00	89.60	95.60	99.00	100.00	100.00	90.50	95.00	100.00
		Bharti	PMR Q1	86.23	NA	NA	9.30	8.80	49.10	0.14	97.87	91.11	88.98	NA	NA	99.00	100.00	100.00
			TUVQ1	94.80	3.60	95.40	9.85	0.09	54.18	0.15	100.00	94.94	89.10	ND	ND	ND	ND	DNP
			PMRQ2	85.65	8.24	3.33	14.80	0.00	50.90	0.44	95.76	80.44	99.81	NA	NA	66.31	89.39	100.00
			TUVQ2	96.82	2.63	98.12	9.70	0.00	55.77	0.18	99.62	85.19	99.70	DNP	DNP	DNP	DNP	90.00
			PMRQ3	98.76	4.00	95.21	6.16	0.00	53.00	0.35	66.84	90.82	88.78	NA	NA	90.46	92.40	14.07
			TUVQ3	87.75	5.75	97.13	9.91	0.00	55.65	0.00	71.61	84.75	99.83	100.00	100.00	100.00	100.00	30.64
		HFCL	PMR Q1	97.90	5.81	95.89	5.80	0.00	55.65	0.09	95.99	96.14	92.45	100.00	100.00	76.00	98.00	100.00
			TUVQ1	98.31	1.80	96.00	0.44	0.00	80.81	0.02	94.40	96.80	93.60	ND	ND	ND	ND	DNP
			PMRQ2	95.18	1.79	98.34	4.78	0.00	56.88	0.09	98.10	97.06	98.77	100.00	100.00	98.00	100.00	100.00



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			TUVQ2	98.10	0.96	96.30	5.77	0.00	78.16	.04	98.05	97.42	98.60	DNP	DNP	DNP	DNP	100.00
			PMRQ3	97.42	2.12	96.58	6.03	0.00	56.04	0.08	95.35	97.54	98.69	100.00	Nil	80.00	98.00	100.00
			TUVQ3	96.00	1.67	96.41	6.65	0.00	79.00	0.01	94.18	97.57	98.97	100.00	100.00	90.00	97.00	100.00
8	Rajasthan	BSNL	PMR Q1	78.98	NA	NA	11.00	NA	57.00	0.02	89.48	82.23	94.26	NA	NA	NA	NA	100.00
			TUVQ1	68.50	9.45	83.40	6.88	0.00	63.80	0.01	100.00	100.00	100.00	ND	ND	ND	ND	100.00
			PMRQ2	78.93	8.30	91.00	10.40	NA	NA	0.02	95.88	99.09	93.15	NA	NA	NA	NA	100.00
			TUVQ2	52.94	11.14	61.69	8.86	0.03	46.08	0.21	79.16	95.23	95.30	DNP	DNP	DNP	DNP	83.59
			PMRQ3	76.80	9.60	84.00	10.70	NA	54.00	NA	94.00	99.00	95.00	NA	NA	NA	NA	NA
		Reliance	TUVQ3	46.16	8.70	78.17	6.97	0.00	46.93	0.84	89.90	96.72	97.14	99.61	100.00	100.00	100.00	64.22
			PMR Q1	17.68	3.22	93.85	5.24	0.00	NA	0.00	Nil	68.66	97.78	NA	NA	91.50	100.00	100.00
			TUVQ1	74.52	2.64	100.00	11.00	0.04	51.24	0.00	85.00	66.66	97.78	ND	ND	ND	ND	NI
			PMRQ2	83.38	4.67	94.59	5.57	0.44	38.22	0.00	0.00	100.00	96.52	100.00	100.00	94.33	100.00	100.00
			TUVQ2	88.50	4.89	97.91	7.50	0.05	38.22	0.00	ni	100.00	99.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	85.32	4.40	93.00	3.41	0.03	NA	0.02	0.00	100.00	97.85	100.00	100.00	91.50	95.50	100.00
			TUVQ3	86.50	4.50	94.64	5.00	0.00	34.00	0.00	100.00	100.00	97.00	100.00	100.00	90.50	95.00	100.00
		Shyam	PMR Q1	99.16	2.94	92.34	4.80	0.00	79.00	0.09	100.00	100.00	100.00	NA	NA	93.00	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			PMRQ2	99.16	2.93	93.10	4.80	0.00	83.00	0.10	96.63	100.00	98.85	NA	NA	92.00	NA	100.00
			TUVQ2	99.10	2.94	93.20	9.23	0.00	n/app	0.01	73.00	100.00	98.23	DNP	DNP	DNP	DNP	91.00
			PMRQ3	98.10	2.95	92.87	4.80	0.00	84.00	0.10	96.80	100.00	97.95	NA	NA	92.00	NA	90.00
			TUVQ3	99.14	2.95	92.96	6.03	0.00	DNP	0.10	95.90	NI	97.80	NA	NA	91.69	NA	91.69
9	Tamil Nadu	BSNL	PMR Q1	100.00	NA	NA	8.00	NA	74.00	0.02	100.00	100.00	99.13	NA	NA	NA	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			PMRQ2	100.00	3.00	96.00	5.90	NA	NA	0.02	100.00	100.00	100.00	NA	NA	NA	NA	100.00
			TUVQ2	87.19	3.38	97.99	5.31	0.00	67.55	0.04	62.05	98.05	93.20	DNP	DNP	DNP	DNP	86.92
			PMRQ3	100.00	3.40	96.00	6.10	NA	75.00	0.02	100.00	100.00	100.00	99.22	99.22	94.41	95.32	NA
			TUVQ3	99.00	3.25	98.67	5.50	0.00	89.49	0.02	31.87	31.51	78.72	NA	NA	NA	NA	100.00
		Reliance	PMR Q1	48.45	0.99	90.56	4.83	1.97	NA	0.11	33.33	57.61	100.00	NA	NA	91.50	100.00	100.00
			TUVQ1	73.48	0.94	95.30	4.15	2.01	55.24	0.06	97.67	47.03	99.96	ND	ND	ND	ND	NI
			PMRQ2	93.30	0.85	85.27	6.63	2.40	35.41	0.03	46.15	97.21	99.35	100.00	100.00	94.33	100.00	100.00
			TUVQ2	95.50	0.88	98.93	7.38	2.39	35.87	0.03	100.00	99.00	99.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	73.40	9.20	94.00	9.20	NA	70.00	0.04	96.00	98.00	98.00	NA	NA	97.33	100.00	100.00
			TUVQ3	90.50	0.50	96.26	4.00	0.00	43.00	0.00	NI	97.50	98.60	100.00	100.00	90.50	95.00	100.00
		Bharti	PMR Q1	94.13	2.12	NA	1.16	0.00	70.00	0.03	78.39	98.82	97.16	67.61	NA	78.29	94.28	100.00



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		TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
		PMRQ2	75.19	1.96	99.92	1.28	0.00	64.88	0.00	98.84	98.13	22.43	99.53	99.74	85.58	90.09	100.00	
		TUVQ2	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNP	DNP	DNP	DNP	ND		
		PMRQ3	32.58	7.50	91.00	16.30	NA	64.00	0.04	100.00	100.00	100.00	NA	NA	NA	NA	100.00	
		TUVQ3	92.19	3.45	99.69	3.89	0.00	68.00	0.02	54.00	75.82	98.90	84.00	100.00	88.00	100.00	100.00	
	Tata	PMR Q1	NA	NA	NA	NA	0.00	60.88	NA	NA	NA	NA	NA	NA	NA	NA	100.00	
		TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		PMRQ2	100.00	1.32	100.00	4.20	0.00	62.50	Nil	NA	NA	NA	100.00	100.00	98.00	99.00	100.00	
		TUVQ2	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNP	DNP	DNP	DNP	ND		
		PMRQ3	100.00	Nil	Nil	NA	0.00	62.50	Nil	NA	NA	NA	100.00	100.00	94.00	97.00	NA	
		TUVQ3	81.22	6.23	100.00	7.40	0.00	52.00	0.01	15.00	30.00	100.00	86.00	100.00	96.00	100.00	100.00	
10	Haryana	BSNL	PMR Q1	97.42	NA	NA	9.00	NA	71.00	0.04	99.00	94.35	93.64	NA	NA	NA	100.00	
			TUVQ1	71.70	9.69	76.50	11.00	0.08	59.70	0.03	74.80	83.60	94.00	82.00	100.00	82.00	100.00	50.40
			PMRQ2	97.90	7.00	94.00	8.00	NA	NA	0.02	99.59	94.63	93.77	NA	NA	NA	100.00	
			TUVQ2	39.64	7.35	60.45	13.60	0.00	78.39	0.21	95.91	99.48	100.00	DNP	DNP	DNP	DNP	81.96
			PMRQ3	98.51	7.20	98.00	8.10	NA	73.00	0.02	100.00	96.00	95.00	100.00	100.00	80.00	100.00	100.00
			TUVQ3	79.47	10.91	81.22	7.60	0.00	74.73	0.32	89.49	57.90	89.78	98.10	100.00	82.31	91.11	100.00
	Reliance	PMR Q1	88.24	Nil	Nil	0.00	0.11	NA	0.00	40.00	90.32	NA	NA	NA	91.50	100.00	100.00	
		TUVQ1	24.29	0.00	0.00	DNC	0.12	45.68	0.00	87.50	72.70	99.92	ND	ND	ND	ND	NI	
		PMRQ2	89.50	Nil	Nil	0.00	0.42	65.71	0.00	Nil	Nil	NA	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	77.00	0.00	100.00	0.00	0.06	60.03	0.00	0.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	94.66	Nil	Nil	Nil	0.50	NA	0.00	Nil	Nil	100.00	100.00	100.00	91.50	95.50	Nil	
		TUVQ3	93.50	DNP	DNP	DNP	0.00	65.00	0.00	NI	NI	100.00	100.00	100.00	90.50	95.00	100.00	
	Bharti	PMR Q1	100.00	2.90	NA	9.30	0.00	59.89	0.04	83.18	85.51	85.37	NA	NA	NA	NA	100.00	
		TUVQ1	90.30	2.83	92.90	7.19	0.03	63.80	0.33	34.30	99.60	87.30	100.00	100.00	84.00	100.00	100.00	
		PMRQ2	97.72	5.66	95.00	9.68	0.00	45.76	0.14	97.24	93.96	95.94	NA	NA	64.87	NA	100.00	
		TUVQ2	96.72	2.70	99.26	7.41	0.00	59.80	0.10	97.64	93.78	95.16	DNP	DNP	DNP	DNP	96.00	
		PMRQ3	91.68	7.08	94.78	6.40	0.00	50.00	0.26	49.70	80.32	68.62	NA	NA	90.90	92.66	33.41	
		TUVQ3	98.60	5.30	99.90	7.20	0.00	61.60	0.10	97.60	91.41	91.87	NA	NA	98.10	99.40	100.00	
11	Karnataka	BSNL	PMR Q1	96.26	NA	N.A	11.00	NA	57.00	0.04	96.31	92.44	91.22	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	94.73	6.60	91.00	11.70	NA	NA	0.05	98.45	97.04	92.44	NA	NA	NA	NA	100.00
			TUVQ2	18.61	13.93	49.79	6.56	0.07	33.97	DNP	11.70	23.06	15.12	DNP	DNP	DNP	DNP	100.00
			PMRQ3	97.09	7.50	91.00	11.60	NA	55.00	0.04	98.00	98.00	93.00	100.00	100.00	99.53	99.73	100.00
			TUVQ3	38.52	5.40	77.96	4.81	0.00	44.80	0.01	20.46	58.49	23.19	100.00	100.00	99.50	99.60	74.00



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		Reliance	PMR Q1	44.57	Nil	94.33	3.10	0.92	NA	0.09	96.72	56.81	99.91	NA	NA	91.50	100.00	100.00	
			TUVQ1	42.62	0.373	98.09	49.74	1.01	51.92	0.19	95.34	58.63	99.85	ND	ND	ND	ND	NI	
			PMRQ2	88.75	0.43	97.52	4.35	0.67	55.99	0.03	39.86	98.92	98.36	100.00	100.00	94.33	100.00	100.00	
			TUVQ2	89.00	.43	99.33	5.43	0.72	60.19	0.02	63.00	99.00	95.00	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	83.66	0.45	98.36	5.15	0.10	NA	0.04	58.42	91.05	98.25	100.00	100.00	91.50	95.50	100.00	
			TUVQ3	91.50	0.40	98.16	2.50	0.00	70.00	0.00	89.50	89.00	98.00	100.00	100.00	90.50	95.00	100.00	
		Bharti	PMR Q1	89.01	2.28	NA	2.80	0.00	55.37	0.51	35.51	95.00	98.56	100.00	100.00	100.00	100.00	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	90.06	1.78	99.45	2.76	0.00	63.00	0.01	84.19	95.00	99.67	100.00	Nil	NA	NA	NA	100.00
			TUVQ2	80.00	1.80	99.61	83.61	0.00	62.87	0.05	86.12	56.32	86.44	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	89.93	4.34	96.88	4.34	0.00	57.56	0.02	100.00	95.00	99.37	99.98	99.98	99.49	98.16	100.00	
			TUVQ3	79.77	2.03	99.43	4.02	0.00	58.00	0.13	80.29	99.00	99.90	100.00	100.00	100.00	100.00	98.50	
		Tata	PMR Q1	94.71	0.04	93.13	6.37	0.00	55.00	0.11	68.57	22.86	84.13	NA	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	98.77	0.30	99.32	5.70	0.00	51.55	0.05	91.20	93.43	98.34	100.00	100.00	91.00	95.00	100.00	
			TUVQ2	98.54	24.60	60.80	8.23	0.00	52.37	DNP	57.50	0.00	91.75	DNP	DNP	DNP	DNP	ND	
			PMRQ3	97.13	0.20	99.32	3.90	0.48	48.00	0.04	91.20	100.00	97.02	100.00	100.00	92.00	96.00	100.00	
			TUVQ3	95.11	2.15	72.50	6.30	0.00	DNP	0.11	71.43	0.00	95.43	NA	NA	98.00	98.00	100.00	
12	A&N	BSNL	PMR Q1	85.51	NA	NA	14.00	NA	41.00	0.15	81.62	68.80	89.87	NA	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	86.79	13.30	89.00	13.00	NA	41.47	0.09	86.24	98.24	90.74	NA	NA	NA	NA	100.00	
			TUVQ2															ND	
			PMRQ3	88.01	12.40	89.00	13.00	NA	38.00	0.26	88.08	98.78	98.09	NA	NA	NA	NA	100.00	
			TUVQ3	34.10	20.10	87.40	5.30	DNP	DNP	0.00	67.90	76.50	100.00	NA	NA	NA	NA	DNP	
13	Assam	BSNL	PMR Q1	32.30	NA	NA	4.00	NA	63.00	0.07	100.00	49.41	NA	NA	NA	NA	NA	100.00	
			TUVQ1	24.07	9.70	65.70	17.05	0.54	16.89	0.19	100.00	DNC	DNC	100.00	100.00	75.00	80.00	88.80	
			PMRQ2	28.97	8.00	92.00	4.00	NA	NA	0.07	100.00	89.84	NA	NA	NA	NA	NA	100.00	
			TUVQ2	9.33	9.31	76.03	11.05	0.50	47.00	0.03	66.66	100.00	100.00	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	30.38	7.80	89.00	15.00	NA	58.00	0.08	100.00	90.07	76.91	NA	NA	NA	NA	100.00	
			TUVQ3	80.99	16.35	83.64	8.64	0.29	60.13	0.04	72.22	96.73	100.00	100.00	100.00	NA	NA	3.47	
14	Chennai	BSNL	PMR Q1	93.48	NA	NA	17.00	NA	70.00	0.05	89.73	100.00	100.00	NA	NA	NA	NA	100.00	
			TUVQ1	24.00	13.90	35.90	27.90	DNC	DNC	DNC	DNC	DNC	0.00	0.00	100.00	100.00	100.00		
			PMRQ2	94.59	5.60	94.00	12.30	NA	NA	0.02	94.15	100.00	100.00	NA	NA	NA	NA	100.00	
			TUVQ2	43.20	8.46	35.14	7.92	0.32	67.67	0.01	70.72	67.00	87.36	DNP	DNP	DNP	DNP	98.50	



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		PMRQ3	94.92	4.60	94.00	10.60	NA	66.00	0.02	95.00	100.00	100.00	100.00	100.00	99.10	99.62	100.00	
		TUVQ3	67.11	9.04	99.00	7.21	0.00	80.00	0.35	17.00	28.36	100.00	78.00	100.00	80.00	100.00	100.00	
Reliance		PMR Q1	83.38	1.97	92.60	4.52	1.25	NA	0.07	97.83	39.71	99.55	NA	NA	91.50	100.00	100.00	
		TUVQ1	49.18	2.17	97.45	2.25	0.00	51.35	0.10	79.16	18.18	98.51	ND	ND	ND	ND	100.00	
		PMRQ2	89.32	1.56	84.82	6.50	0.07	59.40	0.00	20.18	98.61	99.37	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	95.00	1.90	98.50	6.50	0.02	63.66	0.00	96.00	99.00	99.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	64.22	1.38	93.44	13.23	0.11	NA	0.01	51.14	99.56	98.74	100.00	100.00	91.50	95.50	100.00	
		TUVQ3	66.50	1.20	94.00	6.50	0.05	65.00	0.00	91.70	99.00	99.00	100.00	100.00	90.50	95.00	100.00	
Bharti		PMR Q1	88.34	4.64	0.00	1.52	0.00	66.00	0.03	75.67	97.77	92.76	67.61	NA	88.29	100.00	100.00	
		TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	
		PMRQ2	86.64	3.85	99.94	1.48	0.00	65.00	0.01	92.22	96.93	17.22	99.53	99.74	85.58	90.09	100.00	
		TUVQ2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNP	DNP	DNP	DNP	ND	
		PMRQ3	52.57	1.33	99.43	1.14	0.00	55.00	0.01	55.19	88.38	97.79	99.91	99.94	83.30	88.29	100.00	
		TUVQ3	84.28	3.78	99.78	4.77	0.00	63.40	0.02	54.00	75.82	98.90	84.00	100.00	88.00	100.00	100.00	
Tata		PMR Q1	NA	NA	NA	NA	NA	66.44	NA	NA	NA	NA	NA	NA	NA	NA	100.00	
		TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		PMRQ2	98.34	0.51	100.00	2.70	0.00	66.11	0.00	Nil	100.00	Nil	100.00	100.00	98.00	99.00	100.00	
		TUVQ2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	DNP	DNP	DNP	DNP	ND	
		PMRQ3	98.34	0.10	100.00	2.80	0.00	64.00	0.00	Nil	Nil	Nil	100.00	100.00	94.00	97.00	NA	
		TUVQ3	64.03	5.96	100.00	7.14	0.00	54.00	0.02	15.00	30.00	100.00	78.00	100.00	94.00	100.00	100.00	
15	HP	Reliance	PMR Q1	50.00	NIL	NIL	Nil	0.00	NA	0.00	Nil	Nil	Nil	NA	NA	91.50	100.00	100.00
			TUVQ1	100.00	0.00	0.00	5.33	0.00	50.48	0.00	DNC	DNC	DNC	50.00	50.00	50.00	50.00	NI
			PMRQ2	62.50	Nil	Nil	0.00	0.19	NA	0.00	Nil	Nil	Nil	100.00	100.00	94.33	100.00	100.00
			TUVQ2	100.00	0.00	100.00	0.00	0.06	100.00	0.00	0.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00
			PMRQ3	NA	Nil	Nil	Nil	0.05	NA	0.00	Nil	Nil	Nil	100.00	100.00	91.50	95.50	Nil
			TUVQ3	100.00	NI	NI	NI	0.10	32.00	0.00	NI	NI	NI	100.00	100.00	90.50	95.00	100.00
		BSNL	PMR Q1	98.53	NA	NA	7.00	NA	63.00	0.04	95.38	97.91	91.27	NA	NA	NA	NA	100.00
			TUVQ1	48.80	7.43	96.60	8.41	0.01	69.40	0.00	50.00	99.80	100.00	99.80	100.00	99.80	100.00	81.20
			PMRQ2	98.22	9.00	92.00	7.00	NA	NA	0.02	90.56	88.01	93.56	NA	NA	NA	NA	100.00
			TUVQ2	58.34	8.87	77.27	7.27	0.00	72.39	0.00	100.00	99.72	97.67	DNP	DNP	DNP	DNP	100.00
			PMRQ3	99.68	9.60	93.00	6.90	NA	63.00	0.03	98.00	79.00	96.00	NA	NA	NA	NA	100.00
			TUVQ3	23.07	8.35	72.12	12.08	0.00	62.93	0.00	52.00	96.51	95.48	100.00	100.00	100.00	100.00	92.85
16	JharkaND	BSNL	PMR Q1	97.17	NA	NA	15.00	NA	37.00	0.07	92.11	100.00	98.73	NA	NA	NA	NA	100.00
			TUVQ1	MERGED WITH BIHAR														ND



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			PMRQ2	97.67	8.00	94.00	16.33	NA	NA	0.06	96.49	98.76	97.28	NA	NA	NA	NA	NA	100.00
			TUVQ2	42.50	9.30	97.74	6.17	0.32	44.00	0.34	98.35	100.00	100.00	DNP	DNP	DNP	DNP	DNP	54.10
			PMRQ3	99.10	7.10	90.00	15.60	NA	50.00	0.14	97.00	94.00	59.00	NA	NA	NA	NA	NA	100.00
			TUVQ3	47.44	23.31	67.35	8.24	0.00	96.58	0.00	72.73	96.00	100.00	100.00	100.00	100.00	100.00	100.00	50.00
17	J&K	BSNL	PMR Q1	15.93	NA	NA	9.00	NA	41.00	0.01	NA	93.48	NA	NA	NA	NA	NA	100.00	
			TUVQ1	50.00	7.60	93.90	26.00	0.23	50.00	DNC	DNC	DNC	91.00	91.00	93.00	93.00	DNP		
			PMRQ2	16.28	10.60	84.00	2.20	NA	NA	0.09	Nil	81.27	83.99	NA	NA	NA	NA	100.00	
			TUVQ2	3.98	16.20	72.90	8.26	0.00	56.00	0.00	ni	100.00	ni	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	61.81	10.30	85.00	6.40	NA	51.00	0.07	Nil	98.00	99.00	NA	NA	NA	NA	100.00	
			TUVQ3	8.25	4.73	53.63	12.62	0.00	53.50	0.00	0.00	0.00	100.00	100.00	0.00	0.00	NI		
18	Kerala	BSNL	PMR Q1	62.11	NA	NA	15.00	NA	69.00	0.02	98.69	93.68	89.08	NA	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	84.53	8.00	87.00	15.00	NA	NA	0.02	91.84	98.33	91.25	NA	NA	NA	NA	100.00	
			TUVQ2	28.21	17.31	70.97	11.22	0.37	63.99	0.11	36.86	72.49	61.32	DNP	DNP	DNP	DNP	99.75	
			PMRQ3	85.59	8.40	88.00	14.00	NA	69.00	0.02	87.00	97.00	95.00	100.00	100.00	60.00	100.00	100.00	
			TUVQ3	38.54	8.80	59.86	9.26	0.00	61.16	0.00	15.61	87.05	70.21	NA	NA	98.00	99.00	50.75	
			Bharti	PMR Q1	77.09	10.60	NA	1.57	3.00	53.00	1.82	0.00	0.00	100.00	NA	NA	NA	NA	100.00
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	88.17	6.76	96.19	2.65	NA	50.78	0.44	18.74	100.00	81.46	NA	NA	NA	NA	100.00	
			TUVQ2	59.96	8.30	95.00	7.59	0.00	34.70	2.59	18.18	0.00	84.82	DNP	DNP	DNP	DNP	55.84	
			PMRQ3	77.21	3.35	94.01	2.50	NA	55.00	39.71	30.43	0.00	40.18	NA	NA	99.74	99.43	NA	
			TUVQ3	79.35	6.33	99.50	4.06	0	30.46	0.01	0.00	0.00	52.38	NA	NA	98.00	99.00	93.33	
			Reliance	PMR Q1	69.10	3.02	89.29	2.36	0.13	NA	0.10	94.92	53.29	98.25	NA	NA	91.50	100.00	100.00
			TUVQ1	53.47	3.33	88.65	3.61	0.10	61.18	0.17	95.34	33.70	98.42	ND	ND	ND	ND	NI	
			PMRQ2	90.88	1.96	100.00	2.55	0.38	51.21	0.04	75.68	91.67	98.26	100.00	100.00	94.33	100.00	100.00	
			TUVQ2	91.50	1.69	90.24	1.31	0.99	30.40	0.37	NA	0.00	NA	94.96	98.93	100.00	100.00	91.50	
			PMRQ3	90.24	1.31	99.37	3.04	0.37	NA	0.00	NA	94.96	98.93	100.00	100.00	91.50	95.50	100.00	
			TUVQ3	92.50	1.67	100.00	1.50	0.00	47.50	0.00	96.50	94.00	99.00	100.00	100.00	90.50	95.00	100.00	
19	Kolkata	Bharti	PMR Q1	53.66	10.30	NA	0.40	0.00	51.17	0.91	22.73	95.78	96.17	96.44	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	54.60	4.61	81.93	5.51	0.00	54.99	0.05	50.00	73.69	91.61	93.43	100.00	93.43	100.00	100.00	
			TUVQ2	91.83	4.59	81.93	9.47	0.00	60.04	0.05	50.00	100.00	91.60	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	75.05	6.18	60.61	28.20	0.00	55.00	0.78	0.00	81.71	84.87	85.60	87.57	85.60	87.57	NA	
			TUVQ3	89.06	4.56	85.79	11.38	0.00	65.12	0.00	0.00	99.50	99.80	NA	NA	81.78	83.97	100.00	
			Reliance	PMR	49.27	2.13	94.69	2.80	0.00	NA	0.10	82.76	12.43	98.45	NA	NA	91.50	100.00	100.00



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		Q1																
		TUVQ1	67.43	1.89	98.03	4.00	1.81	54.78	0.07	95.23	58.63	99.80	ND	ND	ND	ND	100.00	
		PMRQ2	86.36	2.04	94.29	5.24	2.82	34.60	0.05	74.42	93.14	99.19	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	89.50	1.66	100.00	5.17	DNP	DNP	0.00	64.00	98.00	99.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	89.67	2.61	96.38	7.15	0.00	NA	0.08	97.78	96.44	98.76	100.00	100.00	91.50	95.50	100.00	
		TUVQ3	89.00	2.80	96.30	3.50	0.49	34.50	0.00	98.00	95.00	99.00	100.00	100.00	90.50	95.00	100.00	
	BSNL	PMR Q1	78.08	NA	NA	9.00	NA	50.00	0.05	65.51	100.00	98.89	NA	NA	NA	NA	100.00	
		TUVQ1	65.10	6.17	83.70	7.47	0.90	59.80	0.00	84.50	100.00	100.00	100.00	100.00	100.00	100.00	NI	
		PMRQ2	97.23	5.00	90.42	10.00	NA	NA	0.04	96.73	99.54	99.14	NA	NA	NA	NA	100.00	
		TUVQ2	68.39	7.36	96.05	8.05	0.00	46.22	0.28	72.97	35.84	100.00	DNP	DNP	DNP	DNP	59.30	
		PMRQ3	98.24	5.10	92.00	10.60	NA	61.00	0.10	98.00	100.00	99.00	100.00	100.00	100.00	100.00	100.00	
		TUVQ3	62.89	13.89	94.02	6.55	0.12	62.97	0.05	86.81	71.01	100.00	100.00	100.00	NA	NA	100.00	
20	Mumbai	Tata	PMR Q1	NA	35.57	98.71	5.34	0.00	61.44	0.34	57.03	NA	98.49	NA	NA	NA	100.00	
		TUVQ1	67.86	3.38	98.30	5.18	0.00	90.86	0.12	53.13	NA	86.67	98.00	100.00	76.00	82.00	18.64	
		PMRQ2	78.71	1.16	97.52	4.44	0.00	62.00	0.39	58.72	100.00	NA	100.00	Nil	75.00	79.00	100.00	
		TUVQ2	81.13	2.69	97.81	4.09	0.01	63.79	DNP	59.12	28.60	95.77	DNP	DNP	DNP	DNP	ND	
		PMRQ3	69.72	4.21	92.21	7.24	0.00	62.00	0.42	68.36	100.00	96.65	100.00	Nil	79.00	83.00	81.00	
		TUVQ3	72.50	4.20	94.50	13.35	0.12	76.00	0.01	69.50	0.00	99.00	100.00	100.00	74.00	79.00	32.96	
		Bharti	PMR Q1	68.09	8.96	46.00	1.57	0.00	44.00	2.11	21.95	13.84	76.51	N/AP	N/AP	85.31	89.65	100.00
		TUVQ1	86.80	2.69	71.30	10.20	0.09	47.60	2.89	27.30	40.10	67.90	NR	NR	94.00	94.00	99.20	
		PMRQ2	65.30	4.33	81.67	2.65	0.00	54.86	0.07	68.97	NA	82.63	NA	NA	100.00	Nil	100.00	
		TUVQ2	85.90	3.77	85.00	6.00	0.00	66.80	0.14	73.90	0.00	92.00	DNP	DNP	DNP	DNP	ND	
		PMRQ3	97.90	3.90	89.10	2.50	0.00	56.00	0.17	65.03	100.00	81.53	NA	NA	76.00	81.78	100.00	
		TUVQ3	89.34	6.37	90.00	5.70	0.09	63.60	0.00	59.00	DNP	86.70	NA	NA	72.00	77.00	24.20	
		Reliance	PMR Q1	56.38	2.23	94.35	3.12	0.00	NA	0.11	62.38	26.30	98.05	NA	NA	91.50	100.00	100.00
		TUVQ1	35.93	2.586	99.81	5.16	0.00	52.92	0.13	58.69	28.25	99.25	ND	ND	ND	ND	100.00	
		PMRQ2	87.78	1.49	98.24	4.82	0.00	50.75	0.06	36.00	35.75	99.44	100.00	100.00	94.33	100.00	100.00	
		TUVQ2	84.50	1.22	100.00	5.79	0.00	54.29	0.05	89.00	98.00	99.00	DNP	DNP	DNP	DNP	100.00	
		PMRQ3	94.20	1.45	99.82	3.38	0.00	NA	0.06	60.58	15.89	97.98	100.00	100.00	91.50	95.50	100.00	
		TUVQ3	96.00	1.50	99.50	5.00	0.00	47.50	0.00	87.60	97.50	96.00	100.00	100.00	90.50	95.00	100.00	
	MTNL	PMR Q1	64.67	9.90	NA	23.02	0.00	52.35	0.01	33.70	73.48	59.88	100.00	100.00	71.46	81.38	100.00	
		TUVQ1	34.30	12.80	79.70	19.10	0.03	75.00	0.57	84.20	94.30	88.10	84.00	84.00	75.00	78.00	ND	
		PMRQ2	37.56	9.70	23.02	27.37	0.00	53.24	0.07	31.97	56.02	59.78	100.00	100.00	83.24	92.62	100.00	
		TUVQ2	75.04	8.78	47.68	5.46	0.34	51.25	0.55	42.73	46.55	65.73	DNP	DNP	DNP	DNP	67.84	
		PMRQ3	63.80	15.61	74.99	28.11	0.00	56.00	0.10	22.64	52.18	64.43	100.00	100.00	89.37	95.64	100.00	



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			TUVQ3	57.50	18.41	46.96	5.40	0.03	57.24	0.00	25.00	93.30	53.26	NA	NA	NA	NA	100.00	
21	NE-I	BSNL	PMR Q1	38.00	NA	NA	34.00	NA	53.00	0.07	96.02	100.00	100.00	NA	NA	NA	NA	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	99.43	5.30	92.00	39.10	NA	NA	0.08	98.30	100.00	100.00	NA	NA	NA	NA	100.00	
			TUVQ2	25.58	7.76	41.95	11.90	0.00	23.87	1.19	17.85	96.29	77.42	DNP	DNP	DNP	DNP	62.29	
			PMRQ3	99.43	6.00	92.00	31.90	NA	54.00	0.05	87.00	100.00	98.00	NA	NA	NA	NA	100.00	
			TUVQ3	15.80	8.05	82.49	8.07	DNP	71.33	0.03	62.12	25.04	35.67	97.33	100.00	NA	NA	DNP	
22	NE-II	BSNL	PMR Q1	64.55	NA	NA	11.00	NA	56.00	0.25	89.62	26.01	100.00	NA	NA	NA	NA	100.00	
			TUVQ1	MERGED WITH NORTH EAST -I															ND
			PMRQ2	96.80	5.00	91.00	11.70	NA	NA	0.08	100.00	100.00	92.45	NA	NA	NA	NA	100.00	
			TUVQ2	MERGED WITH NORTH EAST-I															ND
			PMRQ3	96.36	4.39	89.00	11.60	NA	58.00	0.05	98.00	100.00	93.00	86.67	98.67	87.00	99.00	100.00	
			TUVQ3	88.80	20.32	89.41	6.16	0.00	59.07	0.00	10.14	75.00	NI	97.33	100.00	NA	NA	DNP	
23	Orissa	BSNL	PMR Q1	100.00	NA	NA	9.00	NA	73.00	0.10	100.00	84.81	NA	NA	NA	NA	NA	100.00	
			TUVQ1	53.60	4.53	98.90	4.17	0.00	72.50	0.07	75.00	100.00	100.00	60.80	71.70	28.60	39.10	100.00	
			PMRQ2	100.00	6.00	93.00	8.30	NA	NA	0.09	100.00	88.41	82.95	NA	NA	NA	NA	100.00	
			TUVQ2	45.06	9.12	95.71	5.61	0.00	69.00	0.02	99.00	97.50	100.00	DNP	DNP	DNP	DNP	37.23	
			PMRQ3	81.55	6.30	92.00	9.10	NA	69.00	0.09	100.00	96.00	85.00	NA	NA	NA	NA	100.00	
			TUVQ3	76.66	21.84	94.69	7.84	DNP	24.95	0.04	92.81	92.90	97.50	100.00	100.00	NA	NA	100.00	
		Reliance	PMR Q1	38.40	Nil	Nil	NA	12.38	NA	0.00	Nil	Nil	Nil	NA	NA	91.50	100.00	NI	
			TUVQ1	50.00	0.125	100.00	2.18	12.00	43.79	0.00	100.00	100.00	100.00	ND	ND	ND	ND	ND	
			PMRQ2	82.06	Nil	Nil	0.00	11.85	80.95	0.00	Nil	Nil	Nil	100.00	100.00	94.33	100.00	NI	
			TUVQ2	87.00	0	100.00	0.00	11.84	69.54	0.00	100.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	71.83	Nil	Nil	Nil	1.60	NA	0.00	Nil	Nil	100.00	100.00	100.00	91.50	95.50	Nil	
			TUVQ3	90.50	NI	NI	NI	2.64	44.50	0.00	NI	NI	NI	100.00	100.00	90.50	95.00	100.00	
24	UP(E)	BSNL	PMR Q1	93.48	NA	NA	9.00	NA	85.00	0.01	93.81	61.75	98.13	NA	NA	NA	NA	100.00	
			TUVQ1	38.70	9.12	64.60	11.50	0.19	59.90	0.03	58.50	83.60	93.90	86.20	94.60	78.50	85.40	56.00	
			PMRQ2	99.47	7.00	92.00	7.00	NA	NA	0.01	98.59	97.74	98.74	NA	NA	NA	NA	100.00	
			TUVQ2	33.08	16.68	49.97	13.57	0.00	51.05	0.00	49.67	59.79	81.33	DNP	DNP	DNP	DNP	89.96	
			PMRQ3	100.00	7.50	92.00	6.90	NA	70.00	0.04	97.64	97.68	98.23	NA	NA	NA	NA	100.00	
			TUVQ3	35.33	28.33	53.00	12.33	0.00	41.33	0.11	64.00	86.00	97.33	NA	NA	NA	NA	66.66	
		Bharti	PMR Q1	89.82	7.15	NA	14.70	0.00	52.10	1.80	4.29	52.94	23.85	99.00	99.00	78.00	100.00	100.00	
			TUVQ1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
			PMRQ2	82.70	6.99	68.90	15.90	0.00	53.71	1.83	4.38	38.83	90.02	NA	NA	87.67	NA	100.00	



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			TUVQ2	74.17	4.80	95.79	5.64	DNP	53.46	0.03	29.16	26.97	90.11	DNP	DNP	DNP	DNP	100.00	
			PMRQ3	97.97	9.15	78.09	13.03	0.00	47.00	0.74	25.74	75.28	80.22	NA	NA	90.46	92.47	11.11	
			TUVQ3	90.15	8.92	83.84	10.15	DNP	53.28	0.00	25.92	100.00	100.00	NA	NA	49.45	50.54	100.00	
25	UP(W)	BSNL	Reliance	PMR Q1	56.45	8.12	96.25	1.00	0.22	NA	0.07	77.42	42.26	99.12	NA	NA	91.50	100.00	100.00
				TUVQ1	59.98	8.30	95.50	1.00	0.32	38.70	0.08	70.00	43.25	99.47	ND	ND	ND	ND	NI
				PMRQ2	79.27	0.00	98.54	3.22	0.08	30.42	0.09	75.51	98.57	99.73	100.00	100.00	94.33	100.00	100.00
				TUVQ2	96.00	9.81	100.00	4.52	0.08	33.02	.095	76.00	99.00	100.00	DNP	DNP	DNP	DNP	100.00
				PMRQ3	86.13	4.66	99.05	1.30	0.26	NA	0.06	77.27	98.64	99.32	100.00	100.00	91.50	95.50	100.00
				TUVQ3	89.00	4.70	98.81	2.00	0.00	31.50	0.00	72.60	98.50	99.00	100.00	100.00	90.50	95.00	100.00
26	Uttranchal	BSNL	Bharti	PMR Q1	37.56	NA	NA	9.00	NA	62.00	0.02	92.75	82.71	87.12	NA	NA	NA	NA	100.00
				TUVQ1	59.10	16.90	65.90	8.72	0.60	61.80	0.06	98.20	98.00	97.00	87.70	11.00	77.30	100.00	100.00
				PMRQ2	86.38	9.00	90.00	9.10	NA	NA	0.02	98.20	96.94	97.33	NA	NA	NA	NA	100.00
				TUVQ2	56.80	7.54	89.18	15.13	0.10	58.90	0.01	77.81	77.45	90.20	DNP	DNP	DNP	DNP	69.23
				PMRQ3	88.99	9.10	86.00	8.40	NA	65.00	NA	97.00	99.00	98.00	NA	NA	NA	NA	100.00
				TUVQ3	70.86	17.62	67.69	11.71	0.00	44.61	0.37	90.47	93.59	97.12	100.00	100.00	0.00	14.00	93.64
			Reliance	PMR Q1	35.31	24.25	NA	12.72	0.00	46.03	6.60	35.71	63.15	89.32	98.00	98.00	69.33	100.00	100.00
				TUVQ1	93.10	4.62	89.00	14.90	0.00	70.40	1.01	84.20	DNC	87.30	100.00	100.00	100.00	100.00	100.00
				PMRQ2	82.49	11.57	74.71	10.01	0.10	58.00	5.09	92.73	69.79	96.11	NA	NA	85.69	100.00	100.00
				TUVQ2	94.50	4.50	89.00	9.00	0.00	59.01	0.02	31.06	100.00	89.25	DNP	DNP	DNP	DNP	95.00
27	West	BSNL		PMRQ3	95.31	7.77	86.09	11.10	0.00	45.00	0.40	19.05	74.59	66.32	NA	NA	90.00	92.00	57.00
				TUVQ3	32.11	12.51	63.35	9.06	0.00	60.24	0.00	72.72	90.60	100.00	99.80	99.90	97.01	99.14	100.00
			Reliance	PMR Q1	67.13	Nil	Nil	NA	7.27	NA	0.00	Nil	Nil	100.00	NA	NA	91.50	100.00	100.00
				TUVQ1	0.00	0.00	100.00	0.00	7.64	43.73	0.00	70.00	41.17	60.00	ND	ND	ND	ND	NI
				PMRQ2	54.94	Nil	Nil	0.00	4.36	37.20	0.00	Nil	Nil	100.00	100.00	100.00	94.33	100.00	100.00
26	Uttranchal	BSNL		TUVQ2	92.00	0.00	100.00	0.00	4.36	48.86	2.78	100.00	100.00	100.00	DNP	DNP	DNP	DNP	100.00
				PMRQ3	52.54	Nil	Nil	Nil	0.90	NA	0.00	Nil	Nil	100.00	100.00	91.50	95.50	Nil	
				TUVQ3	96.00	NI	NI	NI	0.02	42.50	0.00	NI	NI	NI	100.00	100.00	90.50	95.00	100.00
27	West	BSNL	BSNL	PMR Q1	74.08	NA	NA	6.00	NA	85.00	0.01	98.87	90.08	96.06	NA	NA	NA	NA	100.00
				MERGED WITH UTTAR PRADESH															
				PMRQ2	55.93	9.00	95.00	8.70	NA	NA	0.01	99.41	99.21	98.14	NA	NA	NA	NA	100.00
				MERGED WITH UTTAR PRADESH															
				PMRQ3	73.40	9.20	94.00	9.20	NA	70.00	0.04	96.00	98.00	98.00	NA	NA	97.33	100.00	100.00
				TUVQ3	48.48	10.80	84.84	5.64	0.00	55.90	0.30	33.33	58.33	84.40	35.41	37.51	96.00	98.83	100.00



South Asia

	Bengal		Q1																	
Bengal	TUV	TUVQ1	35.80	9.89	79.70	9.86	0.00	NA	0.34	33.33	66.70	97.50	ND	ND	ND	ND	ND	NI		
		PMRQ2	29.90	8.60	91.65	16.70	NA	NA	0.03	11.00	99.18	100.00	NA	NA	NA	NA	NA	100.00		
		TUVQ2	7.84	18.54	60.88	8.23	DNP	21.72	0.00	64.28	100.00	78.64	DNP	DNP	DNP	DNP	DNP	DNP		
		PMRQ3	32.58	7.50	91.00	16.30	NA	64.00	0.04	100.00	100.00	100.00	NA	NA	NA	NA	NA	100.00		
		TUVQ3	10.22	22.56	72.51	9.30	0.54	48.75	0.00	100.00	72.72	72.90	100.00	100.00	NA	NA	NA	85.71		
Reliance	PMR Q1	PMR Q1	78.38	Nil	Nil	NA	3.18	NA	0.00	Nil	Nil	50.00	NA	NA	91.50	100.00	NI			
		TUVQ1	0.00	0.00	100.00	2.25	1.34	34.78	0.00	60.00	18.18	98.85	ND	ND	ND	ND	ND	100.00		
	PMRQ2	PMRQ2	58.73	Nil	Nil	0.00	2.61	34.60	0.00	Nil	Nil	Nil	100.00	100.00	94.33	100.00	NI			
		TUVQ2	83.50	0.00	100.00	0.00	2.81	35.53	0.06	100.00	100.00	100.00	DNP	DNP	DNP	DNP	DNP	42.85		
		PMRQ3	92.92	Nil	Nil	Nil	1.52	NA	0.00	Nil	Nil	Nil	100.00	100.00	91.50	95.50	Nil			
		TUVQ3	66.50	NI	NI	NI	0.00	34.50	0.00	NI	NI	98.50	100.00	100.00	90.50	95.00	100.00			



South Asia

**CUSTOMER SATISFACTION SURVEY
QUESTIONNAIRES
FOR MOBILE & BASIC TELECOM SERVICES**



South Asia

CUSTOMER SATISFACTION SURVEY
QUESTIONNAIRES
FOR BASIC TELECOM SERVICES

Name: _____

Tel:

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Operator: 1 Airtel 2 BSNL 3 Reliance Info 4 TATA
 5 MTNL 6 Spice 7 HFCL 8 Shyam

State and code: _____

City and code: _____

Sex: 1 Male 2 Female
Age: 1 < 25 2 25-50 3 > 50
Usage Type : 1 Residential 2 Commercial

Area: 1 Rural 2 Urban
User Type: 1 Prepaid 2 Postpaid
Type: 1 Wireline 2 WLL
Interview: 1 Telephonic 2 In-person

A. SERVICE PROVISION

1. When did you last applied for a phone connection	<input type="checkbox"/> 1 >12 month → (If >12 month, go to Q 4) <input type="checkbox"/> 2 9-12 month <input type="checkbox"/> 3 6-9 month <input type="checkbox"/> 4 <6 month
2. How much time was taken to get the working connection after you applied for it?	<input type="checkbox"/> 1 >45 day <input type="checkbox"/> 2 16-45 day <input type="checkbox"/> 3 7-15 day <input type="checkbox"/> 4 <7 day
3. Are you satisfied with time taken to provide working phone?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy
4. Have you requested for shifting of your phone during last 24 months?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No → (If no, go to Q 7)
5. How long did it take for the complete shifting of phone?	<input type="checkbox"/> 1 >15 day <input type="checkbox"/> 2 8-15 day <input type="checkbox"/> 3 3-7 day <input type="checkbox"/> 4 <3 day
6. Are you satisfied with the time taken for shifting?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy
7. Have you requested to close your phone during 24 month?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No → (If no, go to Q 11)
8. If yes, which operator you requested to close the phone	<input type="checkbox"/> 1 Airtel <input type="checkbox"/> 2 BSNL <input type="checkbox"/> 3 Reliance Info <input type="checkbox"/> 4 TATA <input type="checkbox"/> 5 MTNL <input type="checkbox"/> 6 Spice <input type="checkbox"/> 7 HFCL <input type="checkbox"/> 8 Shyam
9. How long did it take for the closure of phone?	<input type="checkbox"/> 1 >72 hrs <input type="checkbox"/> 2 48-72 hrs <input type="checkbox"/> 3 24-48 hrs <input type="checkbox"/> 4 <24 hrs
10. Are you satisfied with the time taken for closure?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy

B. BILLING RELATED

11. Are the bills received at least a week before the due date of payment?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 3 Normally <input type="checkbox"/> 4 Always
12. Are the bills correct?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 3 Normally <input type="checkbox"/> 4 Always
13. Do the bills clearly explain the expenditure on phone?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 3 Normally <input type="checkbox"/> 4 Always
14. Have you complained about wrong bill in last one year?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No → (If no, go to Q 16)
15. Are you satisfied with the process of settling of billing disputes?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy

C. HELP DESK

16. Do you know help desk operator number?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No → (If no, go to Q 23)
17. When was the last time you accessed the help desk?	<input type="checkbox"/> 1 upto 1 mon. <input type="checkbox"/> 2 1-3 month <input type="checkbox"/> 3 >3 month <input type="checkbox"/> 4 Never (go to Q23)
18. What was it related to?	<input type="checkbox"/> 1 New connection <input type="checkbox"/> 2 Clarifications →(go to Q20) <input type="checkbox"/> 3 Complaints
19. If for complaints, what was it related to?	<input type="checkbox"/> 1 Billing dispute <input type="checkbox"/> 2 Service related
20. How much time taken by help desk executive to reply?	<input type="checkbox"/> 1 >1 min <input type="checkbox"/> 2 1 min <input type="checkbox"/> 3 30 sec <input type="checkbox"/> 4 Immediately
21. Does the executive listened to your problem with patience?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 3 Normally <input type="checkbox"/> 4 Always
22. Are you satisfied with the behaviour of the executive?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy



D. NETWORK PERFORMANCE

23. How often there is network failure?	<input type="checkbox"/> 1 Frequent <input type="checkbox"/> 3 Occasional	<input checked="" type="checkbox"/> 2h Moderate <input type="checkbox"/> 4 Never
24. Is the voice quality clear?	<input type="checkbox"/> 1 Not clear <input type="checkbox"/> 3 Moderate	<input type="checkbox"/> 2 Manageable <input type="checkbox"/> 4 Clear
25. How often you get connected to wrong number?	<input type="checkbox"/> 1 Frequent <input type="checkbox"/> 3 Occasional	<input type="checkbox"/> 2 Normally <input type="checkbox"/> 4 Never

E. FAULT REPAIR

26. Did you have breakdown of your phone in last six month?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	→ (If no, go to Q 29)
27. How long did it take for repairing after lodging complaint?	<input type="checkbox"/> 1 >3 days <input type="checkbox"/> 3 2 days	<input type="checkbox"/> 2 3 days <input type="checkbox"/> 4 1 day
28. Does the problem reappear?	<input type="checkbox"/> 1 Always <input type="checkbox"/> 3 Occasional	<input type="checkbox"/> 2 Moderate <input type="checkbox"/> 4 Never

F. SUPPLEMENTARY SERVICES

Type of service	Usage		Satisfaction			
	Y	N	<input type="checkbox"/> 1 Hghly dissatisfy	<input type="checkbox"/> 2 Dissatisfy	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy
29.1 Call waiting	Y	N	<input type="checkbox"/> 1 Hghly dissatisfy	<input type="checkbox"/> 2 Dissatisfy	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy
29.2 Forwarding	Y	N	<input type="checkbox"/> 1 Hghly dissatisfy	<input type="checkbox"/> 2 Dissatisfy	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy
29.3 Call answering	Y	N	<input type="checkbox"/> 1 Hghly dissatisfy	<input type="checkbox"/> 2 Dissatisfy	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy
29.4 Any other services	Y	N	<input type="checkbox"/> 1 Hghly dissatisfy	<input type="checkbox"/> 2 Dissatisfy	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy



South Asia



South Asia

CUSTOMER SATISFACTION SURVEY QUESTIONNAIRES FOR MOBILE TELECOM SERVICES



Name: _____

Tel: _____

Operator: 1 Airtel 2 Hutch 3 Idea 4 BSNL 5 Reliance Info
 6 Reliance Tel 7 TATA 8 MTNL 9 Spice 10 BPL 11 Aircell

State and code: _____

City and code: _____

Sex: 1 Male 2 Female

Age: 1 < 25 2 25-50 3 > 50

Usage Type: 1 Residential 2 Commercial

Area: 1 Rural 2 Urban

User Type: 1 Prepaid 2 Postpaid

Type: 1 GSM 2 CDMA

Interview: 1 Telephonic 2 In-person

A. SERVICE PROVISION

1. When did you last applied for cellular phone connection	<input type="checkbox"/> 1 >9 month <input type="checkbox"/> 2 6-9 month <input type="checkbox"/> 3 2-6 month <input type="checkbox"/> 4 <2 month	→ (If >9 months, go to Q 6)
2. Are you satisfied with the availability of dealer-distributor in your locality?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy
3. How much time was taken to get the working connection after you applied for it?	<input type="checkbox"/> 1 >7 day <input type="checkbox"/> 3 2-3 day	<input type="checkbox"/> 2 4-7 day <input type="checkbox"/> 4 Next day
4. Are you satisfy with time taken to provide working phone	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy
5. Are you satisfied with the clarity of plan? (Rate per call, monthly rental etc.)	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy
6. Have you requested to close your phone in last 6 month	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	→ [go to Q10-prepaid or Q11-postpaid]
30. If yes, which operator you requested to close the phone	<input type="checkbox"/> 1 Airtel <input type="checkbox"/> 2 Hutch <input type="checkbox"/> 3 Idea <input type="checkbox"/> 4 BSNL <input type="checkbox"/> 5 Reliance Info <input type="checkbox"/> 6 Rel Tel <input type="checkbox"/> 7 TATA <input type="checkbox"/> 8 MTNL <input type="checkbox"/> 9 Spice <input type="checkbox"/> 10 BPL <input type="checkbox"/> 11 Aircell	
8. How long did it take for the closure of phone?	<input type="checkbox"/> 1 >7 day <input type="checkbox"/> 3 1-3 day	<input type="checkbox"/> 2 3-7 day <input type="checkbox"/> 4 1 day
9. Are you satisfied with the time taken for closure?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy

B. BILLING RELATED - PREPAID CUSTOMER

10. Are you satisfied with the charging?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy
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C. BILLING RELATED - POSTPAID CUSTOMER

11. Are the bills received at least a week before the due date of payment?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 3 Normally	<input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 4 Always
12. Do you think the bills are correct?	<input type="checkbox"/> 3 Yes <input type="checkbox"/> 2 No	→ (If yes, go to Q 15)
13. Have you complained about wrong bill in last 6 month	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	→ (If no, go to Q 15)
14. Are you satisfied with the process of settling of billing disputes?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy

D. HELP DESK

15. Do you know help desk operator number?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	→ (If no, go to Q 22)
16. When was the last time you accessed the help desk?	<input type="checkbox"/> 1 upto 1 mon. <input type="checkbox"/> 3 >3 month	<input type="checkbox"/> 2 1-3 month <input type="checkbox"/> 4 Never (go to Q22)
17. What was it related to?	<input type="checkbox"/> 1 New connection <input type="checkbox"/> 3 Complaints	<input type="checkbox"/> 2 Clarifications →(go to Q19)
18. If for complaints, what was it related to?	<input type="checkbox"/> 1 Billing dispute	<input type="checkbox"/> 2 Service related
19. How much time taken by help desk executive to reply	<input type="checkbox"/> 1 >1 min <input type="checkbox"/> 3 30 sec	<input type="checkbox"/> 2 1 min <input type="checkbox"/> 4 Immediately
20. Does the executive listened to your problem with patience?	<input type="checkbox"/> 1 Never	<input type="checkbox"/> 2 Occasionally



	<input type="checkbox"/> 3 Normally	<input type="checkbox"/> 4 Always
21. Are you satisfied with the behaviour of the executive?	<input type="checkbox"/> 1 Highly dissatisfy	South Africa Dissatisfy
	<input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 4 V satisfy

E. NETWORK PERFORMANCE

22. Are you satisfied with the coverage of your operator?	<input type="checkbox"/> 3 Yes <input type="checkbox"/> 2 No	
23. Are you able to make or get calls in first attempt?	<input type="checkbox"/> 1 Never <input type="checkbox"/> 3 Normally	<input type="checkbox"/> 2 Occasionally <input type="checkbox"/> 4 Always
24. How often does your call drops during conversation?	<input type="checkbox"/> 1 Always <input type="checkbox"/> 3 Occasionally	<input type="checkbox"/> 2 Normally <input type="checkbox"/> 4 Never
25. Is the voice quality clear?	<input type="checkbox"/> 3 Yes <input type="checkbox"/> 2 No (Please Tick) 1 Echo 2 Crackling 3 Uneven 4 Blank 5 Hissing 6 Other	
26. How often you get connected to wrong number?	<input type="checkbox"/> 1 Frequent <input type="checkbox"/> 3 Occasional	<input type="checkbox"/> 2 Normally <input type="checkbox"/> 4 Never

F. FAULT REPAIR

27. Did you have problem in setting your mobile for GPRS,SMS, VOICE Mail in last one month?	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	—————> (If no, go to Q 30)
28. How long did it take for correction of problem after lodging complaint?	<input type="checkbox"/> 1 >5 hour <input type="checkbox"/> 3 2-3 hrs	<input type="checkbox"/> 2 4-5 hrs <input type="checkbox"/> 4 <1 hour
29. Are you satisfied with complaint registration process?	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 3 Satisfy	<input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 4 V satisfy

G. SUPPLEMENTARY SERVICES

30. Usage of following services and satisfaction with the quality of supplementary services provided by the operator		
Type of service	Usage	Satisfaction
30.1 SMS	Y N	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy
30.2 Roaming	Y N	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy
30.3 Voice mail	Y N	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy
30.4 Any other supplementary services like email	Y N	<input type="checkbox"/> 1 Highly dissatisfy <input type="checkbox"/> 2 Dissatisfy <input type="checkbox"/> 3 Satisfy <input type="checkbox"/> 4 V satisfy

