South Asia

REPORT ON

QUALITY OF SERVICE
&
CUSTOMER SATISFACTION SURVEY
(Quarter April 2006 to June 2006)

SUBMITTED FOR: SUBMITTED BY:

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AUTHORITY OF INDIA   13.10.06 (Revised)

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1.   INTRODUCTION

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

2.   EXECUTIVE SUMMARY

2.1   PREFACE

TUV South Asia is entrusted by TRAI to carry out

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

The Objective Assessment involved, Audit of sampled exchange's (including customer care centre), Helpline for Basic operator and audit of sampled MSC's (including customer care centre), POI Congestion, Helpline and Drive Test for Cellular Operators.

For QOS audit of Basic Service, TUV Officials visited 450 Basic Telephone Exchanges (105 Urban and 345 Rural exchanges) while auditing 65 Basic Operators (licensee). Further, the operation of 126 Cellular mobile service operators, were verified as a part of this exercise.

In the case of Basic 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's satisfaction level for all the Basic operators ((BSO) and Cellular Mobile Service Proviers (CMSP) including Unified Access Service Providersoperators (UASP) spread over various operating circles.

During this quarter, a large sample of about 21021 basic and 39519 cellular 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.

For Rural subscribers, 100% of the subscribers were personally interviewed. In case of Urban Subscriber, 75% were personally interviewed and 25% were interviewed telephonically. Subscribers were selected based on their age, gender and usage basis.

QOS performance monitoring report (PMR) for the period March 2006 was considered as reference for coverage during execution and QOS performance monitoring report PMR for June 2006 was considered for comparison of data.

2.2 <u>ANALYSIS</u>

2.2.1 QUALITY OF SERVICE OF CELLULAR MOBILE SERVICES

2.2.1.1 MSC AUDIT

In case of cellular services out of the 15 benchmark parameters requirements as per regulation July 2005, most of the operators are having positive results with regard to **Service Access Delay, Call Drop rate, Call Set up Success rate, Billing Complaints resolved within 4 weeks, Period of Refunds due to customer from the date of resolution of complaint, % of Calls Answered Electronically within 40 sec, % of Calls Answered Electronically within 20 sec, % of Connection with good voice quality, Accumulated Down Time of Community isolation, SDCCH Congestion, TCH Congestion** with 98.98%, 100%, 96.03%, 95.61%, 89.38%, 89.09%, 91.89%, 90.32%, 84.93%, 87.2% and 88.8% of the operators meeting the benchmarks of these parameters respectively.

In respect of the parameter **Accumulated Down Time of community isolation the benchmark for which is** less than **24 Hrs,** the highest duration of **Accumulated Down Time for community isolation** is noticed in **BSNL – Gujarat (167 hrs), BSNL-UP(W)(65.82), and MTNL : Mumbai(71), RISL : -Kolkata (50.47), BPL : Tamilnadu (62.83), Idea : Gujrat (72.57): Kerela (65.3) Tata : Kerela (67.6), Harayana(54) , Bharti : Andhra pradesh(177.6) ; Rajsthan (68.16)**

In case of the parameter **SDCCH / Paging congestion (benchmark <1%),** the highest congestion is noticed in Tata – Haryana (17%) followed by MTNL-Delhi (10.5%) and Reliance Info – Chennai (5.39%).

In the case of parameter **TCH Congestion (benchmark <2%)**, the TCH congestion rate is noticed at Spice-Karnataka, Reliance Telecom – MP, Bihar and WB as 17.14%, 19.37%, 13.56% and 13.06% respectively, which is much beyond the benchmark.

However the performance of service providers relating to the parameters **% of Calls Answered by Operator within 60 sec** and **% of Calls Answered by Operator within 90 sec** is a matter of concern as only 57.98% and 58.62% of the operators are meeting the benchmarks of these parameters respectively.

In case of **Billing Complaints per 100 Bills issued (benchmark <0.1%)**, a significant higher percentage of billing complaints are observed in case of Tata – Maharashtra (0.99%), Tata – Haryana (1.75%), Tata – Punjab (2.1%), Tata – WB (7.4%), Tata – HP (1.36%) and

Dishnet – NE (1.45%). POI Congestion is also a concern with only 13.6% of the operators meeting the defined benchmark criteria.

2.2.1.2 DRIVE TEST

353 number of Drive test were conducted to verify parameters like Call Drop Rate, Call Setup Success Rate, Blocked Call Rate and % Connection with good voice quality.

In **Metro Circles** Drive test was carried for 22 operators. MTNL-Mumbai is not meeting any of the parameter of the drive test.out of 22 operators 6 operators i.e 27.28%   (**Bharti**-Chennai,**Tata**-Mumbai,**Idea**-Delhi,**MTNL**-Del, **RelianceInfo**-Kolkatta**, RISL**-Kolkatta,) are not meeting benchmark for at least one of the parameters.

In **A Circles** Drive test was carried for 28 operators out of which 7 operators i.e 25% (**Bharti**-Gujrat & Maharastra, **Tata**-TN, **BSNL**-Andhra Pradesh, Gujrat, Maharastra, karnataka**,** are not meeting benchmark for atleast one of the parameters.

In **B Circles** Drive test was carried for 47 operators. **BSNL**-Kerla is not meeting any of the parameter. Out of 47 operators12 operators i.e 25.5%   (**BSNL**- Madhya Pradesh, UP East, UP West, West Bengal **Bharti**-Haryana, Kerala, MP **Hutch**-UP East, **Idea**-Haryana, **RelianceInfo**-Madhya Pradesh, UP East, **Reliance Telecom**-Madhya Pradesh) are not meeting benchmark for at least one of the parameters.

In **C Circles** Drive test was carried for 25 operators out of which 8 operators i.e 32% (**Bharti**-Assam,NE **Tata**-Orissa, **BSNL**-J&K,Orissa **Reliance Telecom**-Bihar,**Dishnet**-NE,Orissa) are not meeting benchmark for atleast one of the parameters.

2.2.1.3 INTER OPERATOR CALL ASSESSMENT

Inter Operator calls were made to verify the **Point of Interconnect Congestion.** In BSNL POI congestion is noticed at interconnection with 34 operators out of a total interconnection with 109 operators (31.19%).   In Idea circles, POI congestion is observed at the interconnection with 15 operators out of 53 (28.3%). Similarly, in Dishnet circles this is 7 out of 20 (35%), in MTNL 2 out of 13 (15.38%), in Bharti 20 out of 133 (15.03%), in Hutch 15 out of 87 (17.24%), and in Reliance Infocomm 22 out of 134 (16.4%).

The POI Congestion Value collected from MSC's of different operators was 19 out of 97 (19.58%) for Rel Tel, 8 out of 41 (19.51%) in case of BPL, 7 out of 42 (16.67%) in case of Spice and 105 out of 727 (14.44%) in case of Bharti. *(Refer Circle wise tables in Section 3.6 page 41 onwards.)*

No co-relation could be established between the data of congestion assessed practically by inter operator call and that obtained from MSC.

2.2.1.4 HELP LINE

Calls were made to verify the **% of Calls Answered Electronically within 20 sec and 40 sec** and **% of Calls Answered by operator within 60 sec and 90 sec**. It is observed that **% of Calls Answered by operator within 60 sec and 90 sec** is met by only 63.2% and 70.4% of operators respectively. Incase **% of Calls Answered Electronically within 20 sec,** 84.8% of the operators are meeting the benchmark and 77.6% of operators are meeting the benchmark of **% of Calls Answered Electronically within 40 sec**.

2.2.2   QUALITY OF SERVICE OF BASIC SERVICE

2.2.2.1   EXCHANGE AUDIT

In case of basic service, out of the 18 benchmark parameter as per QoS Regulation July 2005, the performance of all the audited licencee (65)   was significantly below the benchmark.

In case of parameter **Provision of Telephone after registration, except Reliance–H.P & Tata - Delhi** none of the operators is meeting the benchmark.

Parameters **Fault repair by next working day, Request for Closure, Fault incidence parameter** and **Time Taken for Refunds are** not met by   40% of the operators.**.**

36.5%, 26.7% and 31.75% of the operators do not meet parameters **Request for additional Facility, Metering and Billing Credibility and Mean Time for Repair** respectively.

Parameter **Call Completion Rate - Local Network** is not met by 46.7% of the operators. 64% operators are not meeting the parameter **Grade of Service – Junction between Local Exchange** and 70.5% operators are not meeting parameter **Request for shifting.**

2.2.2.2 HELP LINE

Calls were made to verify the **% of Calls Answered Electronically within 20 sec and 40 sec** and **% of Calls Answered by operator within 60 sec and 90 sec**. The performance w.r.t. parameters **% of Calls Answered by operator within 60 sec** is not met by 23% and **% of Calls Answered by operator within 90 sec** 34.7% operators respectively.

2.2.3   CUSTOMER SATISFACTION SURVEY FOR MOBILE

Customer perception related to operator's service was assessed for seven defined parameters through 29 questions for cellular service subscriber. On an all India basis, 68

(57%) out of 119 operators are not meeting the benchmark criteria for all the parameters taken together. However, the circle wise performance of the operators w.r.t. benchmark on an average is 58.52% in Metro, 52.5% in A Circle, 53.2% in B Circle and in C Circles 69.32% operators do not meet the benchmark parameters. The findings in respect of major parameters are given below:

Overall Customer Satisfaction level: (Benchmark >95%)
- The customer perception of overall customer satisfaction level is poor in all the circles, only 6 licencees out of a total of 119 licencees (5.04%) are meeting the benchmark of >95%.
- In respect of metro circles, none of the licencees have attained the overall customer satisfaction level. The lowest overall customer satisfaction level is with BSNL – Kolkata (77%). In Mumbai none of the operator has achieved the benchmark. The lowest is with Tata-Mumbai (88%). In Kolkata and Chennai none of the operator is meeting the benchmark. In Metro Circle as a whole, the achievement level is ranging between 77-93% with highest achievement level of 93% for Bharti Delhi and MTNL Mumbai.
- In A circles, none of the licencees are meeting the benchmark. The lowest overall customer satisfaction level of all the operators is in Gujarat circle. As a whole in A Circle, the achievement level is ranging between 70-93%. The lowest is with BSNL – Gujarat (70%) and the highest level is with Tata – Maharashtra (93%)
- In category B circles, all the operators in Kerala are meeting the overall customer satisfaction level. In Punjab the overall customer satisfaction level of all other operators are near the benchmark. In B Circle as a whole, the achievement level of the operators not meeting the benchmark ranges between 75-94% with lowest in BSNL – WB (75%).
- In C circles none of the operators has achieved the benchmark. The level of overall customer satisfaction is in the range of 69-90%, which is poorer than the performance of the operators in all other circles.

Network performance (Benchmark >95%):
- The customer perception of the parameter **network performance** is poor, only 12 out of 119 operators (10.08%) are meeting the benchmark.
- In Metro Circle none of the licencees are meeting the benchmark. The performance is poor in Chennai Circle with achievment level 73-77% and in Kolkata Circle with achievement level 58-76%.
- In A circles **none of the operator** is meeting the benchmark. The performance of all the operators in AP is better as compared to other circles with their performance almost touching 90%. The worst performance is in Gujarat (53-64%) and TN (56-73%). As a whole, the achievement level is ranging between 53-91%.
- In B circles though **all the operators** in Kerala and Punjab are meeting the benchmark, the lowest performance is in West Bengal circle. As a whole, the achievement of operators not meeting the benchmark is ranging between 57%-94%.

- In C circles none of licencee is meeting the benchmark. The overall performance of the operators in Himachal Pradesh is better. The overall achievement level is ranging between 46-94%.The lowest performance is in Bihar BSNL (46%).

Billing (Benchmark >90%):
- The survey was conducted separately for post-paid and pre-paid customers. In the case of post-paid segment overall 63.87% of the operators have achieved the satisfaction level of >90% and in the pre-paid segment the number of operators who achieved this level is 85.71%.
- In Metro circles, all the operators are meeting the benchmark for pre-paid. In the case of post-paid 72.7% of operators are not meeting the benchmark with Delhi-Idea (56%), Delhi-MTNL (58%), Delhi-Tata (45%) and Kolkatta-Reliance Info (64%) are significantly below the benchmark.
- In A circles, in the case of pre-paid all the operators are meeting the benchmark, except in Gujarat circle where none of the operator is meeting the benchmark. In post-paid all the operators are meeting the benchmark, except Gujarat-Airtel (80%), Gujarat-BSNL (75%), TN-Tata (34%) and Maharastra-BPL (80%).
- In B circles in the pre-paid segment 4 out of 46 operators are not meeting the benchmark. The achievement level of the operators not meeting the benchmark ranges between 77-89% with lowest in UP (E)-Bharti (77%) In the post-paid segment 10 operators out of 46 are not meeting the benchmark .The achievement level of the operators not meeting the benchmark ranges between   57-89% with lowest in Tatat-UP W (57%) .
- In C circles out of 22 operators surveyed 7 operators are not meeting the benchmark .The achievement level of the operators not meeting the benchmark ranges between 68-89%) with lowest in BSNL – Bihar (68%) for pre-paid segment while 13 operators out of 22 operators are not meeting benchmark criteria (the achievement level of the operators not meeting the benchmark ranges between 46%-89%) . The performance of Aircell – Assam (46%) Airtel – Assam (58%), Aircel – NE (49%) is way below the benchmark.

Maintainability (benchmark >95%):

78 out of 119 (65.54%) service providers are not meeting the benchmark for the Parameter Achievement level of operators not meeting benchmark ranges between 30%-91% in Metro Circle, 40%-93% in A Circles, 40%-94% in B Circle and 45%-94%, in C Circle.

Help Line Service (benchmark >90%):

 None of the operators are meeting the benchmark for the parameter Achievement level of operators' not meeting benchmark value ranges between 51%-86% in Metro circle, 54%-81% in A Circle, 58%-81% in B Circle and 37%-78% in case of C Circles.

2.2.4 CUSTOMER SATISFACTION SURVEY FOR BASIC SERVICE

Customer perception related to operator's service was assessed for seven defined parameters through 30 questions for basic service subscriber. On an all India basis, 37 (58.73%) out of 63 service providers do not meet the benchmark for seven paratmeters on customer perception of service. However, the circle wise performance of the operators w.r.t. benchmark on an average is 66.6% in Metro, 43.4% in A Circle, 57.7% in B Circle and in C Circles 74.6% operators do not meet the benchmark parameters. The findings in respect of major parameters are given below:

Overall Customer Satisfaction(Benchmark >95%):
- In respect of Metro Circles, Mumbai-Tata is meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 69%-93% .
- In A Circles, 8 operators out of 17 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 73%-93%).
- In B Circles, 4 operators out of 22 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 65%-93%.
- In C Circles, none of the operator is meeting the benchmark with the achievement level ranging between 58%-93%.

Maintainability(Benchmark 95%):
- In respect of Metro Circles, 4 operators out of 15 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 79%-93% .
- In A Circles 9 operators out of 17 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 0%-91% and Maharastra –Tata having the lowest(0%).
- In B Circles, 5 operators out of 22 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 54%-92%.
- In C Cirlces, 1 operators out of 9 operators is meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 62%-87%.

Billing Services(Benchmark > 90%):
- In respect of Metro Circles, 6 operators out of 15 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 63%-88%.

- In A Circles, 14 operators out of 17 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 70%-77%).
- In B Circles, 15 operators out of 22 operators are meeting the benchmark with achievement level of operators not meeting the benchmark ranging between 68%-87%.
- In C Cirlces, 2 operators out of 9 operators are meeting the benchmark. The achievement level of operators not meeting the benchmark ranges from 46%-86%.

Helpline Services (Benchmark > 90%):
- In respect of Metro Cirlces, none of the operators are meeting the benchmark with achievement level ranging between 52%-76%).
- In A Circles, none of the operators are meeting the benchmark with achievement level ranging between 53%-89%).
- In B Circles none of the operator is meeting the benchmark with achievement level ranging between 36%-82%).
- In C Circles none of the operator is meeting the benchmark with achievement level is ranging between 55%-88%.

3.   SUMMARISED FINDINGS (ALL INDIA BASIS)

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

Due to various constraints (details described in Summarised Finding (SF) Tables SF-2 & SF-7), Three Cellular Operators (Aircel – Tamil Nadu and Chennai, BSNL Tamil Nadu) could not be covered in the second quarter.

The 7 basic operator's were required to be audited by visiting the Operating circles and conducting the following activity:

- Audit of sampled Exchange's
- Helpline
- Customer Care Centre.

The 14 Cellular Operator's were required to be audited by visiting the Operating Circles and conducting the following activity.

- Operator Assisted Drive test.
- Audit of Sampled MSC's.
- POI Congestion
- Helpline
- Customer Care Centre

In the second quarter, no independent drive test was conducted as no request was received from TRAI.

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
		Reliance CDMA
		TATA
		Hutch
		Spice Communications
		Aircel
		Reliance GSM
		MTNL
		HFCL
		Dishnet
		Reliable Internet Services

Was not covered during Q2

Note 1: Aircel could not be covered because dates were not provided by the operator despite our several follow-ups.

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	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)	
				WB	
03	TATA- CDMA	Delhi	AP	Haryana	Bihar
		Mumbai	Gujarat	Kerala	
		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	

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
			Maharashtra	Punjab	
				Rajasthan	HP
				UP (E)	
				UP(W)	Orissa
		Kolkata	TN	WB	
07	BPL	Mumbai	Maharasthra	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
			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

Total Required as per PMR	14	24	30	48	27
Total Covered	14	23	28	48	27
%age Coverage	**100%**	95.80%	93.3%	100%	100%
Operators Circle Coverage				126/129x100 = **98%**	
Attributed reasons	**Aicel Chennai & Aircel Tamil Nadu**: Inspite of Several Followups, dates for audits were not confirmed. **BSNL Tamil Nadu**: Not done				

Was not covered during Q2

3.1.1.2 - CELLULAR SERVICES OBSERVATIONS
Table SF3: Parameter wise performance of the CMSPs

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	
Accumulated Down Time of Community Isolation	23	2	28	6	48	9	27	2	126	19	84.93
Call Setup Success Rate	23	1	28	1	48	1	27	2	126	5	96.03
Service Access Delay	18	0	20	0	37	0	23	1	98	1	98.98
SDCCH/ Paging cong	23	2	27	2	48	5	27	7	125	16	87.20
TCH cong	23	1	27	2	48	4	27	7	125	14	88.80
Call Drop rate	21	0	27	0	48	0	27	0	123	0	100.00
% Connections with Good Voice Quality	16	0	21	2	36	5	20	2	93	9	90.32
POI congestion	22	17	28	24	48	44	27	23	125	108	13.60
% of Calls answered Electronically within 20 Seconds	20	0	28	5	42	4	21	0	111	9	91.89
% of Calls answered Electronically within 40 Seconds	20	1	28	7	41	3	21	1	110	12	89.09
% of Calls answered by operator within 60 Seconds	21	7	28	16	44	19	26	8	119	50	57.98

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 by operator within 90 Seconds	21	8	28	17	44	18	23	5	116	48	58.62
Billing Complains per 100 bills issued	21	4	28	9	42	11	23	6	114	30	73.68
%of Billing Complaints resolved within 4 weeks	21	2	28	1	42	0	23	2	114	5	95.61
Period of aii refunds/payments due to customers from the date of resolution	20	5	28	2	42	1	23	4	113	12	89.38

This does not cover the operators who have not provided the data (DNP), wherein No incidences have been observed (NI) and Audit Not Done (ND).

3.1.1.3: CRITICAL ANALYSIS

1. The overall compliance with the benchmark is better in respect of the parameters Service Access Delay (98.98%), Call Drop Rate (100%), Call Setup Success Rate (96.03%), Accumulated Downtime (84.93%), SDCCH Congestion (87.20%), TCH Congestion (88.8%), % of Connections with good voice quality (90.32%), % of Calls answered Electronically within 20 Seconds (91.89%), % of Calls answered Electronically within 40 Seconds (89.09%), Complaints resolved within (95.61%), Period of Refunds/dues to customers (89.38%).

The parameters, which are of concern, are

a) **Billing complaints per 100 bills issued:** 26.32% of the operators audited are not meeting the criteria.

b) **% of Calls answered by operator within 60 Seconds:** 42.02% of the operators are not meeting.

c) **% of Calls answered by operator within 90 Seconds:** 41.38% of the operators are not meeting.

The operators whose performance on a particular parameter is significantly lower i.e variation of 100% from the benchmark 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)	MTNL Mumbai (71) RISL – Kol (50.47)	BPL – TN (62.83) Idea – Guj (72.57) Bharti – AP (177.6) BSNL – Guj (167)	BSNL – UP W (65.82) Tata – Ker (67.6) Bharti – Raj (68.16) Tata – Har (54) Idea – Ker (65.3)	
Call Setup Success Rate (>=95%)				
Service Access Delay (9-20SECS)				
SDCCH/ Paging channel cong (<=1%)	MTNL – Del (10.5) Rel Info – Chen (5.3)	Spice – Kar (2.82%)	Tata – Har (17) Bharti – WB (3.15)	Bharti – Bih (2.86) Rel Tel – NE (2.36)
TCH cong (<=2%)	MTNL – Del (4.92)	Spice – Kar (17.14)	Rel Tel – WB (13.06) Rel Tel – MP (19.37)	Rel Tel – Bih (13.56) Rel Tel – Assam (5.15) Rel Tel – NE (7.53) Rel Tel – Orr (4.20)
Call Drop rate (<=3%)				
% Connections with Good Voice Quality (>=95%)				
% of Calls answered Electronically within 20 Seconds		BSNL – Guj (37.4) Hutch – Guj (37)	Idea – UP W (36)	

Parameters	Metro Circles	A Circles	B Circles	C Circles
% of Calls answered Electronically within 40 Seconds				
% of Calls answered by operator within 60 Seconds	Rel Info – Del (37.5) Rel Info – Mum (37.5)	Rel Info – Mah (37.6) Rel Info – Kar (38.72) BSNL – AP (23.11) Hutch – Kar (36.55)	Hutch – UP W (34.72) Tata – Punj (26) Tata - UP E (25) Rel Info – UPW (13.9) Rel Info – UP E (13.8) BSNL – UP W (7.17) BSNL – UP E (3.97)	Tata – Bih (36.1) Tata – Orr (36.2) HP – BSNL (4.13)
% of Calls answered by operator within 90 Seconds	Rel Info – Mum (46) Rel Info – Del (44.9)	Hutch – Kar (37.3) Rel Info – Kar (45.2) Rel Info – Mah (45.99)	Tata – UP E (28.8) Rel Info – UP W (18.47) Rel Info – UP E (18.50) BSNL – UP W (11.42) BSNL – UP E (6)	BSNL – HP (6.94)
Billing Complains per 100 bills issued (0.1%)	Tata – Kol (0.27) MTNL – Mum (0.569) Tata – Mum (0.57)	Tata – TN (0.41) Tata – Mah (0.99) Bharti – TN (0.97) Tata – Guj (0.59) Bharti – Kar (0.5) Tata – Kar (0.53) Idea – Mah (0.52)	Bharti – UP E (0.2) BSNL – UP E (0.39) BSNL – MP (0.39) Bharti – MP (0.4) Tata – MP (0.48) Tata – Har (1.75) Tata – Pun (2.1) Tata – WB (7.4)	Tata – Bih (0.29) Dishnet – NE (1.45) Dishnet – Orr (0.39) Rel Tel – Orr (0.43) Tata – HP (1.36) Bharti – NE (0.21)
%of Billing Complaints resolved within 4 weeks (100%)				
Period of all refunds/payments due to customers from the date of resolution (<4 WEEKS)	BSNL – Kol (22%)	BSNL – Kar (50%)	Tata – UP W (35.29%)	

3.1.2. INTRA AND 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 Info	Rel Tel	Dishnet	HFCL	Spice	BPL	RISL
Metro	10/28	4/26	0/28	2/9	2/13	2/6	3/31	NO	NO	NO	NO	2/3	0/5
A Circle	0/38	3/23	4/38	4/22	NO	3/30	5/39	NO	NO	NO	0/7	2/16	NO
B Circle	8/47	8/38	5/49	11/22	NO	15/52	13/47	1/8	0/6	0/7	0/7	3/7	NO
C Circle	2/20	NO	0/14	NO	NO	14/21	1/17	3/24	7/14	NO	NO	NO	NO
All Circles Total	20/133	15/87	9/129	15/53	2/13	34/109	22/134	4/32	7/20	0/7	0/14	7/26	0/5
% Congestion	15.03	17.24	6.97	28.30	15.38	31.19	16.40	12.5	35.0	0	0	26.9	0

"NO" means not operating

The first figure relates to number of interconnections established with other operators in all the circles where congestion is present. The second figure relates to total number of interconnections (not number of POIs) established with other operators in all the circles. For example for Hutch in Metro Circles they are having 10 inteconnections in Delhi, 3 in Mumbai, 6 in Kolkata, 7 in Chennai in all making 26 connections.

MSC DATA - POI

Circle/Operators	Bharti	Hutch	Tata	Idea	MTNL	BSNL	Rel Info
Metro	16/202	3/133	16/332	1/75	4/62	0/43	2/100
A Circle	13/174	4/117	8/140	10/155	NO	9/130	14/127
B Circle	60/265	30/186	31/267	32/174	NO	18/272	33/170
C Circle	16/86	NO	5/66	NO	NO	11/66	3/66
All Circles Total	105/727	34/436	60/805	43/404	4/62	38/511	52/463
% Congestion	14.44	8.48	7.45	10.64	6.45	7.43	11.23

Circle/Operators	RISL	Rel Tel	Dishnet	HFCL	Spice	Aircel	BPL
Metro	NO	NO	NO	NO	NO	0/31	1/13
A Circle	NO	NO	NO	NO	NO	0/21	7/28
B Circle	NO	2/35	1/17	2/19	5/22	NO	NO
C Circle	NO	17/62	7/49	NO	NO	NO	NO
All Circles Total		19/97	8/66	2/19	7/42	0/52	8/41
% Congestion		19.58	12.12	10.52	16.67	0	19.51

"NO" means not operating

Analysis

The highest no. of POIs are found congested in case of Rel Tel (19.58%), BPL (19.51%), Spice (16.67%) and Bharti (14.44%).

3.1.3 HELPLINE SERVICES – QOS CELLULAR

3.1.3.1 COVERAGE

Calls were made to call centre of 125 operators out of the 129 operating at present.

3.1.3.2 PERFORMANCE

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	22	2	28	9	48	6	27	2	125	19	84.8
% of Calls answered Electronically within 40 Seconds	22	4	28	12	48	9	27	3	125	28	77.6
% of call answered by operator(voice to voice) within 60 sec	22	7	28	17	48	16	27	6	125	46	63.2
% of call answered by operator(voice to voice) within 90 sec	22	8	28	10	48	15	27	4	125	37	70.4

3.1.3.3 CRITICAL ANALYSIS

% of call answered by operator(voice to voice) within 60 sec: 36.8% of the operators audited are not meeting the criteria.

% of call answered by operator(voice to voice) within 90 sec: 29.6% of the operators audited are not meeting the criteria.

3.1.4   DRIVE TEST
3.1.4.1 COVERAGE

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

353 Drive Tests were conducted in the following towns:

Region	Circle	City
North	H.P	Mandi, Hamirpur, Solan
North	Punjab	Amritsar, Patiyala,Faridcot
North	Haryana	Fatehabad, Rewari, Ambala
North	UP-W	Muradabad, Mathura, Meerut
North	UP-E	Kanpur,Jounpur, Raiberaly
North	Rajasthan	Alwar, Churu, Udaipur,Jodhpur
North	M.P.+ CG	Raipur, Jabalpur, Gwaliour
North	Delhi	Noida, Ghaziabad
North	J&K	Srinagar, Anantnag, palwama, Jammu, Katua, Samba
East	W.B	Krishnanagar,Ranaghat,Kharagpur
East	Kolkata	North,South
East	Bihar	Patna,Danapur,Samastipur
East	Jharkhand	Patna,Danapur,Samastipur
East	Orissa	Cuttak, Puri,Bhadrak
East	Assam	Gwhati,Dishpur,Rangia
East	NE	Shilong,Dishpur,Kohima
East	Andaman&nikobar	
South	Chennai	chennai
South	AP	Vishakapattnam,Vijaywada,Guntur
South	Karnateka	Sdharwad,Chitradurga,Simoga
South	Karela	Poonani,Alleppey,Terivenentpuram
South	TN	Coimbatore,Thirunelvell,Cuddalore
West	Maharastra	Nasik,Kolhapur,Ahmadnagar
West	Gujrat	Rajkot,Gandhinagar,Mehsana
West	Mumbai	Mumbai

3.1.4.2 PERFORMANCE

METRO CIRCLES

Parameters / Benchmarks		Delhi						Mumbai						Kolkata					
		Bharti	Hutch	Tata	Idea	MTNL	Rel Info	Bharti	Hutch	Tata	BPL	MTNL	Rel Info	Bharti	Hutch	Tata	BSNL	Rel Info	RISL
% Connections with Good Voice Quality	>95%	98.82	97.85	95.97	92.2	94.49	97.56	96.23	96.21	99.45	95.4	89.85	99.45	97	95.3	95.8	96.89	98.55	86.78
Call Drop Rate	<3%	0	0	0	.006	3.9	0	0	0	6.82	0	4.295	1.2	1.26	.12	.86	.81	2.45	1.12
Call set up Success Rate	>95%	100	100	100	97.6	95.92	100	97.24	98.7	100	100	89.29	98.7	98.8	99.22	99.66	100	89.55	99.76
Blocked Calls	<5%	0	0	0	2.80	4.097	0	3.2	1.20	0	0	11.125	0	0.1	0	0.35	0	.94	0.23

		Chennai				
		Bharti	BPL(Hutch)	Tata	BSNL	Rel Info
% Connections with Good Voice Quality	>95%	91.58	98.68	95.09	ND	98.85
Call Drop Rate	<3%	0	0	0	ND	0
Call set up Success Rate	>95%	98.572	100	100	ND	100
Blocked Calls	<5%	1.428	0	0	ND	0

DNP – Data not provided; ND - Not done

A CIRCLES

Parameters / Benchmarks		AP						Gujrat						Karnataka					
		Bharti	Hutch	Tata	BSNL	Reliance	Idea	Bharti	Hutch	Tata	BSNL	Reliance	Idea	Bharti	SPICE	BSNL	Reliance	Hutch	Tata
% Connections with Good Voice Quality	>95%	95.65	98.17	99.6	88.72	99.77	98.9	97.09	97.81	97.4	84.26	95	96.4	98.57	99.95	92	99.9	98.6	97.3
Call Drop Rate	<3%	0	0.409	0	0.76	0.238	0	0.62	0.7	0	1.33	1.37	0.68	0	0	0.74	0	0.68	0
Call set up Success Rate	>95%	98.75	99.27	100	98.48	100	100	94.97	99.52	100	96.85	100	99.5	100	100	97.5	100	99.54	100
Blocked Calls	<5%	0	0.393	0	1.18	0	0	0.53	0.07	0	0.52	0	0	0	0	2.3	0	0.66	0

Parameters/ Benchmarks		Maharashtra						Tamil Nadu					
		Rel Info	Bharti	BSNL	BPL	TATA	Idea	Reliance	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
% Connections with Good Voice Quality	>95%	98	93.8	93.75	96.31	96.4	97.01	99.76	99.25	ND	ND	99.5	98.57
Call Drop Rate	<3%	0	0	1.45	0	0	.46	.7	0	ND	ND	4.16	0
Call set up Success Rate	>95%	100	100	97.52	98.91	100	100	100	100	ND	ND	100	100
Blocked Calls	≤5%	0	0	1.93	1.08	0	0	0	0	ND	ND	0	0

DNP – Data not provided; ND - Not done

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B CIRCLES

Parameters/ Benchmarks		Haryana						Kerala						MP					
		Hutch	Idea	Relince	BSNL	Tata	Bharti	Hutch (BPL)	Bharti	BSNL	Tata	Idea	Reliance	Reltel	Idea	Reliance	BSNL	Tata	Bharti
% Connections with Good Voice Quality	>95%	99	85.27	99.69	98.3	99.23	99.10	98.6	97.74	92.007	98.771	98.41	100	87.12	99.03	99.41	90.58	98.47	94.20
Call Drop Rate	<3%	.36	0	.52	0	0	13.8	0	11.11	11.96	0	0	0	.80	1.35	5.26	3.2	0	1.90
Call set up Success Rate	>95%	99.1	100	99.97	100	100	98.65	100	98.88	94.118	100	100	100	89.55	100	97	93.03	100	100
Blocked Calls	<5%	.07	0	.02	0	0	1.0	0	1.12	5.88	0	0	0	3.12	0	2.7	0.68	0	0

Parameters/ Benchmarks		Punjab							Rajasthan					UP (E)				
		Spice	Hutch	Reliance	BSNL	Tata	HFCL	Bharti	Hutch	Bharti	BSNL	Tata	Reliance	Hutch	Bharti	BSNL	Tata	Reliane
% Connections with Good Voice Quality	>95%	99.05	99.35	99.32	96.46	96.08	n/app	98.87	95.5	95.03	99	98.73	99.95	80.3	98.28	97.8	99.52	97.12
Call Drop Rate	<3%	0	0	.77	.75	0	n/app	0	0	1.75	0	0	0	2.44	1.65	2.85	0	7.5
Call set up Success Rate	>95%	100	99.48	99.45	100	99.35	n/app	98.78	100	98.93	100	100	98.8	94.36	99.01	90.17	99.68	89.69
Blocked Calls	<5%	0	0.52	0.22	0	0	n/app	0	0	0	0.70	0	0.80	3.57	0.7	8.16	.38	3.77

Parameters / Benchmarks		UP(W)						West Bengal					
		Hutch	Idea	BSNL	Tata	Relince	Bharti	Rel tel	Hutch	Reliance	BSNL	Tata	Dishnet	Bharti
% Connections with Good Voice Quality	>95%	97.16	97.93	90.49	98.88	97.13	96.08	97.46	96.97	98.81	87.8	97.02	99.34	97.8
Call Drop Rate	<3%	1	.63	1.23	0	.16	.69	.6	.16	.74	2.53	0	0	1.2
Call set up Success Rate	>95%	98.44	99.88	94.98	100	99	99.31	99.06	99.14	99.51	98.6	100	100	98.06
Blocked Calls	≤5%	.98	.6	0	0	0	0	.85	.85	.49	.1	0	0	.06

C CIRCLES

Parameters / Benchmarks		ASSAM				BIHAR					HP				
		Rel tel	Bharti	Dishnet	BSNL	Rel tel	Reliane	Tata	BSNL	Bharti	Rel tel	Reliance	Tata	BSNL	Bharti
% Connections with Good Voice Quality	>95%	96.96	83.33	96.95	95.31	89.3	98.71	97.01	Dnp	98.07	97.61	99.69	97.57	96.46	97.41
Call Drop Rate	<3%	.27	33.75	.31	0	0	.58	0	Dnp	.5	0	0	0	0	0
Call set up Success Rate	95%	97.07	99.4	98.01	98.33	99.5	100	100	Dnp	99.73	98.91	100	100	96.99	100
Blocked Calls		2.41	.41	1.48	1.2	.89	0	0	dnp	.2	1.08	0	0	0	0

Parameters/ Benchmarks		NE				J &K			ORISSA					
		Rel tel	Bharti	Dishnet	BSNL	Dishnet	Bharti	BSNL	Rel tel	Reliance	Tata	Dishnet	BSNL	Bharti
% Connections with Good Voice Quality	>95%	98.09	89.86	98.26	Dnp	99.55	99.83	93.51	96.92	98.9	77.14	97.5	90.5	98.77
Call Drop Rate	<3%	.73	1.95	13.11	Dnp	0	0	2.85	.97	1.21	.88	0	.3	.6
Call set u o Success Rate	>95%	100	98.26	99.16	Dnp	100	100	98.61	99.68	98.2	97.8	94.46	93.3	100
Blocked Calls	≤5%	0	0	0	dnp	0	0	0	0	0	0.6	.3	.3	0

DNP – Data not provided; ND - Not done

3.2 QOS – BASIC SERVICES

3.2.1 EXCHANGE AUDIT (INCLUDES CUSTOMER CARE CENTRES)

3.2.1.1.: COVERAGE

The following operators were covered in Quarter 1:

Type	Nos.of Operators	Name Of Operators
Basic	7	MTNL
		BSNL
		Reliance
		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	Reliance	Delhi	AP	MP	Bihar
		Mumbai	Gujarat	Punjab	Orissa
		Chennai	Maharasthra	Rajasthan	HP
		Kolkata	TN	Haryana	
			Karnataka	Kerala	
				UP(E)	
				UP(W)	
				WB	
04	TATA	Delhi	AP		
		Mumbai	Gujarat		
		Chennai	Maharasthra		
			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	25	13
Total Covered	7	13	17	25	10

Sr.Nos	Service Provider	Metro Circle	"A" Circle	"B" Circle	"C" Circle
%age Covered	**100%**	86.6%	85%	100%	76.9%
Operators-Circle Coverage	65/73 x 100 = **89%**				
Attributed Reasons	**1.Tata-Chennai, AP, TN and Bharti-Chennai,TN did not not confirm dates inspite of several followup** **2.A&N, NE2 and Uttranchal were merged with West Bengal, NE1 and Uttranchal respectively**				

▮ Could not be audited

3.2.1.2 PERFORMANCE

Table SF 9: 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 audtied	No of operator not meeting benchmark	
Provision of Telephone after registration of demand	13	12	16	16	25	25	10	9	64	62	3.13
Fault Incidences	13	4	16	5	25	10	10	7	64	26	59.37
Fault repair by Next Working Day	13	6	16	5	25	9	10	5	64	25	60.94
Mean time for Repair	12	2	16	3	25	11	10	4	63	20	68.25
Grade of Service 1) Junction between Local Exch,2) Outgoing junction from TAX to Local Exch 3)Incoming Junction from local Exchange to tax 4)Incoming or Outgoing Junction between TAX											
1)	12	7	16	11	23	15	10	6	61	39	36.07
2)	10	3	11	7	20	14	10	7	51	31	39.2
3)	12	5	16	6	25	12	10	8	63	31	50.7

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 audtied	No of operator not meeting benchmark	
4)	3	3	8	7	16	12	6	3	33	25	24
CCR within local network	12	4	16	9	24	12	10	4	62	29	53.23
Metering and Billing Credibility	12	4	13	2	25	7	10	3	60	16	73.33
Customer Care Promptness Request for Shift	13	11	16	13	24	16	8	3	61	43	29.5
Customer Care Promptness Request for Closure	12	7	14	7	25	10	10	0	61	24	60.66
Customer Care Promptness Request for Additional Facility	13	6	16	6	25	10	9	1	63	23	63.49
% of calls answered electronically within 20 Seconds	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of calls answered electronically within 40 Seconds	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of calls answered by operator within 60 Seconds	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of calls answered by operator within 90 Seconds	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP

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 audtied	No of operator not meeting benchmark	
Time taken for refund of deposit after closure	11	4	13	2	24	14	10	3	58	23	60.34

This does not cover the operators who have not provided the data (DNP), wherein No incidences have been observed (NI) and Audit Not Done (ND).

3.2.1.3 CRITICAL ANALYSIS

The parameters, which are of concern, are

a) **Provision of Telephone**: 96.87% of the operators audited are not meeting the criteria.

b) **Fault Incidences**: 40.63% of the operators audited are not meeting the criteria.

c) **Grade of service (Junction to Local)**: 63.93% of the operators audited are not meeting the criteria.

d) **Call Completion Rate (Local Network)**: 46.77% of the operators audited are not meeting the criteria.

e) **Shift Request:** 70.5% of the operators audited are not meeting the 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)	BSNL – Chen (43.2)	BSNL – Kar (18.61) BSNL – Mah (25.29)	BSNL – UP E (33.08) BSNL – Har (39.64) BSNL – Ker (28.21) BSNL – WB (7.84)	BSNL – Orr (45) BSNL – Bihar (3.8) BSNL – J & K (3.98) BSNL – Assam (9.33) BSNL – NE (25.58) BSNL – Jhar (42.5)
Fault Incidences (<5%)	MTNL – Del (12.22)	BSNL – Kar (13.93) Tata – Kar (24.6)	BSNL – UP E (16.6) BSNL – Pun (10.43) BSNL – Ker (17.31) BSNL – WB (18.54) BSNL – CTG (23.38)	BSNL – J&K (16.2) BSNL – Bihar (18.35)

Parameters	Metro Circles	A Circles	B Circles	C Circles
Fault repair by Next Working Day (90%)	Bharti – Del (2.97) BSNL – Chen (35.14)			BSNL – NE (41.95)
Mean time for Repair (<8 HRS)		Bharti – Kar (83.61)		
Grade of Service Junction between Local Exch (0.002%)	Tata – Mum (0.01) MTNL – Mum (0.34) Rel Info – Che (0.02) BSNL – Chen (0.32) Bharti – Del (0.014)	Rel Info – Mah (0.51) Rel Info – Kar (0.7) BSNL – Kar (0.066) BSNL – Mah (0.10) BSNL – Guj (0.393) Rel Info – Guj (0.32) BSNL – AP (0.06) Rel Info – TN (2.39) Rel Info – AP (4.1) Bharti – Guj (0.17)	Rel Info – Raj (0.05) Rel Info – Har (0.063) Rel Info – WB (2.81) Rel Info – UP W (4.36) Rel Info – Ker (0.38) Rel Info – UP E (0.08) Rel Info – MP (0.03) Rel Info – Pun (0.028) BSNL – Raj (0.03) BSNL – UP W (0.104) BSNL – Ker (0.37) BSNL – Pun (0.52)	BSNL – Bih (0.62) Rel Info – Bih (0.063) Rel Info – Oris (11.84) Rel Info – HP (0.063) BSNL – Jhar (0.315) BSNL – Ass (0.501)
CCR within local network (>55%)		Bharti – Mah (26.8)	BSNL – WB (21.72)	BSNL – NE (23.87)
Metering and Billing Credibility (<0.10%)	Bharti – Del (1.09) BSNL – Kol (0.28) MTNL – Mum (0.548)	Bharti – AP (0.37) Tata – Mah (1.20)	BSNL – Har (0.214) Bharti – Ker (2.59) Rel Info – MP (0.65) BSNL – Raj (0.21) Rel Info – UP W (2.78)	BSNL – Bih (0.85) BSNL – Jhar (0.34) BSNL – NE (1.19)
Customer Care Promptness Shift Requests (95% WITH IN 3 DAYS)	MTNL – Mum (42.73) Bharti – Del (30.20)	Bharti – AP (26.79) BSNL – Kar (11.70)	Bharti – UP W (31.06) Rel Info – Har (0) Bharti – Ker (18.18) BSNL – Ker (36.86) Bharti – UP E (29.16)	Rel Info – HP (0) BSNL – NE (17.85)
Customer Care Promptness Closure Requests (95% WITH IN 24 HOURS)	Tata – Mum (28.60) BSNL – Kol (35.84) Bharti – Mum (0) MTNL – Mum (46.55)	BSNL – Kar (23.06) Tata – Kar (0)	Bharti – Ker (0) Bharti – UP E (26.97)	
Customer Care Promptness Additional Facility Requests (95% WITHIN 24 HOURS)		BSNL – Kar (15.12)		
Time taken for refund of deposit after closure (100% WITHIN 60 DAYS)	Bharti – Del (22.09)		Bharti – MP (20) Rel Info – WB (42.85)	BSNL – Oris (37.23)

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 audtied	No of operator not meeting benchmark	
% of calls answered electronically within 20 Seconds	5	0	7	0	13	1	6	1	31	2	93.55
% of calls answered electronically within 40 Seconds	5	0	7	1	12	0	6	2	30	3	90.0
% of calls answered by operator within 60 Seconds	12	4	13	4	17	2	6	1	48	11	77.08
% of calls answered by operator within 90 Seconds	12	3	13	6	17	3	7	5	49	17	65.30

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%)				BSNL – Orissa (6.92)
% of calls answered electronically within 40 Seconds (Benchmark 95%)				BSNL – Orissa (1.40)
% of calls answered by operator within 60 Seconds Seconds (Benchmark 80%)	BSNL – Chenn (6.96)		BSNL – Ker (6)	BSNL – J&K (0)
% of calls answered by operator within 90 Seconds Seconds (Benchmark 80%) (Benchmark 95%)	BSNL – Chen (10.44)			BSNL – J&K (0) BSNL – Jhar (22.9)

3.3 **CUSTOMER SATISFACTION SURVEY (CELLULAR)**

3.3.1 **COVERAGE**

State	Idea	BSNL	Rel Info	Tata	Rel Tel	Airtel	Hutch	Aircel	BPL	MTNL	Spice	Total
Maharashtra	400	400	400	200		400			400			2200
MP	230	240	255	257	234	249						1465
WB		255		244	250	247	252	100				1348
Chennai		604	587	164		600	600	600				3155
Orissa		244	251	250	253	250		187				1435
TN		400	400	400		408			358			1966
Kolkata		596	601			601	601					2399
UP-E		259	399	250		234	248					1390
UP-W	259	250	250	251		250	250					1510
AP	400	400	399	399		401	400					2399
Mumbai			601	600		585	600		572	472		3430
Gujarat	400	401	400	200		401	400					2202
NE		250			249			40				539
Assam		250			250	251		217				968
Delhi	600		600	599		601	600			600		3600
Bihar		250		80	250	252						832
Karnataka		400	400	400		400	400				400	2400
Rajasthan		250	213	41		222	195					921
HP		220			170	222						612
Punjab		203	339	89		236	250				250	1367
Haryana	250	250	250	77		250	250					1327
J&K		138				118						256
Kerela	249	250	400	400		250			249			1798
Total	2788	6510	6745	4901	1656	7428	5046	1144	1579	1072	650	39519

Note: The following operators were not surveyed due to reasons given below

Reliance Info- West Bengal, Bihar,Himachal Pradesh and **Airtel** –North East **Dishnet**- J&K, **HFCL**- Punjab, **Aircel**-Tamil Nadu (Planning problem TUV)

Tata- Kolkatta, HP (Because of low subscriber these are required to be covered in two quarter only and will be covered in Q3 AND Q4

RISL-Kolkatta (Recently Lunched and very low subscriber Base)

3.3.2 PERFORMANCE

Parameter wise performance of the CMSPs

TABLE SF: 12

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	22	1	29	3	46	13	22	13	119	30	74.79
% Satisfied with Billing (Pre-paid Customers)	22	0	29	6	46	4	22	7	119	17	85.71
% Satisfied with Billing (Post-paid Customers)	22	16	29	4	46	10	22	13	119	43	63.87
% Satisfied with help services	22	22	29	29	46	46	22	22	119	119	0.00
% Satisfied with Network Performance	22	22	29	29	46	34	22	22	119	107	10.08
% Satisfied with maintainability	22	20	29	10	46	30	22	18	119	78	34.45
Satisfaction with supplementary services	22	0	29	12	46	19	22	5	119	36	69.75
Overall customer satisfaction	22	22	29	29	46	40	22	22	119	113	5.04

TABLE SF:13 **CRITICAL ANALYSIS**

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

Parameters	Metro Circles	A Circles	B Circles	C Circles
Satisfied with Provision of Service (90%)				
% Satisfied with Billing (Pre-paid Customers) (90%)				
% Satisfied with Billing (Post-paid Customers) (90%)	Delhi-Tata (45%)	TN-Tata (34%)		Assam-Aircell (46%) NE-Aircell (46%)
% Satisfied with help services (95%)				Orissa-Tata (41%) Bihar-BSNL (48%) Orissa-Aircell (37%)
% Satisfied with Network Performance (95%)				Bihar-BSNL (46%) Orissa-Aircell (47%)
% Satisfied with maintainability (95%)	Delhi-Tata (30%) Delhi-MTNL (35%)	Maharashtra-BSNL (40%)	MP-Rel Tel (40%) UP E -Rel Info (49%)	Orissa-BSNL (45%)
Overall customer satisfaction (95%)				
%Satisfactied with supplementary services (95%)		AP – BSNL (5%)		

3.4 CUSTOMER SATISFACTION SURVEY BASIC

3.4.1 Coverage

State	Airtel	Tata	MTNL	Rel Info	BSNL	Shyam	HFCL	Total
Delhi	600	600	1200	600				3000
Assam					250			250
Bihar				200	250			652
NE					500			500
Orissa				200	260			659
UP-E	146			154	247			739
Kolkata	222			250	600			1272
WB					250			250
Maharashtra		400		400	400			1200
Kerala				250	250			700
Karnataka	65	400			800			1265
AP	251	400		199	400			1250
Chennai	465	600		183	589			1837
Mumbai	200	596	802	486				2084
Gujarat		400		384	250			1034
MP	215			57	451			789
UP-W	99			154	250			695
TN	328	375		200	401			1304
HP				177	239			570
Rajasthan				206	370	212		988
Punjab	5			212	256		314	1017
J&K					250			250
Haryana	96			223	232			705
Grand Total	2692	3771	2002	4535	7495	212	314	21021

Note: The following operators were not surveyed due to reasons given below

Reliance Info- West Bengal, Karnataka and **Airtel** –Maharastra, Kerala, Gujrat **(Subscriber is very low i.e less than 50000 and Could not locate subscribers due to non availability of Subscriber List/ Directory)**

BSNL: A&N, Uttranchal,North East-2, Jharkhand,Chattisgarh **(Assumed to be merged with WB,UPW,NE1,Bihar and MP respectively)**

3.4.2 PERFORMACE

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	9	17	6	22	12	9	5	63	32	49.2
% Satisfied with Billing services (90%)	15	9	17	3	22	7	9	7	63	26	58.7
% Satisfied with help services (90%)	15	15	17	17	22	22	9	9	63	63	0
% Satisfied with Network Performance (95%)	15	11	17	9	22	13	9	8	63	41	34.9
% Satisfied with maintainability (95%)	15	11	17	8	22	17	9	8	63	44	30.18
%Satisfied with supplementary services (95%)	15	1	17	0	22	0	9	1	63	2	96.8
Overall customer satisfaction (95%)	15	14	17	9	22	18	9	9	63	50	20.6

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

TABLE SF:15 **CRITICAL ANALYSIS**

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

Parameters	Metro Circles	A Circles	B Circles	C Circles
% Satisfied with provision of service (90%)				
% Satisfied with Billing services (90%)				Orissa-Tata-42% Bihar-BSNL-46%
% Satisfied with help services (90%)			UP(E)-BSNL-36%	
% Satisfied with Network Performance (95%)				
% Satisfied with maintainability (95%)				
Overall customer satisfaction (95%)				
%Satisfied with supplementary services (95%)				

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   PREFORMANCE REPORT - QOS CELLULAR
Metro Circles

Parameters / Benchmark		Chennai					Delhi						Kolkata					
		Bharti	BSNL	Hutch	Rel Info	Tata	Bharti	Hutch	Idea	MTNL	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	RISL	Tata
Accumulated down time of community isolation	<24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	50.47	0.00
Call Setup Success Rate	>95%	99.43	97.81	99.96	98.80	99.93	98.94	99.09	99.98	98.83	99.47	98.11	96.83	82.50	99.92	99.44	99.19	97.23
Service Access Delay	9-20 sec	3.65	dnp	2.60	1.31	13.13	3.50	7.98	3.11	8.49	dnp	11.20	17.48	16.60	19.00	dnp	17.40	9.10
SDCCH /paging channel congestion <1%	<1%	0.120	0.190	0.970	5.390	0.000	0.130	0.008	0.870	10.500	0.000	0.000	0.750	0.740	0.250	0.000	0.010	0.000
TCH Congestion < 2%	< 2%	0.200	0.605	1.670	0.200	0.008	0.106	0.035	1.440	4.920	0.530	0.310	0.740	1.320	0.800	0.560	0.130	0.620
Call Drop Rate	<3%	0.56	0.71	0.70	0.50	0.01	1.21	1.07	0.50	dnp	0.57	0.66	1.31	0.73	0.70	0.67	0.99	0.69
% of connections with good voice quality	>95%	98.61	dnp	99.39	99.61	96.93	96.60	100.00	96.02	dnp	dnp	96.67	96.10	dnp	95.73	dnp	98.79	95.80
%of call answered (electronically) within 20 sec	>80%	dnp	85.00	100.00	99.50	100.00	99.58	100.00	100.00	92.50	99.50	100.00	95.35	84.00	dnp	99.50	n/app	99.50
% of call answered(electronically) within 40 sec	>95%	dnp	96.00	100.00	100.00	100.00	99.88	100.00	100.00	95.00	99.50	100.00	98.58	99.00	dnp	99.50	n/app	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	dnp	89.00	74.00	48.99	85.00	97.60	74.00	100.00	90.00	37.50	98.00	98.13	81.00	dnp	46.45	100.00	100.00
% of call answered by operator(voice to voice t within 90 sec	>95%	dnp	100.00	100.00	55.87	90.00	98.58	100.00	100.00	95.20	44.96	100.00	99.19	96.00	dnp	53.32	100.00	100.00
Billing Complaints per 100 bills issued	<0.1%	0.090	Nd	0.010	0.065	0.0046	0.060	0.073	0.000	0.124	0.065	0.012	0.040	0.100	0.040	0.065	n/app	0.270
% of billing complaints resolved within 4 weeks	100%	100.00	Nd	100.00	100.00	100.00	100.00	100.00	100.00	98.26	100.00	100.00	100.00	100.00	100.00	100.00	n/app	100.00

Parameters / Benchmark		Chennai					Delhi						Kolkata					
		Bharti	BSNL	Hutch	Rel Info	Tata	Bharti	Hutch	Idea	MTNL	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	RISL	Tata
Period of all refunds/payment due to customers from the date of resolution of complaints	100%	100.00	nd	100.00	100.00	100.00	100.00	97.99	100.00	99.73	100.00	100.00	100.00	22.00	100.00	100.00	n/app	75.70

Parameters / Benchmark		Mumbai					
		Bharti	BPL	Hutch	MTNL	Rel Info	Tata
Accumulated down time of community isolation	<24	0.00	18.18	0.00	71.05	0.00	0.00
Call Setup Success Rate	>95%	99.29	99.40	99.59	98.82	99.49	98.32
Service Access Delay	9-20 sec	3.18	10.81	10.50	dnp	dnp	8.90
SDCCH /paging channel congestion <1%	<1%	0.445	0.210	0.440	0.933	0.000	0.000
TCH Congestion	< 2%	0.697	1.420	1.520	1.690	0.515	0.360
Call Drop Rate	<3%	1.20	1.43	1.86	dnp	0.78	0.33
% of connections with good voice quality	>95%	96.91	98.85	95.60	dnp	dnp	95.14
%of call answered (electronically) within 20 sec	>80%	97.00	82.00	99.59	84.00	99.50	100.00
% of call answered(electronically) within 40 sec	>95%	97.33	85.00	99.59	97.00	99.50	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	95.00	88.00	88.40	85.00	37.57	75.00
% of call answered by operator(voice to voice t within 90 sec	>95%	96.00	89.00	93.28	97.00	45.99	79.00

Parameters / Benchmark		Mumbai					
		Bharti	**BPL**	**Hutch**	**MTNL**	**Rel Info**	**Tata**
Billing Complaints per 100 bills issued	<0.1%	0.100	0.097	0.005	0.569	0.070	0.570
% of billing complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	93.97
Period of all refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	ni	100.00	96.45

DNP – Data not provided; ND - Not done; NA – Not applicable.

MSC DATA - POI

	Delhi						Mumbai						Kolkata				
	Bharti	Hutch	Tata	Idea	MTNL	Rel Info	Bharti	Hutch	Tata	BPL	MTNL	Rel Info	Bharti	Hutch	Tata	BSNL	Rel Info
Total POIs	13	30	97	75	36	27	120	54	175	13	26	34	35	26	28	14	5
POIs Not Meeting	4	1	11	1	2	0	9	1	3	1	2	1	2	1	1	0	0

	Chennai					
	Bharti	Hutch	Tata	BSNL	Rel Info	Aircel
Total POIs	34	23	32	29	34	31
POIs Not Meeting	1	0	1	0	1	0

Practical Data - INTER OPERATOR CALL ASSESSMENT

	Delhi						Mumbai						Kolkata					
	Bharti	Hutch	Tata	Idea	MTNL	Rel Info	Bharti	Hutch	Tata	BPL	MTNL	Rel Info	Bharti	Hutch	Tata	BSNL	Rel Info	RISL
Total POIs	8	10	10	9	7	10	7	3	4	3	6	8	7	6	6	6	6	5
POIs Not Meeting	0	0	0	2	0	0	4	2	0	2	2	1	0	0	0	2	2	0

	Chennai					
	Bharti	Hutch	Tata	BSNL	Rel Info	Aircel
Total POIs	6	7	8	ND	7	ND
POIs Not Meeting	6	2	0	ND	0	ND

Legends:-

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

HELPLINE DATA – PRACTICAL

Operator	DELHI						MUMBAI						KOLKATA					
	Bharti	Hutch	Tata	Idea	MTNL	Rel Info	Bharti	Hutch	Tata	BPL	MTNL	Rel Info	Bharti	Hutch	Tata	BSNL	Rel Info	RISL
%of call answered (electronically) within 20 sec	98	100	100	96	100	100	98	92	100	80	92	100	100	90	100	100	18	n/app
% of call answered(electronically) within 40 sec	100	100	100	100	100	100	100	96	100	90	100	100	100	98	100	100	50	n/app
% of call answered by operator(voice to voice) within 60 sec	96	74	98	80	100	100	12	22	0	0	92	100	100	78	84	98	12	100
% of call answered by operator(voice to voice t within 90 sec	100	100	100	88	100	100	35	26	0	0	100	100	100	94	100	100	50	100

Operator	CHENNAI					
	Bharti	Hutch	Tata	BSNL	Rel Info	Aircel
%of call answered (electronically) within 20 sec	40	100	100	ND	100	ND
% of call answered(electronically) within 40 sec	88	100	100	ND	10	ND
% of call answered by operator(voice to voice) within 60 sec	100	96	96	ND	82	ND
% of call answered by operator(voice to voice t within 90 sec	100	100	100	ND	90	ND

A Circles

Parameters / Benchmark		AP						Gujarat						Karnataka					
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	Spice	Tata
Accumulated down time of community isolation	<24	177.6	5.78	14.07	9.67	2.10	36.00	20.60	167.5	19.40	72.57	1.07	13.68	20.02	24.14	23.62	2.18	18.05	23.30
Call Setup Success Rate	>95%	98.18	98.00	99.62	99.98	99.56	98.10	98.73	99.80	98.00	98.25	99.53	98.60	99.58	97.43	98.38	99.62	98.05	94.54
Service Access Delay	9-20 sec	2.28	7.12	5.00	1.40	dnp	5.40	4.84	dnp	dnp	3.88	dnp	4.60	7.30	9.37	10.25	dnp	8.33	2.68
SDCCH /paging channel congestion <1%	<1%	0.810	0.980	0.365	0.220	0.000	0.000	0.131	0.640	0.280	0.992	0.000	0.000	0.860	0.620	0.180	0.000	2.820	0.000
TCH Congestion < 2%	< 2%	1.810	3.390	0.380	1.225	0.440	0.180	0.215	1.431	0.940	0.800	0.465	0.040	1.800	1.540	1.610	0.380	17.140	1.000
Call Drop Rate	<3%	0.89	1.53	1.59	0.60	0.72	0.44	0.67	0.85	1.33	1.000	0.75	0.54	1.18	1.00	1.63	0.58	0.91	1.12
% of connections with good voice quality	>95%	97.89	89.40	98.29	99.50	dnp	99.61	98.28	99.64	dnp	97.87	dnp	96.39	99.35	77.33	98.67	99.94	99.05	97.39
%of call answered (electronically) within 20 sec	>80%	100.00	99.77	100.00	100.00	99.50	100.00	51.10	37.40	37.00	49.00	99.50	44.90	98.39	100.00	97.00	99.50	99.99	100.00
% of call answered(electronically) within 40 sec	>95%	100.00	100.00	100.00	100.00	99.50	100.00	51.10	50.00	50.00	56.00	99.50	48.00	98.40	100.00	100.00	99.50	100.00	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	90.00	23.11	100.00	91.00	52.12	100.00	88.85	62.00	50.00	58.00	51.42	59.00	74.83	63.00	36.55	38.72	91.10	96.00
% of call answered by operator(voice to voice t within 90 sec	>95%	96.00	61.00	100.00	100.00	59.15	100.00	90.87	71.00	90.00	74.00	60.17	65.00	78.26	81.00	37.31	45.18	99.16	100.00
Billing Complaints per 100 bills issued	<0.1%	0.005	0.040	0.070	0.038	0.065	0.140	0.104	0.012	0.034	0.044	0.065	0.59	0.500	0.050	0.030	0.055	0.010	0.530
% of billing 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	99.52	100.00	100.00	100.00	100.00	100.00

Parameters / Benchmark		AP						Gujarat						Karnataka					
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	Spice	Tata
Period of all 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	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00

Parameters / Benchmark		Maharastra						TN					
		Bharti	BPL	BSNL	Idea	Rel Info	Tata	Bharti	BPL	BSNL	Aircel	Rel Info	Tata
Accumulated down time of community isolation	<24	7.63	20.32	0.00	3.42	1.99	0.00	0.00	62.83	Nd	Nd	2.65	0.00
Call Setup Success Rate	>95%	99.35	98.18	99.54	98.75	99.50	98.31	99.34	99.21	Nd	Nd	99.47	99.42
Service Access Delay	9-20 sec	11.42	15.57	7.90	9.78	dnp	9.80	dnp	2.60	Nd	Nd	dnp	10.04
SDCCH /paging channel congestion <1%	<1%	0.480	1.400	n/a	0.690	0.000	0.000	0.660	0.970	Nd	Nd	0.000	0.000
TCH Congestion < 2%	< 2%	0.640	1.860	n/a	1.510	0.505	0.910	0.680	1.720	Nd	Nd	0.520	0.205
Call Drop Rate	<3%	0.47	1.24	n/a	1.46	0.81	0.54	0.77	0.70	Nd	Nd	1.60	0.01
% of connections with good voice quality	>95%	97.56	99.86	n/a	97.03	dnp	96.05	dnp	99.39	Nd	Nd	dnp	96.78
%of call answered (electronically) within 20 sec	>80%	84.00	100.00	100.00	100.00	99.50	100.00	95.00	89.00	Nd	Nd	99.50	100.00
% of call answered(electronically) within 40 sec	>95%	84.00	100.00	100.00	100.00	99.50	100.00	100.00	92.00	Nd	Nd	99.50	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	56.00	50.80	99.54	84.63	37.57	88.00	94.00	58.00	Nd	Nd	48.99	95.00
% of call answered by operator(voice to voice t within 90 sec	>95%	96.00	50.80	99.90	91.08	45.99	96.00	95.00	69.00	Nd	Nd	55.87	97.00

Parameters / Benchmark		Maharastra						TN					
		Bharti	BPL	BSNL	Idea	Rel Info	Tata	Bharti	BPL	BSNL	Aircel	Rel Info	Tata
Billing Complaints per 100 bills issued	<0.1%	0.044	0.010	0.040	0.520	0.065	0.990	0.970	0.010	Nd	Nd	0.065	0.410
% of billing complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	Nd	Nd	100.00	100.00
Period of all 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	Nd	Nd	100.00	74.00

DNP – Data not provided; ND - Not done;

MSC DATA – POI

	Andhra Pradesh						Gujarat						Karnataka					
	Bharti	Hutch	Tata	BSNL	Rel Info	Idea	Bharti	Hutch	Tata	BSNL	Rel Info	Idea	Bharti	Spice	BSNL	Rel Info	Hutch	Tata
Total POIs	36	32	26	14	31	24	22	28	27	57	18	48	29	20	13	31	28	32
POIs Not Meeting	1	0	1	1	2	1	1	2	2	4	0	1	2	2	1	2	1	2

	Maharashtra						Tamil Nadu					
	Rel Info	Bharti	BSNL	BPL	Tata	Idea	Rel Info	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
Total POIs	29	65	30	28	21	83	18	22	21	16	34	29
POIs Not Meeting	8	3	1	7	0	8	2	1	0	2	3	1

DNP – Data not provided; ND - Not done.

PRACTICAL DATA – INTER OPERATOR CALL ASSESSMENT

	Andhra Pradesh						Gujarat						Karnataka					
	Bharti	Hutch	Tata	BSNL	Rel Info	Idea	Bharti	Hutch	Tata	BSNL	Rel Info	Idea	Bharti	Spice	BSNL	Rel Info	Hutch	Tata
Total POIs	8	8	8	8	8	7	7	8	8	7	8	8	7	7	7	7	7	7
POIs Not Meeting	0	3	4	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0

	Maharashtra						Tamil Nadu					
	Rel Info	Bharti	BSNL	BPL	Tata	Idea	Rel Info	Bharti	Aircel	BSNL	Tata	Hutch (BPL)
Total POIs	8	8	8	8	8	8	8	8	ND	ND	7	8
POIs Not Meeting	1	0	0	1	0	0	3	0	ND	ND	0	1

HELPLINE DATA – PRACTICAL

Operator	AP						GUJ						KARNATAKA					
	Bharti	Hutch	Tata	BSNL	Rel Info	Idea	Bharti	Hutch	Tata	BSNL	Idea	Rel Info	Bharti	Spice	BSNL	Rel Info	Hutch	Tata
%of call answered (electronically) within 20 sec	100	72	100	80	94	92	45	37	42	45	41	40	96	100	48	100	96	100
% of call answered(electronically) within 40 sec	100	90	100	92	94	100	50	59	50	50	56	50	100	100	48.5	100	100	100
% of call answered by operator(voice to voice) within 60 sec	84	64	100	18	68	70	50	50	100	50	52	56	76	100	45.5	92	92	98
% of call answered by operator(voice to voice t within 90 sec	100	84	100	70	70	95	100	100	100	100	100	100	100	100	60	100	100	100

Operator	MAH						TN					
	Rel Info	Bharti	BSNL	BPL	Tata	Idea	Rel Info	Bharti	Aircel	BSNL	Tata	Hutch
%of call answered (electronically) within 20 sec	20	84	100	100	100	100	100	95	ND	ND	100	84
% of call answered(electronically) within 40 sec	20	84	100	100	100	100	100	100	ND	ND	100	100
% of call answered by operator(voice to voice) within 60 sec	12	56	78	88	88	52	52.5	67	ND	ND	91	92
% of call answered by operator(voice to voice t within 90 sec	12	96	94	92	96	64	77.5	90	ND	ND	100	100

B Circles

Parameters / Benchmark		Haryana						Kerala						MP					
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BPL	BSNL	Idea	Rel Info	Tata	Bharti	BSNL	Idea	Rel Tel	Rel Info	Tata
Accumulated down time of community isolation	<24	45.00	7.10	7.58	7.17	1.87	54.00	24.95	14.80	43.35	65.30	1.18	67.63	16.23	15.15	17.38	18.66	1.27	3.77
Call Setup Success Rate	>95%	99.29	97.40	99.60	99.97	99.70	97.56	99.45	95.76	97.76	99.03	99.58	99.85	98.93	94.50	98.57	100.00	99.32	99.50
Service Access Delay	9-20 sec	3.73	2.80	3.08	2.77	Dnp	1.40	8.06	7.79	n/a	14.16	Dnp	17.40	11.36	13.17	3.71	14.00	dnp	3.33
SDCCH /paging channel congestion <1%	<1%	0.190	0.143	0.020	0.390	0.000	17.000	0.306	0.560	0.366	0.466	0.000	0.000	0.250	0.300	0.790	0.470	0.000	0.000
TCH Congestion < 2%	< 2%	0.280	1.400	0.200	1.050	0.305	0.690	0.300	1.070	1.700	1.456	0.425	0.740	1.080	0.800	1.340	19.370	0.685	0.000
Call Drop Rate	<3%	1.31	2.75	1.64	0.71	0.98	0.78	1.55	1.64	1.48	0.72	0.85	0.51	0.93	1.42	1.20	1.66	0.98	0.91
% of connections with good voice quality	>95%	96.20	97.07	97.32	99.46	Dnp	97.97	98.94	98.48	dnp	98.20	Dnp	98.66	96.12	88.05	98.93	96.55	dnp	98.63
%of call answered (electronically) within 20 sec	>80%	100.00	96.00	100.00	98.00	99.50	86.00	96.50	100.00	93.50	100.00	95.50	97.00	99.90	84.50	100.00	n/app	99.50	98.60
% of call answered(electronically) within 40 sec	>95%	100.00	100.00	100.00	100.00	99.50	100.00	100.00	100.00	100.00	100.00	95.50	100.00	99.99	85.50	100.00	n/app	99.50	99.98
% of call answered by operator(voice to voice) within 60 sec	>80%	100.00	70.00	100.00	94.00	69.57	52.00	89.00	100.00	84.00	85.00	46.45	93.00	97.08	42.00	97.46	96.00	58.19	92.40
% of call answered by operator(voice to voice t within 90 sec	>95%	100.00	100.00	100.00	100.00	78.04	68.00	95.00	100.00	95.00	95.00	53.32	95.00	98.76	55.00	99.33	100.00	69.01	96.30
Billing Complaints per 100 bills issued	<0.1%	0.085	0.000	0.001	0.160	0.070	1.750	Nd	0.030	Nd	0.080	0.075	Nd	0.400	0.390	0.045	0.000	0.070	0.480
% of billing complaints resolved within 4 weeks	100%	100.00	100.00	100.00	100.00	100.00	100.00	Nd	100.00	Nd	100.00	100.00	Nd	100.00	100.00	100.00	100.00	100.00	100.00

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Parameters / Benchmark		Haryana						Kerala						MP					
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BPL	BSNL	Idea	Rel Info	Tata	Bharti	BSNL	Idea	Rel Tel	Rel Info	Tata
Period of all 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	nd	100.00	nd	100.00	100.00	Nd	100.00	100.00	100.00	100.00	100.00	100.00

Parameters / Benchmark		Punjab							Raj					UP - E				
		Bharti	BSNL	Hutch	Rel Info	Spice	HFCL	Tata	Bharti	BSNL	Hutch	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	Tata
Accumulated down time of community isolation	<24	0.00	0.00	0.00	2.22	14.00	0.00	0.00	68.16	21.66	15.17	1.96	17.27	14.27	14	0.00	2.38	7.28
Call Setup Success Rate	>95%	99.12	99.70	99.31	99.71	95.67	97.65	98.25	97.42	97.60	98.50	99.50	97.42	99.01	97.15	99.60	99.44	97.40
Service Access Delay	9-20 sec	3.50	3.20	4.90	dnp	5.98	10.00	1.41	8.00	dnp	5.60	dnp	1.38	3.63	7.00	9.00	dnp	11.05
SDCCH /paging channel congestion <1%	<1%	0.410	0.050	0.080	0.000	0.420	0.000	0.000	0.590	0.450	1.410	0.000	0.000	1.150	1.220	0.470	0.000	0.000
TCH Congestion	< 2%	0.350	0.450	0.240	0.290	2.820	0.003	0.003	0.400	1.450	1.570	0.500	0.320	1.190	0.340	1.900	0.565	0.180
Call Drop Rate	<3%	1.70	1.21	1.42	0.82	1.43	0.68	0.74	1.48	2.40	1.76	0.94	0.79	1.65	2.84	1.60	0.98	0.88
% of connections with good voice quality	>95%	98.67	95.32	99.16	dnp	98.23	n/app	96.08	95.53	85.70	95.10	dnp	96.50	97.88	97.80	85.12	dnp	99.52
%of call answered (electronically) within 20 sec	>80%	100.00	100.00	100.00	99.50	100.00	100.00	74.00	dnp	68.50	98.75	99.50	Dnp	98.00	99.92	100.00	99.50	75.00
% of call answered(electronically) within 40 sec	>95%	100.00	100.00	100.00	99.50	100.00	100.00	100.00	dnp	69.10	98.80	99.50	n/a	100.00	99.97	100.00	99.50	no prov
% of call answered by operator(voice to voice)	>80%	86.00	80.00	92.00	69.57	74.00	96.00	26.00	dnp	86.20	47.39	56.47	89.56	95.00	3.97	80.00	13.85	25.00

Parameters / Benchmark		Punjab							Raj					UP - E				
		Bharti	BSNL	Hutch	Rel Info	Spice	HFCL	Tata	Bharti	BSNL	Hutch	Rel Info	Tata	Bharti	BSNL	Hutch	Rel Info	Tata
within 60 sec																		
% of call answered by operator(voice to voice t within 90 sec	>95%	100.00	100.00	100.00	78.04	84.00	100.00	62.00	dnp	88.00	100.00	65.74	93.91	100.00	5.99	100.00	18.47	28.88
Billing Complaints per 100 bills issued	<0.1%	0.080	0.010	0.080	0.070	0.040	0.040	2.100	dnp	0.012	0.087	0.070	0.072	0.200	0.390	0.050	0.070	0.185
% of billing 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
Period of all 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

Parameters / Benchmark		UP - W						WB						
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Dishnet	Hutch	Rel Tel	Rel Info	Tata
Accumulated down time of community isolation	<24	18.75	65.82	31.93	15.75	2.86	20.55	3.25	0.00	0.00	0.00	4.50	2.45	3.58
Call Setup Success Rate	>95%	96.30	98.36	99.86	99.67	99.46	97.56	98.61	98.50	99.90	98.60	95.31	99.41	96.65
Service Access Delay	9-20 sec	4.36	4.78	2.74	11.37	dnp	8.70	2.97	dnp	15.53	15.50	15.81	dnp	10.70
SDCCH /paging channel congestion <1%	<1%	0.756	0.560	0.426	0.976	0.000	0.000	3.150	0.200	0.210	0.400	0.960	0.000	0.000
TCH Congestion < 2%	< 2%	1.315	0.143	0.700	2.340	0.530	0.690	1.380	1.400	0.390	1.400	13.060	0.580	0.000

Parameters / Benchmark		UP - W						WB						
		Bharti	BSNL	Hutch	Idea	Rel Info	Tata	Bharti	BSNL	Dishnet	Hutch	Rel Tel	Rel Info	Tata
Call Drop Rate	<3%	1.56	1.76	1.98	0.90	2.28	0.83	1.94	2.10	0.04	1.85	2.59	1.31	0.94
% of connections with good voice quality	>95%	95.13	92.77	96.72	97.68	dnp	97.60	93.10	dnp	99.08	98.10	n/app	dnp	97.17
%of call answered (electronically) within 20 sec	>80%	99.98	99.87	99.98	36.00	99.50	99.99	97.60	86.00	dnp	100.00	n/app	99.50	dnp
% of call answered(electronically) within 40 sec	>95%	99.99	99.98	100.00	66.00	99.50	100.00	97.73	99.00	dnp	100.00	n/app	99.50	dnp
% of call answered by operator(voice to voice) within 60 sec	>80%	96.00	7.17	34.72	65.00	13.85	87.00	99.36	82.00	dnp	97.00	Dnp	46.45	dnp
% of call answered by operator(voice to voice t within 90 sec	>95%	97.00	11.42	83.30	69.00	18.47	96.00	99.48	97.00	dnp	99.00	Dnp	53.32	dnp
Billing Complaints per 100 bills issued	<0.1%	0.100	ni	0.089	0.069	0.080	0.185	0.000	0.000	0.000	0.090	n/app	0.090	7.400
% of billing complaints resolved within 4 weeks	100%	100.00	ni	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	n/app	100.00	100.00
Period of all refunds/payment due to customers from the date of resolution of complaints	100%	100.00	ni	100.00	100.00	100.00	35.29	100.00	100.00	100.00	100.00	n/app	100.00	100.00

DNP – Data not provided; ND - Not done; NI - No recorded incidents by Operator

MSC DATA – POI

	Haryana						Kerala						Madhya Pradesh					
	Hutch	Idea	Rel Info	BSNL	Tata	Bharti	Hutch (BPL)	Bharti	BSNL	Tata	Idea	Rel Info	Rel Tel	Idea	Rel Info	BSNL	Tata	Bharti
Total POIs	24	21	9	23	33	27	13	11	26	33	45	26	19	58	35	53	65	59
POIs Not Meeting	0	3	0	2	8	4	0	2	2	0	5	4	1	17	10	1	11	3

	Rajasthan					UP (E)					Punjab						
	Hutch	Bharti	BSNL	Tata	Rel Info	Hutch	Bharti	BSNL	Tata	Rel Info	Spice	Hutch	Rel Info	BSNL	Tata	HFCL	Bharti
Total POIs	26	33	28	29	20	33	40	80	32	24	22	34	15	14	16	19	48
POIs Not Meeting	10	14	4	3	3	6	23	4	2	8	5	4	2	1	1	2	3

	UP (W)						West Bengal						
	Hutch	Idea	BSNL	Tata	Rel Info	Bharti	Rel Tel	Hutch	Rel Info	BSNL	Tata	Dishnet	Bharti
Total POIs	35	50	25	30	16	24	16	21	25	23	29	17	23
POIs Not Meeting	9	7	1	4	2	10	1	1	4	3	2	1	1

DNP – Data not provided; ND - Not done;

PRACTICAL DATA – INTER OPERATOR CALL ASSESSMENT

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

	Rajasthan					UP (E)					Punjab						
	Hutch	Bharti	BSNL	Tata	Rel Info	Hutch	Bharti	BSNL	Tata	Rel Info	Spice	Hutch	Rel Info	BSNL	Tata	HFCL	Bharti
Total POIs	5	6	5	5	5	6	6	7	8	6	7	7	7	7	7	7	7
POIs Not Meeting	1	0	2	1	2	4	3	1	1	4	0	0	1	0	1	0	0

	UP (W)						West Bengal						
	Hutch	Idea	BSNL	Tata	Rel Info	Bharti	Rel Tel	Hutch	Rel Info	BSNL	Tata	Dishnet	Bharti
Total POIs	6	7	8	6	6	6	6	8	8	6	7	6	6
POIs Not Meeting	3	7	7	2	3	2	1	0	1	0	0	0	3

HELPLINE DATA – PRACTICAL

Operator	Haryana						Kerla						M.P.					
	Hutch	Idea	BSNL	Rel Info	Tata	Bharti	Hutch	Bharti	BSNL	Tata	Idea	Rel Info	Rel Tel	Idea	Rel Info	BSNL	Tata	Bharti
%of call answered (electronically) within 20 sec	100	96	96	100	86	100	96	82	44	100	100	n/app	n/app	100	100	82	84	100
% of call answered(electronically) within 40 sec	100	100	96	100	100	100	100	90	44	100	100	94	n/app	100	100	92	100	100
% of call answered by operator(voice to voice) within 60 sec	100	94	70	100	52	100	88	98	42	98	n/app	n/app	96	86	100	86	88	100
% of call answered by operator(voice to voice t within 90 sec	100	100	100	100	68	100	98	98	42	100	68	68	100	100	100	90	100	100

Operator	Punjab							U.P.(E)					U.P.(W)					
	Spice	Hutch	Rel Info	BSNL	HFCL	Bharti	Tata	Bharti	Hutch	Tata	BSNL	Rel Info	Hutch	Idea	BSNL	Tata	Rel Info	Bharti
%of call answered (electronically) within 20 sec	100	100	100	100	100	100	74	90	100	100	20	100	100	92	86	92	22	72
% of call answered(electronically) within 40 sec	100	100	100	100	100	100	100	100	100	100	100	100	100	92	86	96	22	80
% of call answered by operator(voice to voice) within 60 sec	74	92	88	80	96	86	26	66	100	90	0	94	88	74	0	10	58	4
% of call answered by operator(voice to voice t within 90 sec	84	100	100	100	100	100	62	100	100	100	0	100	100	96	38	60	78	32

Operator	W.B.							Rajasthan				
	Rel Tel	Hutch	Rel Info	BSNL	Tata	Dishnet	Bharti	Hutch	Bharti	Tata	BSNL	Rel Info
%of call answered (electronically) within 20 sec	n/app	82	100	86	100	100	100	100	100	100	100	72
% of call answered(electronically) within 40 sec	n/app	94	100	100	100	100	100	100	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	100	78	60	82	100	100	90	100	100	100	0	0
% of call answered by operator(voice to voice t within 90 sec	100	94	100	100	100	100	100	100	100	100	8	16

C Circles

Parameters / Benchmark		Assam				Bihar					HP					J&K		
		Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Rel Tel	Rel Info	Tata	Bharti	BSNL	Rel Tel	Rel Info	Tata	Bharti	BSNL	Dishnet
Accumulated down time of community isolation	<24	0.00	0.00	43.43	0.00	6.75	9.50	7.60	1.00	0.00	0.00	0.00	20.46	2.47	29.60	0.00	0.00	0.00
Call Setup Success Rate	>95%	98.00	99.90	98.02	96.50	97.72	96.31	86.33	99.36	96.62	99.62	97.64	99.00	99.66	98.36	99.19	91.10	98.61
Service Access Delay	9-20 sec	8.20	2.63	14.06	15.04	3.36	11.99	3.39	dnp	9.31	3.25	5.75	8.18	dnp	1.33	21.01	0.00	dnp
SDCCH /paging channel congestion <1%	<1%	1.530	0.830	1.320	0.840	2.860	0.830	1.790	0.000	0.000	0.205	0.700	0.067	0.000	0.000	0.490	0.850	1.170
TCH Congestion	< 2%	2.800	1.710	1.990	5.150	2.270	1.690	13.560	0.640	0.000	0.480	1.800	1.680	0.335	0.460	0.390	2.000	0.130
Call Drop Rate	<3%	2.80	1.72	1.97	1.06	1.07	1.61	1.65	1.04	0.74	1.53	2.09	2.45	0.61	0.77	1.45	0.18	0.71
% of connections with good voice quality	>95%	Dnp	96.44	99.83	96.94	96.67	90.00	96.64	dnp	95.40	95.31	97.70	98.87	dnp	96.94	96.05	92.83	99.55
%of call answered (electronically) within 20 sec	>80%	98.00	87.00	100.00	n/app	86.39	86.00	n/app	99.50	99.61	100.00	99.80	n/app	99.50	100.00	100.00	100.00	100.00
% of call answered(electronically) within 40 sec	>95%	98.40	99.00	100.00	n/app	91.67	99.00	n/app	99.50	100.00	100.00	99.94	n/app	99.50	100.00	100.00	100.00	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	100.00	84.00	92.49	100.00	47.46	82.00	100.00	46.45	36.17	100.00	4.13	100.00	69.57	86.00	100.00	50.00	100.00
% of call answered by operator(voice to voice t within 90 sec	>95%	100.00	96.00	100.00	100.00	49.75	97.00	100.00	53.32	dnp	100.00	6.94	100.00	78.04	98.00	100.00	100.00	100.00
Billing Complaints per 100 bills issued	<0.1%	0.003	0.013	0.006	0.033	0.050	0.000	ni	0.080	0.290	0.030	0.000	0.000	0.060	1.360	0.006	ni	ni

Parameters / Benchmark		Assam				Bihar					HP					J&K		
		Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Rel Tel	Rel Info	Tata	Bharti	BSNL	Rel Tel	Rel Info	Tata	Bharti	BSNL	Dishnet
% of billing complaints resolved within 4 weeks	100%	66.29	100.00	100.00	100.00	100.00	100.00	ni	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	ni	ni
Period of all refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	55.50	100.00	61.50	100.00	ni	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	ni	ni

Parameters / Benchmark		NE				Orissa					
		Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Dishnet	Rel Tel	Rel Info	Tata
Accumulated down time of community isolation	<24	2.97	0.00	5.25	0.00	0.00	0.00	4.50	16.95	1.35	0.00
Call Setup Success Rate	>95%	99.15	99.00	97.95	97.50	98.43	97.45	98.79	99.15	99.75	97.87
Service Access Delay	9-20 sec	8.50	8.05	14.05	14.22	2.45	2.91	2.62	15.20	dnp	10.20
SDCCH /paging channel congestion <1%	<1%	0.280	0.530	1.130	2.360	0.250	0.850	0.450	0.280	0.000	0.000
TCH Congestion	< 2%	0.850	1.400	2.060	7.530	0.620	1.850	0.250	4.200	0.240	0.000
Call Drop Rate	<3%	0.85	1.45	2.18	2.58	1.24	1.42	0.88	1.62	1.38	0.89
% of connections with good voice quality	>95%	dnp	dnp	99.83	98.28	99.46	dnp	98.99	99.08	dnp	98.50

Parameters / Benchmark		NE				Orissa					
		Bharti	BSNL	Dishnet	Rel Tel	Bharti	BSNL	Dishnet	Rel Tel	Rel Info	Tata
%of call answered (electronically) within 20 sec	>80%	99.00	87.00	100.00	n/app	99.90	dnp	100.00	n/app	99.50	99.60
% of call answered(electronically) within 40 sec	>95%	99.60	99.00	100.00	n/app	100.00	dnp	100.00	n/app	99.50	100.00
% of call answered by operator(voice to voice) within 60 sec	>80%	100.00	82.00	96.62	100.00	96.37	dnp	89.76	99.00	58.19	36.17
% of call answered by operator(voice to voice t within 90 sec	>95%	100.00	97.00	100.00	100.00	98.00	dnp	dnp	100.00	69.01	dnp
Billing Complaints per 100 bills issued	<0.1%	0.210	0.000	1.450	0.008	0.040	dnp	0.390	0.430	0.065	0.100
% of billing complaints resolved within 4 weeks	100%	74.00	100.00	100.00	100.00	100.00	dnp	100.00	100.00	100.00	100.00
Period of all refunds/payment due to customers from the date of resolution of complaints	100%	100.00	100.00	100.00	100.00	100.00	dnp	100.00	77.00	100.00	66.60

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

MSC DATA - POI

	Assam				Bihar					Himachal Pradesh				
	Rel Tel	Bharti	Dishnet	BSNL	Rel Tel	Rel Info	Tata	BSNL	Bharti	Rel Tel	Rel Info	Tata	BSNL	Bharti
Total POIs	8	7	11	6	25	26	23	19	21	13	32	29	20	17
POIs Not Meeting	3	2	3	1	8	0	2	4	3	2	3	1	0	9

	Jammu & Kashmir			Orissa						North East			
	Dishnet	Bharti	BSNL	Rel Tel	Rel Info	Tata	Dishnet	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL
Total POIs	13	16	9	12	8	14	14	7	16	4	9	11	5
POIs Not Meeting	1	0	3	1	0	2	1	2	1	3	1	2	1

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 Info	Tata	BSNL	Bharti	Rel Tel	Rel Info	Tata	BSNL	Bharti
Total POIs	3	3	3	3	5	5	3	4	1	6	6	5	4	5
POIs Not Meeting	0	0	1	1	1	0	2	4	0	1	0	0	2	0

	Jammu & Kashmir			Orissa						North East			
	Dishnet	Bharti	BSNL	Rel Tel	Rel Info	Tata	Dishnet	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL
Total POIs	2	2	2	7	6	6	6	5	6	3	3	3	3
POIs Not Meeting	0	0	1	1	1	0	5	3	1	0	1	1	3

HELPLINE DATA – PRACTICAL

Operator	Assam				Bihar					H.P.					NE			
	Rel Tel	Bharti	Disnet	BSNL	Rel Tel	Rel Info	Tata	BSNL	Bharti	Rel Tel	Rel Info	Tata	BSNL	Bharti	Rel Tel	Bharti	Dishnet	BSNL
%of call answered (electronically) within 20 sec	n/app	100	100	14	n/app	0	100	82	100	n/app	100	100	100	100	n/app	100	100	84
% of call answered(electronically) within 40 sec	n/app	100	100	14	n/app	52	100	94	100	n/app	100	100	100	100	n/app	100	100	100
% of call answered by operator(voice to voice) within 60 sec	60	24	100	92	100	99	100	70	92	100	100	86	0	100	100	94	100	20
% of call answered by operator(voice to voice t within 90 sec	100	75	100	100	100	100	100	94	100	100	100	98	16	100	100	100	100	52

Operator	J & K			Orissa					
	Bharti	BSNL	Dishnet	Rel Tel	Rel Info	Tata	Dishnet	BSNL	Bharti
%of call answered (electronically) within 20 sec	100	100	100	n/app	100	100	100	100	100
% of call answered(electronically) within 40 sec	100	100	100	n/app	100	100	100	100	100
% of call answered by operator(voice to voice) within 60 sec	100	50	100	100	100	98	100	99	100
% of call answered by operator(voice to voice t within 90 sec	100	100	100	100	100	100	100	100	100

3.6.2 PERFORMANCE REPORT QOS - BASIC

METRO CIRCLES

Parameters / Benchmark		Chennai				Delhi				Kolkata			Mumbai			
		Bharti	BSNL	Reliance	Tata	Bharti	MTNL	Reliance	Tata	Bharti	BSNL	Reliance	Bharti	MTNL	Reliance	Tata
Provision of telephone after registration of demand	100%	Nd	43.20	95.00	Nd	88.79	77.98	84.50	100.00	91.83	68.39	89.50	85.90	75.04	84.50	81.13
Fault incidence(No.of faulats/100 subscrubers/mont)h	<5	Nd	8.46	1.90	Nd	3.42	12.22	0.84	0.06	4.59	7.36	1.66	3.77	8.78	1.22	2.69
Fault repaired by next working day	>90	Nd	35.14	98.50	Nd	2.97	86.50	99.65	100.00	81.93	96.05	100.00	85.00	47.68	100.00	97.81
Mean Time to Repair (MTTR)	<8	Nd	7.92	6.50	Nd	DNP	7.13	5.26	4.00	9.47	8.05	5.17	6.00	5.46	5.79	4.09
Grade of service(Junction between local exchange)	<0.002	Nd	0.32	0.023	Nd	0.0147	0.004	0.00	0.00	0.000689	0.00275	dnp	0.00	0.34	0.00	0.0053
Grade of service(Outgoing Junction from Tax to Local exchange)	<0.005	Nd	0.38	.1289	Nd	N/A	000	0.00	N/A	0.00	.1410	Dnp	0.00	0.00	0.00	.002
Grade of service(Incoming Junction from local Exchange to Tax)	<0.005	Nd	0.51	.25	Nd	.0192	000	0.00	0.00	.00825	.0842	Dnp	0.00	0.00	0.00	.0026
Grade of service(Incoming or Outgoing Junction between TAX)	<0.005	Nd	N/A	.54	Nd	N/APP	N/A	.74	N/A	N/APP	N/A	dnp	N/APP	N/A	.31	N/A
Call completion rate with in local network	>55%	Nd	67.67	63.66	Nd	60.71	64.21	65.14	53.92	60.04	46.22	dnp	66.80	51.25	54.29	63.79
Metering & billing credibility	0.1%	Nd	0.01	0.00	Nd	1.09	0.06	0.06	0.02	0.05	0.28	0.00	0.14	0.55	0.05	dnp
Customer care (promptness in	95%	Nd	70.72	96.00	Nd	30.20	53.74	75.00	100.00	50.00	72.97	64.00	73.90	42.73	89.00	59.12

Parameters / Benchmark		Chennai				Delhi				Kolkata			Mumbai			
		Bharti	BSNL	Reliance	Tata	Bharti	MTNL	Reliance	Tata	Bharti	BSNL	Reliance	Bharti	MTNL	Reliance	Tata
attending to customer request)(a)Shifts																
(b)Closures	95%	Nd	67.00	99.00	Nd	DNP	93.61	94.00	99.68	100.00	35.84	98.00	0.00	46.55	98.00	28.60
©Additional facility	95%	Nd	87.36	99.00	Nd	90.86	77.70	99.00	99.00	91.60	100.00	99.00	92.00	65.73	99.00	95.77
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
Time taken for refund of deposits after closer	100%	Nd	98.50	100.00	Nd	22.09	100.00	100.00	100.00	100.00	59.30	100.00	Nd	67.84	100.00	Nd

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	Reliance	Tata	Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata
Provision of telephone after registration of demand	100%	80.50	60.02	99.64	Nd	dnp	68.50	92.50	94.57	80.00	18.61	89.00	98.54
Fault incidence(No.of faulats/100 subscrubers/month)	<5	8.50	4.43	2.36	Nd	dnp	5.28	4.82	1.18	1.80	13.93	0.43	24.60
Fault repaired by next working day	>90	93.80	63.70	100.00	Nd	dnp	57.00	99.80	90.85	99.61	49.79	99.33	60.80
Mean Time to Repair (MTTR)	<8	5.04	6.96	7.60	Nd	dnp	6.66	6.69	7.17	83.61	6.56	5.43	8.23

Parameters / Benchmark		AP				Gujarat				Karnataka			
		Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata
Grade of service(Junction between local exchange)	<0.002	0.00	0.06	4.10	Nd	0.16677	0.3934	0.32	0.000519	0.00	0.066	0.72	0.001
Grade of service(Outgoing Junction from Tax to Local exchange)	<0.005	N/A	0.00	1.9	Nd	N/A	.4583	.25	N/A	0.00	0.00	1.16	N/A
Grade of service(Incoming Junction from local Exchange to Tax)	<0.005	0.00	0.00	.48	Nd	Dnp	.51470	.003	.00255	0.00	0.00	.14	0.00
Grade of service(Incoming or Outgoing Junction between TAX)	<0.005	N/APP	.016	3.7	Nd	N/APP	.5418	.07	N/A	N/APP	N/A	4.25	N/A
Call completion rate with in local network	>55%	65.92	51.25	63.64	Nd	dnp	48.14	41.25	65.00	62.87	33.97	60.19	52.37
Metering & billing credibility	0.1%	0.37	0.00	0.04	Nd	dnp	0.00	0.05	dnp	0.05	dnp	0.015	dnp
Customer care (promptness in attending to customer request) (a)Shifts	95%	26.79	67.28	82.00	Nd	dnp	74.63	70.00	94.15	86.12	11.70	63.00	57.50
(b)Closures	95%	dnp	48.48	97.00	Nd	dnp	87.10	99.00	ni	56.32	23.06	99.00	0.00
©Additional facility	95%	98.71	61.56	100.00	Nd	dnp	75.17	100.00	98.71	86.44	15.12	95.00	91.75
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
Time taken for refund of deposits after closer	100%	dnp	100	100	Nd	dnp	dnp	100	100	100	100	100	Nd

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Parameters / Benchmark		Maharastra				TN			
		Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata
Provision of telephone after registration of demand	100%	91.55	25.29	93.50	63.33	Nd	87.19	95.50	Nd
Fault incidence(No.of faulats/100 subscrubers/month)	<5	4.68	7.91	0.50	3.89	Nd	3.38	0.88	Nd
Fault repaired by next working day	>90	90.00	63.95	99.02	96.98	Nd	97.99	98.93	Nd
Mean Time to Repair (MTTR)	<8	8.74	6.60	5.32	3.62	Nd	5.31	7.38	Nd
Grade of service(Junction between local exchange)	<0.002	ni	0.10	0.51	0.20	Nd	0.00	2.39	Nd
Grade of service(Outgoing Junction from Tax to Local exchange)	<0.005	Ni	.15	.11	N/A	Nd	0.00	1.007	Nd
Grade of service(Incoming Junction from local Exchange to Tax)	<0.005	.068	0	2.83	0.00	Nd	0.00	1.251	Nd
Grade of service(Incoming or Outgoing Junction between TAX)	<0.005	N/APP	N/A	.07	N/A	Nd	0.00	.28	Nd
Call completion rate with in local network	>55%	26.80	51.00	42.98	63.00	Nd	67.55	35.87	Nd
Metering & billing credibility	0.1%	0.02	0.01	0.07	1.20	Nd	0.04	0.03	Nd
Customer care (promptness in attending to customer request)(a)Shifts	95%	94.50	98.00	93.00	100.00	Nd	62.05	100.00	Nd
(b)Closures	95%	91.78	100.00	91.00	100.00	Nd	98.05	99.00	Nd
©Additional facility	95%	96.16	100.00	98.00	100.00	Nd	93.20	99.00	Nd
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP

Parameters / Benchmark		Maharastra				TN			
		Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
Time taken for refund of deposits after closer	100%	100	88.43	100	100	Nd	86.92	100	Nd

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

B Circles

Parameters / Benchmark		Haryana			Kerala			MP			CTG
		Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL
Provision of telephone after registration of demand	100%	96.72	39.64	77.00	59.96	28.21	91.50	97.34	95.91	94.00	96.40
Fault incidence (No.of faulats/100 subscrubers/month	<5	2.70	7.35	0.00	8.30	17.31	1.69	3.92	4.92	4.25	23.38
Fault repaired by next working day	>90	99.26	60.45	100.00	95.00	70.97	100.00	96.91	98.06	99.65	72.39
Mean Time to Repair (MTTR)	<8	7.41	13.60	0.00	7.59	11.22	4.06	6.16	4.95	4.88	10.32
Grade of service(Junction between local exchange)	<0.002	0.00	0.003	0.063	0.00	0.37	0.38	0.00	0.00	0.03	0.00

Parameters / Benchmark		Haryana			Kerala			MP			CTG
		Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL
Grade of service(Outgoing Junction from Tax to Local exchange)	<0.005	N/A	0.00	.3679	0.00	.006	.78	N/A	0.00	.58	.005
Grade of service(Incoming Junction from local Exchange to Tax)	<0.005	0.00	0.00	.2	.00239	.12	.003	0.00	0.00	0.00	0.00
Grade of service(Incoming or Outgoing Junction between TAX)	<0.005	N/APP	1.768	.09	N/APP	0	.007	N/APP	0.00	.036	000
Call completion rate with in local network	>55%	59.80	78.39	60.03	34.70	63.99	53.04	66.37	54.17	55.52	47.91
Metering & billing credibility	0.1%	0.10	0.21	0.00	2.59	0.11	0.01	0.04	0.06	0.65	0.00
Customer care (promptness in attending to customer request)(a)Shifts	95%	97.64	95.91	0.00	18.18	36.86	98.00	51.63	96.45	57.00	93.10
(b)Closures	95%	93.78	99.48	100.00	0.00	72.49	91.00	96.61	96.13	81.00	91.35
©Additional facility	95%	95.16	100.00	100.00	84.82	61.32	99.00	83.91	99.98	98.00	87.30
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
Time taken for refund of deposits after closer	100%	96.00	81.96	100.00	55.84	99.75	100.00	20.00	54.10	100.00	95.67

Parameters / Benchmark		Punjab				Rajasthan			UP(E)			UP(W)			WB	
		Bharti	BSNL	HFCL	Relia nce	BSNL	Relianc e	Shyam	Bharti	BSNL	Reliance	Bharti	BSNL	Relian ce	BSNL	Relian ce
Provision of telephone after registration of demand	100 %	96.82	65.32	98.10	92.00	52.94	88.50	99.10	74.17	33.08	96.00	94.50	56.80	92.00	7.84	83.50
Fault incidence (No.of faulats/100 subscrubers /month)	<5	2.63	10.43	0.96	3.95	11.14	4.89	2.94	4.80	16.68	9.81	4.50	7.54	0.00	18.54	0.00
Fault repaired by next working day	>90	98.12	70.35	96.30	99.13	61.69	97.91	93.20	95.79	49.97	100.00	89.00	89.18	100.00	60.88	100.00
Mean Time to Repair (MTTR)	<8	9.70	11.26	5.77	5.78	8.86	7.50	9.23	5.64	13.57	4.52	9.00	15.13	0.00	8.23	0.00
Grade of service(Junc tion between local exchange)	<0.0 02	0.002	0.52	0.00004	0.028	0.03	0.053	0.001	dnp	0.003	0.08	0.003	0.10425	4.36	dnp	2.81
Grade of service(Outg oing Junction from Tax to Local exchange)	<0.0 05	N/A	.50	.00005	.76	.04	.4088	N/A	.00563	.00081	.5802	N/A	.4182	.38	.1533	3.82
Grade of service(Inco ming Junction from local Exchange to Tax)	<0.0 05	.001	.57	.000001	.64	.047	.0662	.001	.000022 8	.037	.48	0.00	.4936	2.23	.2266	2.07
Grade of service(Inco ming or Outgoing Junction	<0.0 05	N/APP	.60	N/APP	1.06	.010	.003	N/APP	N/APP	.0265	.68	N/APP	.141	.36	N/A	.017

Parameters / Benchmark		Punjab				Rajasthan			UP(E)			UP(W)			WB	
		Bharti	BSNL	HFCL	Reliance	BSNL	Reliance	Shyam	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL	Reliance
between TAX)																
Call completion rate with in local network	>55%	55.77	55.00	78.16	55.21	46.08	38.22	n/app	53.46	51.05	33.02	59.01	58.90	48.86	21.72	35.53
Metering & billing credibility	0.1%	0.18	0.01	0.04	0.02	0.21	0.00	0.01	0.03	0.00	0.10	0.02	0.01	2.78	0.00	0.06
Customer care (promptness in attending to customer request)(a)Shifts	95%	99.62	52.99	98.05	67.00	79.16	ni	73.00	29.16	49.67	76.00	31.06	77.81	100.00	64.28	100.00
(b)Closures	95%	85.19	98.39	97.42	98.00	95.23	100.00	100.00	26.97	59.79	99.00	100.00	77.45	100.00	100.00	100.00
©Additional facility	95%	99.70	78.16	98.60	100.00	95.30	99.00	98.23	90.11	81.33	100.00	89.25	90.20	100.00	78.64	100.00
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP

Parameters / Benchmark		Punjab				Rajasthan			UP(E)			UP(W)			WB	
		Bharti	BSNL	HFCL	Reliance	BSNL	Reliance	Shyam	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL	Reliance
sec																
Time taken for refund of deposits after closer	100 %	90.00	100.00	100.00	100.00	83.59	100.00	91.00	100.00	89.96	100.00	95.00	69.23	100.00		42.85

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

Parameters / Benchmark		Assam	Bihar		HP		J&K	Jharkand	NE-I	Orissa	
		BSNL	BSNL	Reliance	BSNL	Reliance	BSNL	BSNL	BSNL	BSNL	Reliance
Provision of telephone after registration of demand	100%	9.33	3.80	80.00	58.34	100.00	3.98	42.50	25.58	45.06	87.00
Fault incidence(No.of faulats/100 subscrubers/month)	<5	9.31	18.35	0.00	8.87	0.00	16.20	9.30	7.76	9.12	0.00
Fault repaired by next working day	>90	76.03	48.63	100.00	77.27	100.00	72.90	97.74	41.95	95.71	100.00
Mean Time to Repair (MTTR)	<8	11.05	14.80	0.00	7.27	0.00	8.26	6.17	11.90	5.61	0.00
Grade of service(Junction between local exchange)	<0.002	0.5009	0.6223	0.063	0.00	0.063	0.00	0.315	0.00118	0.00018	11.84
Grade of service(Outgoing Junction from Tax to Local exchange)	<0.005	.500	.63000	.4335	0.00	.26	0.00	.50100	.00103	.17372	2.4
Grade of service(Incoming Junction from local Exchange to Tax)	<0.005	.58	.72250	.07	0.00	.14	0.00	.4900	.016	.30095	.2495
Grade of service(Incoming or Outgoing Junction between TAX)	<0.005	N/A	N/A	.03	0.00	.1631	0.00	N/A	.032	N/A	.003
Call completion rate with in local network	>55%	47.00	50.95	100.00	72.39	100.00	56	44	23.87	69.00	69.54
Metering & billing credibility	0.1%	0.03	0.85	0.00	0.00	0.00	0.00	0.34	1.19	0.02	0.00
Customer care (promptness in attending to customer request)(a)Shifts	95%	66.66	100.00	ni	100.00	0.00	ni	98.35	17.85	99.00	100.00
(b)Closures	95%	100.00	100.00	100.00	99.72	100.00	100.00	100.00	96.29	97.50	100.00
©Additional facility	95%	100.00	100.00	100.00	97.67	100.00	ni	100.00	77.42	100.00	100.00
%of call answered (electronically) within 20 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered(electronically) within 40 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice) within 60 sec	80%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
% of call answered by operator(voice to voice t within 90 sec	95%	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP	DNP
Time taken for refund of deposits after closer	100%	100.00	100.00	100.00	100.00	100.00	100.00	54.10	62.29	37.23	100.00

IVR Data – Practical

Metro Circle

Parameters / Benchmark		Chennai				Delhi				Kolkata			Mumbai			
		Bharti	BSNL	Reliance	Tata	Bharti	MTNL	Reliance	Tata	Bharti	BSNL	Reliance	Bharti	MTNL	Reliance	Tata
%of call answered (electronically) within 20 sec	80%	ND	100	ND	ND	ND	ND	ND	100	ND	100	ND	ND	95	ND	100
% of call answered(electronically) within 40 sec	95%	ND	100	ND	ND	ND	ND	ND	100	ND	100	ND	ND	100	ND	100
% of call answered by operator(voice to voice) within 60 sec	80%	ND	6.96	ND	ND	100	95.05	ND	99	99.43	ND	ND	72	55.21	ND	75
% of call answered by operator(voice to voice t within 90 sec	95%	ND	10.44	ND	ND	100	96	ND	100	100	ND	ND	100	60	ND	78.6

A Circle

Parameters / Benchmark		AP				Gujarat				Karnataka				Maharastra			
		Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata	Bharti	BSNL	Reliance	Tata
%of call answered (electronically) within 20 sec	80%	ND	86	ND	ND	ND	ND	ND	100	100	ND	ND	100	ND	100	ND	100
% of call answered(electronically) within 40 sec	95%	ND	92	ND	ND	ND	ND	ND	100	100	ND	ND	100	ND	100	ND	100
% of call answered by operator(voice to voice) within 60 sec	80%	64	96	ND	ND	50	ND	ND	ND	ND	ND	ND	94	92	80	ND	66
% of call answered by operator(voice to voice t within 90 sec	95%	76	92	ND	ND	70	ND	ND	ND	ND	ND	ND	95	94	96	ND	66

Parameters / Benchmark		TN			
		Bharti	BSNL	Reliance	Tata
%of call answered (electronically) within 20 sec	80%	ND	100	ND	ND

Parameters / Benchmark		TN			
		Bharti	BSNL	Reliance	Tata
% of call answered(electronically) within 40 sec	95%	ND	100	ND	ND
% of call answered by operator(voice to voice) within 60 sec	80%	ND	56.2	ND	ND
% of call answered by operator(voice to voice t within 90 sec	95%	ND	70	ND	ND

B Circle

Parameters / Benchmark		Haryana			Kerala			MP			CTG	Punjab			
		Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL	Bharti	BSNL	HFCL	Reliance
%of call answered (electronically) within 20 sec	80%	ND	100	ND	100	98	ND	100	87.89	ND	78.8	100	100	100	ND
% of call answered(electronically) within 40 sec	95%	ND	100	ND	100	100	ND	100	99.66	ND	97.54	100	100	100	ND
% of call answered by operator(voice to voice) within 60 sec	80%	100	100	ND	92	6	ND	94.26	89.53	ND	73.13	100	96	96	ND
% of call answered by operator(voice to voice t within 90 sec	95%	100	100	ND	92	84	ND	98.31	98.82	ND	94.34	100	100	100	ND

Parameters / Benchmark		Rajasthan			UP(E)			UP(W)			WB	
		BSNL	Reliance	Shyam	Bharti	BSNL	Reliance	Bharti	BSNL	Reliance	BSNL	Reliance
%of call answered (electronically) within 20 sec	80%	98	ND	ND	ND	100	ND	100	90.8	ND	ND	ND
% of call answered(electronically) within 40 sec	95%	99	ND	ND	ND	86.4	ND	100	89.6	ND	ND	ND
% of call answered by operator(voice to voice) within 60 sec	80%	100	ND	93	88	100	ND	96	86.6	ND	100	ND
% of call answered by operator(voice to voice t within 90 sec	95%	100	ND	100	88	89.96	ND	100	90	ND	100	ND

C Circle

Parameters / Benchmark		Assam	Bihar		HP		J&K	Jharkand	NE-I	Orissa	
		BSNL	BSNL	Reliance	BSNL	Reliance	BSNL	BSNL	BSNL	BSNL	Reliance
%of call answered (electronically) within 20 sec	80%	89.47	ND	ND	100	ND	100	100	100	6.92	ND
% of call answered(electronically) within 40 sec	95%	93.73	ND	ND	100	ND	100	100	100	1.4	ND
% of call answered by operator(voice to voice) within 60 sec	80%	81.62	100	ND	100	ND	0	84.7	ND	90.32	ND
% of call answered by operator(voice to voice t within 90 sec	95%	94.84	100	ND	100	ND	0	22.9	62.29	92.32	ND

3.6.3   Performance Report – CSS Cellular
Metro Circles

State-Operator	Chennai-Aircell	Chennai-Airtel	Chennai-BSNL	Chennai-Hutch	Chennai-Rel Info	Chennai-Tata	Delhi-Airtel	Delhi-Hutch	Delhi-Idea	Delhi-MTNL	Delhi-Rel Info	Delhi-Tata	Kolkata-Airtel	Kolkata-BSNL	Kolkata-Hutch	Kolkata-Rel Info
% Satisfied with provision of service (Benchmark 95%)	97%	98%	94%	98%	100%	99%	100%	98%	98%	95%	96%	98%	97%	98%	98%	98%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	97%	97%	94%	96%	95%	98%	98%	99%	99%	98%	99%	99%	91%	98%	95%	93%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	82%	82%	71%	81%	74%	100%	82%	83%	56%	58%	82%	45%	81%	65%	87%	64%
% satisfied with help services (Benchmark 90%)	60%	61%	56%	62%	58%	58%	86%	84%	75%	71%	81%	71%	69%	51%	75%	74%
Network Performance (Benchmark 95%)	75%	73%	76%	77%	75%	75%	90%	90%	85%	80%	88%	78%	73%	58%	73%	76%
Maintability (Benchmark 95%)	82%	76%	72%	83%	91%	77%	68%	62%	80%	35%	62%	30%	78%	83%	97%	98%

State-Operator	Chennai-Aircell	Chennai-Airtel	Chennai-BSNL	Chennai-Hutch	Chennai-Rel Info	Chennai-Tata	Delhi-Airtel	Delhi-Hutch	Delhi-Idea	Delhi-MTNL	Delhi-Rel Info	Delhi-Tata	Kolkata-Airtel	Kolkata-BSNL	Kolkata-Hutch	Kolkata-Rel Info
Supplementary Services (Benchmark 95%)	98%	98%	95%	95%	99%	96%	100%	99%	99%	100%	100%	100%	98%	98%	98%	97%
Overall Customer Satisfaction (Benchmark 95%)	86%	85%	83%	86%	85%	87%	93%	92%	87%	84%	91%	83%	83%	77%	86%	86%

State-Operator	Mumbai-Airtel	Mumbai-BPL	Mumbai-Hutch	Mumbai-MTNL	Mumbai-Rel Info	Mumbai-Tata
% Satisfied with provision of service (Benchmark 95%)	95%	98%	97%	98%	95%	95%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	98%	99%	99%	98%	98%	95%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	99%	87%	99%	96%	99%	90%
% satisfied with help services (Benchmark 90%)	68%	67%	63%	65%	68%	69%

State-Operator	Mumbai-Airtel	Mumbai-BPL	Mumbai-Hutch	Mumbai-MTNL	Mumbai-Rel Info	Mumbai-Tata
Network Performance (Benchmark 95%)	88%	91%	92%	94%	91%	87%
Maintability (Benchmark 95%)	80%	77%	83%	83%	79%	78%
Supplementary Services (Benchmark 95%)	98%	100%	99%	99%	99%	98%
Overall Customer Satisfaction (Benchmark 95%)	91%	92%	92%	93%	92%	88%

A Circles

State-Operator	AP-Airtel	AP-BSNL	AP-Hutch	AP-Idea	AP-Rel Info	AP-Tata	Gujarat-Airtel	Gujarat-BSNL	Gujarat-Hutch	Gujarat-Idea	Gujarat-Rel Info	Gujarat-Tata	Karnataka-Airtel	Karnataka-BSNL	Karnataka-Hutch	Karnataka-Rel Info	Karnataka-Spice	Karnataka-Tata
% Satisfied with provision of service (Benchmark 95%)	97%	100%	98%	100%	98%	99%	98%	93%	98%	98%	99%	98%	100%	100%	100%	100%	100%	99%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	100%	100%	100%	99%	100%	100%	74%	72%	84%	79%	72%	77%	100%	100%	100%	100%	100%	100%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	100%	100%	92%	94%	99%	100%	80%	75%	94%	94%	93%	98%	100%	100%	100%	100%	100%	100%
% satisfied with help services (Benchmark 90%)	64%	54%	65%	64%	66%	64%	74%	65%	78%	71%	68%	81%	61%	60%	61%	61%	60%	62%
Network Performance (Benchmark 95%)	91%	87%	85%	84%	90%	88%	60%	53%	64%	60%	53%	54%	74%	82%	81%	80%	80%	83%
Maintability (Benchmark 95%)	80%	*	*	83%	*	*	88%	58%	100%	98%	88%	96%	*	100%	*	90%	100%	*
Supplementary Services (Benchmark 95%)	96%	5%	95%	96%	96%	95%	98%	90%	97%	96%	98%	98%	95%	76%	90%	78%	88%	82%

State-Operator	AP-Airtel	AP-BSNL	AP-Hutch	AP-Idea	AP-Rel Info	AP-Tata	Gujarat-Airtel	Gujarat-BSNL	Gujarat-Hutch	Gujarat-Idea	Gujarat-Rel Info	Gujarat-Tata	Karnataka-Airtel	Karnataka-BSNL	Karnataka-Hutch	Karnataka-Rel Info	Karnataka-Spice	Karnataka-Tata
Overall Customer Satisfaction (Benchmark 95%)	91%	82%	90%	88%	92%	89%	78%	70%	82%	78%	75%	79%	86%	88%	88%	87%	88%	89%

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

State-Operator	Maharashtra-Airtel	Maharashtra-BPL	Maharashtra-BSNL	Maharashtra-Idea	Maharashtra-Rel Info	Maharashtra-Tata	TN-Airtel	TN-BPL	TN-BSNL	TN-Rel Info	TN-Tata
% Satisfied with provision of service (Benchmark 95%)	94%	86%	99%	100%	100%	96%	100%	98%	100%	100%	96%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	92%	91%	99%	100%	98%	100%	99%	99%	100%	100%	98%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	100%	80%	99%	100%	99%	99%	99%	100%	98%	100%	34%
% satisfied with help services (Benchmark 90%)	66%	58%	59%	72%	73%	69%	60%	63%	66%	62%	60%
Network Performance (Benchmark 95%)	82%	77%	86%	86%	90%	90%	58%	56%	60%	59%	73%

State-Operator	Maharashtra-Airtel	Maharashtra-BPL	Maharashtra-BSNL	Maharashtra-Idea	Maharashtra-Rel Info	Maharashtra-Tata	TN-Airtel	TN-BPL	TN-BSNL	TN-Rel Info	TN-Tata
Maintability (Benchmark 95%)	*	62%	40%	*	*	*	100%	93%	95%	100%	55%
Supplementary Services (Benchmark 95%)	91%	87%	81%	87%	88%	98%	100%	100%	100%	100%	100%
Overall Customer Satisfaction (Benchmark 95%)	86%	80%	89%	91%	92%	93%	82%	82%	84%	83%	84%

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

B Circles

State-Operator	Haryana-Airtel	Haryana-BSNL	Haryana-Hutch	Haryana-Idea	Haryana-Rel Info	Haryana-Tata	Kerela-Airtel	Kerela-BPL	Kerela-BSNL	Kerela-Idea	Kerela-Rel Info	Kerela-Tata	MP-Airtel	MP-BSNL	MP-Idea	MP-Rel Info	MP-Rel Tel	MP-Tata
% Satisfied with provision of service (Benchmark 95%)	89%	97%	91%	91%	86%	88%	100%	100%	100%	100%	100%	98%	98%	97%	100%	99%	96%	97%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	91%	98%	95%	93%	93%	87%	100%	100%	100%	100%	100%	97%	100%	99%	99%	90%	97%	100%
% Satisfied with Billing Provision - Postpaid	87%	97%	96%	99%	98%	90%	100%	100%	100%	100%	100%	100%	100%	86%	92%	96%	78%	94%

State-Operator	Haryana-Airtel	Haryana-BSNL	Haryana-Hutch	Haryana-Idea	Haryana-Rel Info	Haryana-Tata	Kerela-Airtel	Kerela-BPL	Kerela-BSNL	Kerela-Idea	Kerela-Rel Info	Kerela-Tata	MP-Airtel	MP-BSNL	MP-Idea	MP-Rel Info	MP-Rel Tel	MP-Tata
(Benchmark 90%)																		
% satisfied with help services (Benchmark 90%)	70%	75%	76%	78%	71%	58%	60%	60%	60%	60%	60%	58%	76%	75%	78%	70%	77%	79%
Network Performance (Benchmark 95%)	89%	87%	94%	92%	92%	84%	99%	99%	99%	99%	99%	96%	86%	81%	81%	81%	80%	79%
Maintability (Benchmark 95%)	73%	70%	90%	74%	88%	100%	100%	96%	100%	98%	97%	56%	81%	78%	88%	78%	40%	77%
Supplementary Services (Benchmark 95%)	71%	75%	74%	68%	81%	72%	100%	100%	100%	100%	100%	100%	88%	99%	100%	99%	100%	90%
Overall Customer Satisfaction (Benchmark 95%)	82%	86%	87%	85%	85%	80%	98%	99%	98%	98%	99%	95%	90%	90%	91%	87%	89%	89%

State-Operator	Punjab-Airtel	Punjab-BSNL	Punjab-Hutch	Punjab-Rel Info	Punjab-Spice	Punjab-Tata	Rajasthan-Airtel	Rajasthan-BSNL	Rajasthan-Hutch	Rajasthan-Rel Info	Rajasthan-Tata	UP-E-Airtel	UP-E-BSNL	UP-E-Hutch	UP-E-Rel Info	UP-E-Tata
% Satisfied with provision of service (Benchmark 95%)	100%	100%	100%	100%	100%	100%	96%	88%	96%	95%	100%	91%	71%	93%	95%	99%
% Satisfied with Billing	99%	98%	100%	96%	99%	99%	90%	93%	90%	89%	97%	77%	93%	92%	96%	100%

State-Operator	Punjab-Airtel	Punjab-BSNL	Punjab-Hutch	Punjab-Rel Info	Punjab-Spice	Punjab-Tata	Rajasthan-Airtel	Rajasthan-BSNL	Rajasthan-Hutch	Rajasthan-Rel Info	Rajasthan-Tata	UP-E-Airtel	UP-E-BSNL	UP-E-Hutch	UP-E-Rel Info	UP-E-Tata
Provision - Prepaid (Benchmark 90%)																
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	98%	99%	100%	99%	98%	99%	84%	94%	89%	93%	100%	92%	78%	100%	92%	100%
% satisfied with help services (Benchmark 90%)	69%	80%	70%	67%	76%	74%	64%	71%	68%	66%	73%	68%	63%	60%	61%	61%
Network Performance (Benchmark 95%)	96%	98%	97%	97%	96%	97%	87%	83%	86%	87%	85%	76%	77%	86%	85%	89%
Maintability (Benchmark 95%)	90%	98%	99%	94%	100%	*	86%	80%	85%	93%	100%	71%	52%	72%	49%	100%
Supplementary Services (Benchmark 95%)	99%	100%	99%	100%	99%	100%	92%	90%	91%	92%	83%	92%	94%	99%	98%	100%
Overall Customer Satisfaction (Benchmark 95%)	92%	94%	93%	91%	93%	94%	86%	85%	86%	87%	89%	83%	84%	87%	89%	91%

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

State-Operator	UP-W-Airtel	UP-W-BSNL	UP-W-Hutch	UP-W-Idea	UP-W-Rel Info	UP-W-Tata	WB-Aircell	WB-Airtel	WB-BSNL	WB-Hutch	WB-Rel Tel	WB-Tata
% Satisfied with provision of service (Benchmark 95%)	94%	92%	95%	93%	93%	98%	99%	99%	99%	99%	100%	100%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	99%	98%	98%	93%	97%	99%	98%	98%	89%	99%	99%	99%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	90%	90%	94%	95%	92%	57%	82%	100%	70%	100%	93%	76%
% satisfied with help services (Benchmark 90%)	70%	58%	58%	74%	64%	69%	81%	72%	61%	75%	71%	74%
Network Performance (Benchmark 95%)	79%	77%	76%	79%	79%	80%	69%	65%	57%	69%	63%	79%
Maintability (Benchmark 95%)	58%	90%	70%	68%	93%	100%	100%	88%	74%	95%	87%	100%
Supplementary Services (Benchmark 95%)	96%	97%	93%	90%	94%	97%	93%	97%	98%	99%	98%	98%
Overall Customer Satisfaction (Benchmark 95%)	87%	85%	84%	86%	86%	90%	88%	84%	75%	87%	83%	88%

C Circles

State-Operator	Assam-Aircell	Assam-Airtel	Assam-BSNL	Assam-Rel Tel	Bihar-Airtel	Bihar-BSNL	Bihar-Rel Tel	Bihar-Tata	HP-Airtel	HP-BSNL	HP-Rel Tel
% Satisfied with provision of service (Benchmark 95%)	98%	99%	76%	94%	86%	90%	79%	100%	88%	94%	97%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	96%	98%	90%	88%	85%	68%	82%	100%	98%	99%	99%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	46%	58%	73%	78%	90%	96%	92%	90%	97%	95%	100%
% satisfied with help services (Benchmark 90%)	75%	78%	57%	60%	65%	48%	65%	74%	67%	66%	69%
Network Performance (Benchmark 95%)	70%	73%	52%	54%	53%	46%	51%	83%	89%	91%	94%
Maintability (Benchmark 95%)	94%	76%	64%	76%	96%	91%	93%	60%	100%	100%	100%
Supplementary Services (Benchmark 95%)	93%	98%	95%	93%	97%	96%	99%	100%	72%	66%	65%
Overall Customer Satisfaction (Benchmark 95%)	84%	86%	69%	72%	78%	69%	76%	90%	85%	85%	88%

State-Operator	J&K-Airtel	J&K-BSNL	NE-Aircell	NE-BSNL	NE-Rel Tel	Orissa-Aircell	Orissa-Airtel	Orissa-BSNL	Orissa-Rel Info	Orissa-Rel Tel	Orissa-Tata
% Satisfied with provision of service (Benchmark 95%)	87%	91%	99%	94%	90%	100%	98%	84%	96%	93%	100%
% Satisfied with Billing Provision - Prepaid (Benchmark 90%)	97%	94%	91%	96%	92%	100%	89%	79%	78%	91%	100%
% Satisfied with Billing Provision - Postpaid (Benchmark 90%)	89%	87%	49%	77%	80%	94%	78%	83%	78%	83%	91%
% satisfied with help services (Benchmark 90%)	62%	57%	74%	56%	61%	37%	68%	57%	69%	73%	41%
Network Performance (Benchmark 95%)	66%	65%	69%	57%	60%	47%	72%	55%	75%	69%	53%
Maintability (Benchmark 95%)	76%	50%	67%	78%	86%	80%	82%	45%	92%	81%	50%
Supplementary Services (Benchmark 95%)	100%	100%	95%	99%	99%	100%	95%	95%	99%	97%	100%
Overall Customer Satisfaction (Benchmark 95%)	82%	77%	84%	72%	75%	76%	82%	71%	81%	82%	76%

3.6.4 PERFORMANCE RESULTS CSS - BASIC

State-Operator	Chennai - Airtel	Chennai -BSNL	Chennai -Rel Info	Chennai -Tata	Delhi- Airtel	Delhi- MTNL	Delhi- Rel Info	Delhi- Tata	Kolkat a-Airtel	Kolkat a- BSNL	Kolkat a-Rel Info		Mumb ai- Airtel	Mumb ai- MTNL	Mumb ai-Rel Info	Mumb ai-Tata
% Satisfied with provision of service (Benchmark 95%)	97%	84%	95%	93%	94%	86%	92%	91%	99%	79%	98%		96%	94%	93%	98%
Billing Provison (Benchmark 90%)	98%	88%	95%	95%	83%	76%	82%	86%	79%	66%	63%		79%	94%	95%	97%
% satisfied with help services (Benchmark 90%)	63%	59%	69%	67%	70%	52%	76%	75%	71%	56%	69%		65%	54%	62%	66%
Network Performance (Benchmark 95%)	93%	89%	94%	93%	90%	82%	87%	86%	71%	70%	73%		97%	97%	96%	99%
Maintainability (Benchmark 95%)	93%	80%	97%	96%	89%	87%	93%	86%	96%	82%	86%		98%	81%	81%	79%
Supplementary Services (Benchmark 95%)	99%	100%	99%	99%	100%	100%	100%	100%	*	100%	100%		97%	98%	100%	90%
Overall Customer Satisfaction (Benchmark 95%)	93%	86%	93%	93%	87%	79%	86%	85%	79%	69%	74%		92%	91%	92%	95%

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

A Circles

State-Operator	AP-Airtel	AP-BSNL	AP-Rel Info	AP-Tata	Gujarat-BSNL	Gujarat-Rel Info	Gujarat-Tata	Karnataka-Airtel	Karnataka-BSNL	Karnataka-Tata	Mah-BSNL	Mah-Rel Info	Mah-Tata	TN-Airtel	TN-BSNL	TN-Rel Info	TN-Tata
% Satisfied with provision of service (Benchmark 95%)	100%	86%	93%	92%	88%	97%	98%	96%	100%	100%	86%	99%	98%	96%	95%	97%	94%
Billing Provison (Benchmark 90%)	100%	96%	100%	98%	70%	75%	77%	96%	100%	98%	99%	99%	95%	98%	99%	98%	100%
% satisfied with help services (Benchmark 90%)	85%	53%	58%	60%	67%	78%	76%	55%	61%	59%	61%	75%	75%	89%	88%	82%	80%
Network Performance (Benchmark 95%)	100%	87%	83%	83%	71%	69%	69%	92%	94%	94%	99%	97%	98%	99%	99%	99%	99%
Maintainability (Benchmark 95%)	*	91%	70%	89%	84%	88%	91%	87%	98%	100%	*	*	0%	100%	96%	100%	98%
Supplementary Services (Benchmark 95%)	100%	98%	96%	95%	100%	100%	100%	100%	*	99%	100%	99%	99%	100%	100%	100%	100%
Overall Customer Satisfaction (Benchmark 95%)	99%	89%	83%	85%	73%	79%	79%	92%	91%	93%	97%	96%	95%	98%	98%	97%	97%

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

B Circles

State-Operator	Haryana-Airtel	Haryana-BSNL	Haryana-Rel Info		Kerala-BSNL	Kerala-Rel Info		MP-Airtel	MP-BSNL	MP-Rel Info		Punjab-Airtel	Punjab-BSNL	Punjab-HFCL	Punjab-Rel Info	
% Satisfied with provision of service (Benchmark 95%)	99%	90%	96%		100%	100%		91%	94%	100%		100%	75%	99%	95%	
Billing Provison (Benchmark 90%)	78%	87%	91%		99%	100%		94%	97%	99%		100%	93%	98%	97%	
% satisfied with help services (Benchmark 90%)	72%	70%	82%		65%	73%		66%	68%	80%		73%	77%	72%	75%	
Network Performance (Benchmark 95%)	92%	91%	95%		99%	100%		95%	96%	81%		100%	95%	98%	100%	
Maintainability (Benchmark 95%)	100%	54%	57%		91%	95%		92%	88%	73%		100%	92%	98%	96%	
Supplementary Services (Benchmark 95%)	*	99%	100%		100%	100%		100%	100%	99%		100%	99%	100%	100%	
Overall Customer Satisfaction (Benchmark 95%)	88%	80%	85%		97%	97%		91%	93%	88%		95%	91%	95%	93%	

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

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State-Operator	Raj-BSNL	Raj-Rel Info	Raj-Shyam		UP(E)-Airtel	UP(E)-BSNL	UP(E)-Rel Info		UP(W)-Airtel	UP(W)-BSNL	UP(W)-Rel Info		WB-BSNL
% Satisfied with provision of service (Benchmark 95%)	93%	89%	91%		98%	84%	93%		95%	92%	92%		79%
Billing Provison (Benchmark 90%)	90%	98%	91%		78%	85%	94%		82%	80%	92%		68%
% satisfied with help services (Benchmark 90%)	55%	65%	62%		60%	36%	74%		63%	65%	73%		66%
Network Performance (Benchmark 95%)	92%	93%	92%		89%	76%	90%		93%	94%	91%		50%
Maintainability (Benchmark 95%)	83%	82%	91%		90%	68%	69%		73%	84%	76%		81%
Supplementary Services (Benchmark 95%)	96%	97%	97%		100%	100%	100%		*	98%	100%		100%
Overall Customer Satisfaction (Benchmark 95%)	87%	88%	87%		84%	76%	88%		82%	86%	88%		65%

* **Did not report any problem or didn't access the services . Such cases are treated as positive during calculation**

C Circles

State-Operator	Assam-BSNL	Bihar-BSNL	Bihar-Rel Info		HP-BSNL	HP-Rel Info		J&K-BSNL	NE-BSNL	Orissa-BSNL	Orissa-Rel Info	
% Satisfied with provision of service (Benchmark 95%)	66%	63%	98%		100%	98%		87%	77%	73%	96%	
Billing Provison (Benchmark 90%)	62%	46%	83%		96%	97%		86%	60%	56%	59%	
% satisfied with help services (Benchmark 90%)	58%	78%	88%		88%	78%		55%	62%	59%	73%	
Network Performance (Benchmark 95%)	54%	88%	95%		92%	94%		89%	56%	68%	68%	
Maintainability (Benchmark 95%)	62%	87%	96%		74%	77%		86%	71%	66%	87%	
Supplementary Services (Benchmark 95%)	*	100%	100%		100%	100%		100%	*	93%	100%	
Overall Customer Satisfaction (Benchmark 95%)	58%	75%	92%		89%	93%		83%	61%	63%	75%	

* Did not report any problem or didn't access the services . Such cases are treated as positive during calculation

4.   GRAPHICAL REPRESENTATION OF RESULTS

4.1   QOS CELLULAR

4.1.1   METRO CIRCLES
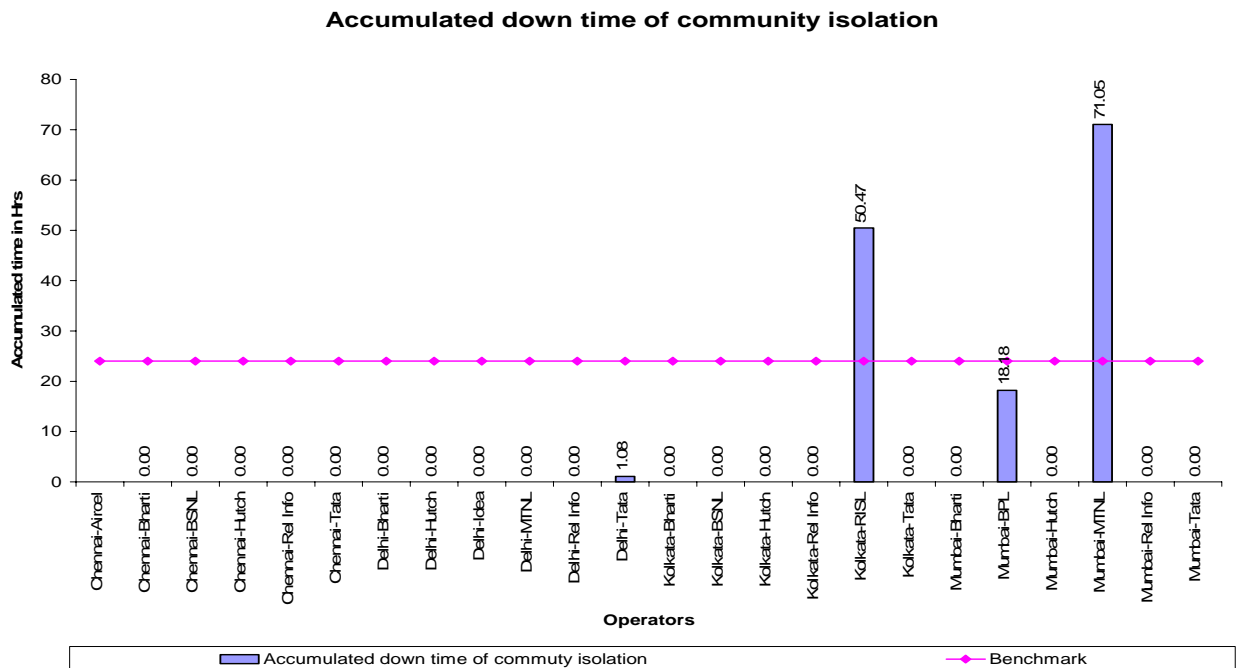
Accumulated down time of community isolation

Audit was conducted for 23 operators. Two operators are not meeting the benchmark parameter. Aircel Chennai was not covered.

Call Setup Success Rate
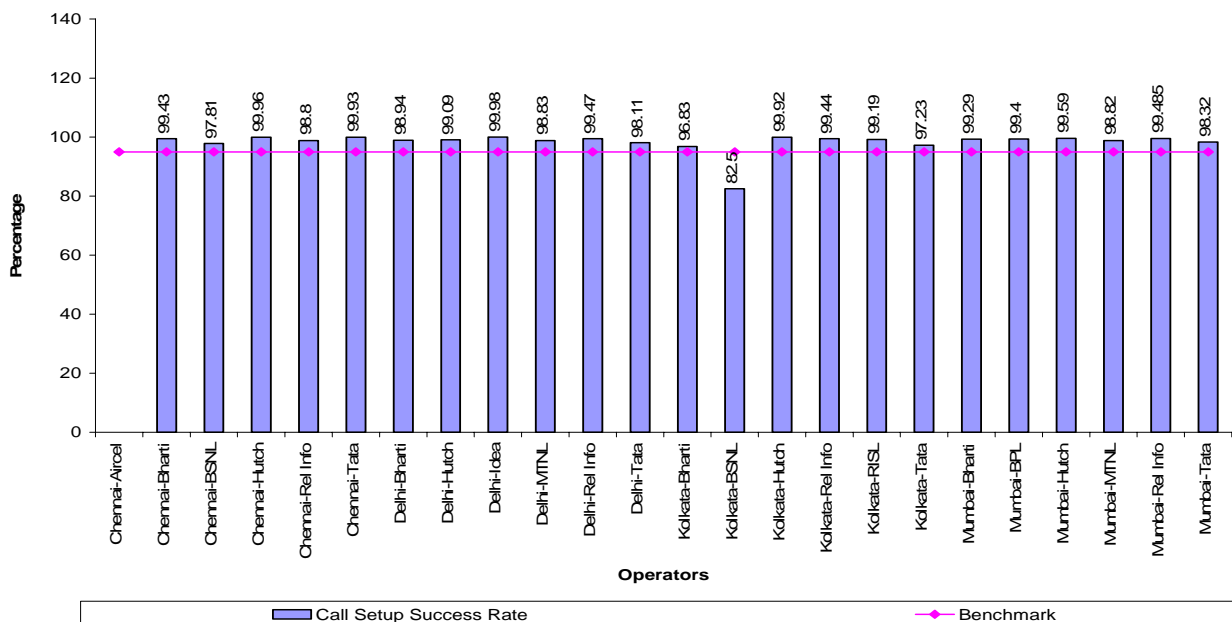
Audit was conducted for 23 operators. One operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered.

Service Access Delay
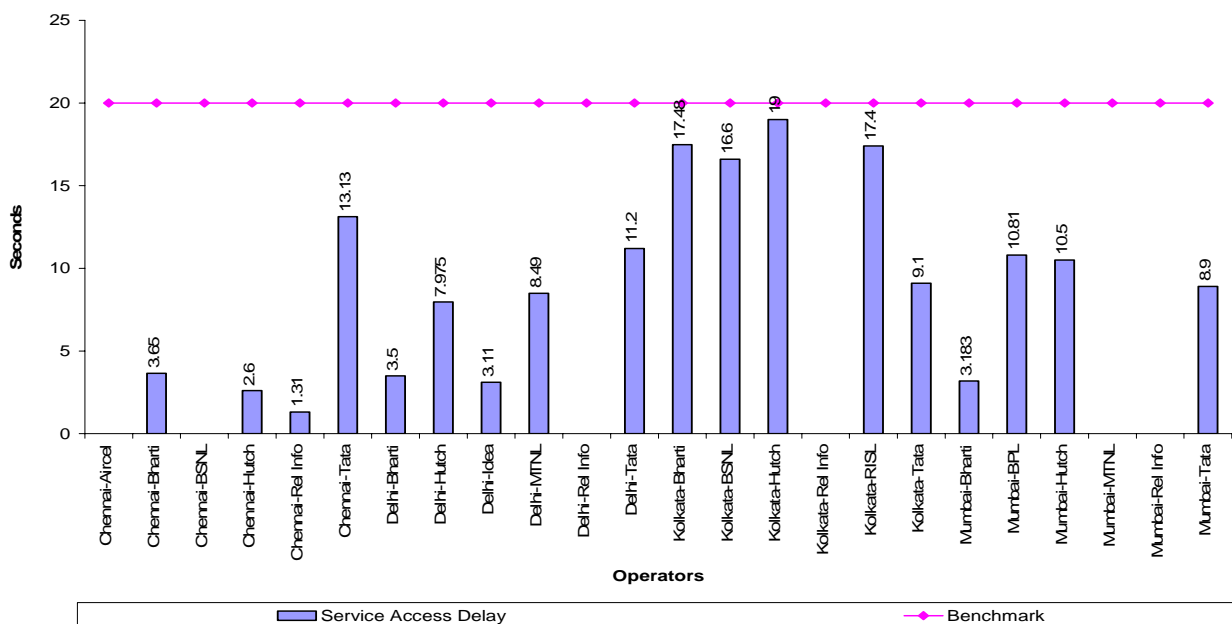
Audit was conducted for 18 operators. All Operators are meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by BSNL-Chennai, Rel Info-Del, Rel Info – Kolkata, MTNL-Mumbai and Rel Info-Mumbai.
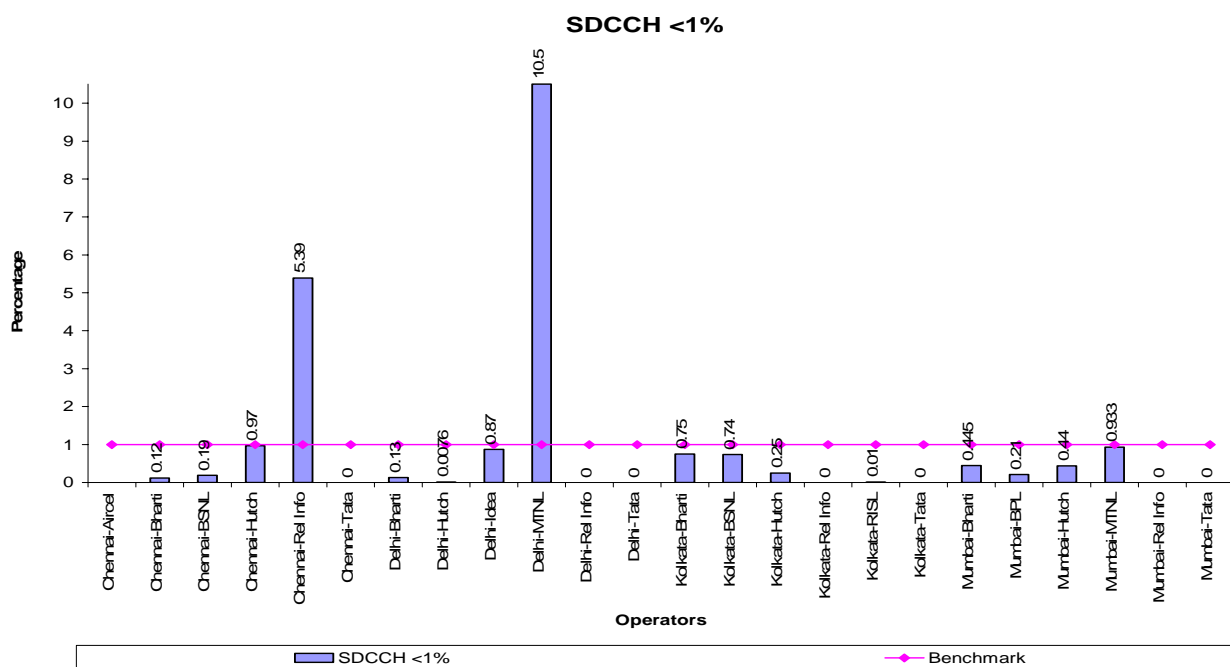
SDCCH <1%

Audit was conducted for 23 operators. Two operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered.

TCH Congestion < 2%
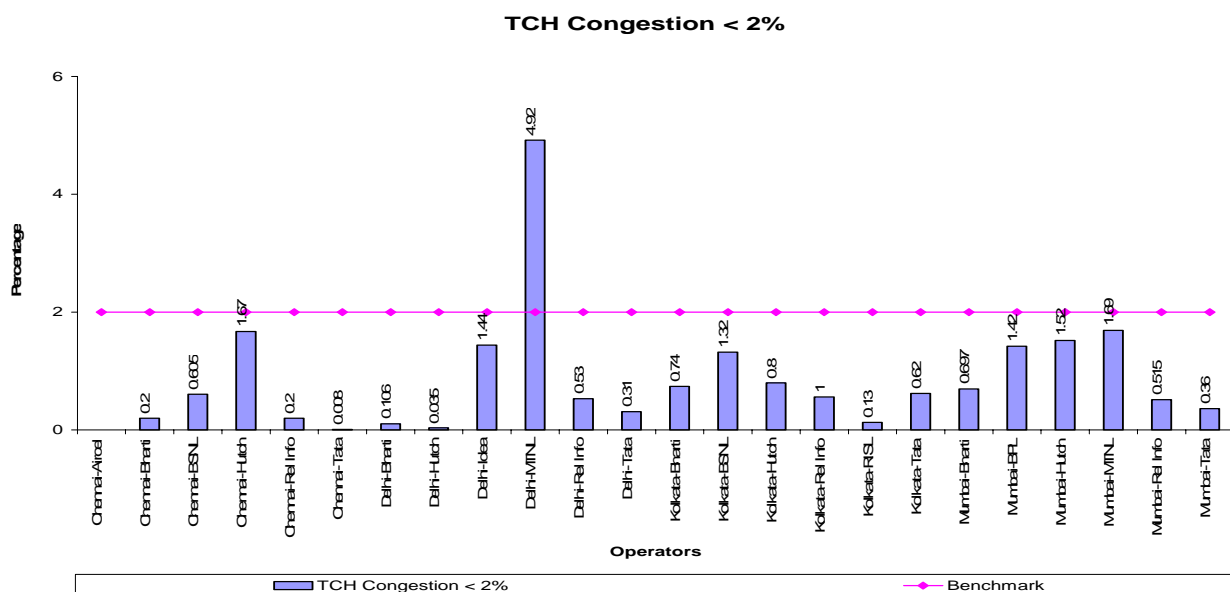
Audit was conducted for 23 operators. One operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered.

Call Drop Rate
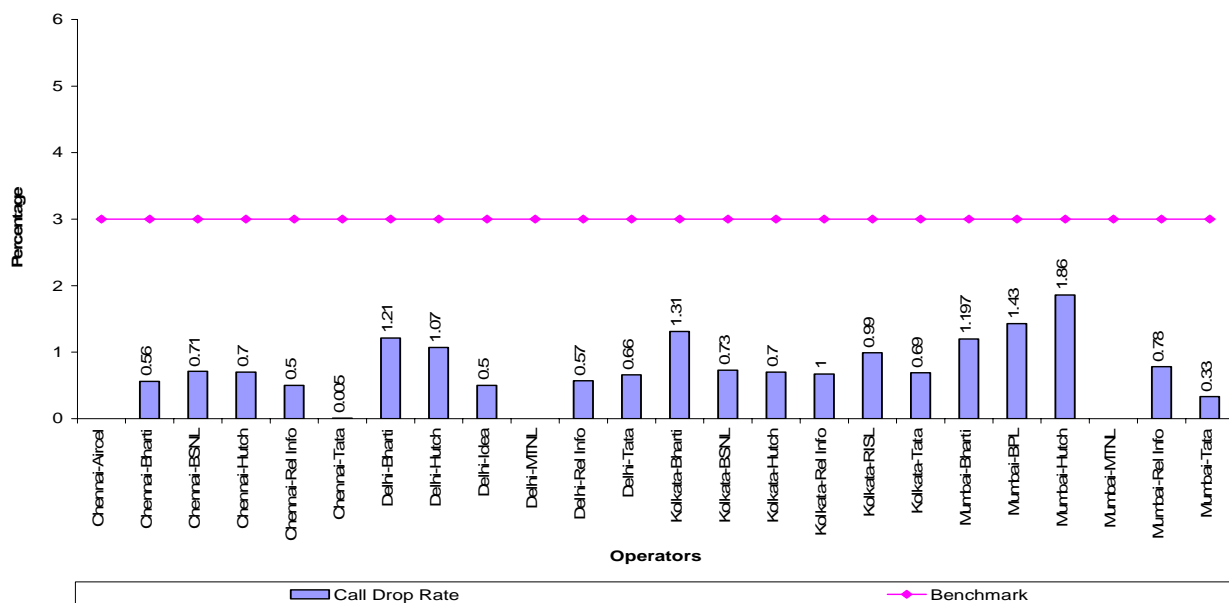
Audit was conducted for 21 operators. All operator(s) are meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by MTNL – Delhi & Mumbai.

% Connection with Good Voice Quality
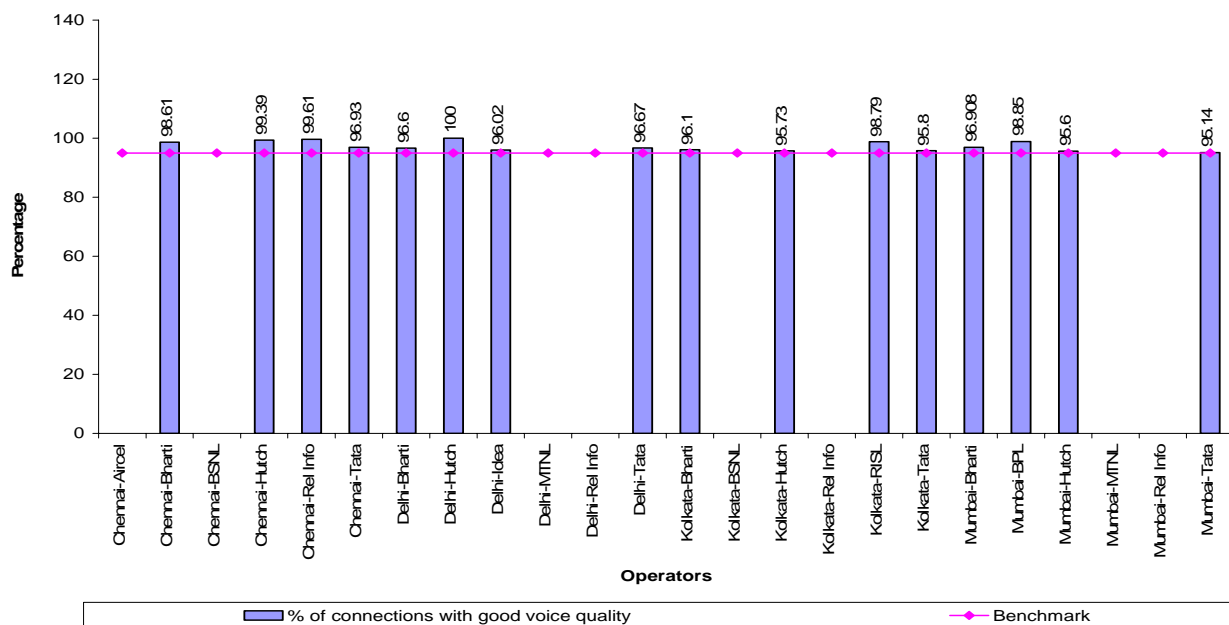
Audit was conducted for 16 operators. All operator(s) are meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by BSNL-Chennai, MTNL & Rel Info Delhi, BSNL & Rel-Info – Kolkata, MTNL & Rel Info – Mumbai

IVR within 20 seconds
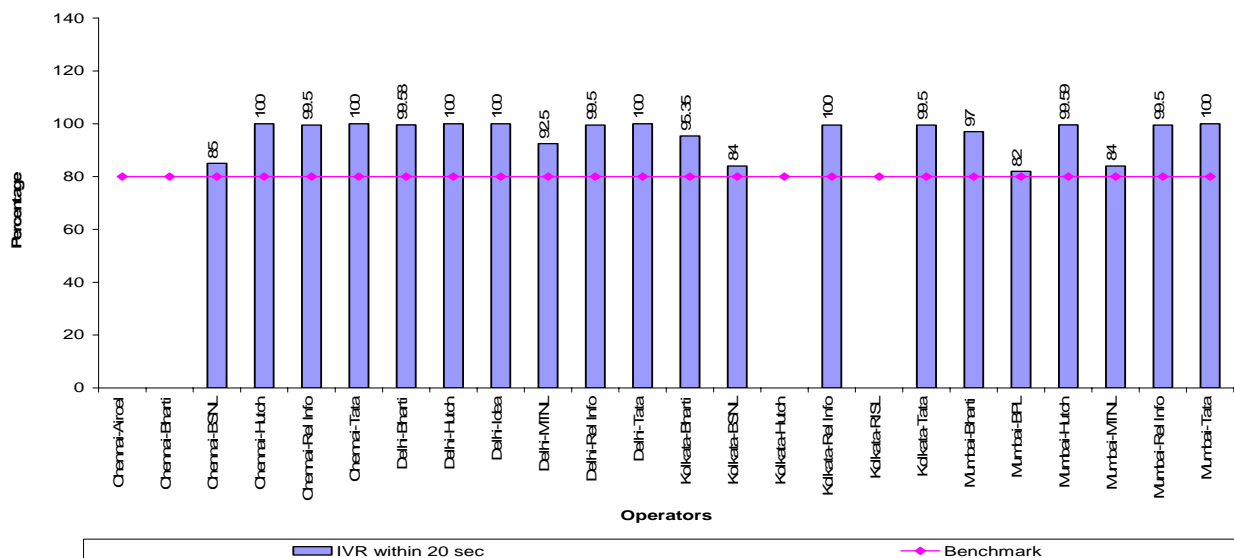
Audit was conducted for 20 operators. All operator(s) are meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by Bharti – Chennai, Hutch-Kolkata. RISL – Kolkata does not have IVR system.

IVR within 40 seconds
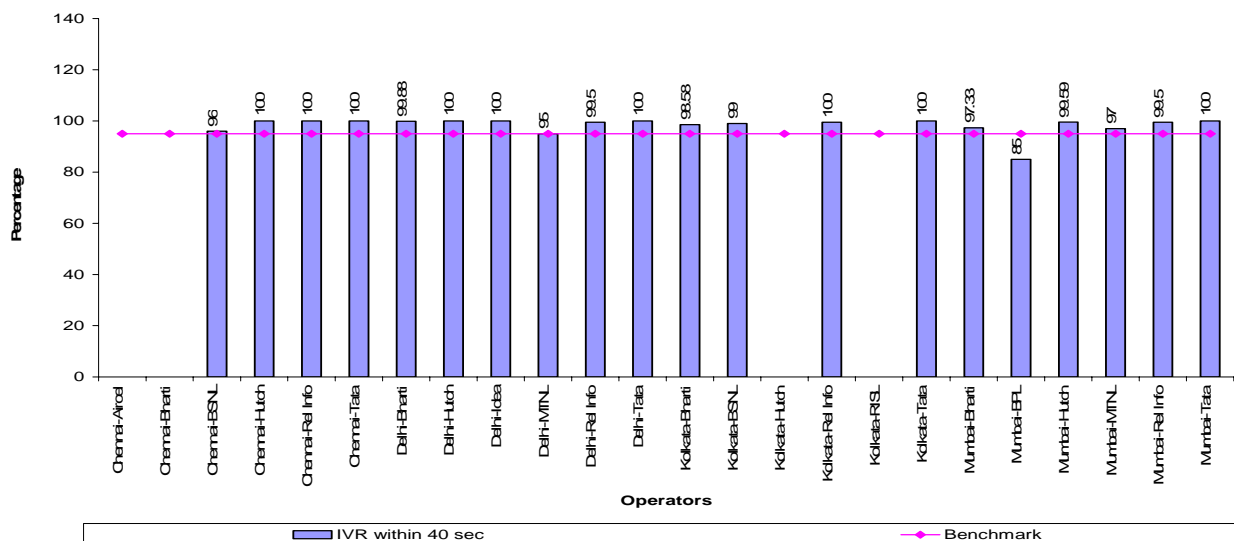
Audit was conducted for 20 operators. One operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by Bharti – Chennai, Hutch-Kolkata. RISL – Kolkata does not have IVR system

Voice within 60 seconds
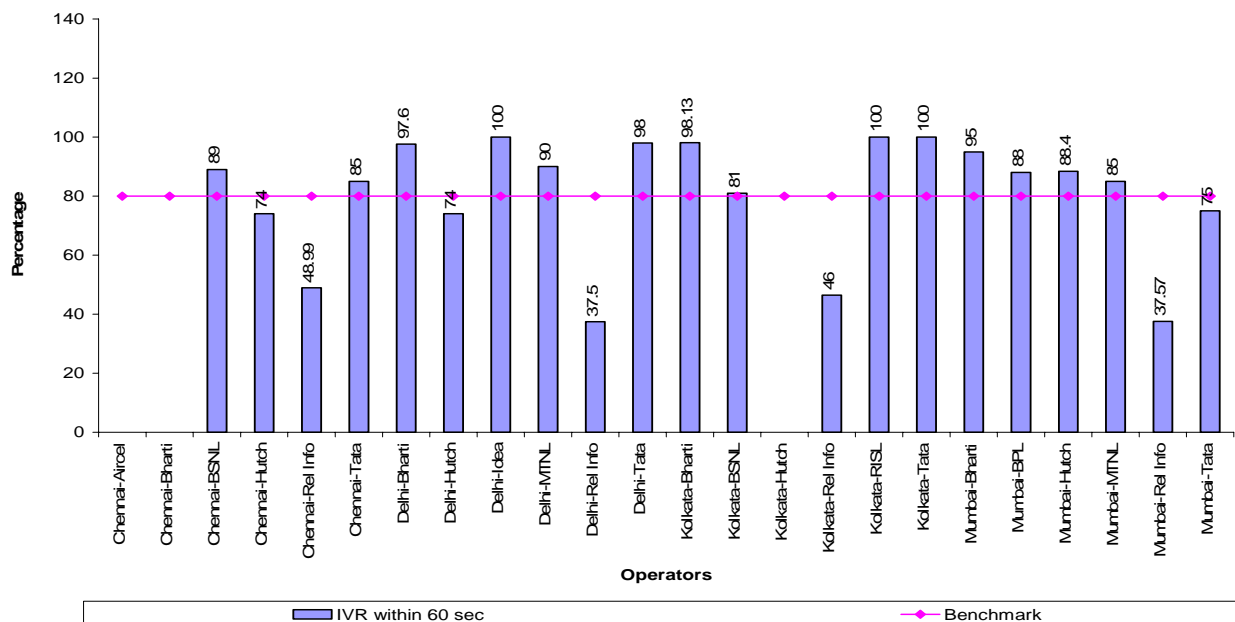
Audit was conducted for 21 operators. Seven operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by Bharti – Chennai and Hutch-Kolkata.

Voice within 90 seconds
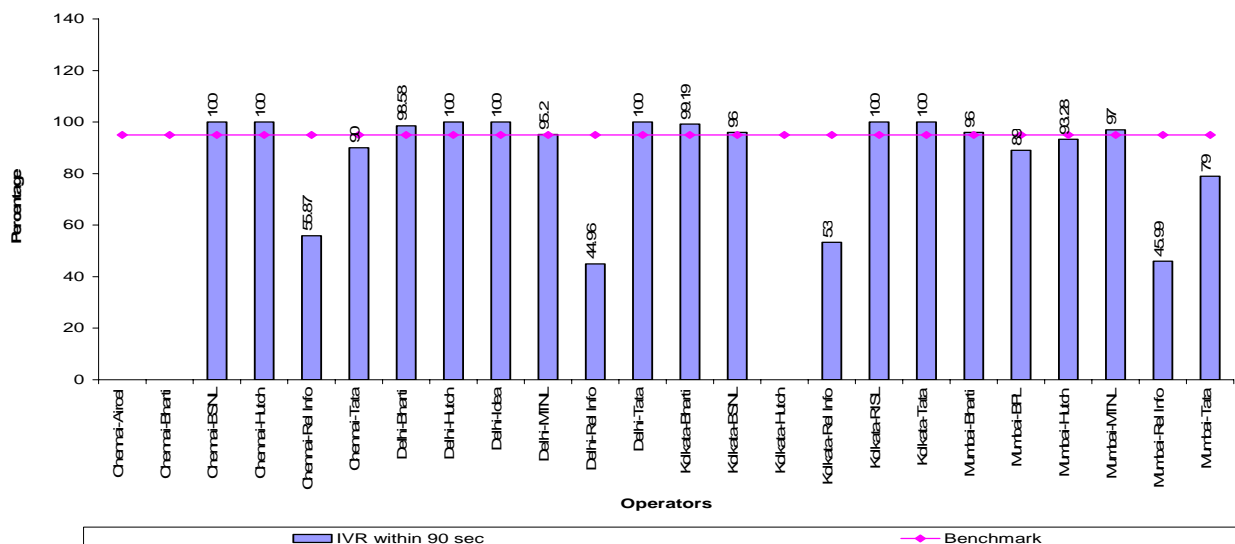
Audit was conducted for 21 operators. Eight operator(s) are not meeting the benchmark parameter. Aircel Chennai was not covered. Data not provided by Bharti – Chennai and Hutch-Kolkata.

Billing Complains per 100 bill issued
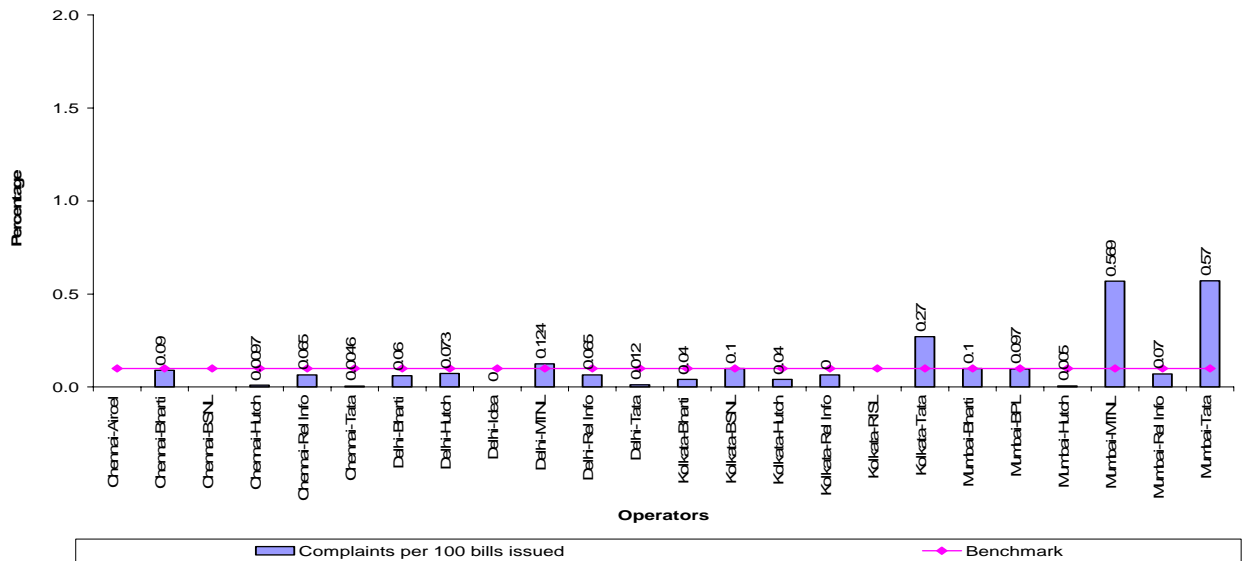
Audit was conducted for 21 operators. Four operator(s) are not meeting the benchmark parameter. Aircel, BSNL & Tata Chennai was not covered. No incidences were reported at RISL - Kolkata

% of Billing Complaints resolved within 4 weeks
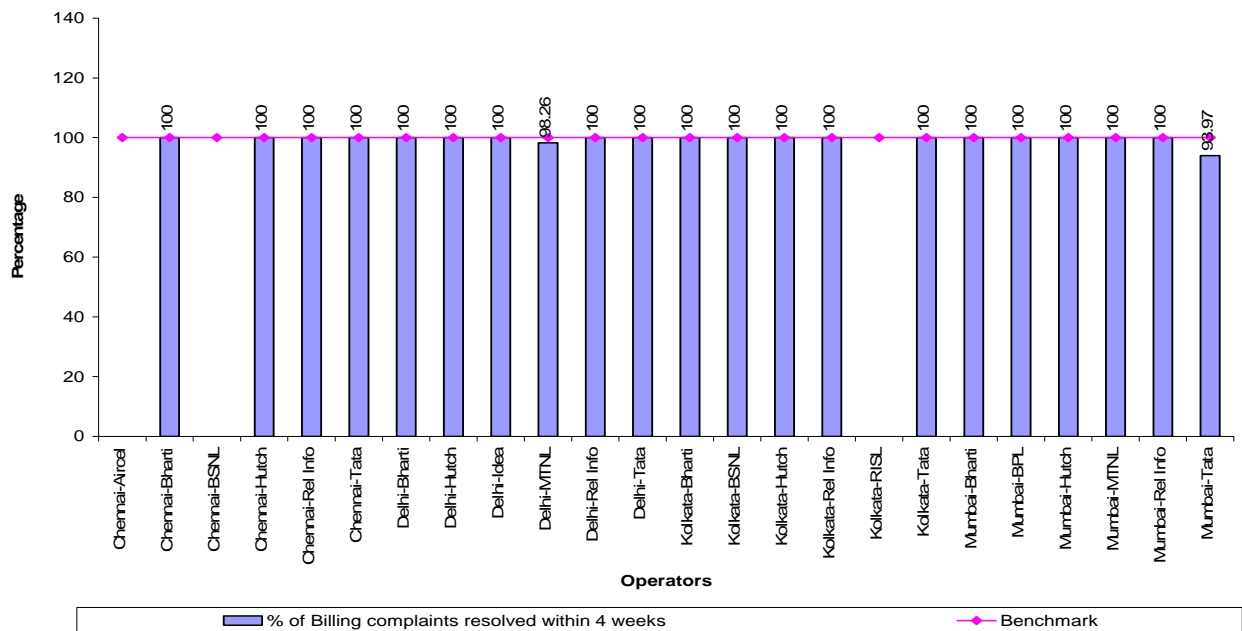
Audit was conducted for 21 operators. Two operator(s) are not meeting the benchmark parameter. Aircel, BSNL & Tata Chennai was not covered. No incidences were reported at RISL - Kolkata

Period of refunds / payment due to customers from the date of resolution of complaints
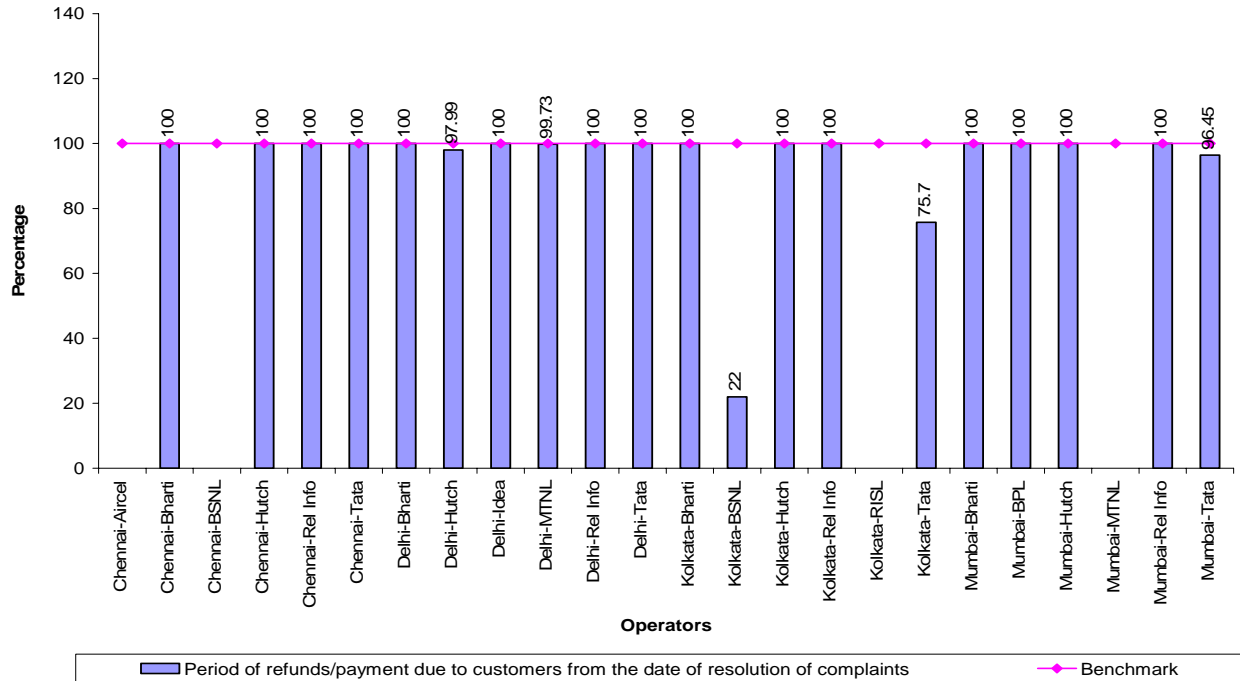
Audit was conducted for 20 operators. Five operator(s) are not meeting the benchmark parameter. Aircel, BSNL & Tata Chennai was not covered. No incidences were reported at RISL – Kolkata and MTNL-Mumbai.

4.1.2 A CIRCLES

Accumulated down time of community isolation
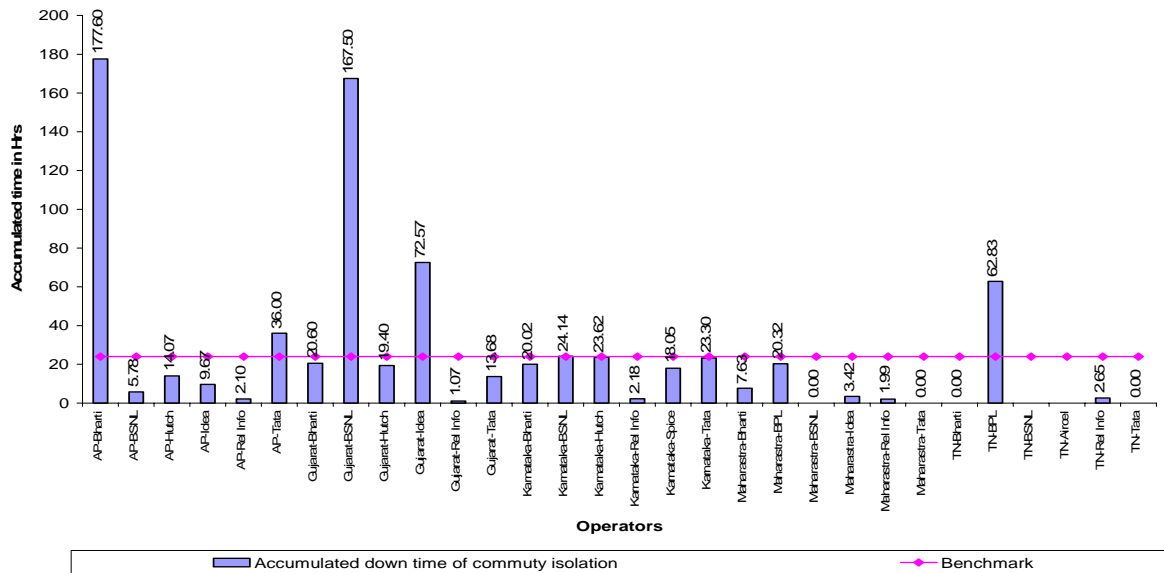
Audit was conducted for 28 operators. Seven operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

Call Setup Success Rate
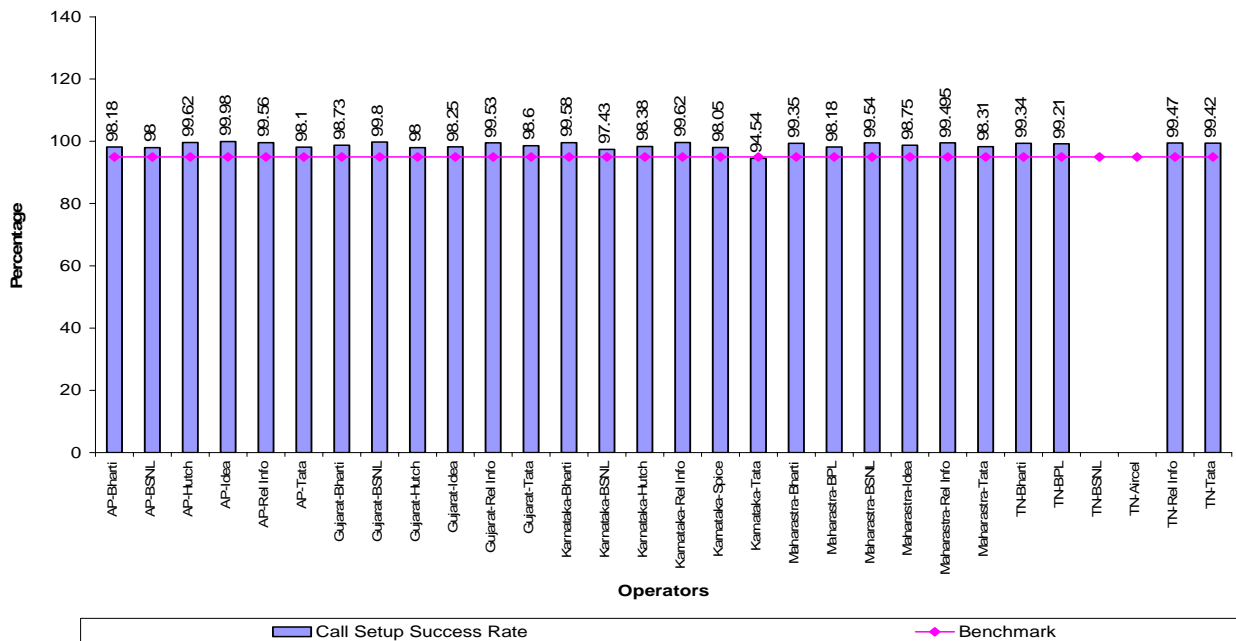
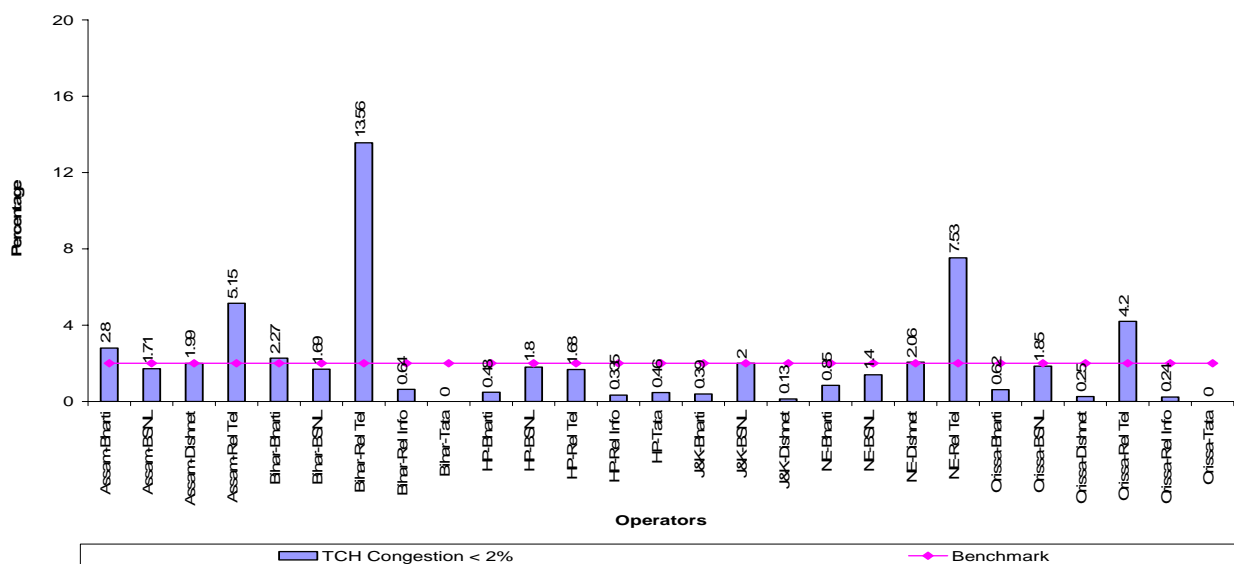Audit was conducted for 28 operators. One operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

Service Access Delay

Service Access Delay chart with Benchmark line at 20 seconds. Values: AP-Bharti 2.28, AP-BSNL 7.12, AP-Hutch 5, AP-Idea 1.4, AP-Rel Info (none), AP-Tata 5.4, Gujarat-Bharti 4.84, Gujarat-BSNL (none), Gujarat-Hutch (none), Gujarat-Idea 3.88, Gujarat-Rel Info (none), Gujarat-Tata 4.6, Karnataka-Bharti 7.3, Karnataka-BSNL 9.37, Karnataka-Hutch 10.25, Karnataka-Rel Info (none), Karnataka-Spice 8.33, Karnataka-Tata 2.679, Maharashtra-Bharti 11.42, Maharashtra-BPL 15.57, Maharashtra-BSNL 7.9, Maharashtra-Idea 9.78, Maharashtra-Rel Info (none), Maharashtra-Tata 9.8, TN-Bharti (none), TN-BPL 2.6, TN-BSNL (none), TN-Aircel (none), TN-Rel Info (none), TN-Tata 10.04

Audit was conducted for 20 operators. All operator(s) are meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered. Data Not provided by Rel Info – AP, Gujarat, Karnataka, Maharashtra and TN, BSNL – Gujarat, Hutch – Gujarat, Bharti – TN.

SDCCH <1%

SDCCH <1% chart with Benchmark line at 1. Values: AP-Bharti 0.81, AP-BSNL 0.98, AP-Hutch 0.355, AP-Idea 0.22, AP-Rel Info 0, AP-Tata 0, Gujarat-Bharti 0.131, Gujarat-BSNL 0.64, Gujarat-Hutch 0.28, Gujarat-Idea 0.992, Gujarat-Rel Info 0, Gujarat-Tata 0, Karnataka-Bharti 0.86, Karnataka-BSNL 0.62, Karnataka-Hutch 0.18, Karnataka-Rel Info 0, Karnataka-Spice 2.82, Karnataka-Tata 0, Maharashtra-Bharti 0.48, Maharashtra-BPL 1.4, Maharashtra-BSNL (none), Maharashtra-Idea 0.69, Maharashtra-Rel Info 0, Maharashtra-Tata 0, TN-Bharti 0.66, TN-BPL 0.97, TN-BSNL (none), TN-Aircel (none), TN-Rel Info 0, TN-Tata 0

Audit was conducted for 27 operators. Two operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered. Data not provided by BSNL – Maharashtra

TCH Congestion < 2%
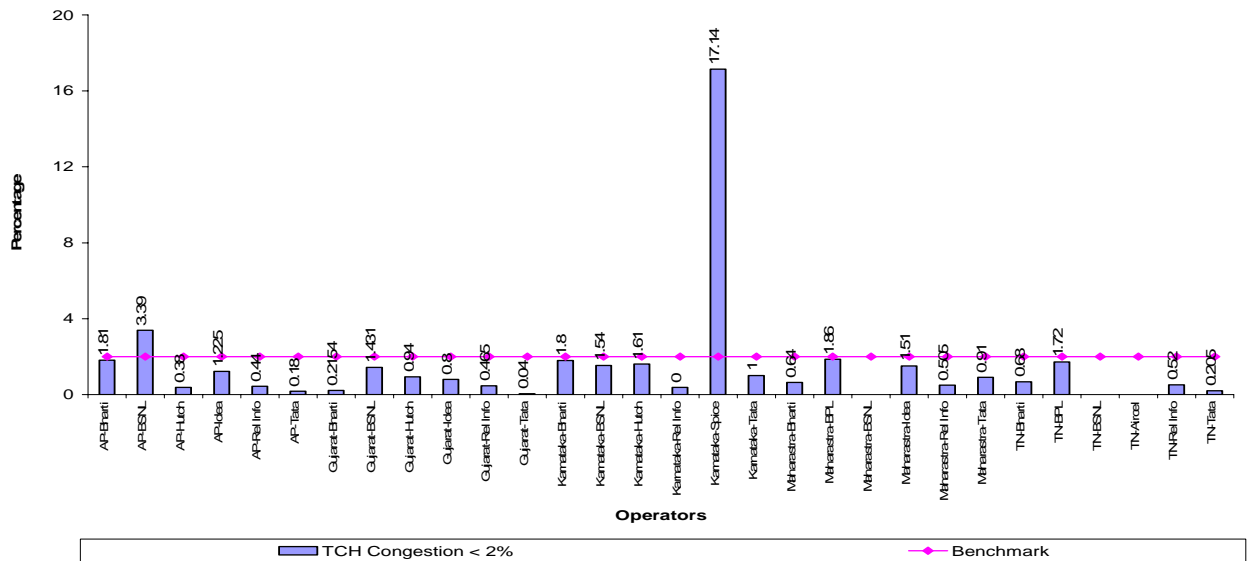
Audit was conducted for 27 operators. Two operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered. Data not provided by BSNL - Maharashtra

Call Drop Rate
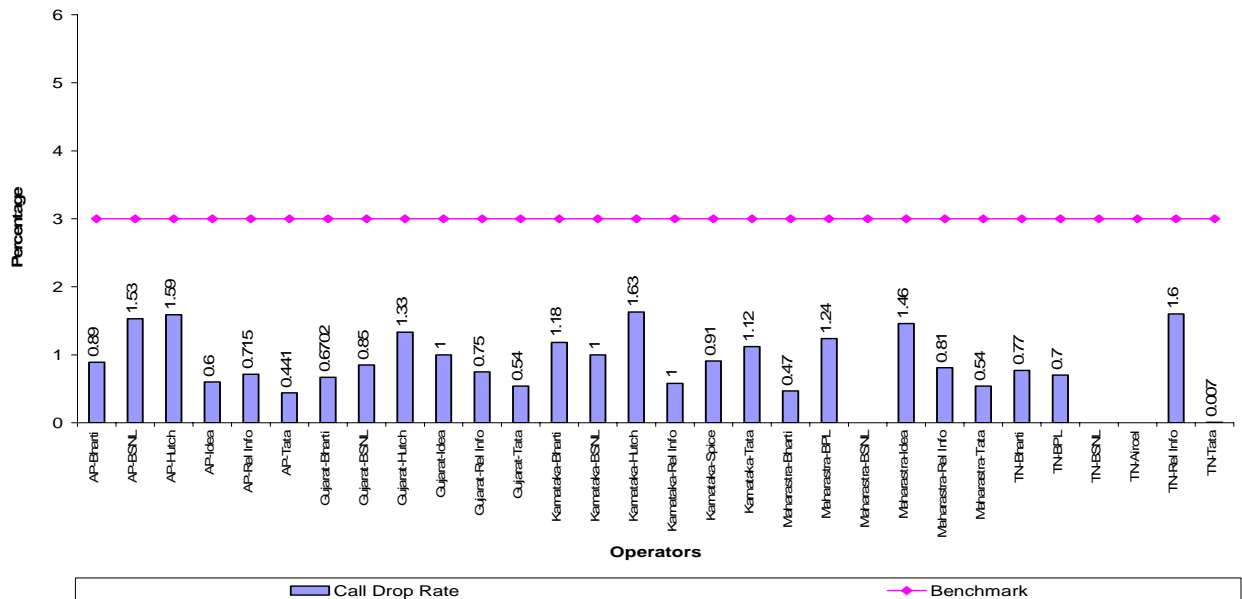
Audit was conducted for 27 operators. All operator(s) are meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered. Data not provided by BSNL – Maharashtra.

% Connection with Good Voice Quality
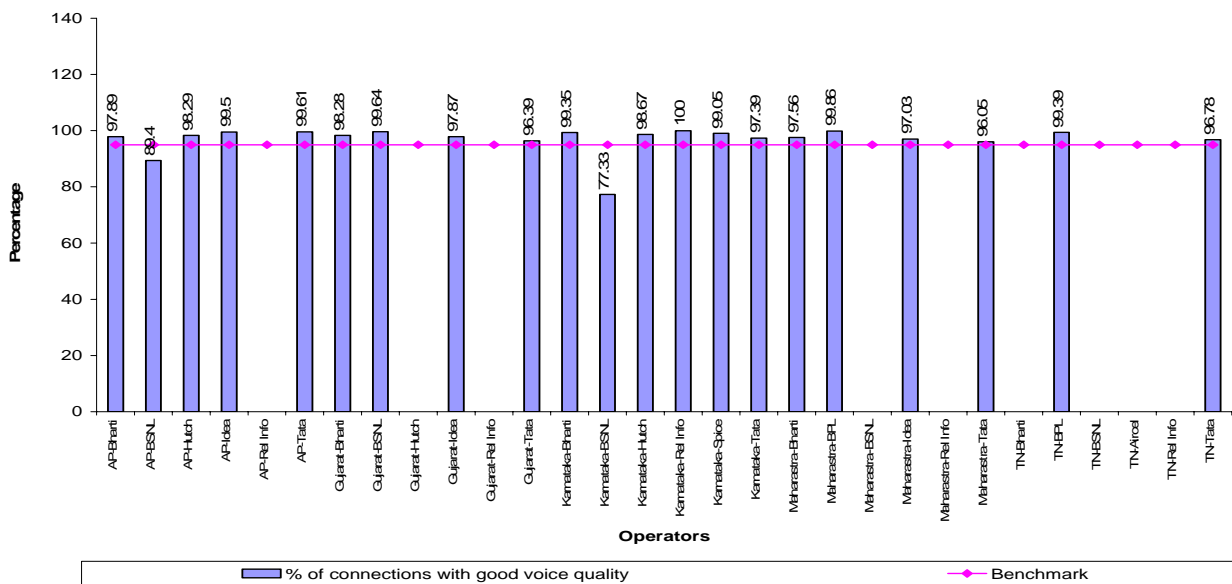
% of connections with good voice quality — Benchmark

Audit was conducted for 21 operators. Two operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered. Data not provided by Rel Info – AP, Gujarat, Maharashtra & TN, Hutch – Gujarat, BSNL – Maharashtra and Bharti - TN

IVR within 20 seconds

IVR within 20 sec — Benchmark
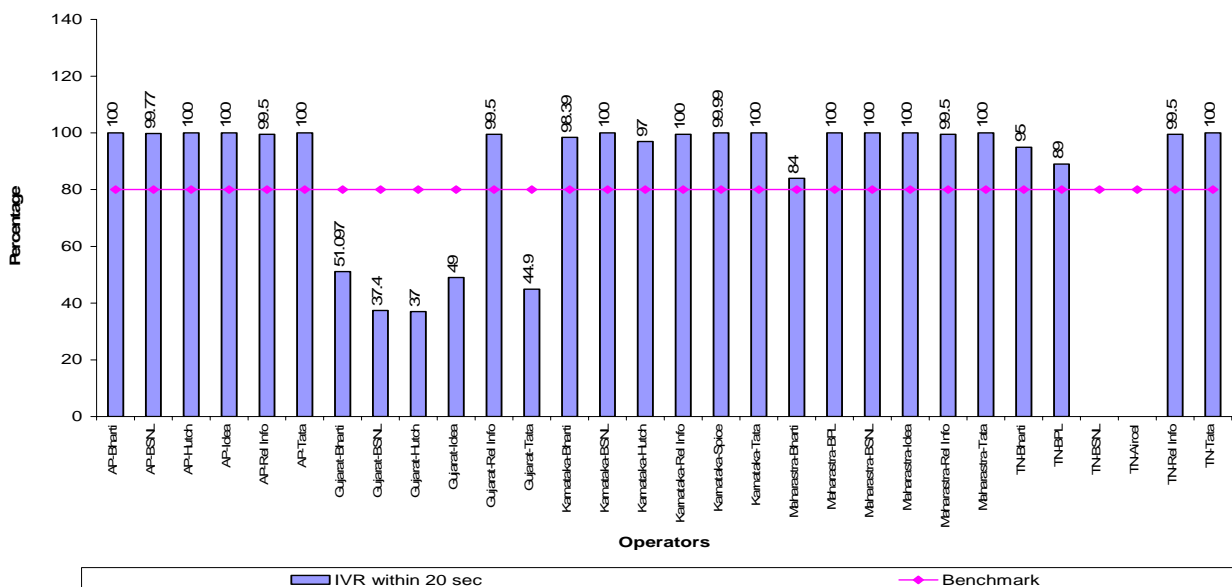
Audit was conducted for 28 operators. Five operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

IVR within 40 seconds
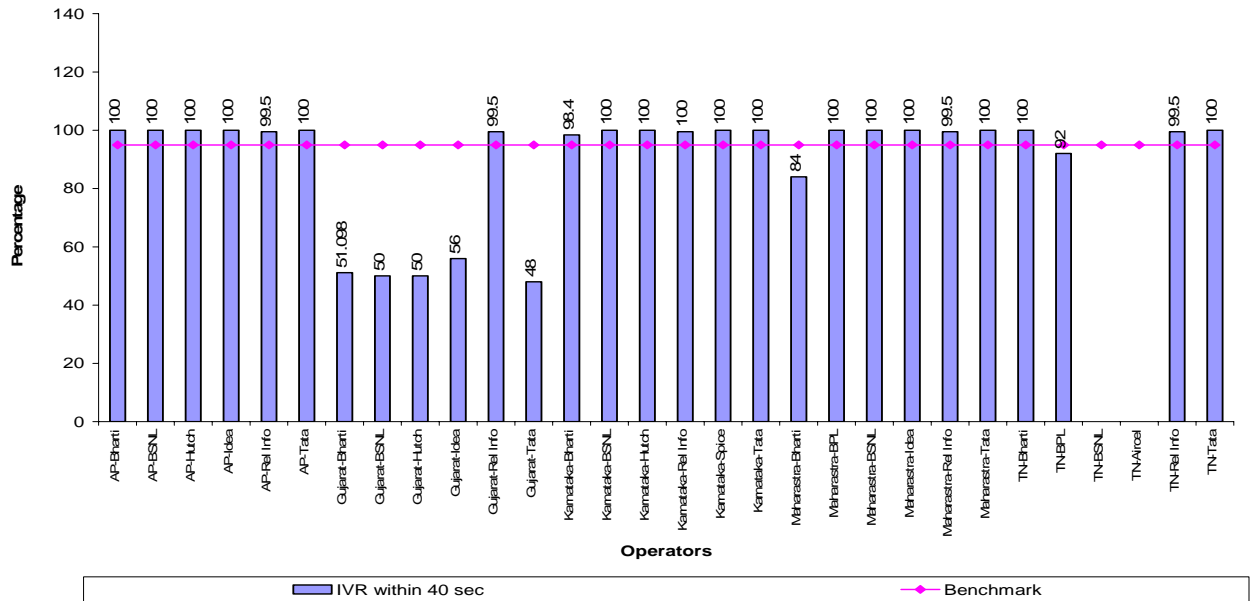
Audit was conducted for 28 operators. Seven operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

Voice within 60 seconds
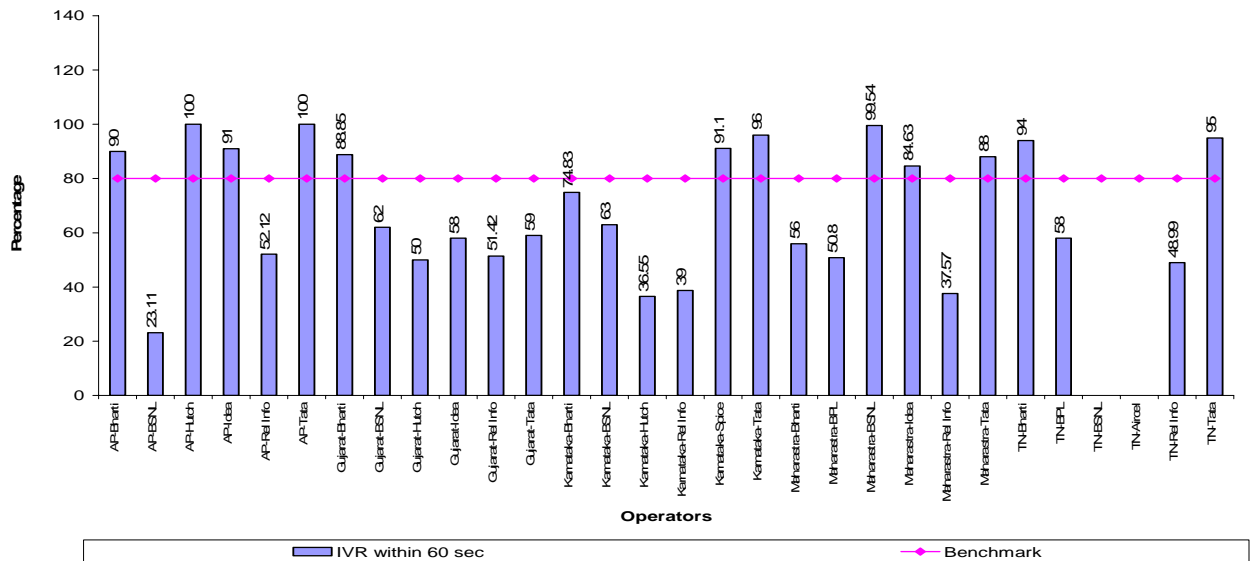
Audit was conducted for 28 operators. Sixteen operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

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Voice within 90 seconds
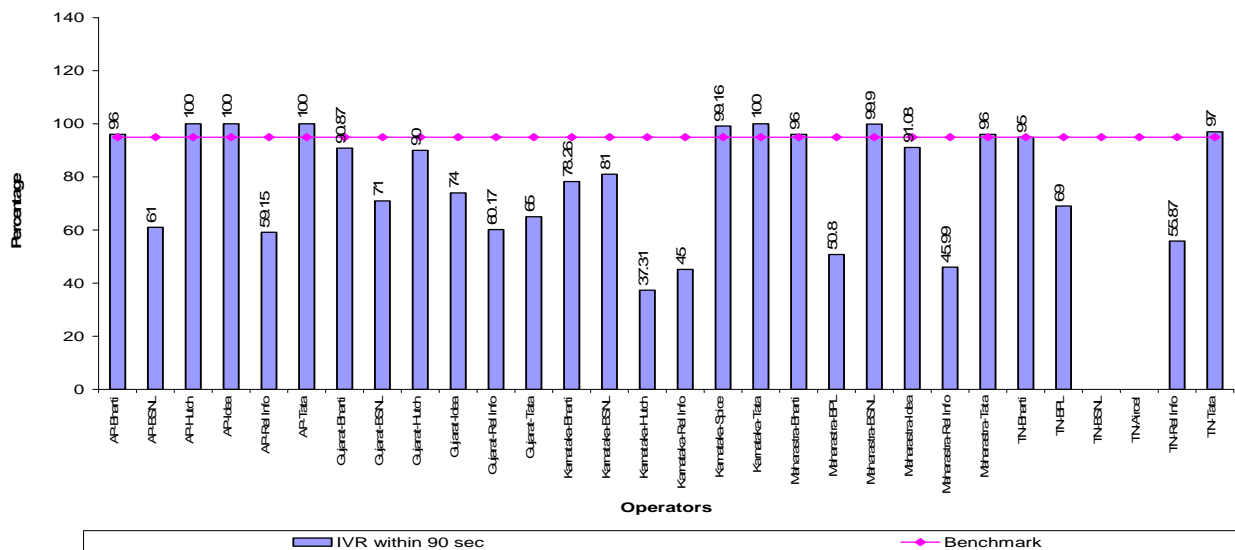
Audit was conducted for 28 operators. Seventeen operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

Billing Complains per 100 bill issued
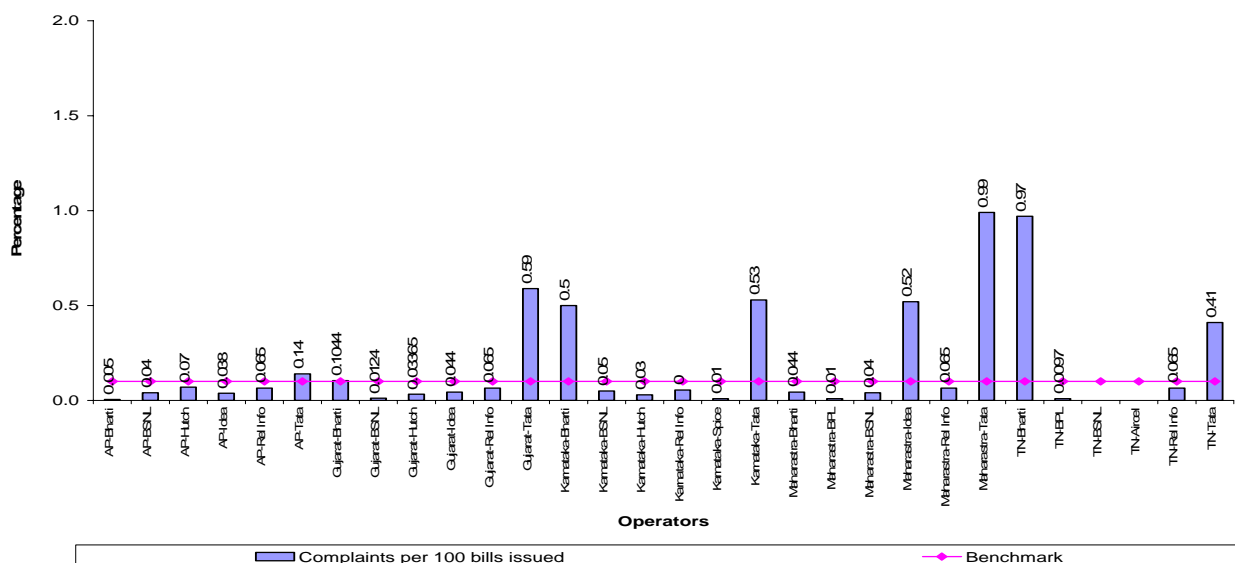
Audit was conducted for 28 operators. Nine operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

% of Billing Complaints resolved within 4 weeks
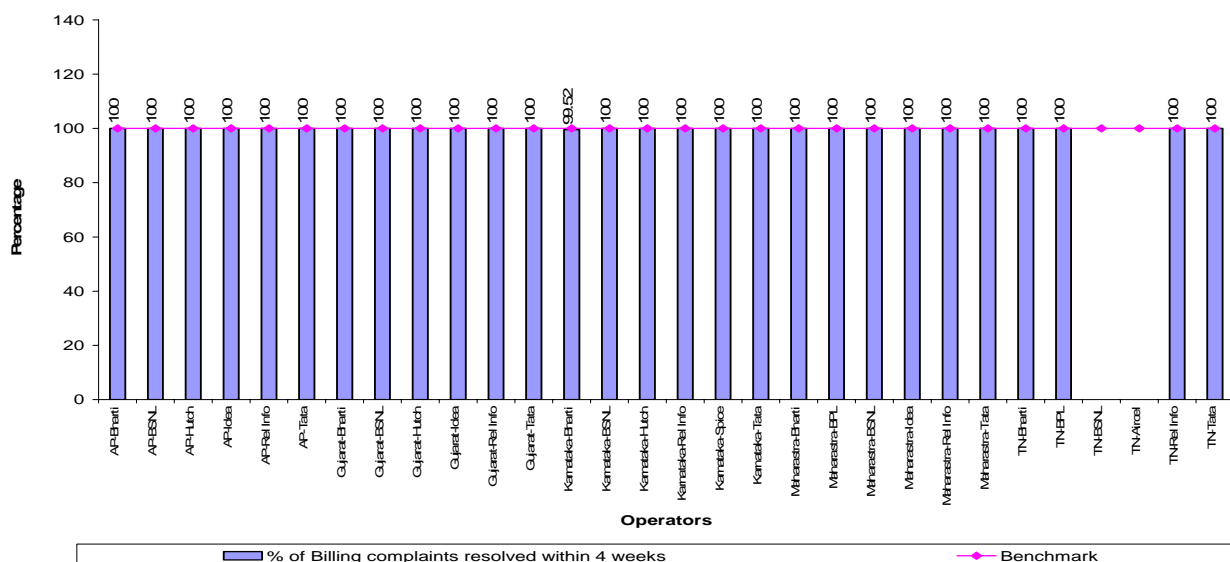
Audit was conducted for 28 operators. One operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

Period of refunds / payment due to customers from the date of resolution of complaints
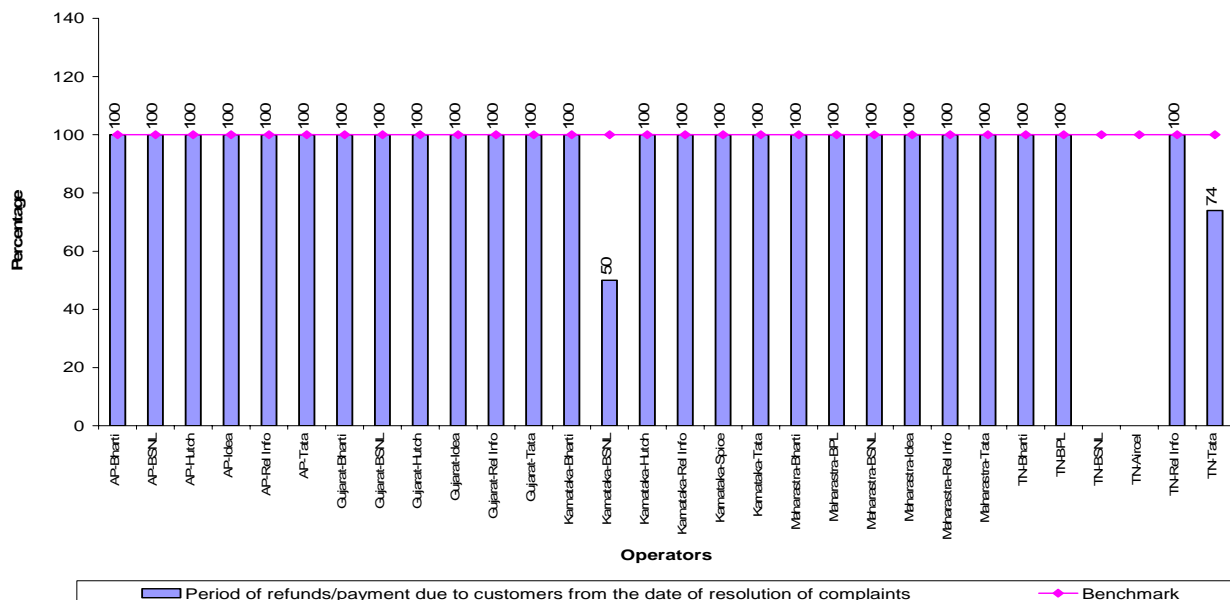
Audit was conducted for 28 operators.Two operator(s) are not meeting the benchmark parameter. BSNL & Aircel Tamil Nadu were not covered.

4.1.3 B CIRCLES

Accumulated down time of community isolation
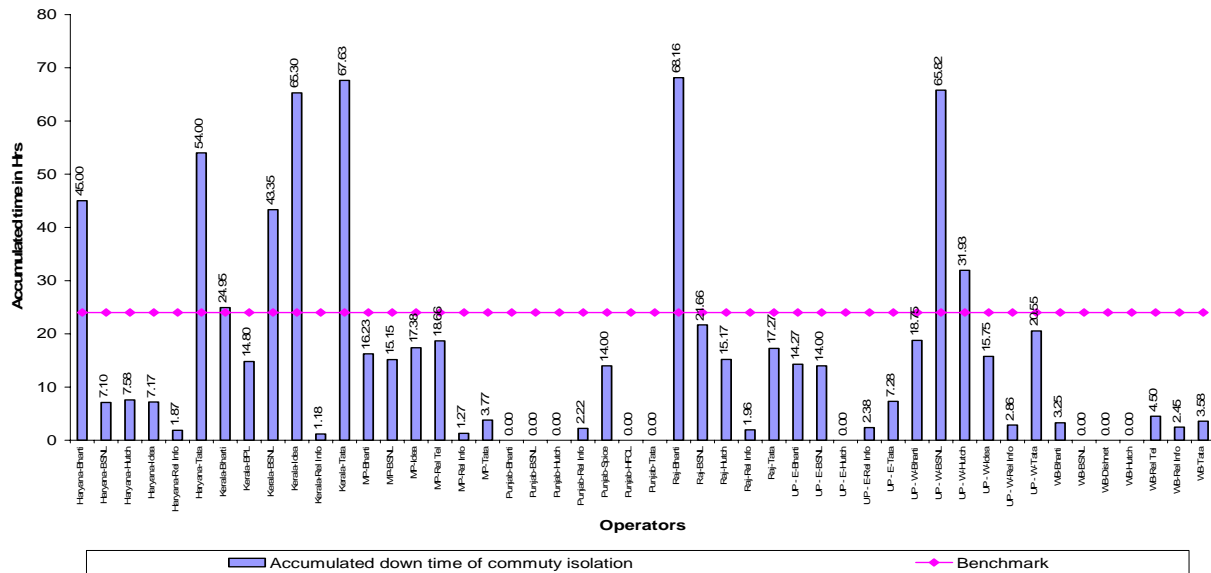
Audit was conducted for 48 operators. Ten operator(s) are not meeting the benchmark parameter.

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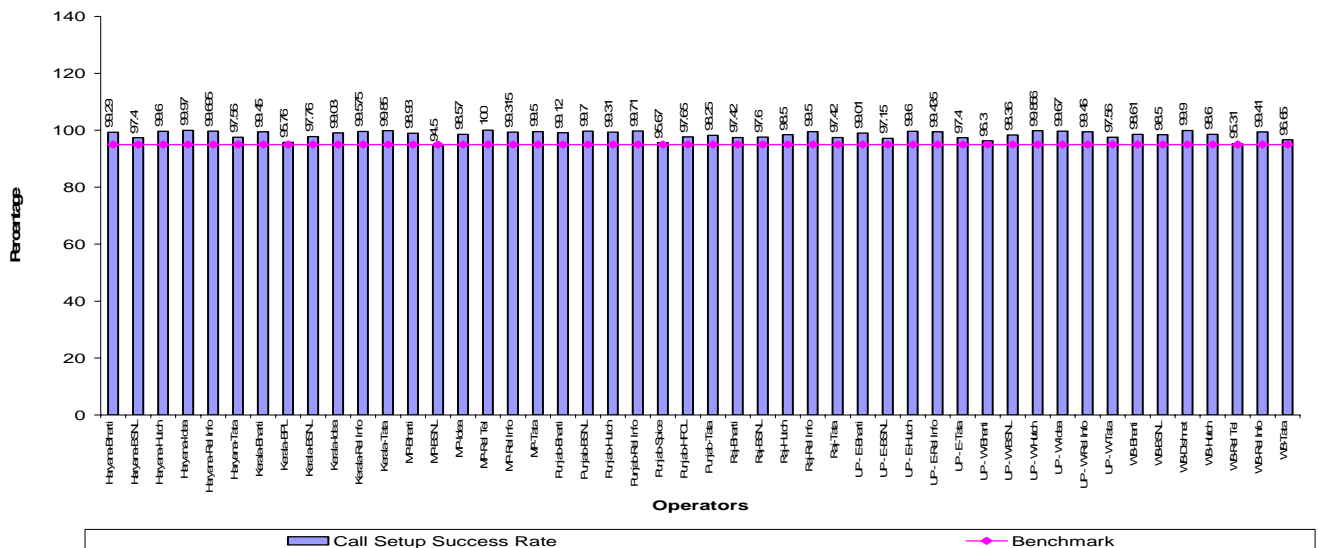
Audit was conducted for 48 operators. One operator(s) are not meeting the benchmark parameter.

Service Access Delay
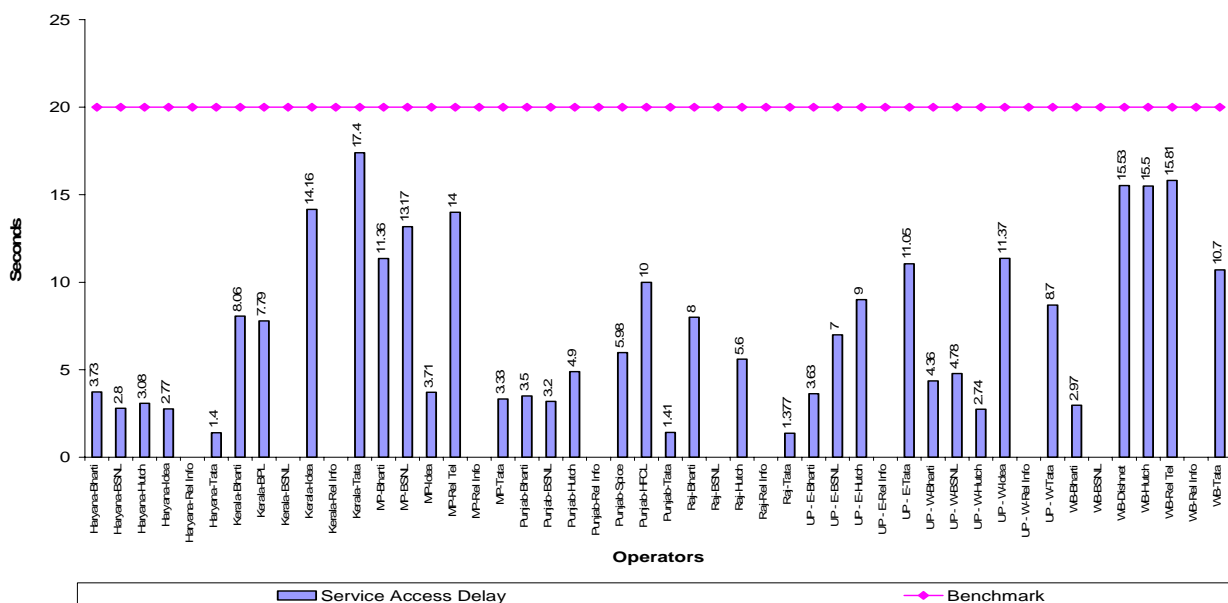
Audit was conducted for 37 operators. All operator(s) are meeting the benchmark parameter. Data not provided by Rel Info – Haryana, Kerala, MP, Punjab, Rajasthan, UP E, UP W & WB, BSNL – Kerala, Rajasthan & WB.

SDCCH <1%
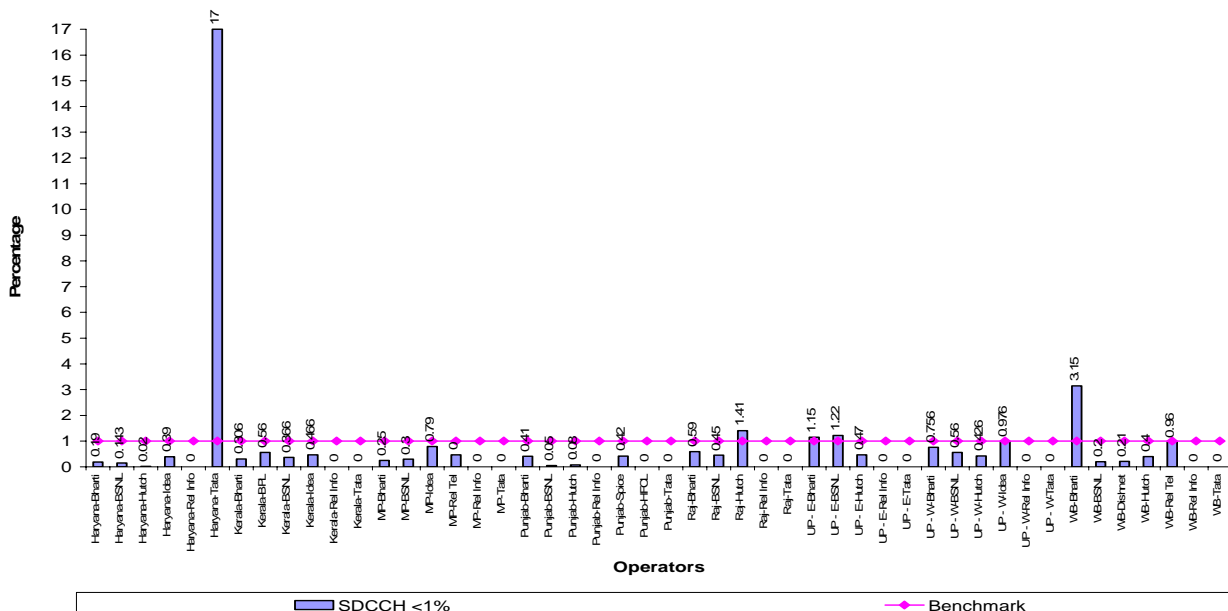
Audit was conducted for 48 operators. Five operator(s) are not meeting the benchmark parameter..

TCH Congestion < 2%
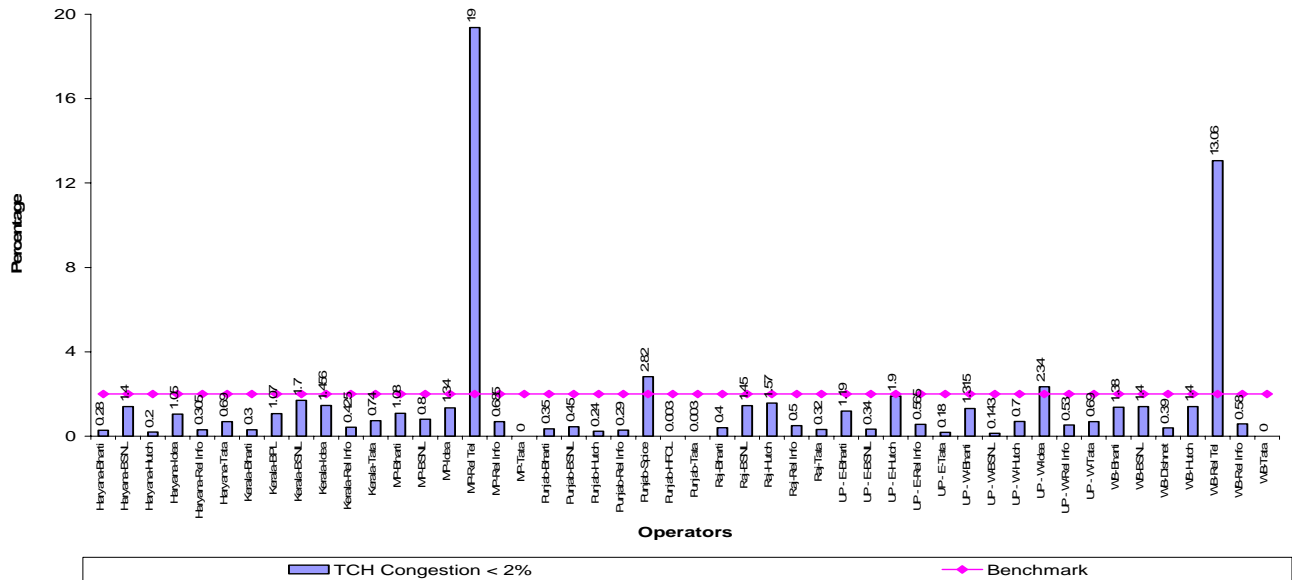
Audit was conducted for 48 operators. Four operator(s) are not meeting the benchmark parameter..
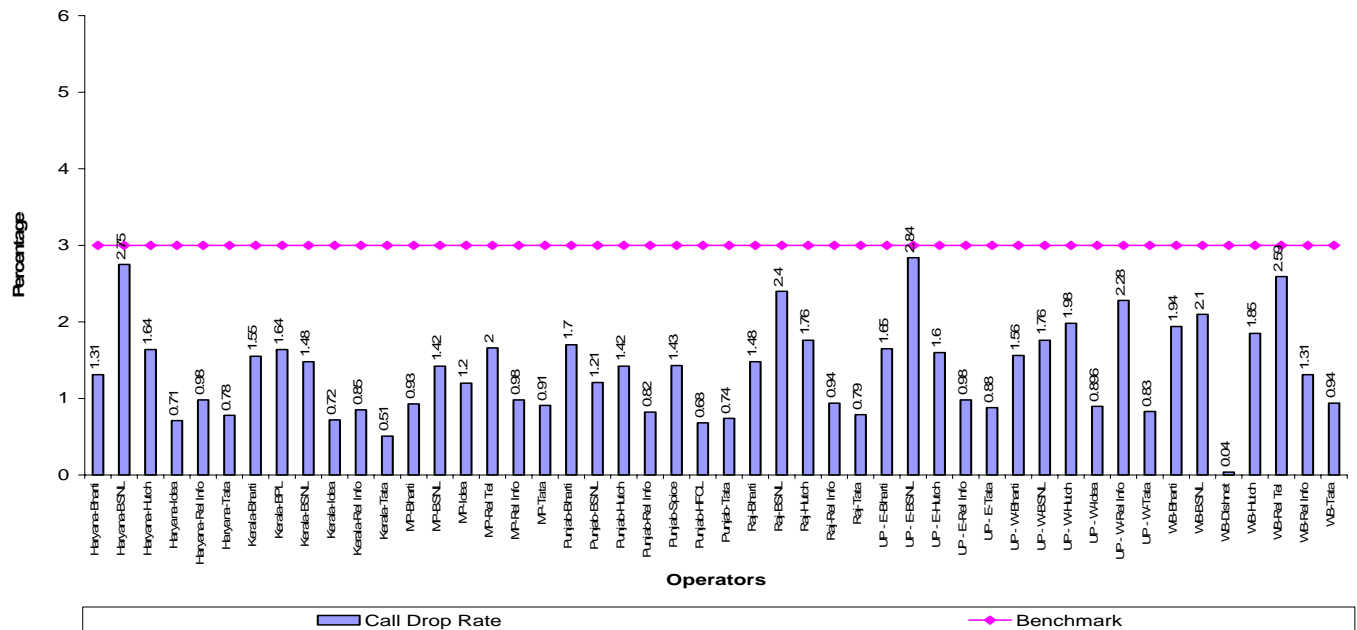
Call Drop Rate

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

% Connection with Good Voice Quality

% of connections with good voice quality   Benchmark
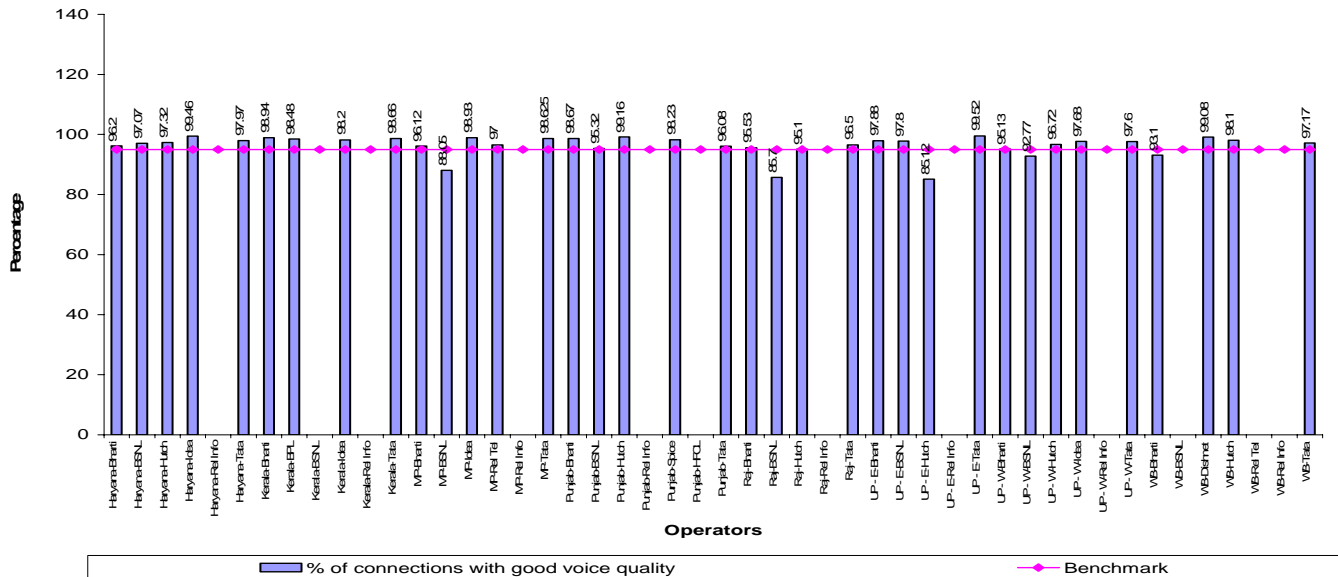
Audit was conducted for 36 operators. Five operator(s) are not meeting the benchmark parameter. Data not provided by Rel Info – Haryana, Kerala, MP, Punjab, Rajasthan, UP E, UP W & WB, BSNL – Kerala, WB, HFCL – Punjab and Rel Tel – WB.

IVR within 20 seconds

IVR within 20 sec   Benchmark
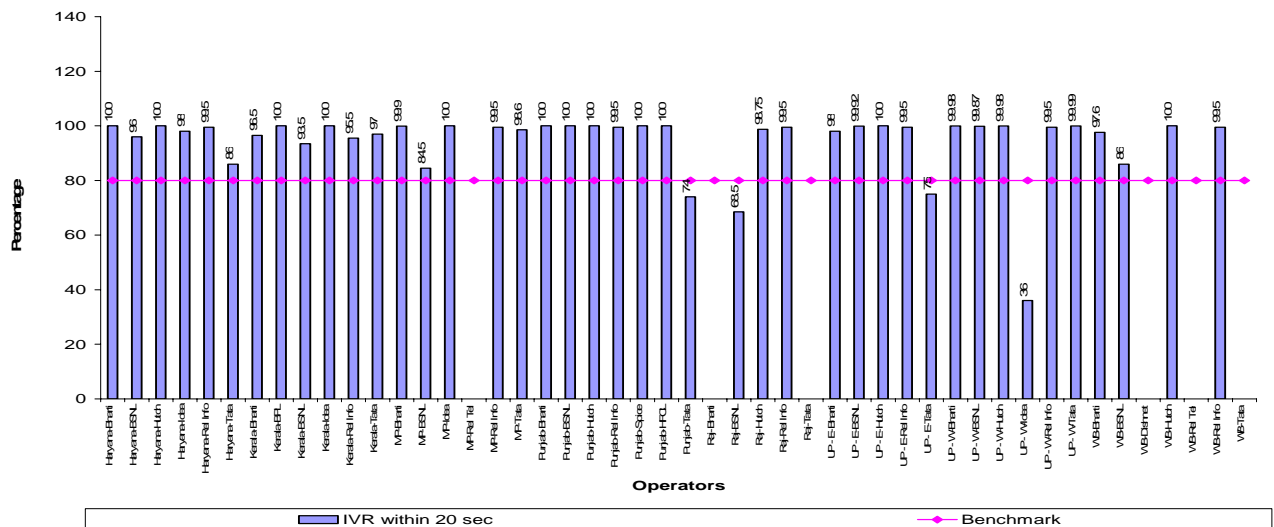
Audit was conducted for 42 operators. Four operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Raj, Dishnet – WB, Tata – WB & Raj. Rel Tel – WB & MP are not having provison of IVR.

IVR within 40 seconds
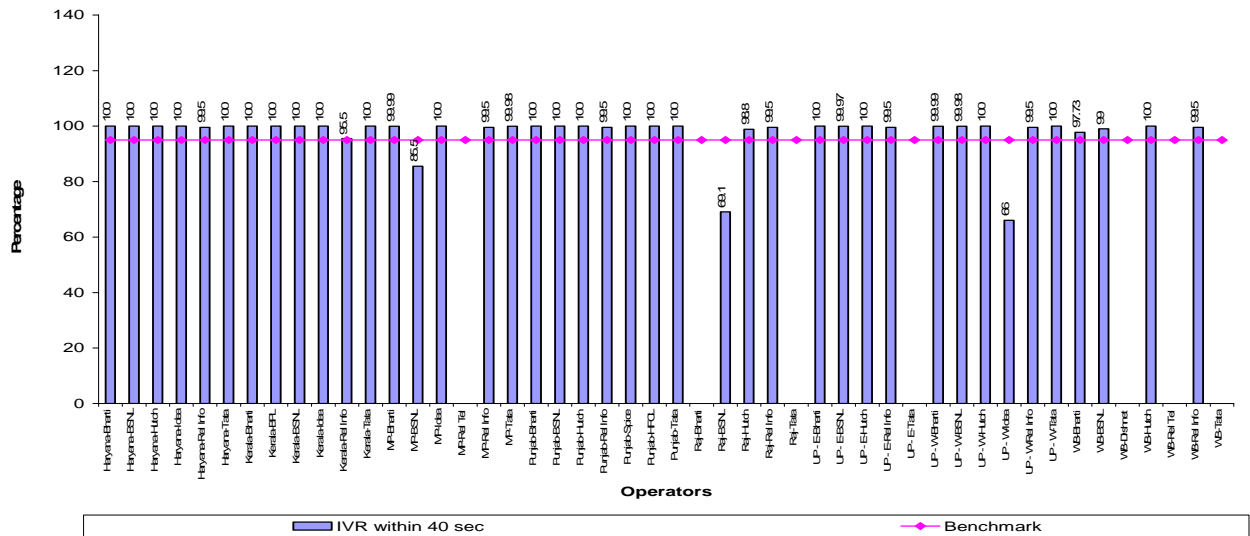
Audit was conducted for 41 operators. Three operator(s) are not meeting the benchmark parameter. Data not provide by Bharti – Raj, Tata – Raj, UP E, & WB, Dishnet – WB. Rel Tel – MP & WB are not having the provision of IVR.

Voice within 60 seconds
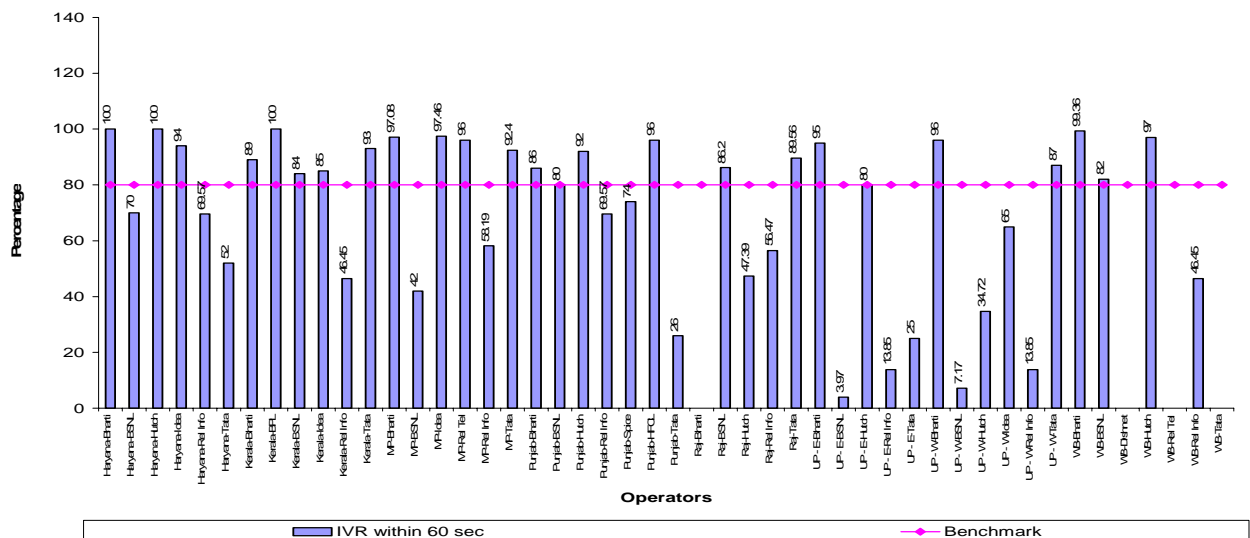
Audit was conducted for 44 operators. Nineteen operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Raj, Dishnet – WB and Tata – WB and Rel Tel – MP.

Voice within 90 seconds
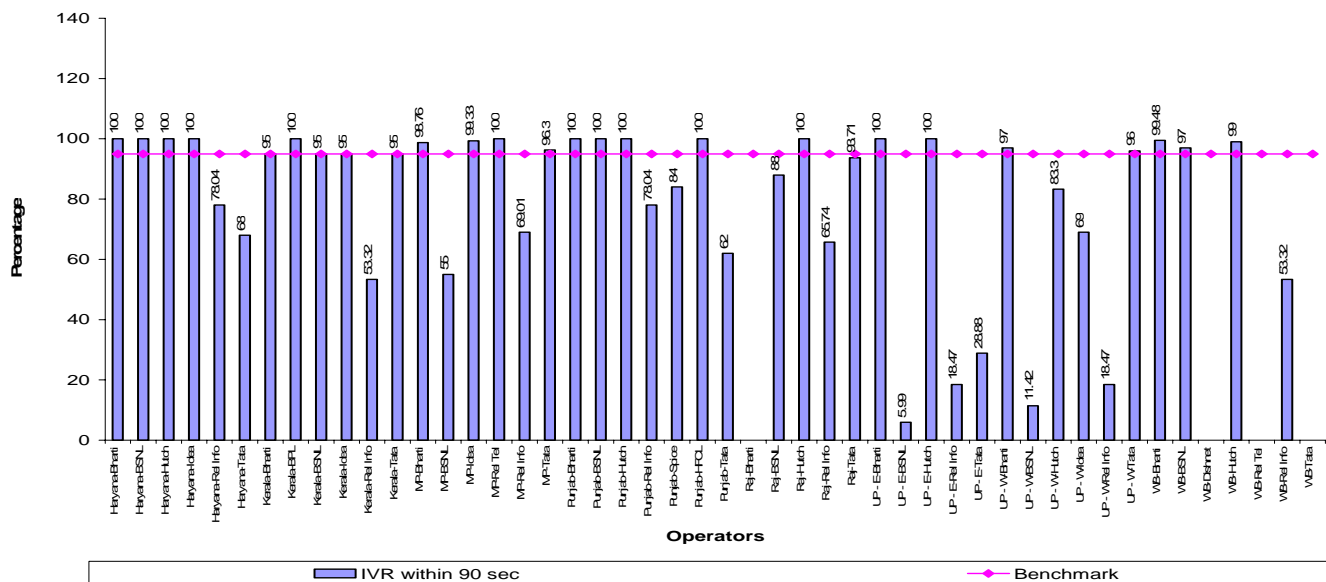
Audit was conducted for 44 operators. Eighteen operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Raj, Dishnet – WB and Tata – WB and Rel Tel – MP

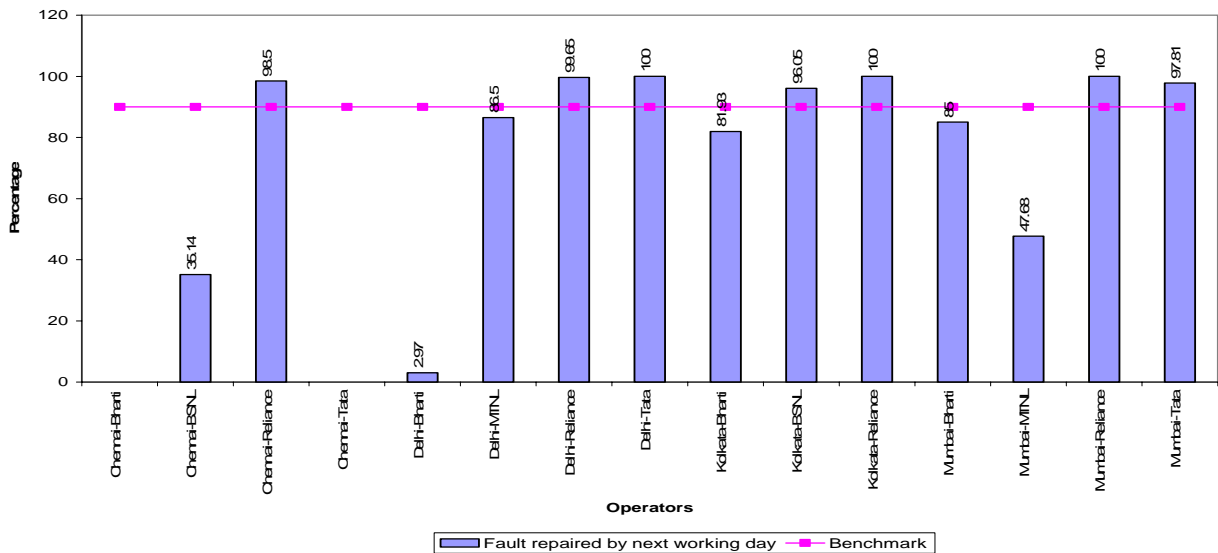## Billing Complains per 100 bill issued
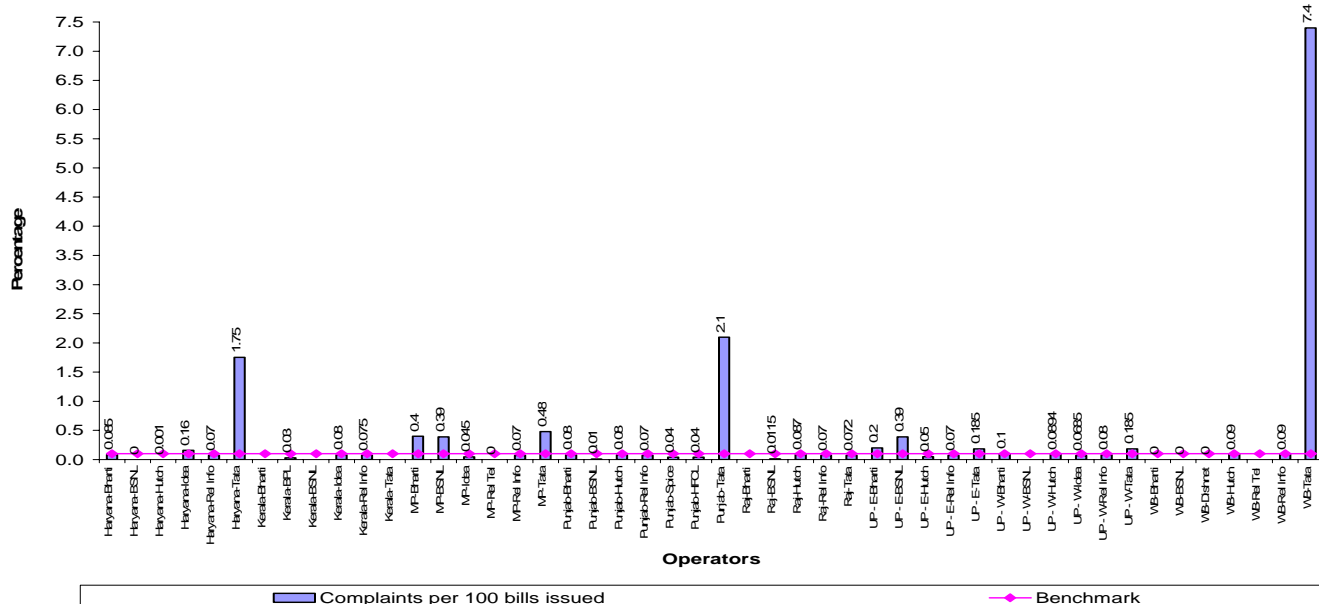
Audit was conducted for 42 operators. Eleven operator(s) are not meeting the benchmark parameter. Bharti, BSNL & Tata - Kerala were not covered. Data not provided by Bharti – Rajasthan. No incidences were observed in BSNL – UPW and Rel Tel – WB.

% of Billing Complaints resolved within 4 weeks
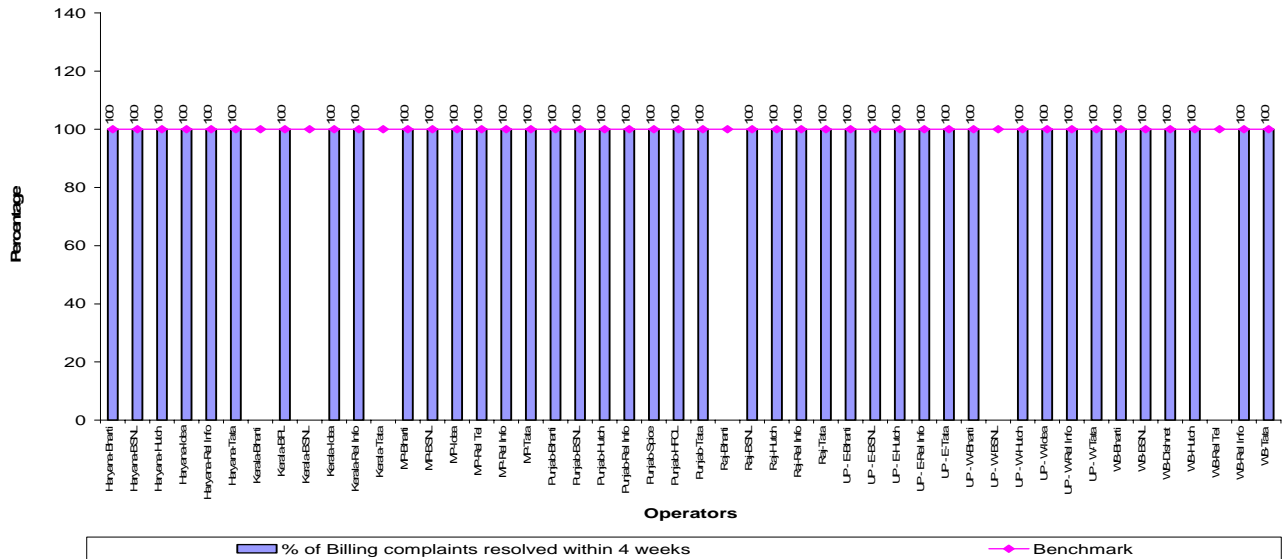
Audit was conducted for 42 operators. All operator(s) are meeting the benchmark parameter. Bharti, BSNL & Tata - Kerala were not covered. Data not provided by Bharti – Rajasthan. No incidences were observed in BSNL – UPW and Rel Tel – WB.

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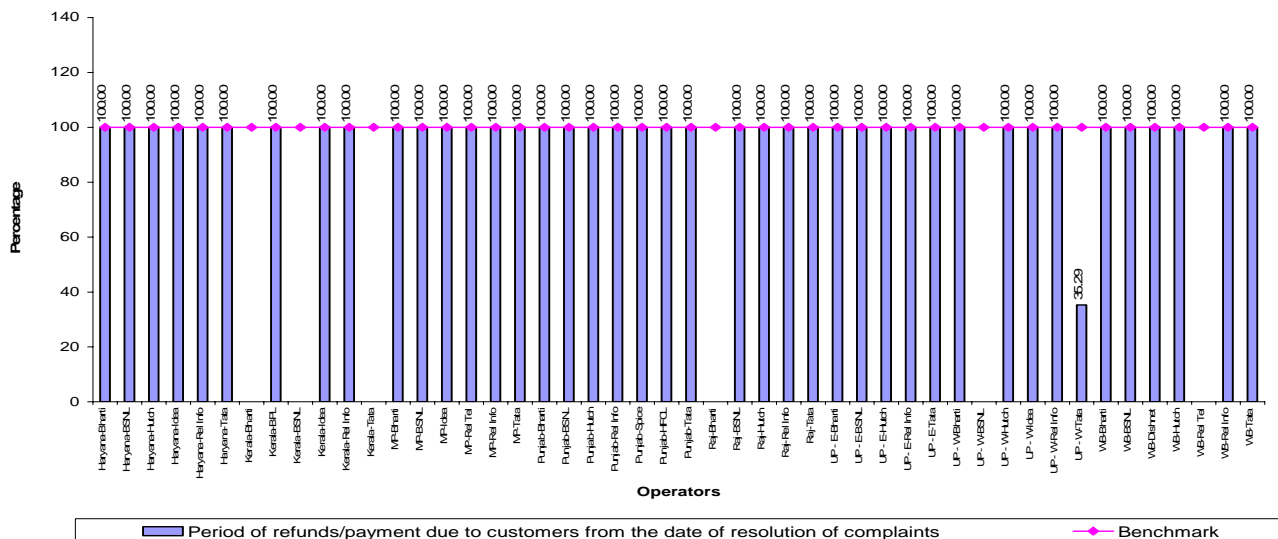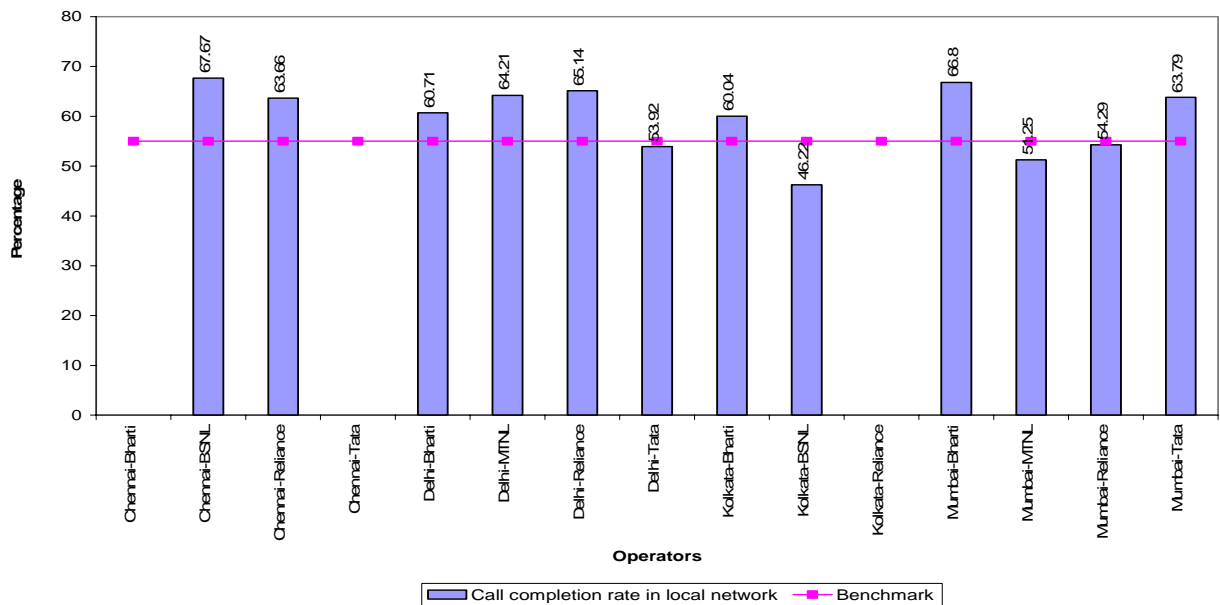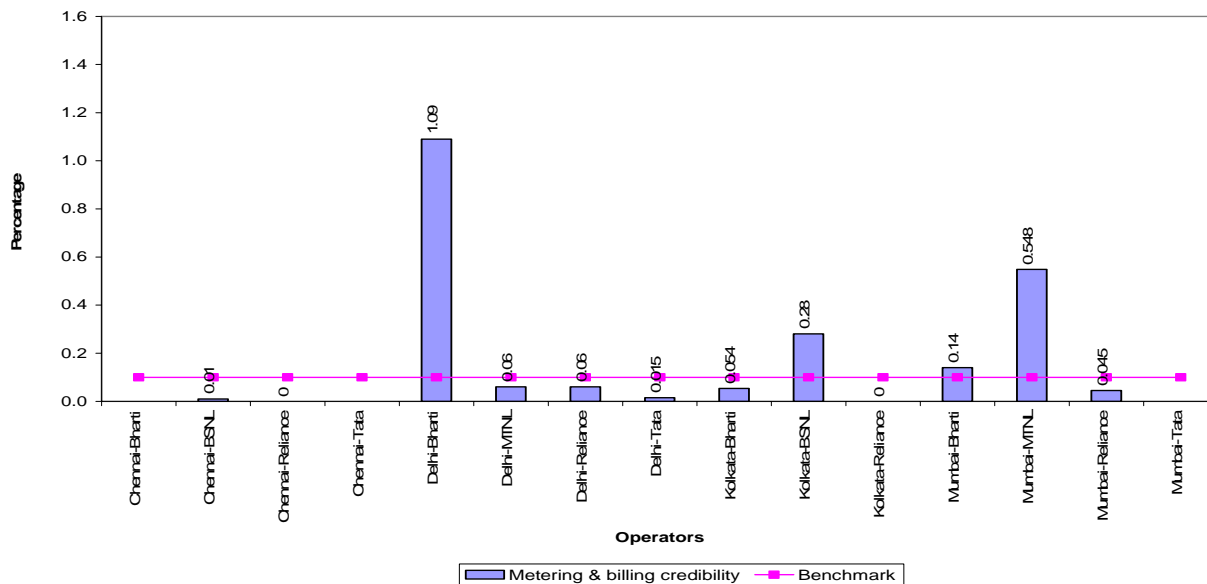

Audit was conducted for 42 operators. One operator(s) are not meeting the benchmark parameter. Bharti, BSNL & Tata - Kerala were not covered. Data not provided by Bharti – Rajasthan. No incidences were observed in BSNL – UPW and Rel Tel – WB.

4.1.4 C CIRCLES

Accumulated down time of community isolation
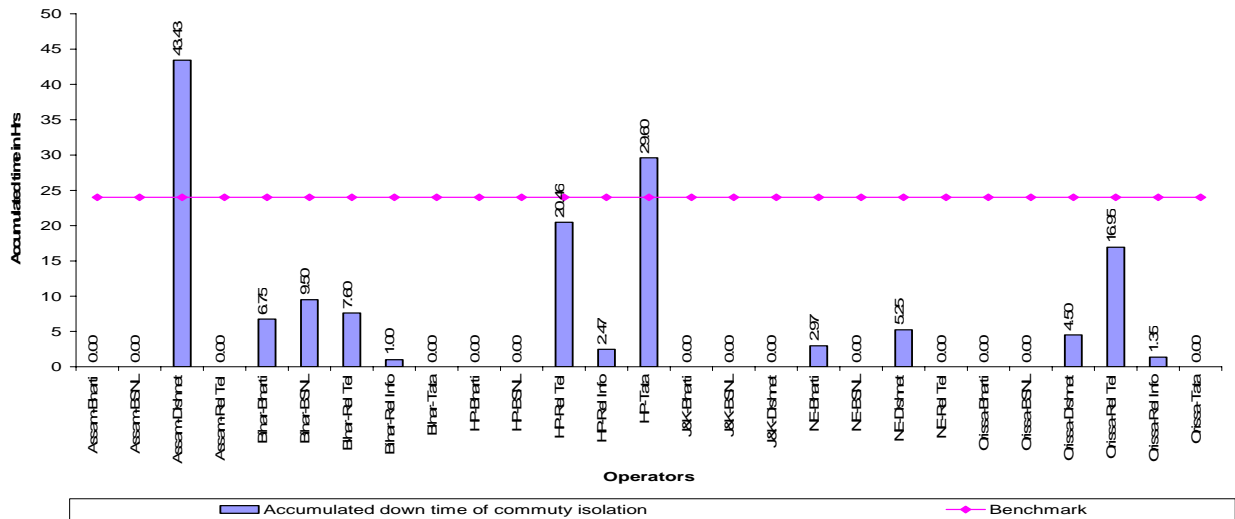
Audit was conducted for 27 operators. Two operator(s) are not meeting the benchmark parameter.

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Call Setup Success Rate
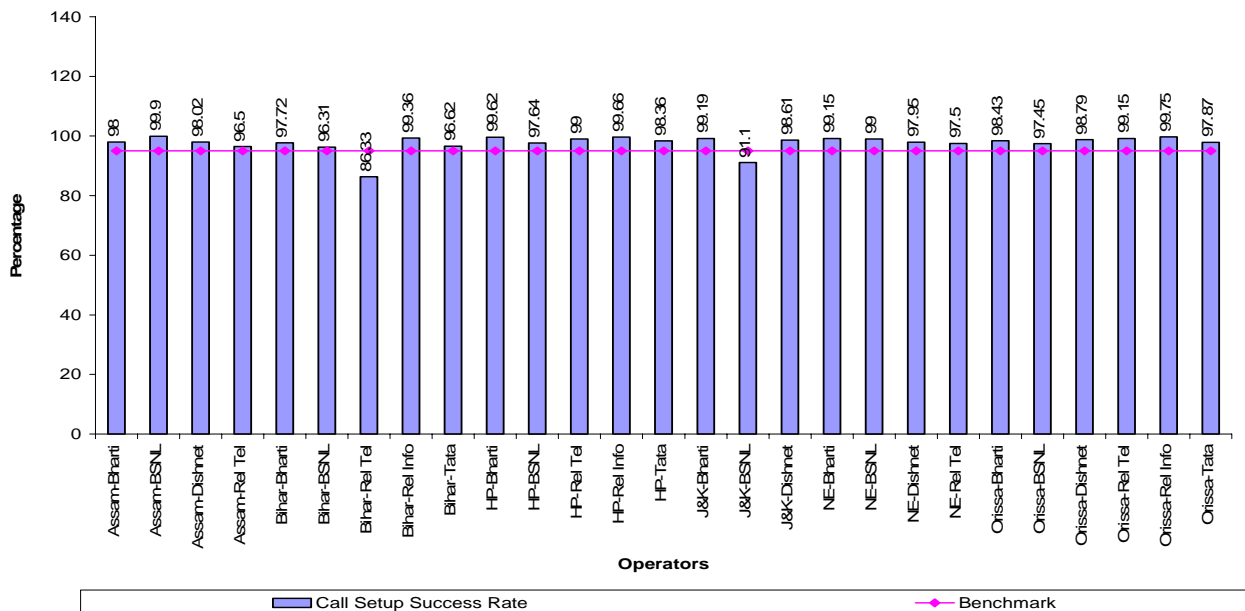
Audit was conducted for 27 operators. Two operator(s) are not meeting the benchmark parameter.

Service Access Delay
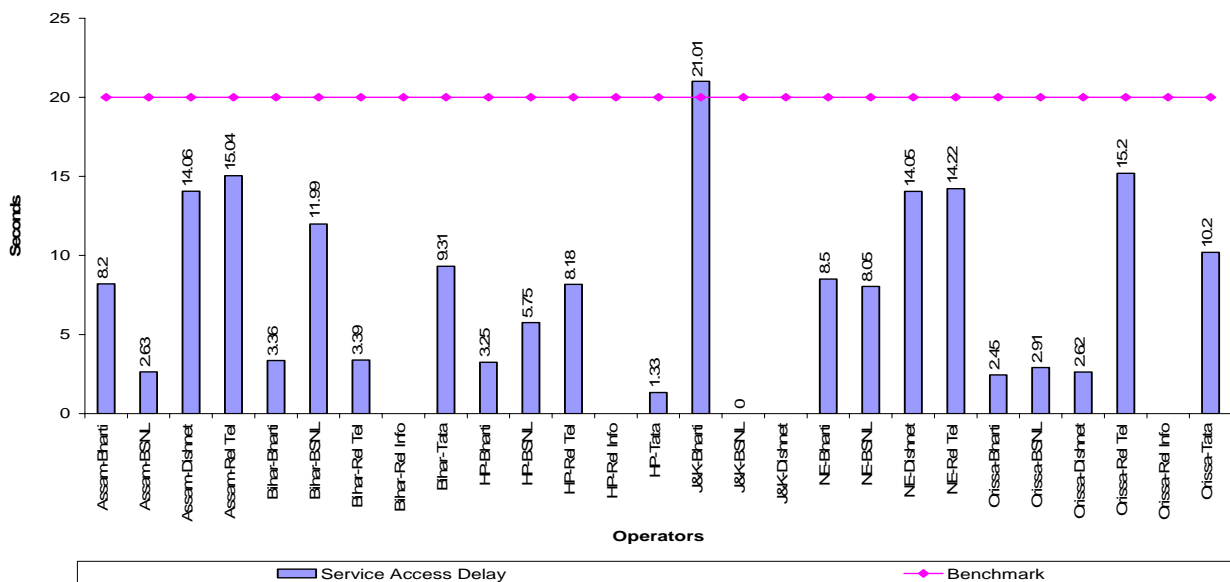
Audit was conducted for 23 operators. One operator(s) are not meeting the benchmark parameter. Data not provided by Rel Info – Bihar, HP & Orissa and Dishnet – J&K.

SDCCH <1%
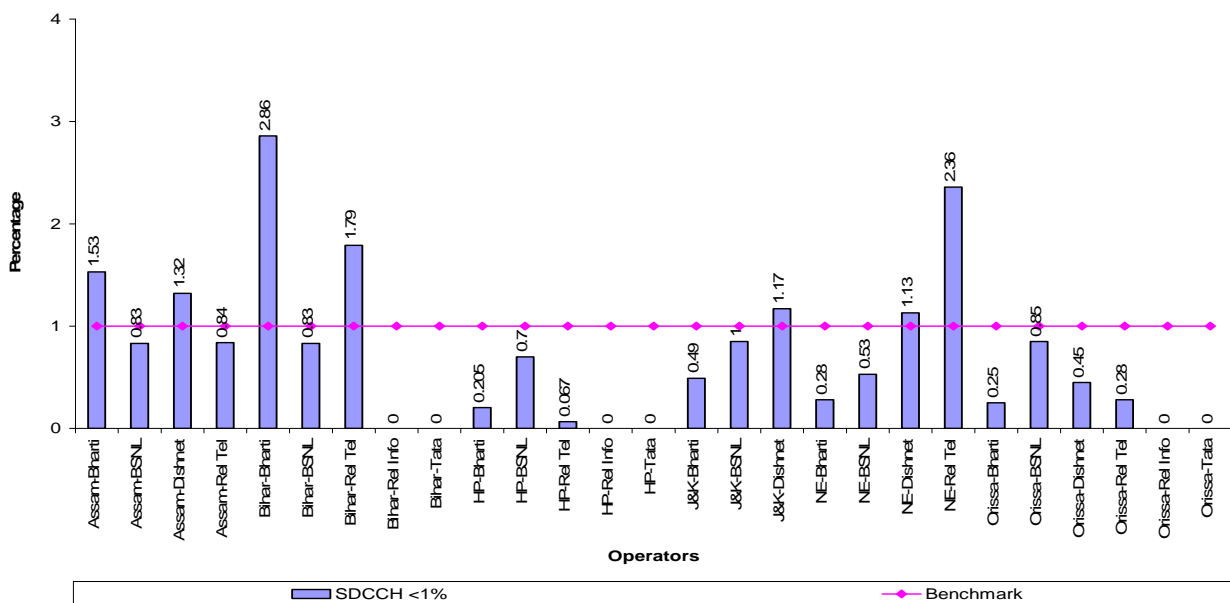
Audit was conducted for 27 operators. Seven operator(s) are not meeting the benchmark parameter.

TCH Congestion < 2%

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

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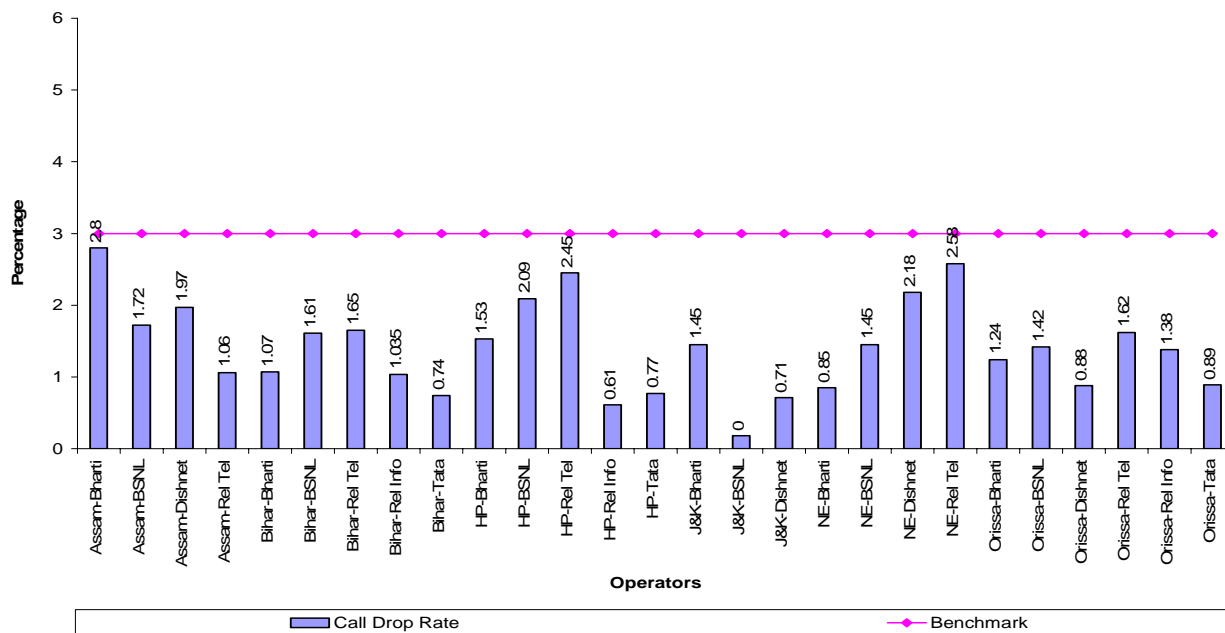
Audit was conducted for 27 operators. All operator(s) are meeting the benchmark parameter.

% Connection with Good Voice Quality
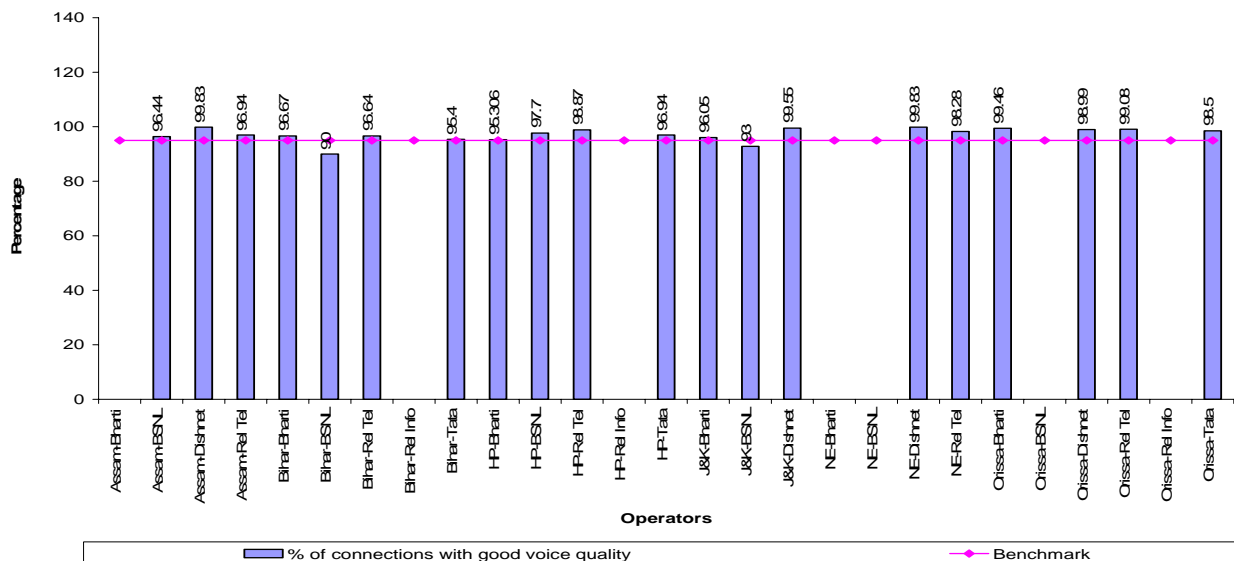
Audit was conducted for 20 operators. Two operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – Assam, Rel Info – Bihar, HP, Bharti – NE, BSNL – NE, BSNL – Orissa and Rel Info – Orissa.

IVR within 20 seconds
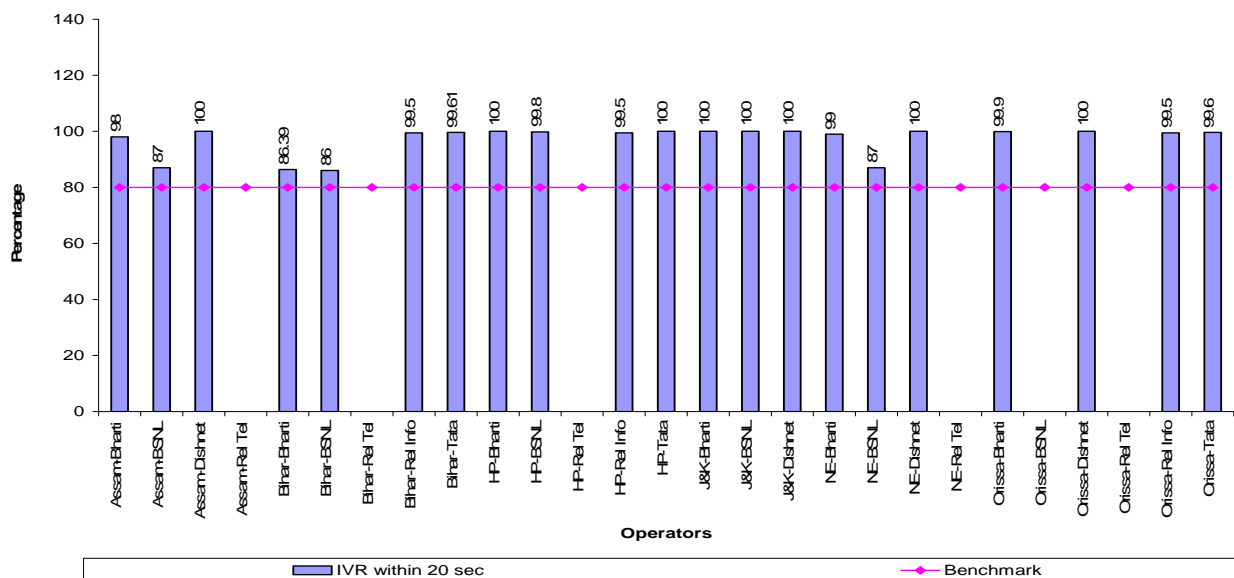
Audit was conducted for 21 operators. All operator(s) are meeting the benchmark parameter. No IVR System exists for Rel Tel – Assam, Bihar, HP, NE & Orissa. Data not provided by BSNL – Orissa.

IVR within 40 seconds
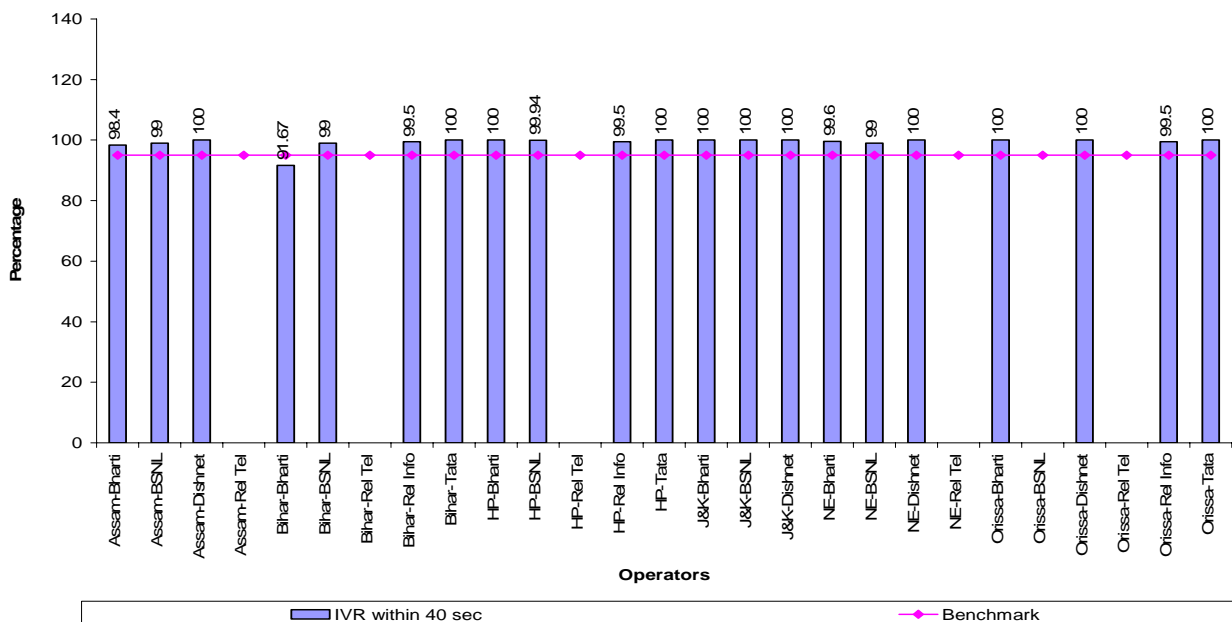
Audit was conducted for 21 operators. One operator(s) is not meeting the benchmark parameter. No IVR System exists for Rel Tel – Assam, Bihar, HP, NE & Orissa. Data not provided by BSNL – Orissa.

Voice within 60 seconds
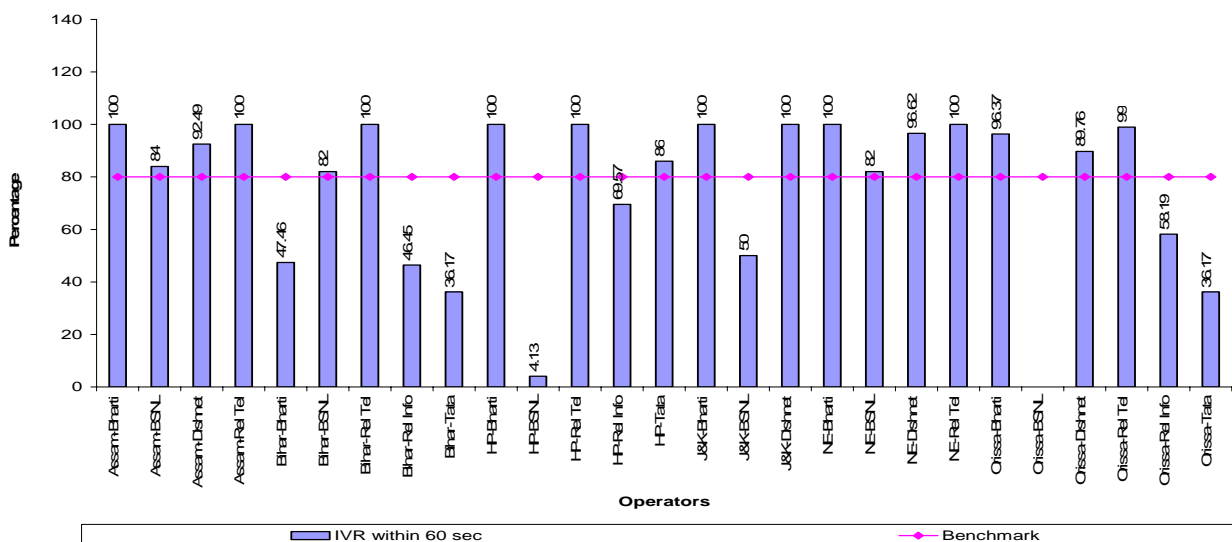
Audit was conducted for 26 operators. Eight operator(s) are not meeting the benchmark parameter. Data not provided by BSNL – Orissa.

Voice within 90 seconds
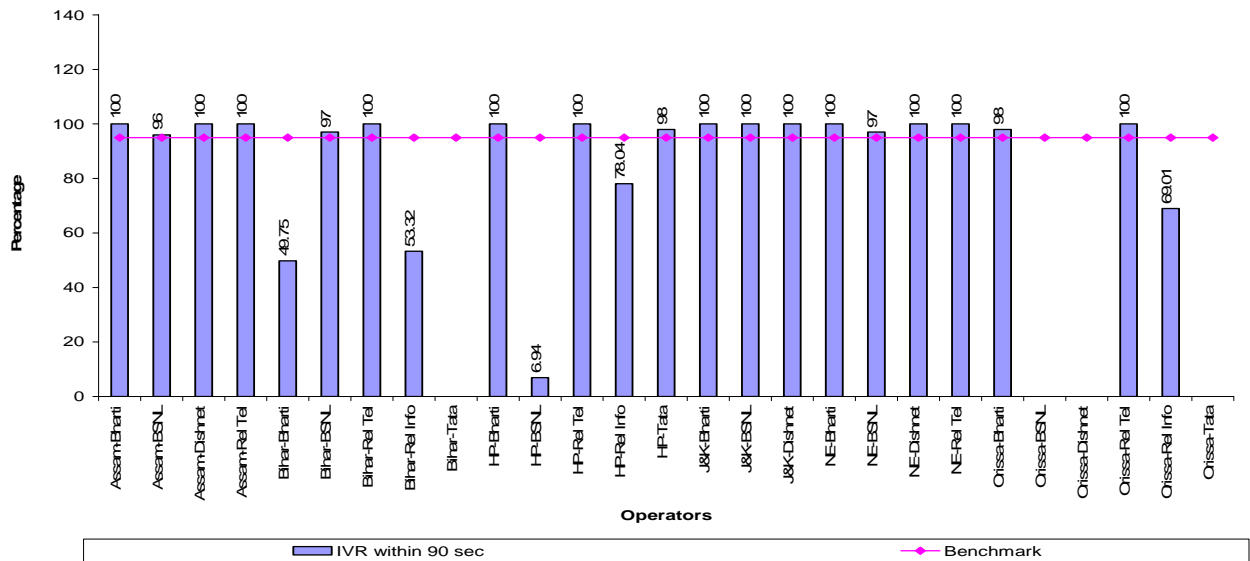
Audit was conducted for 23 operators. Five operator(s) are not meeting the benchmark parameter.. Data not provided by Tata – Bihar & Orissa, BSNL – Orissa & Dishnet – Orissa.

Billing Complains per 100 bill issued
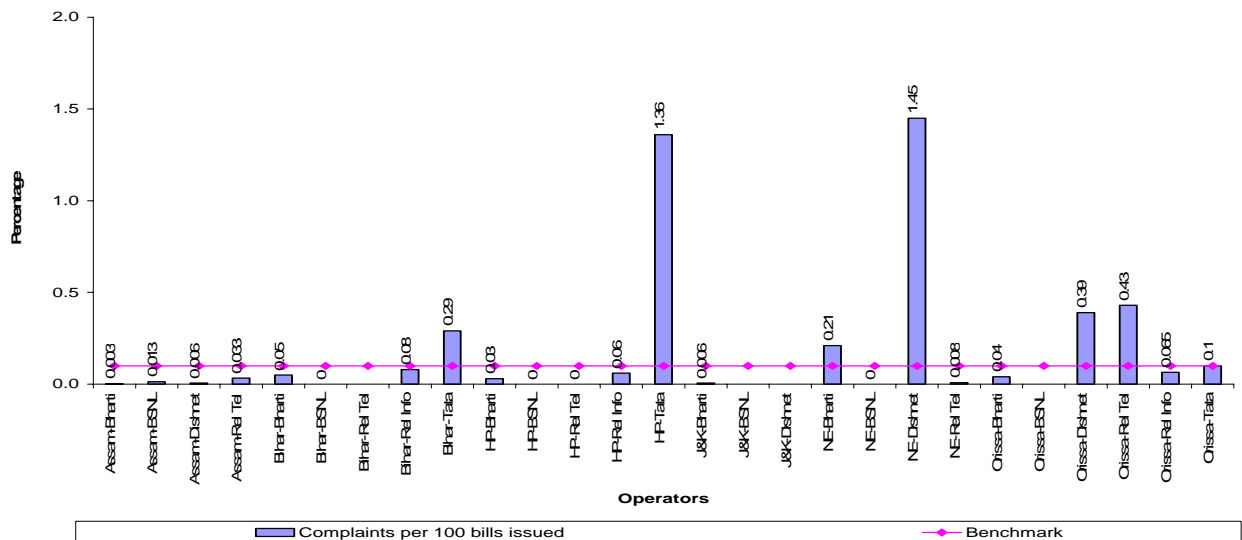
Audit was conducted for 23 operators. Six operator(s) are not meeting the benchmark parameter. No incidences were observed at Rel Tel – Bihar, BSNL – J&K, Dishnet - J&K. Data not provided by BSNL – Orissa.

% of Billing Complaints resolved within 4 weeks
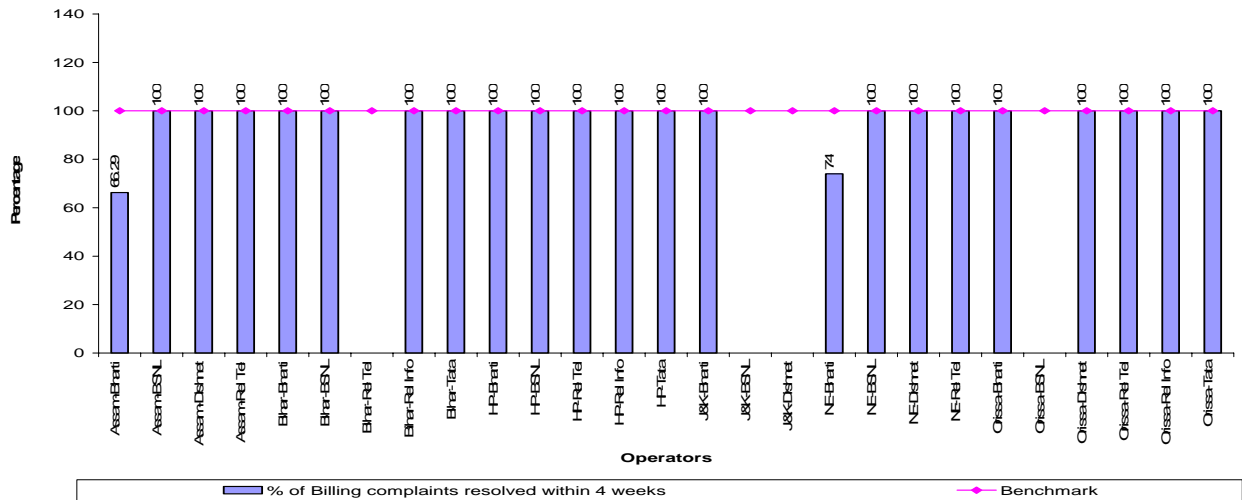
Audit was conducted for 23 operators. Two operator(s) are not meeting the benchmark parameter. No incidences were observed at Rel Tel – Bihar, BSNL – J&K and Dishnet J&K. Data not provided by BSNL – Orissa.

Period of refunds / payment due to customers from the date of resolution of complaints
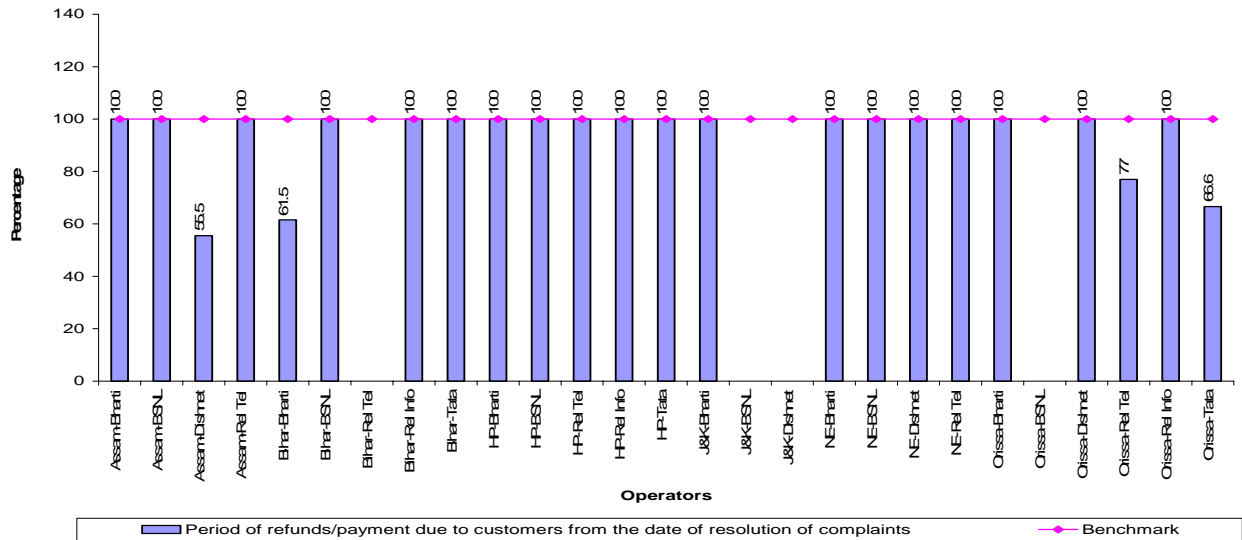
Audit was conducted for 23 operators. Four operator(s) are not meeting the benchmark parameter. No incidences were observed at Rel Tel – Bihar, BSNL – J&K and Dishnet J&K. Data not provided by BSNL – Orissa

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4.2 QOS – BASIC

4.2.1   METRO CIRCLES

Provision of Telephone after registration of demand
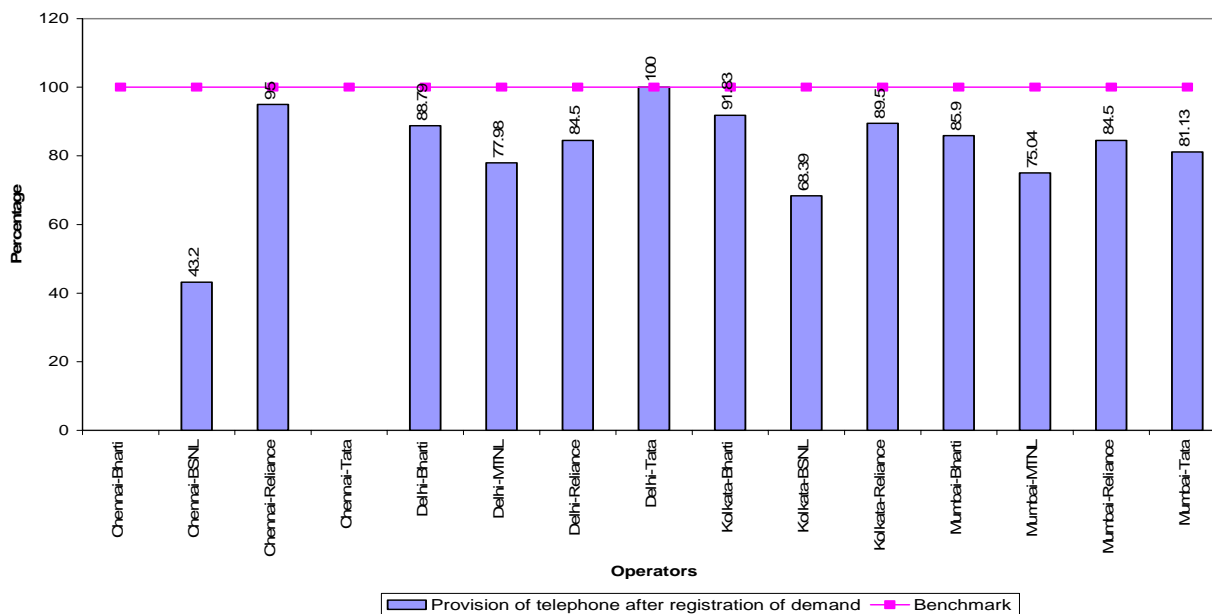
Audit was conducted for 13 operators. Twelve operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered.

Fault Incidence
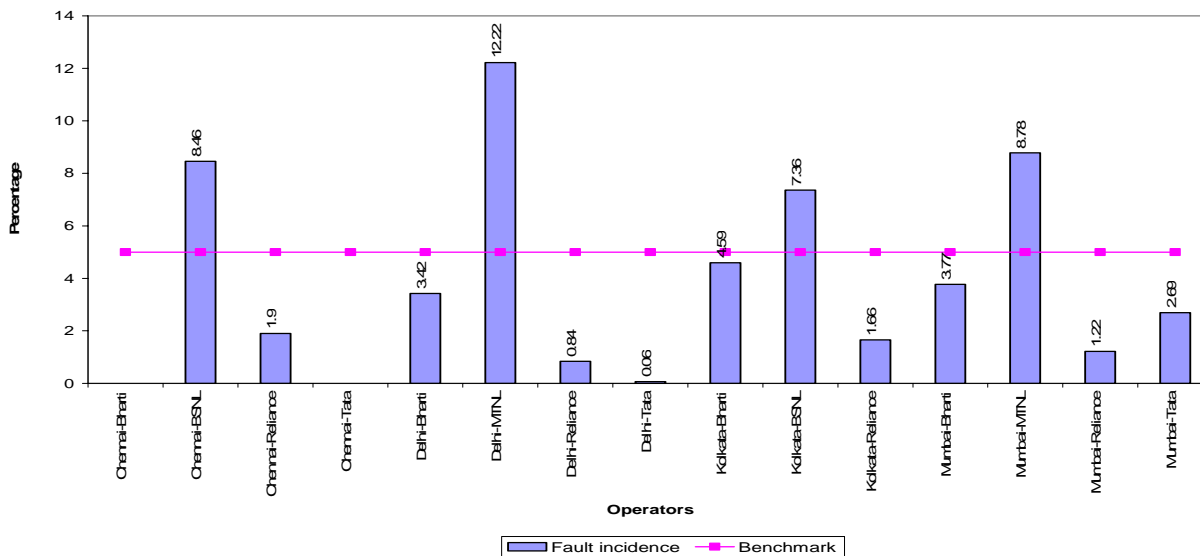
Audit was conducted for 13 operators. Four operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered.
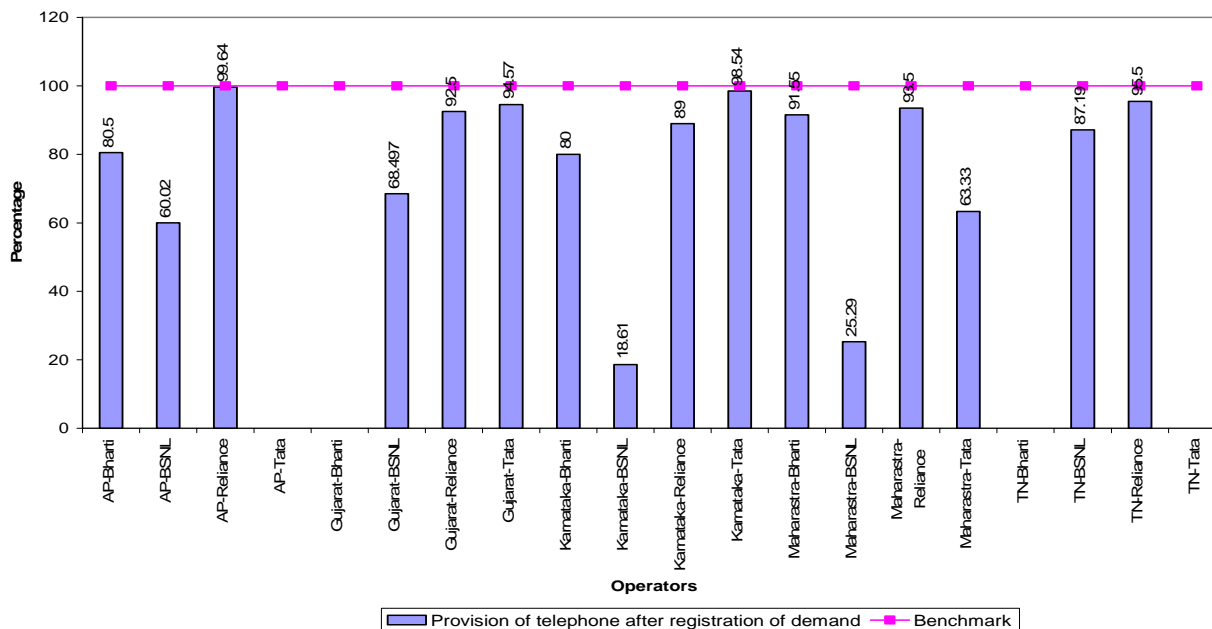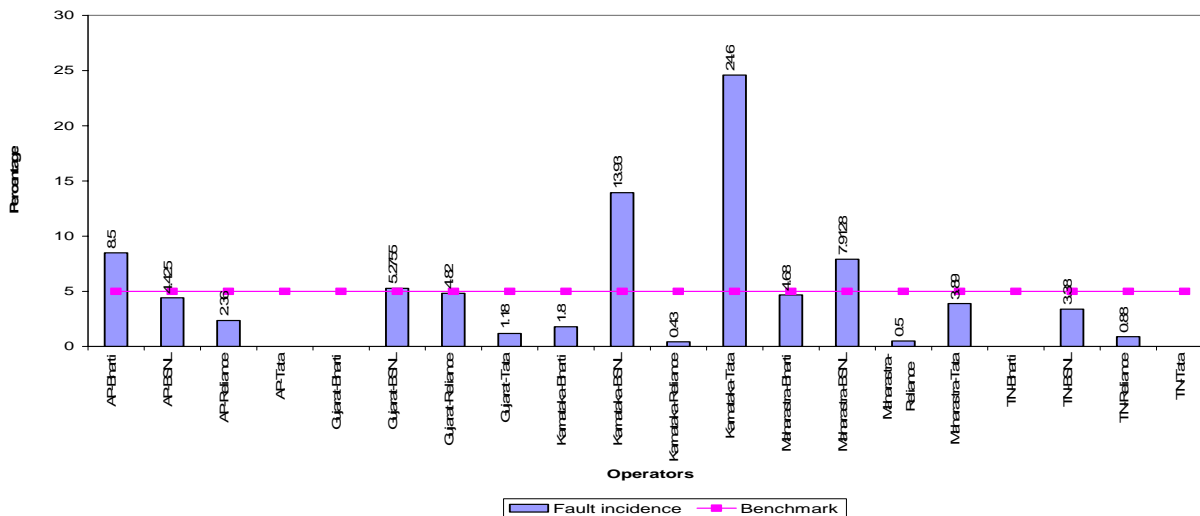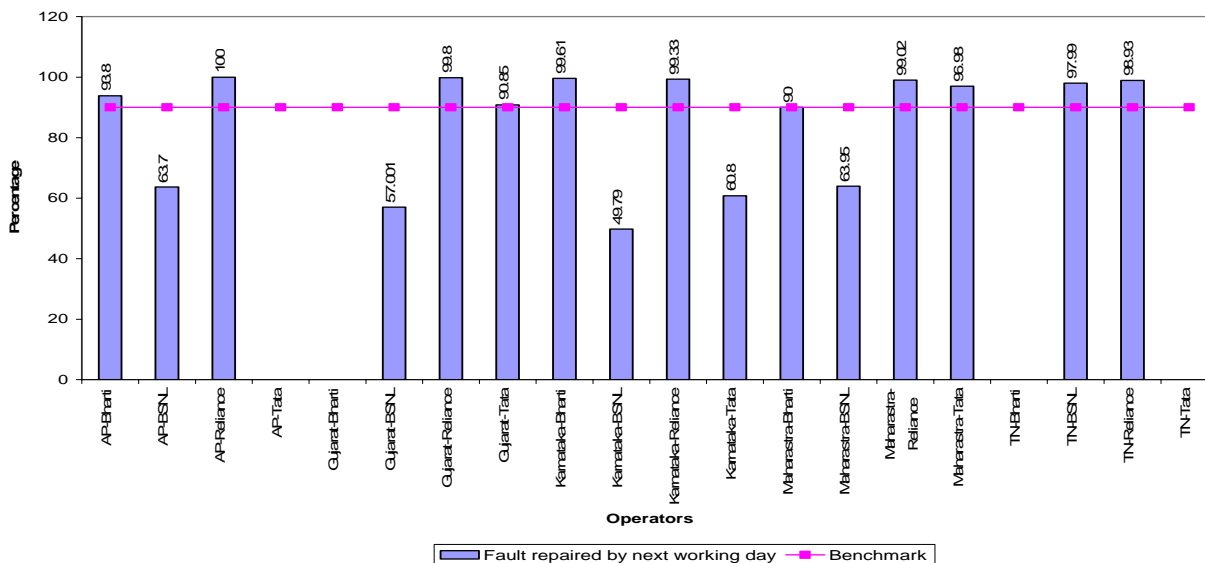
Fault Repair by next working day

Audit was conducted for 13 operators. Six operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered.

Mean Time for Repair
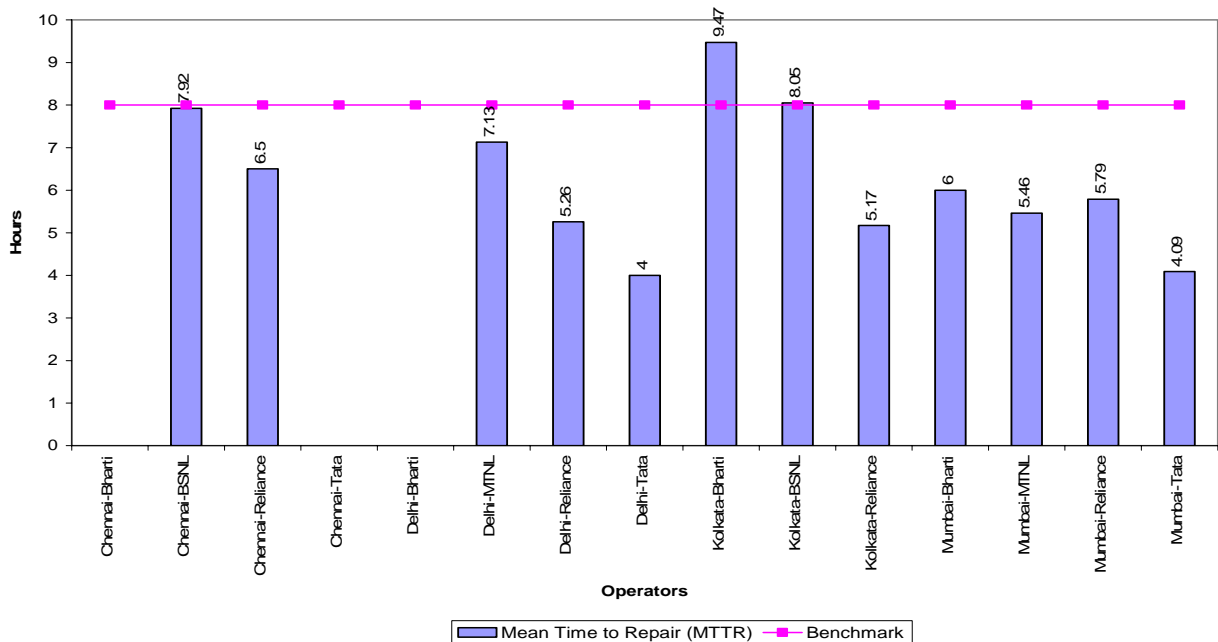
Audit was conducted for 12 operators. Two operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Bharti - Delhi

Junction to Local Exchange
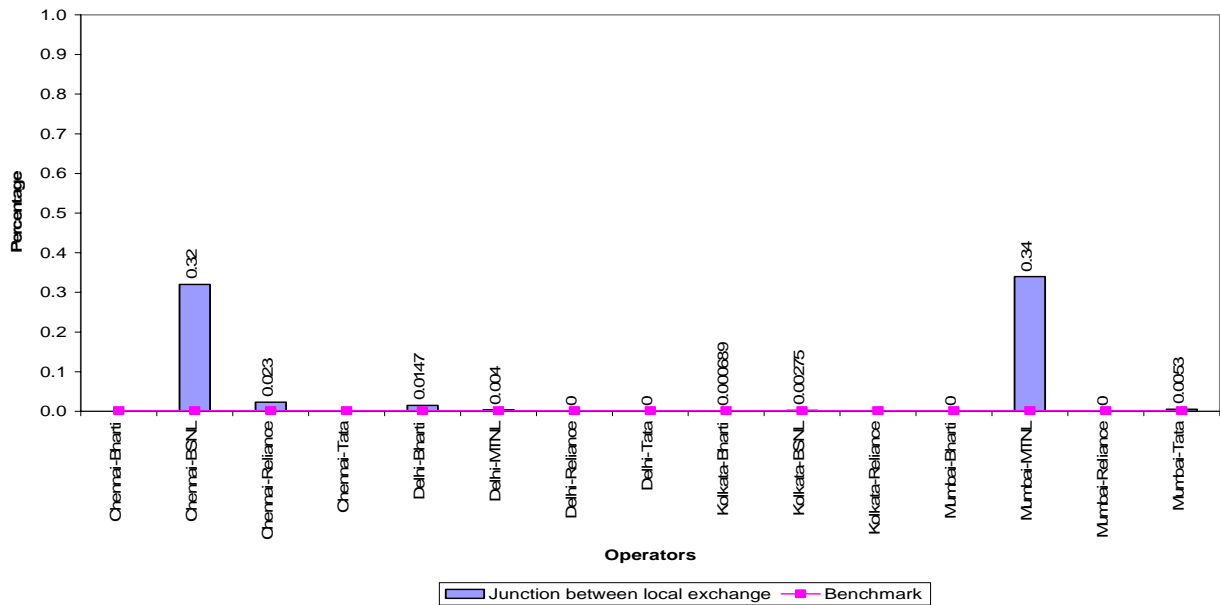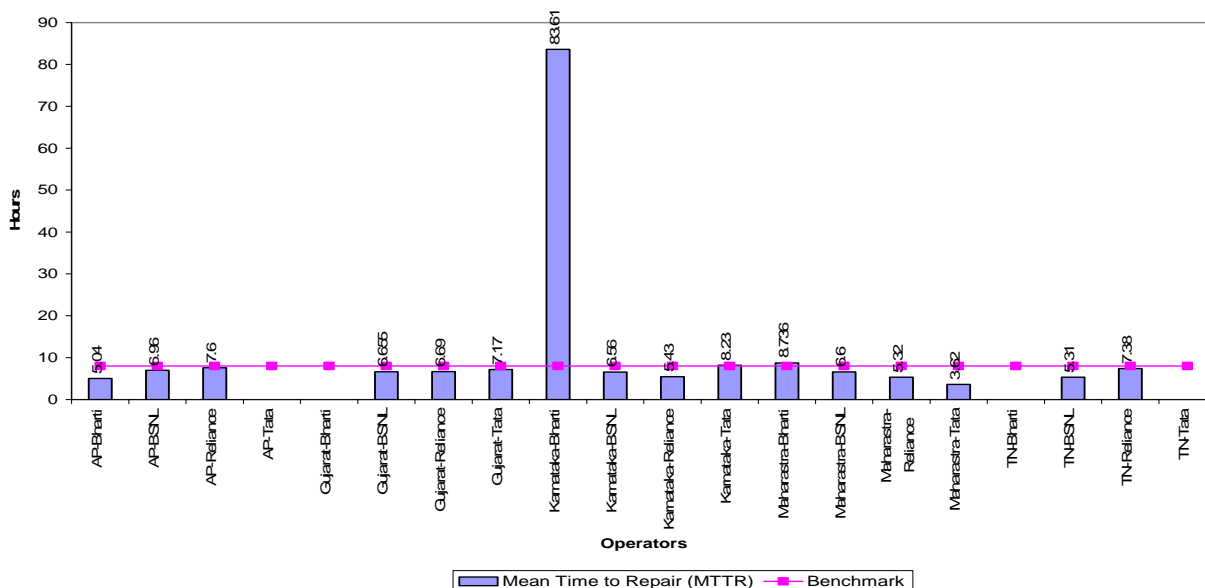

Audit was conducted for 12 operators. Seven operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Rel Info – Kolkata.

Intra office

Audit was conducted for 12 operators. Four operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Rel Info – Kolkata.
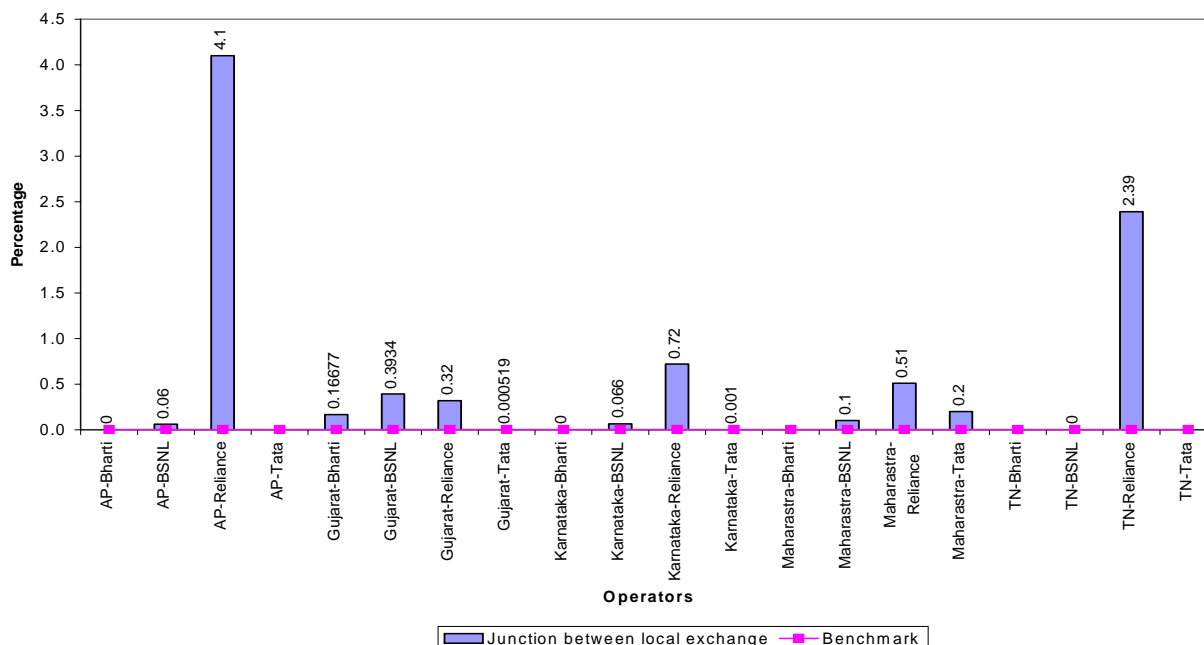
Metering & Billing Credibility

Audit was conducted for 12 operators. Four operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Tata - Mumbai

Shift
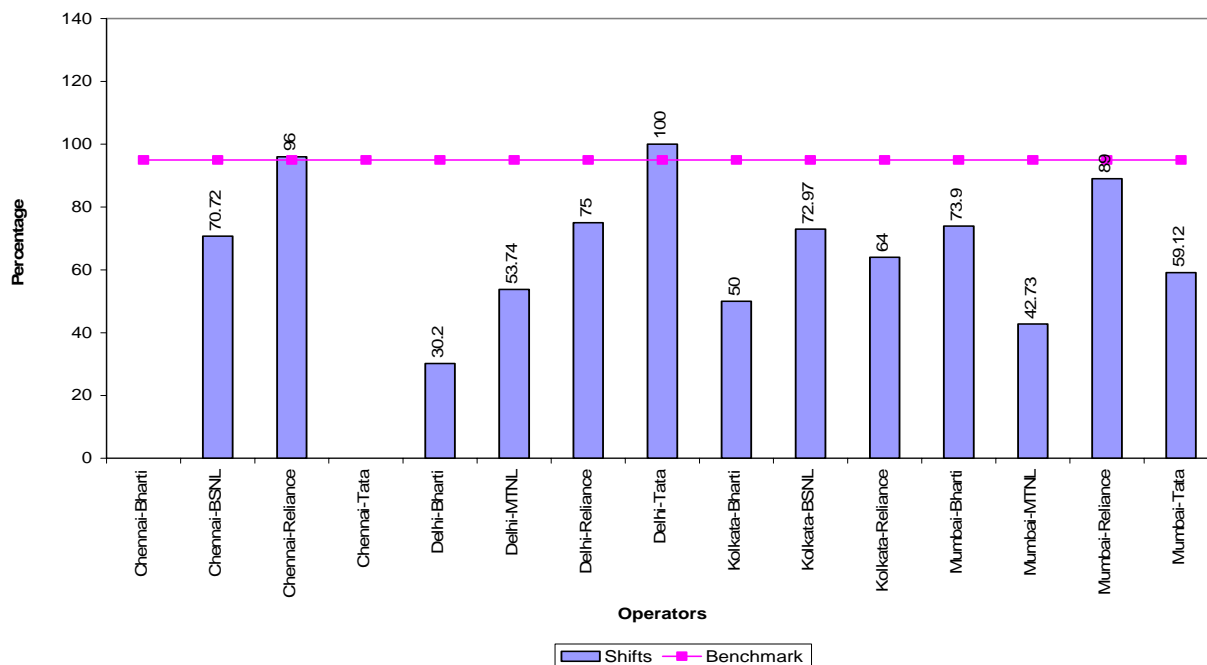
Audit was conducted for 13 operators. Eleven operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered.

Clousre
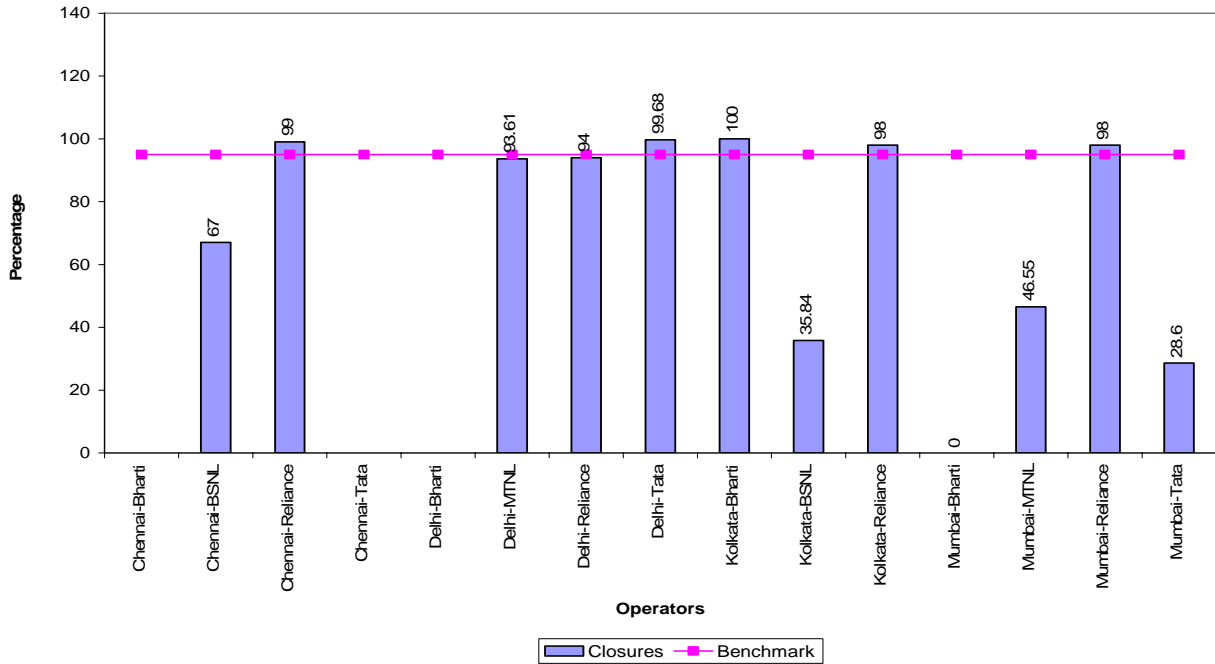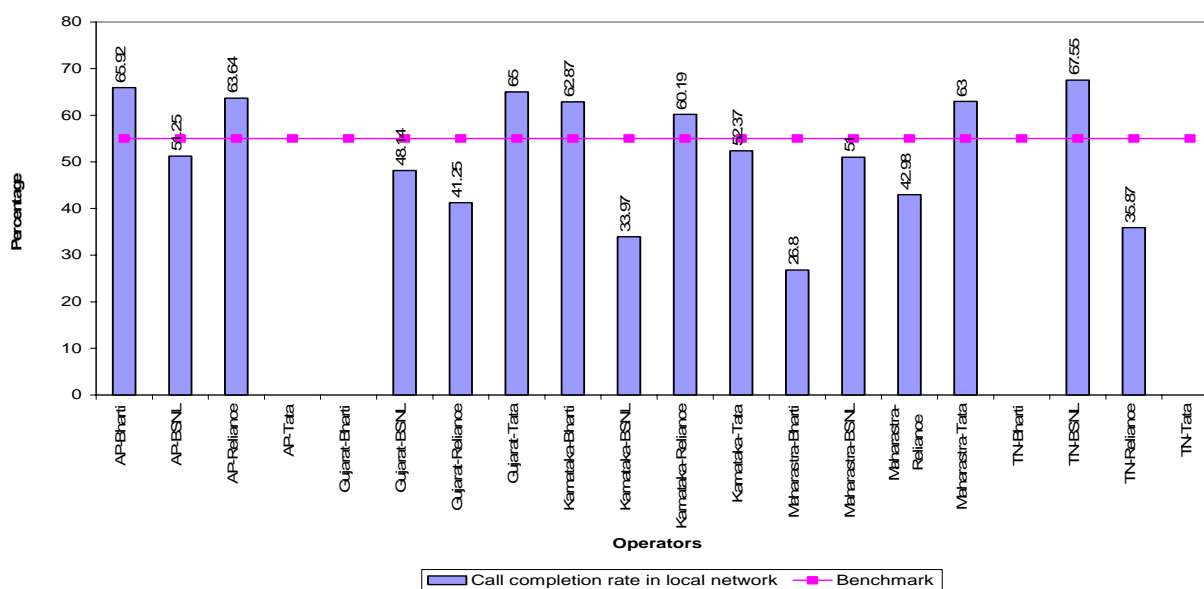

Audit was conducted for 12 operators. Seven operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Bharti - Delhi

Additional Facility
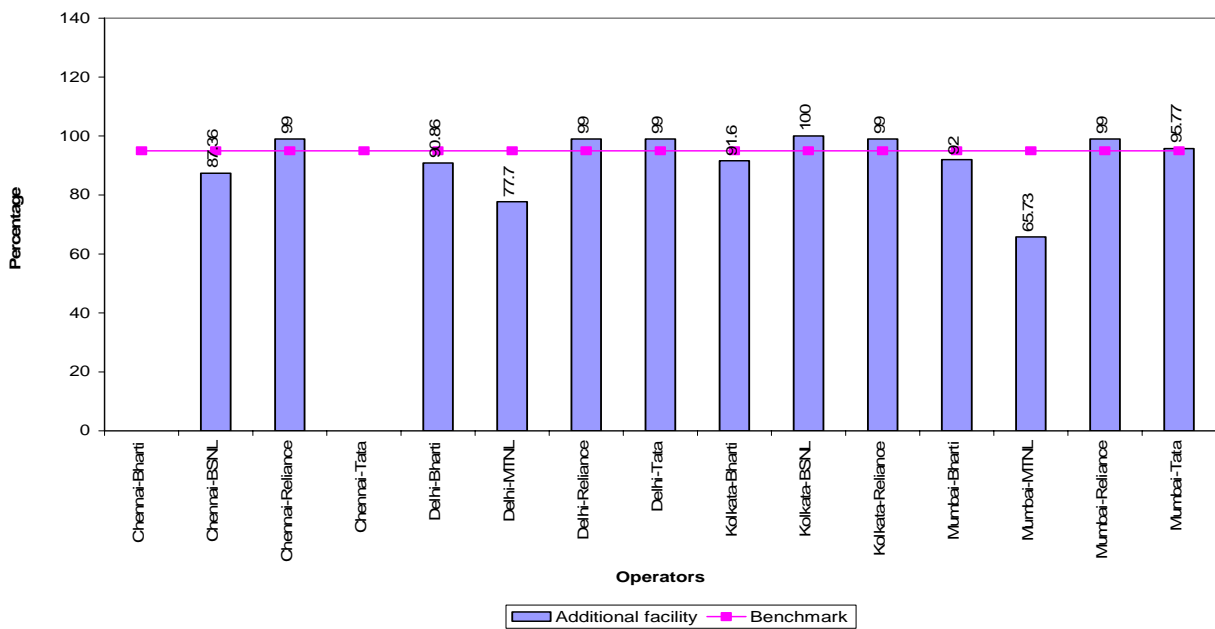
Audit was conducted for 13 operators. Six operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered.

Time taken for refund of deposits after clousre
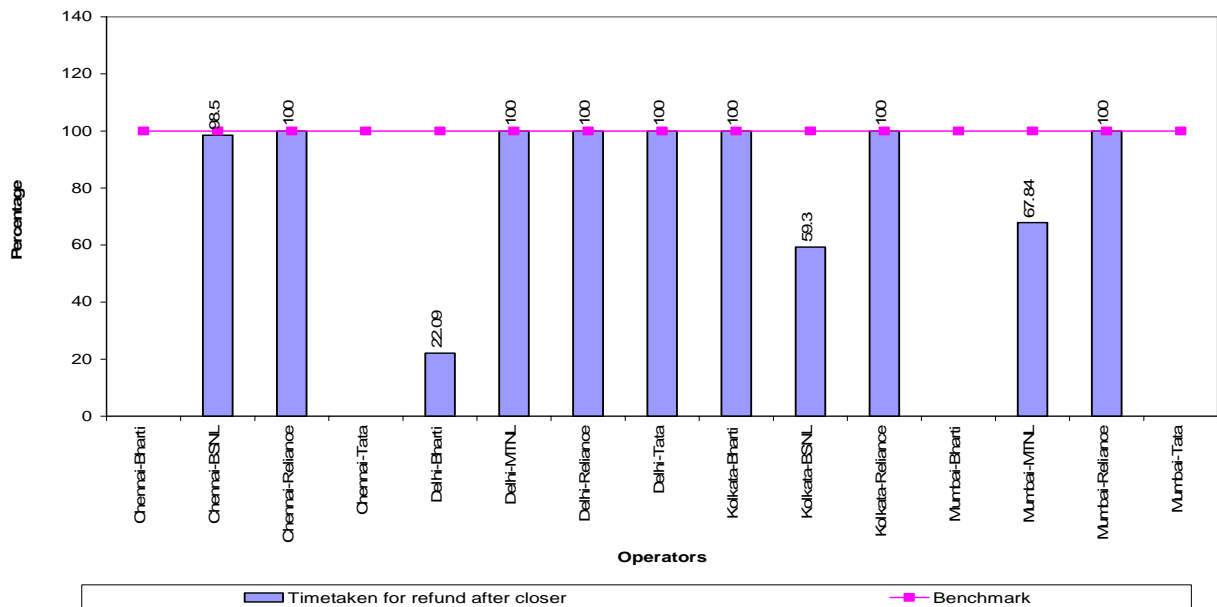
Audit was conducted for 11 operators. Four operator(s) are not meeting the benchmark parameter. Bharti & Tata – Chennai were not covered. Data not provided by Bharti & Tata – Mumbai.

4.2.2 A CIRCLES

Provision of Telephone after registration of demand

Audit was conducted for 16 operators. All operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.
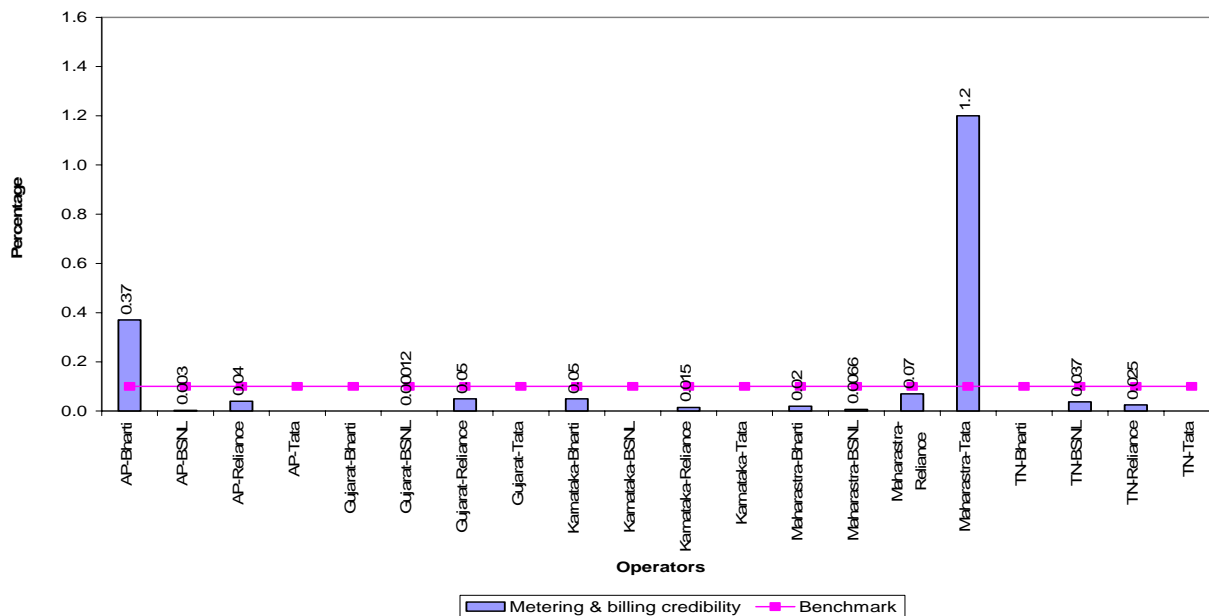
Fault Incidence

Audit was conducted for 16 operators. Five operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.
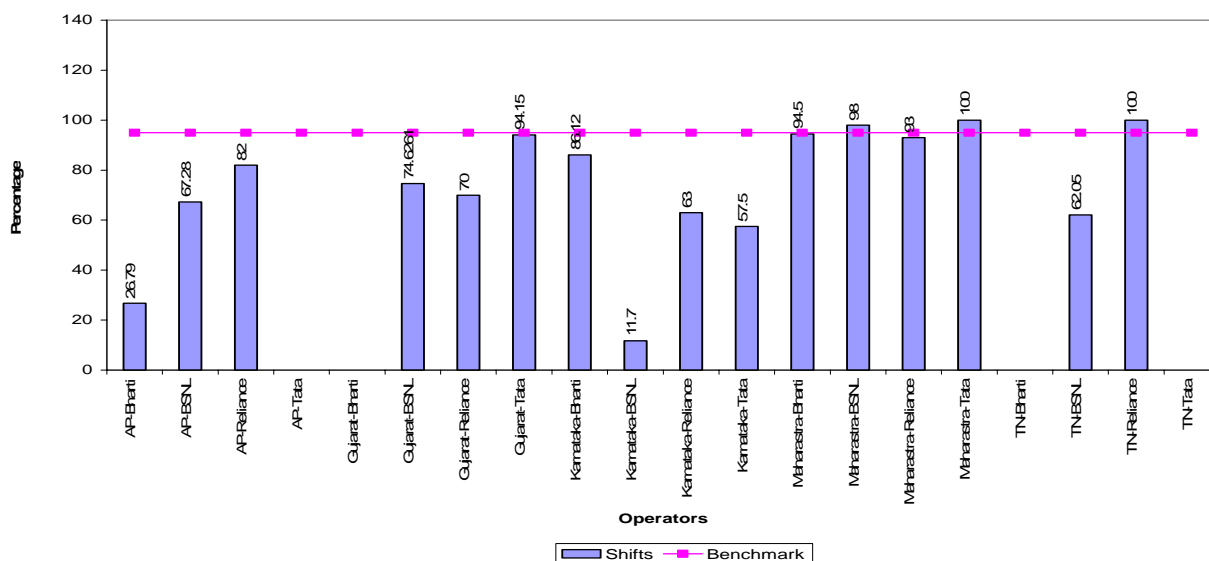
Fault Repair by next working day

Audit was conducted for 16 operators. Five operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.

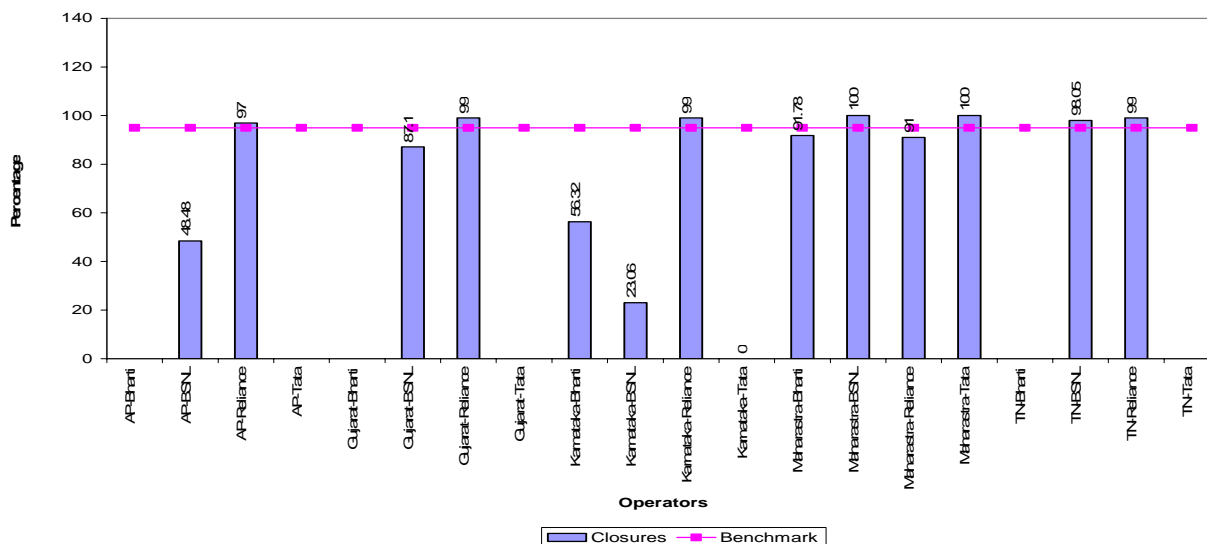**Mean Time for Repair**

Audit was conducted for 16 operators. Three operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.

Junction to Local Exchange

Junction between local exchange ▬■▬ Benchmark

Audit was conducted for 16 operators. Eleven operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. No incidences were reported for Bharti – Maharashtra.

Intra office

Call completion rate in local network ▬■▬ Benchmark

Audit was conducted for 16 operators. Nine operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.

Metering & Billing Credibility

Audit was conducted for 13 operators. Two operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti & Tata - Gujarat, BSNL & Tata - Karnataka.
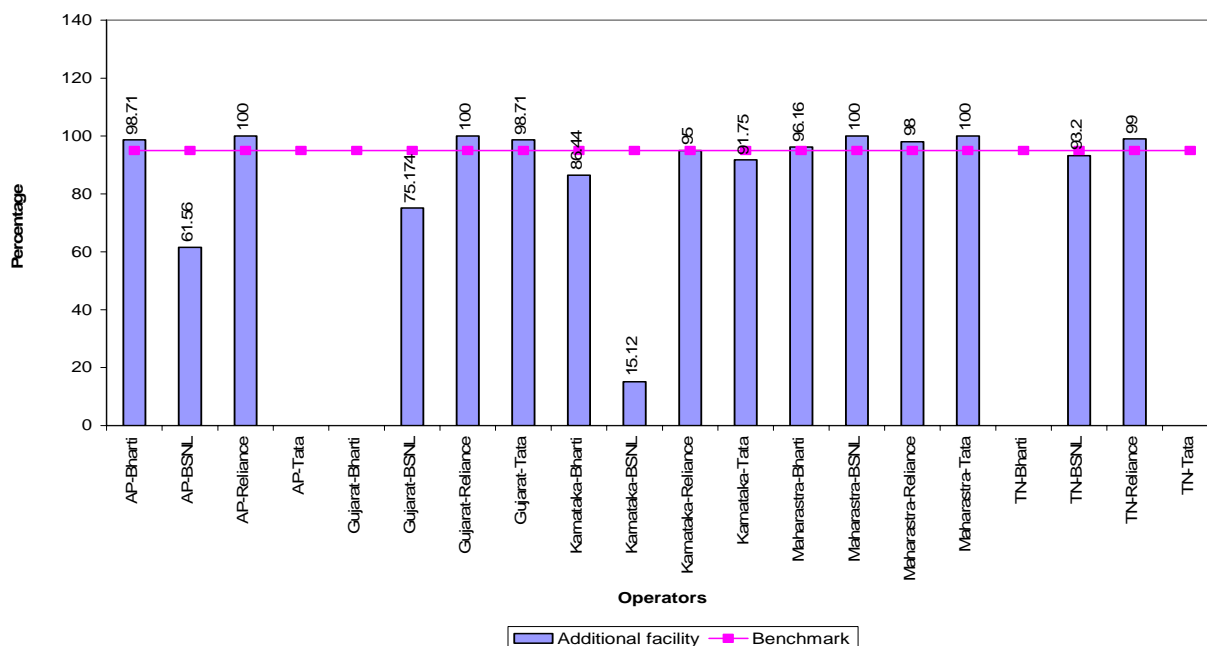
Shift

Audit was conducted for 16 operators. Thirteen operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.
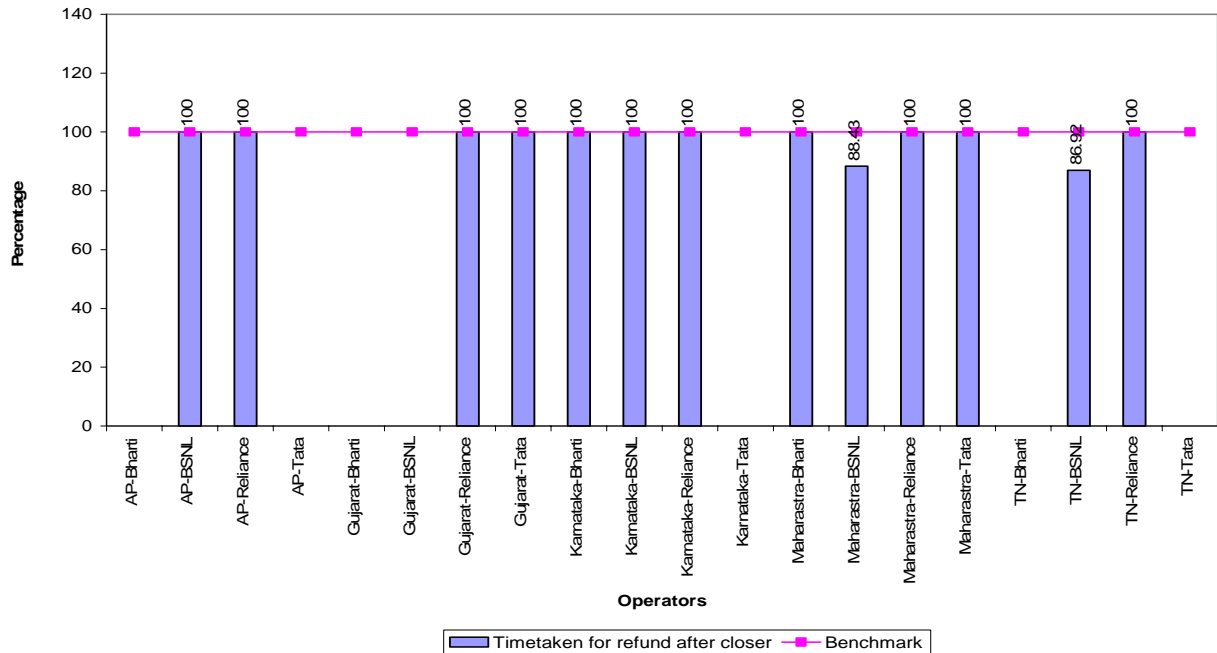
Clousre

Audit was conducted for 14 operators. Seven operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat & AP. No incidences were reported for Tata -Gujarat .

Additional Facility

Audit was conducted for 16 operators. Six operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP were not covered. Data not provided by Bharti – Gujarat.

Time taken for refund of deposits after clousre

Legend: Timetaken for refund after closer — Benchmark

Audit was conducted for 13 operators. Two operator(s) are not meeting the benchmark parameter. Bharti & Tata – TN and Tata – AP and Karnataka were not covered. Data not provided by Bharti & BNSL – Gujarat, Bharti - AP
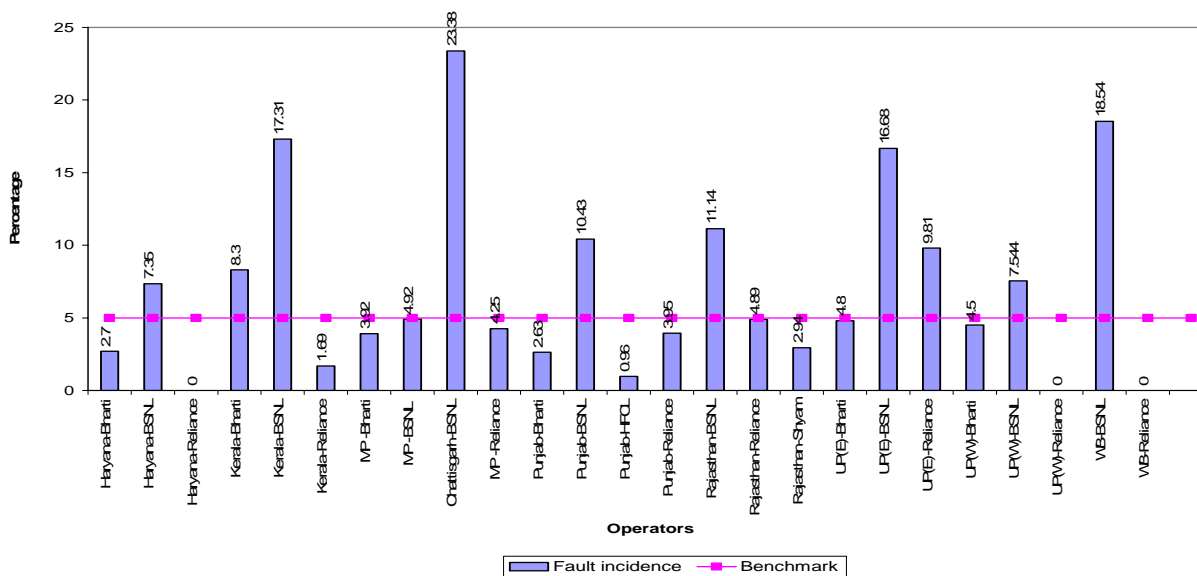
4.2.3 B CIRCLES

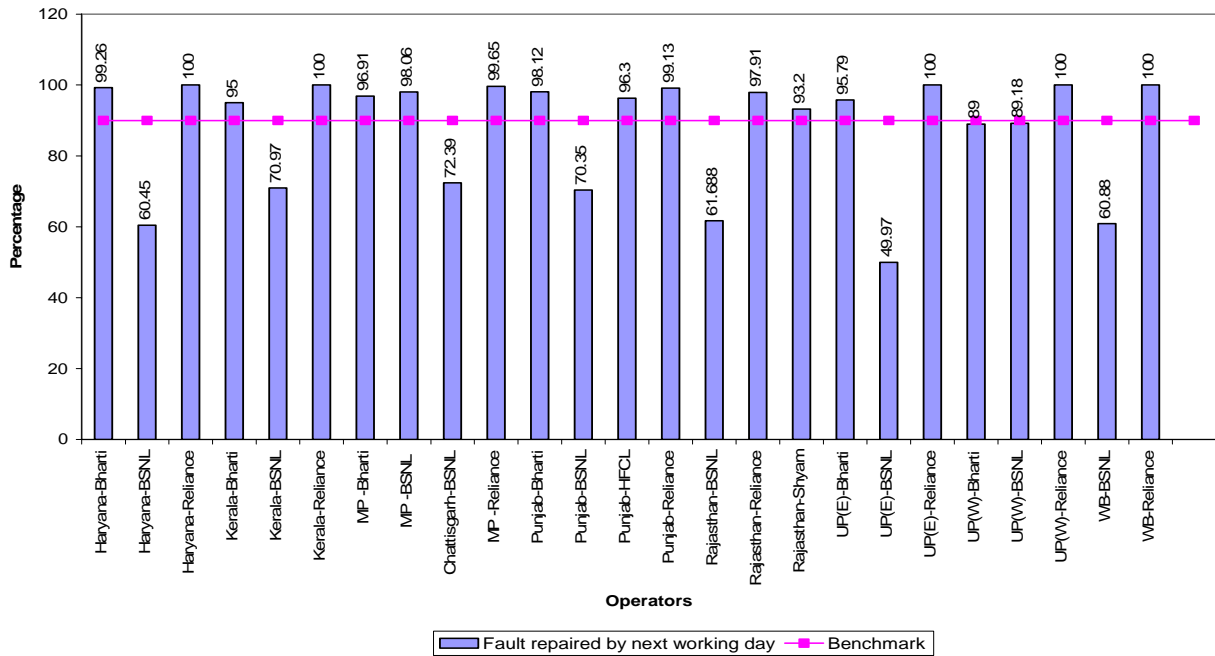**Provision of Telephone after registration of demand**
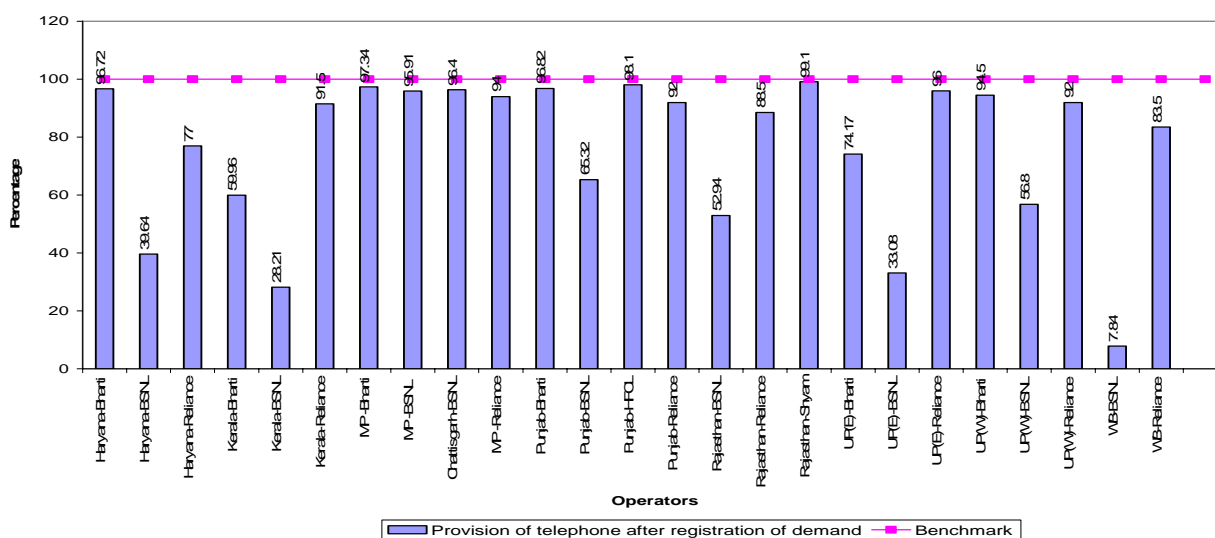
Audit was conducted for 25 operators. All operator(s) are not meeting the benchmark parameter.
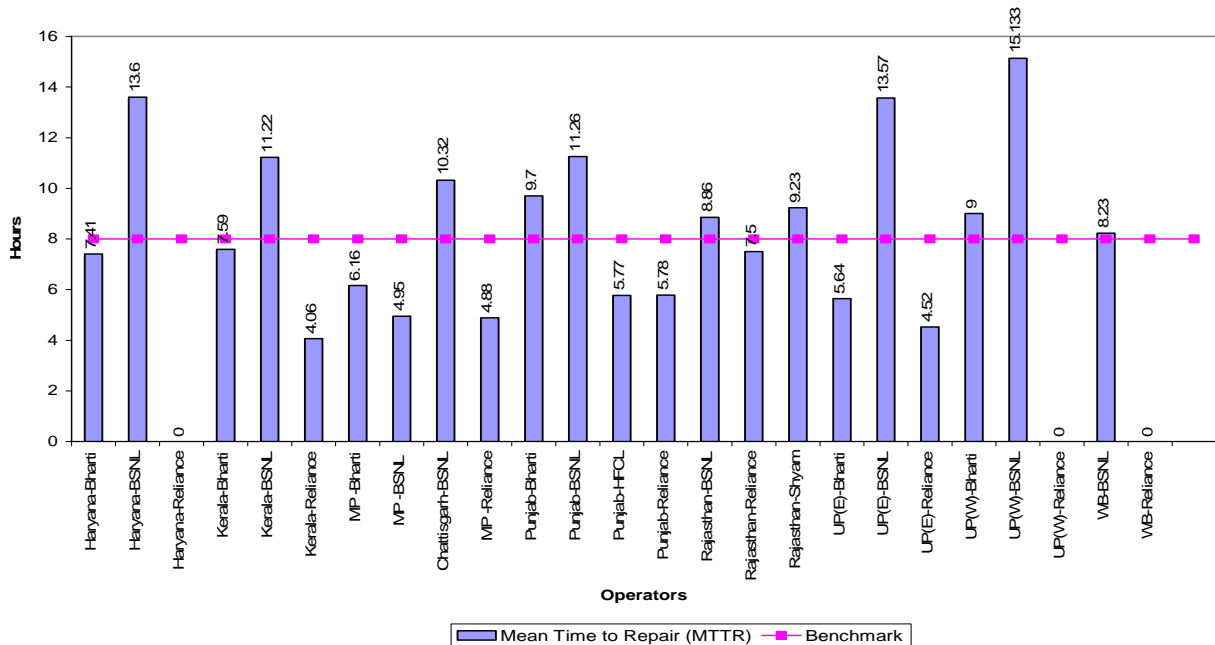
Fault Incidence

Audit was conducted for 25 operators. Ten operator(s) are not meeting the benchmark parameter.

Fault Repair by next working day

Audit was conducted for 25 operators. Nine operator(s) are not meeting the benchmark parameter.

Mean Time for Repair

Audit was conducted for 25 operators. Eleven operator(s) are not meeting the benchmark parameter.

Junction to Local Exchange

Audit was conducted for 25 operators. Fifteen operator(s) are not meeting the benchmark parameter. Data not provided by Bharti – UP E. Not applicable for BSNL – WB.

Intra office
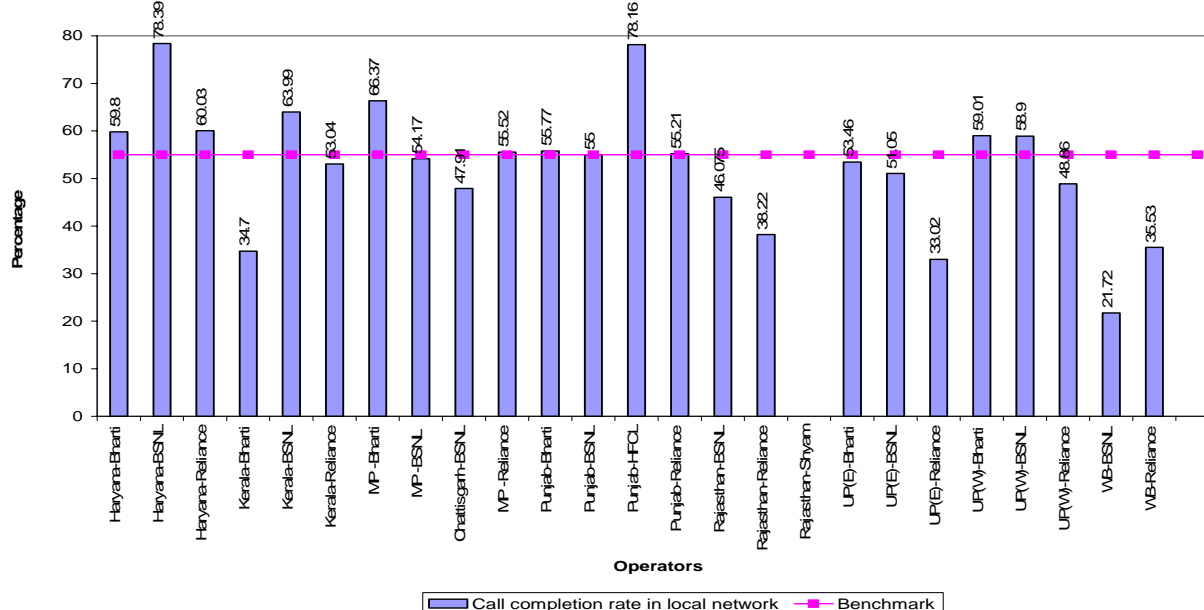
Audit was conducted for 25 operators. Twelve operator(s) are not meeting the benchmark parameter. Not applicable for Shyam - Rajasthan

Metering & Billing Credibility

Audit was conducted for 25 operators. Seven operator(s) are not meeting the benchmark parameter.

Shift
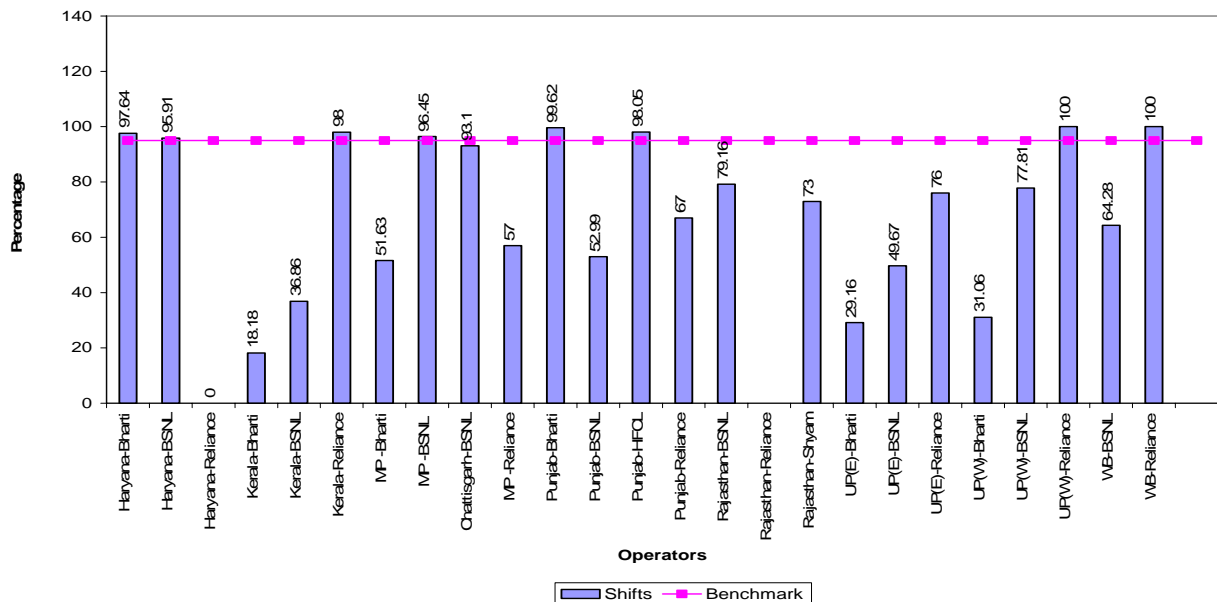
Audit was conducted for 24 operators. Sixteen operator(s) are not meeting the benchmark parameter. No incidences were reported for Rel Info - Rajasthan
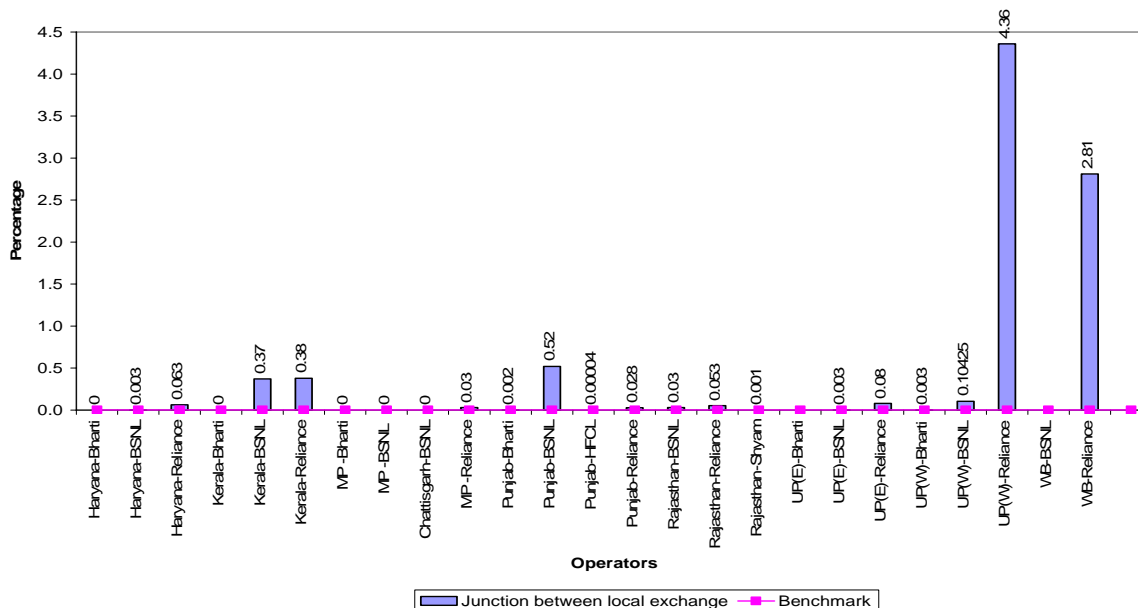
Clousre

Audit was conducted for 25 operators. Ten operator(s) are not meeting the benchmark parameter.

Additional Facility

Audit was conducted for 25 operators. Ten operator(s) are not meeting the benchmark parameter.

Time taken for refund of deposits after clousre

Audit was conducted for 24 operators. Fourteen operator(s) are not meeting the benchmark parameter. Data not provided by BSNL – WB.

4.2.4 C CIRCLES

Provision of Telephone after registration of demand
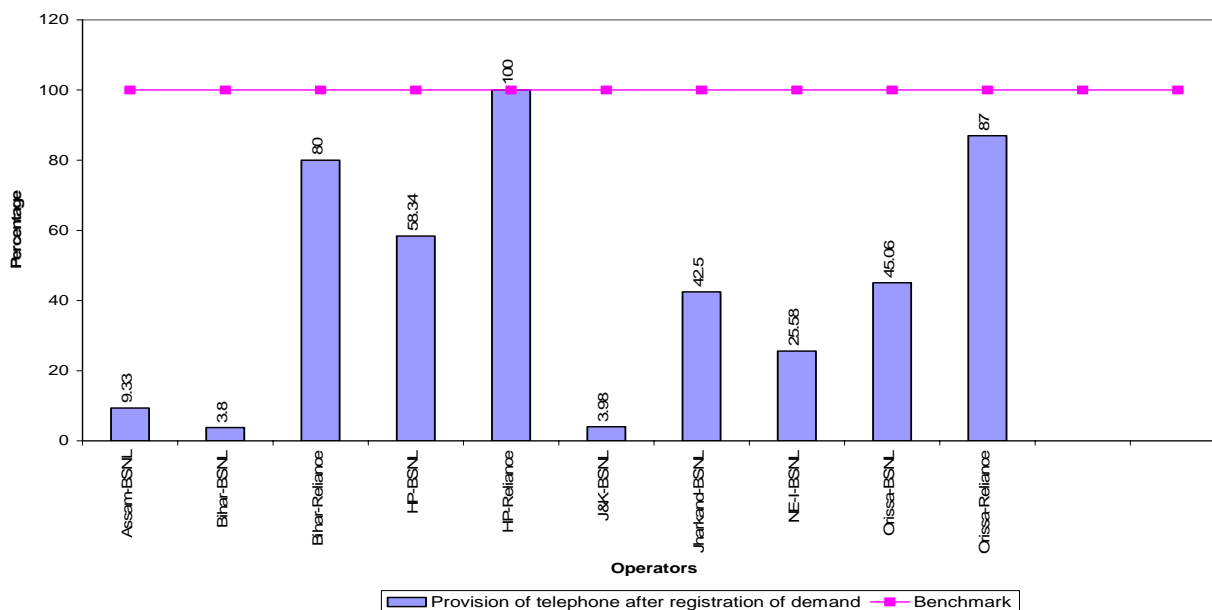
Audit was conducted for 10 operators. Nine operator(s) are not meeting the benchmark parameter.

Fault Incidence
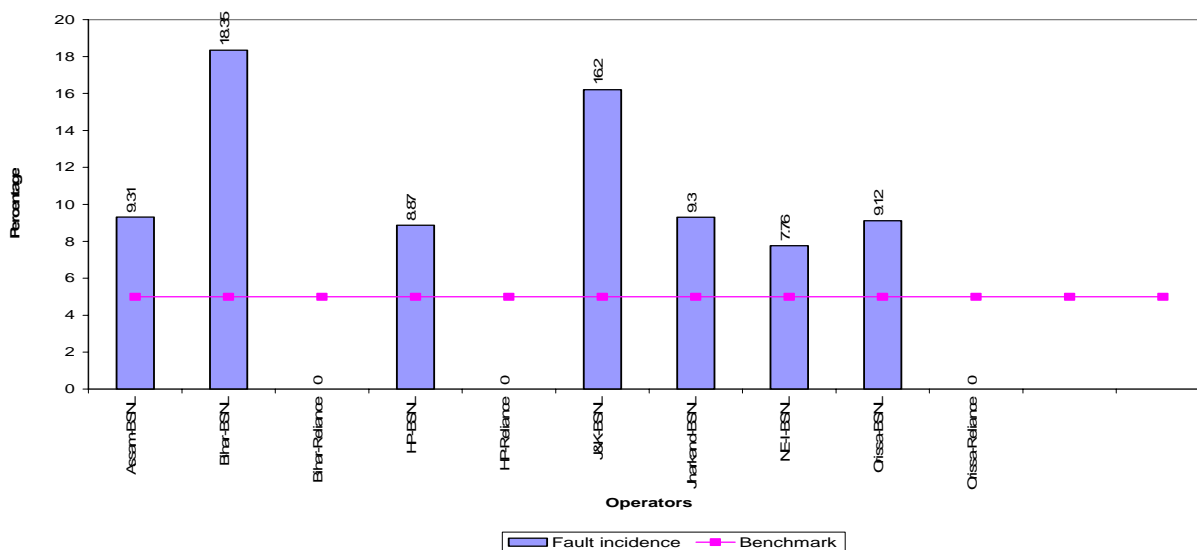
Audit was conducted for 10 operators. Seven operator(s) are not meeting the benchmark parameter.

Fault Repair by next working day
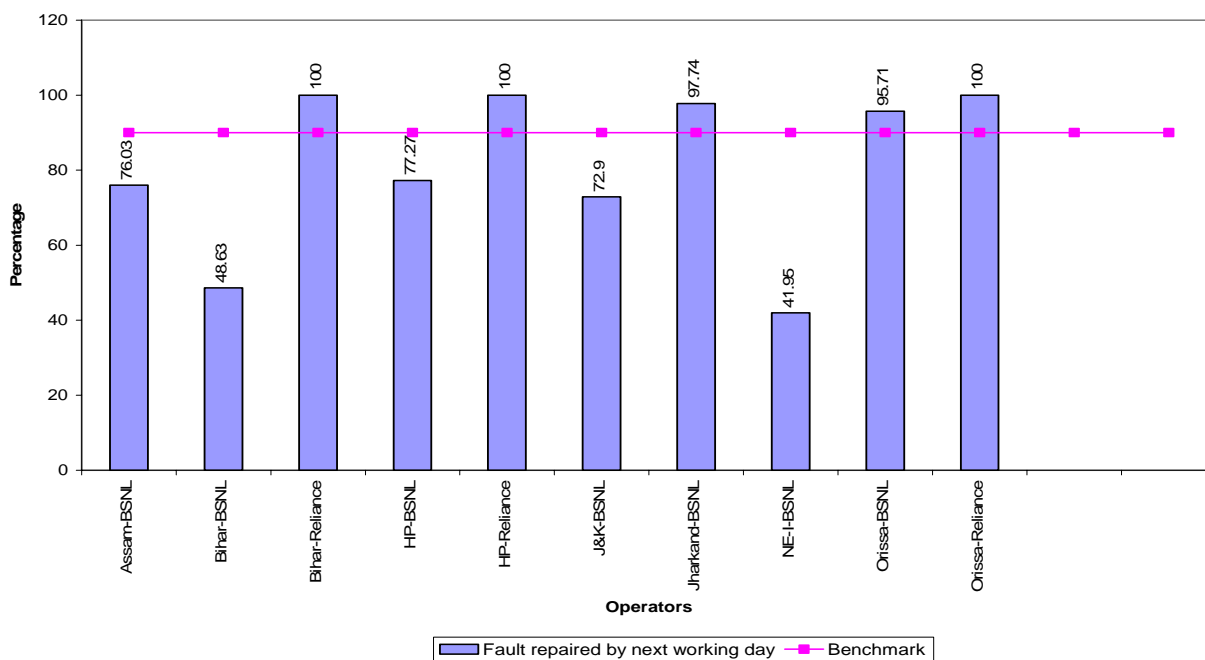
Audit was conducted for 10 operators. Five operator(s) are not meeting the benchmark parameter.
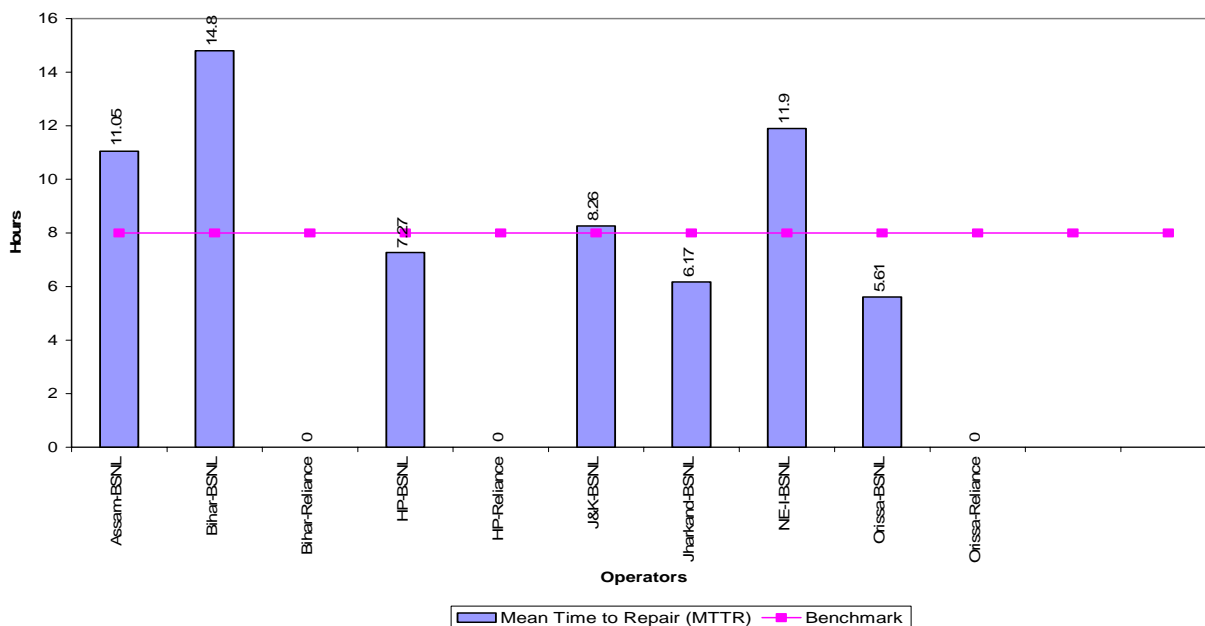
Mean Time for Repair

Audit was conducted for 10 operators. Four operator(s) are not meeting the benchmark parameter.
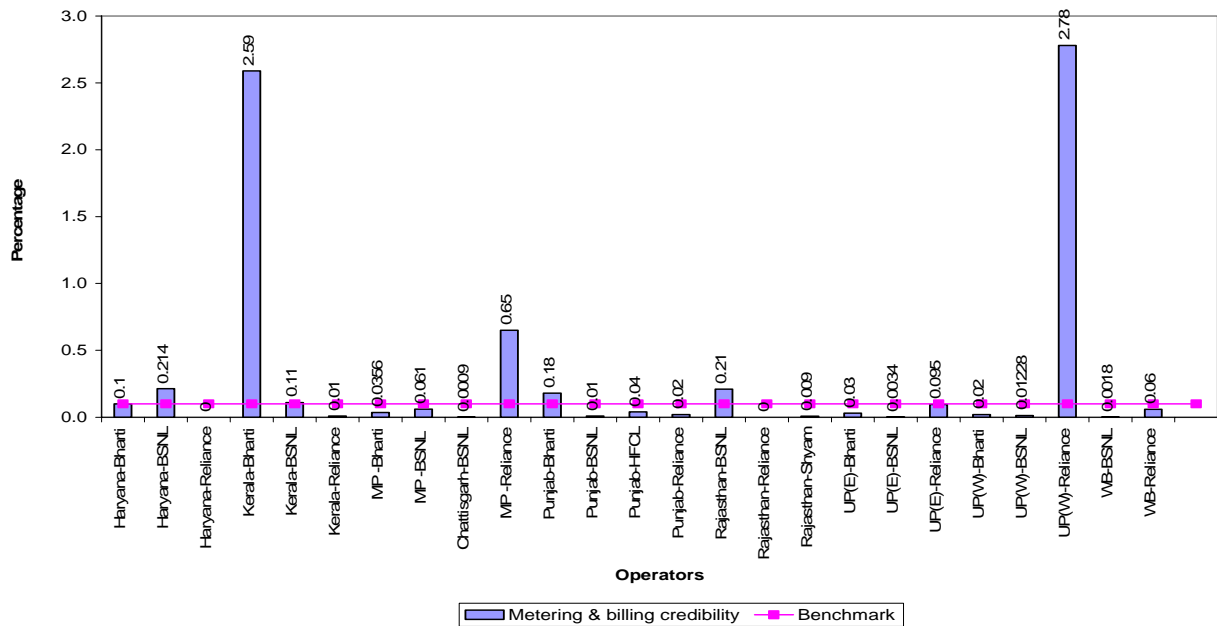
Junction to Local Exchange
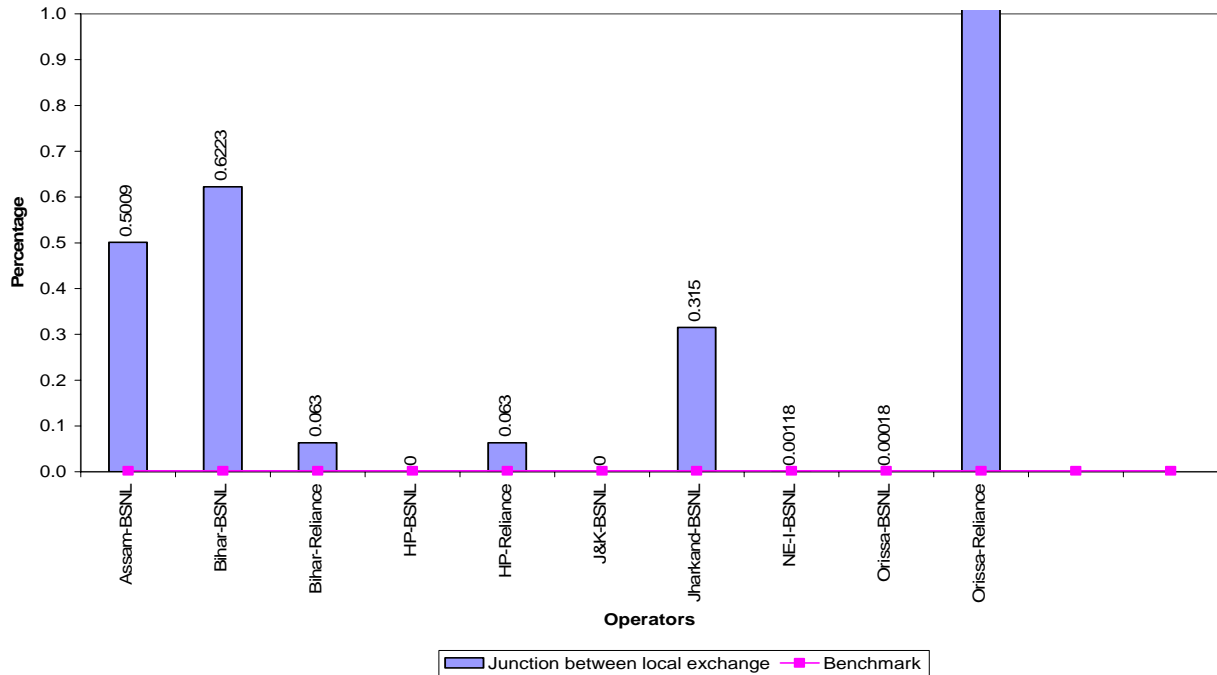
Audit was conducted for 10 operators. Six operator(s) are not meeting the benchmark parameter.

Intra office
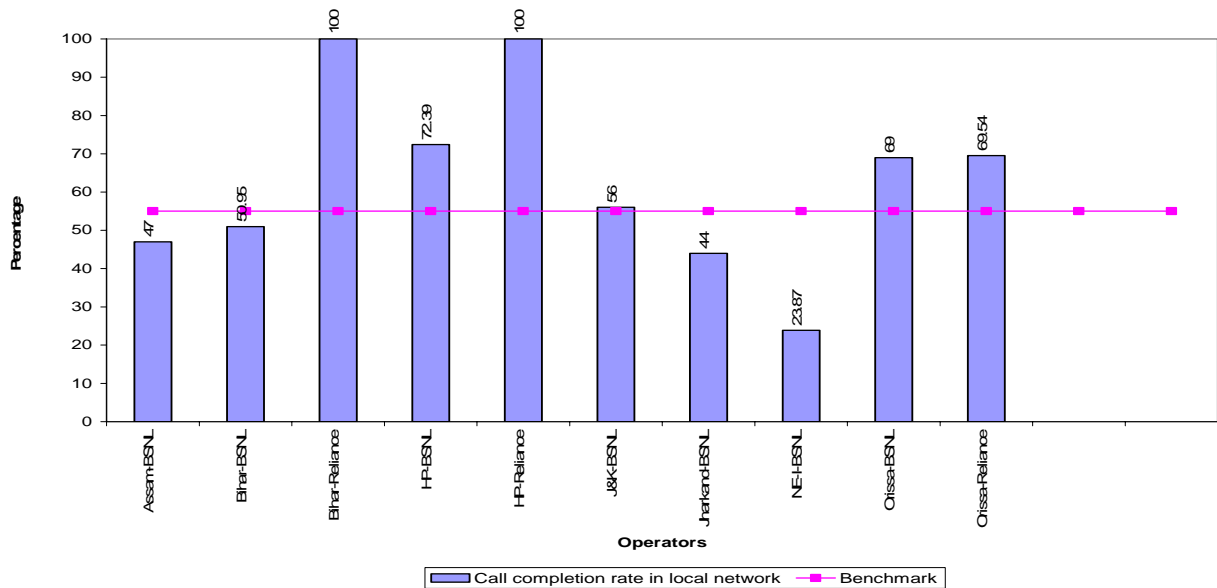
Audit was conducted for 10 operators. Four operator(s) are not meeting the benchmark parameter.
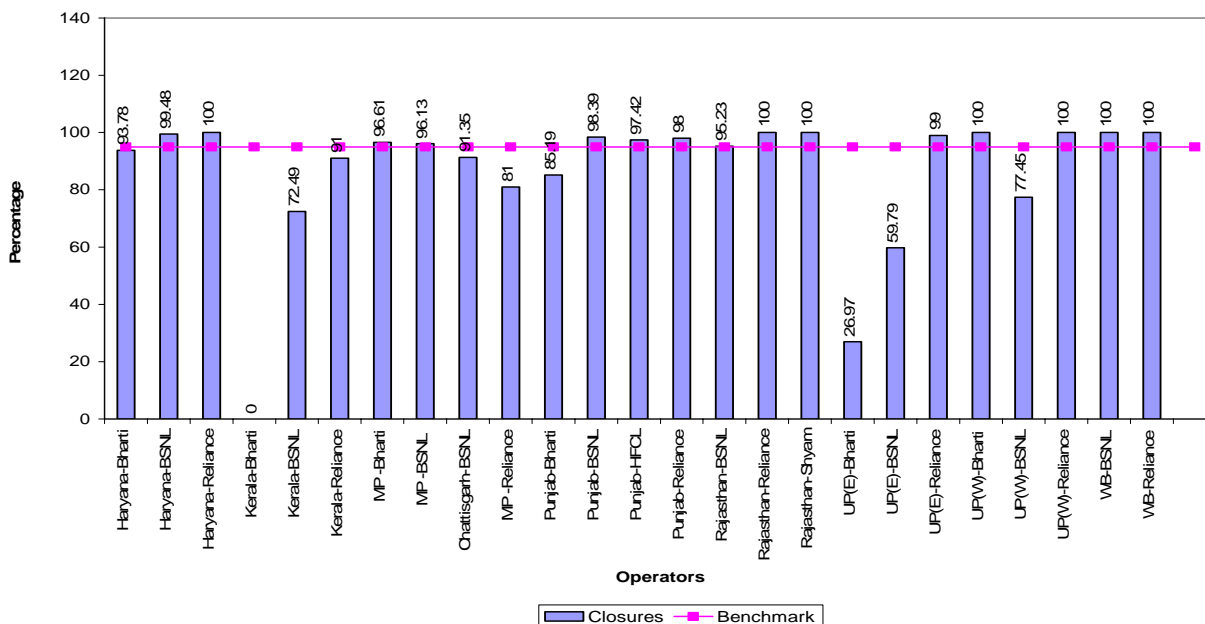
Metering & Billing Credibility
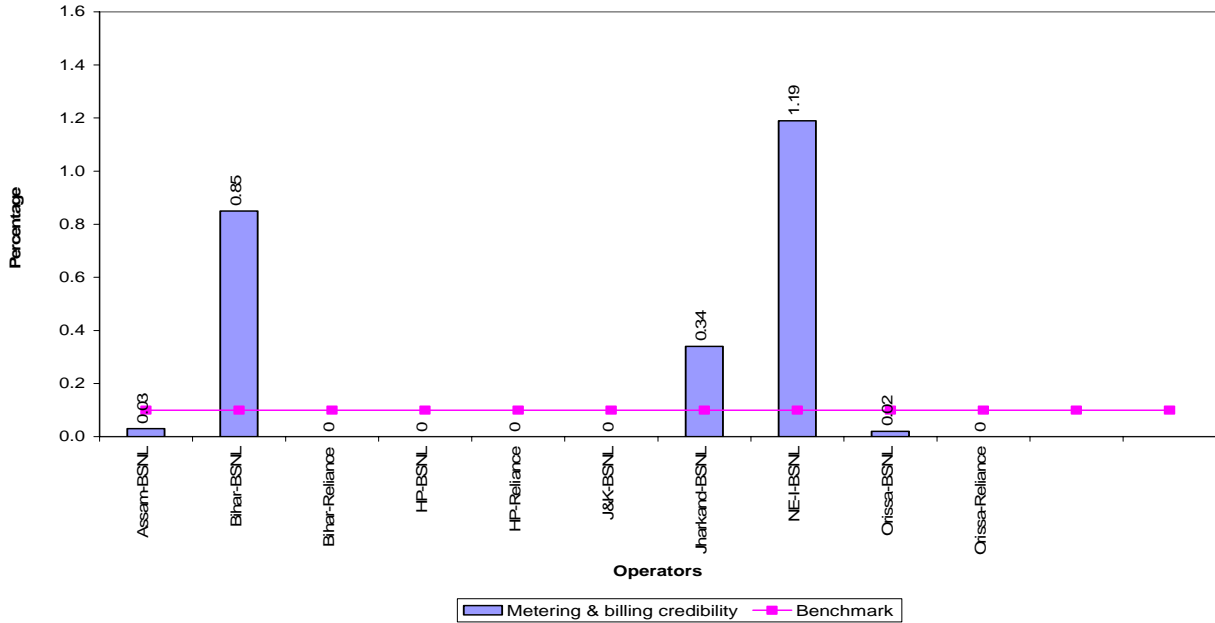
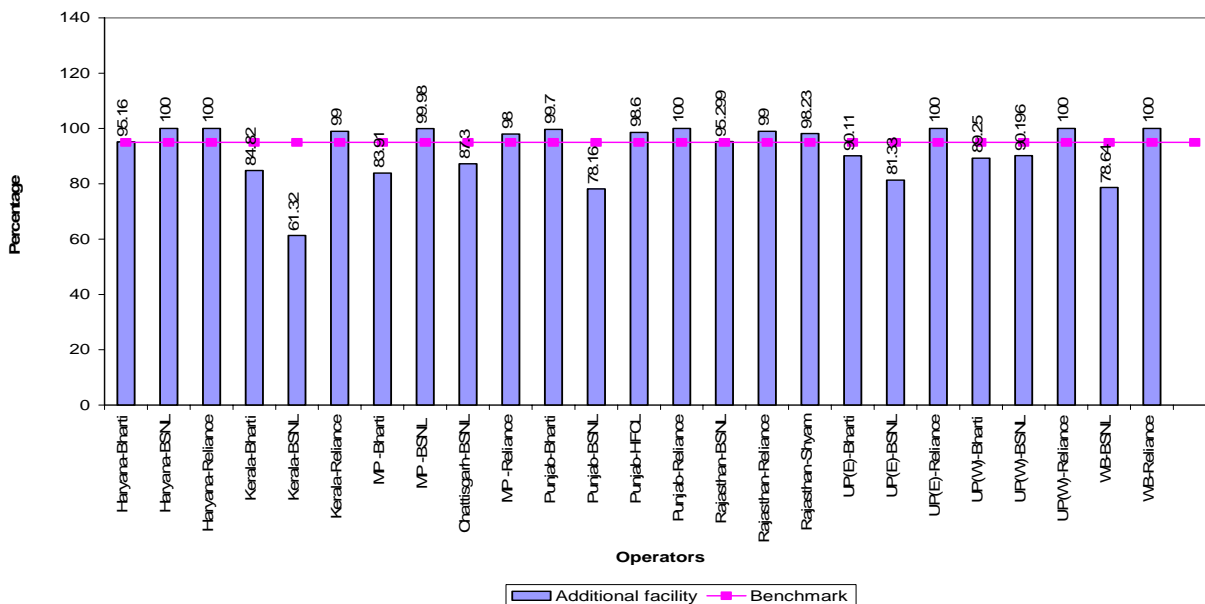Audit was conducted for 10 operators. Three operator(s) are not meeting the benchmark parameter.

Shift
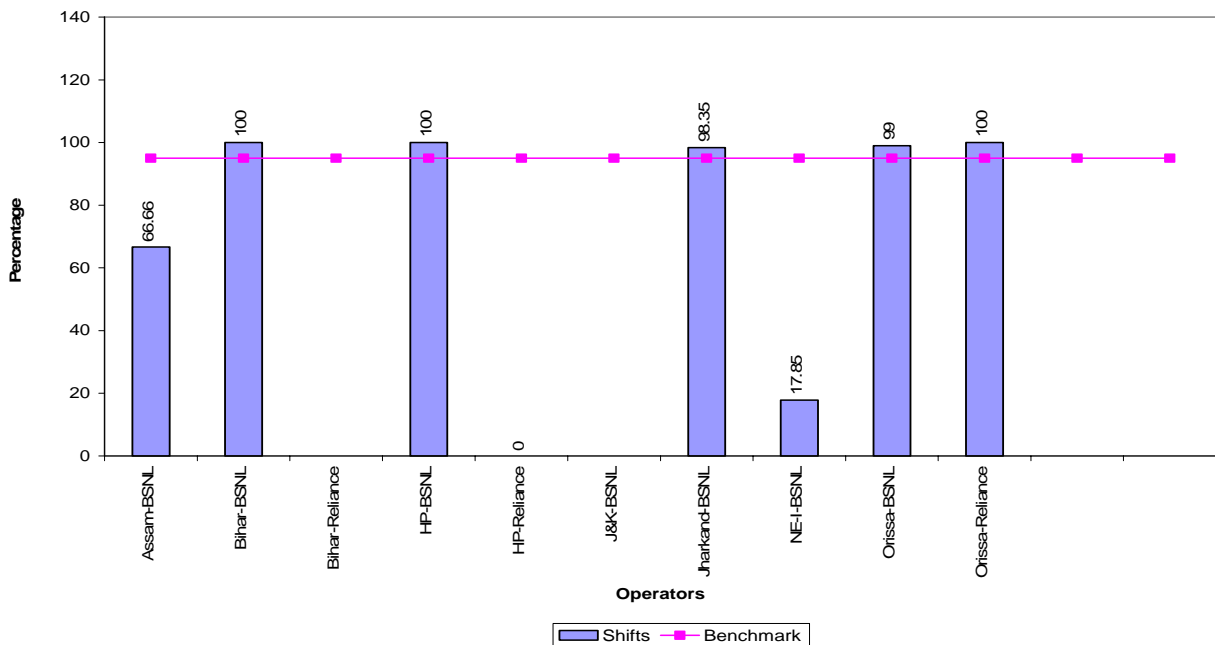
Audit was conducted for 8 operators. Three operator(s) are not meeting the benchmark parameter. No incidences were observed in case of Rel Info – Bihar and BSNL – J&K.

Clousre

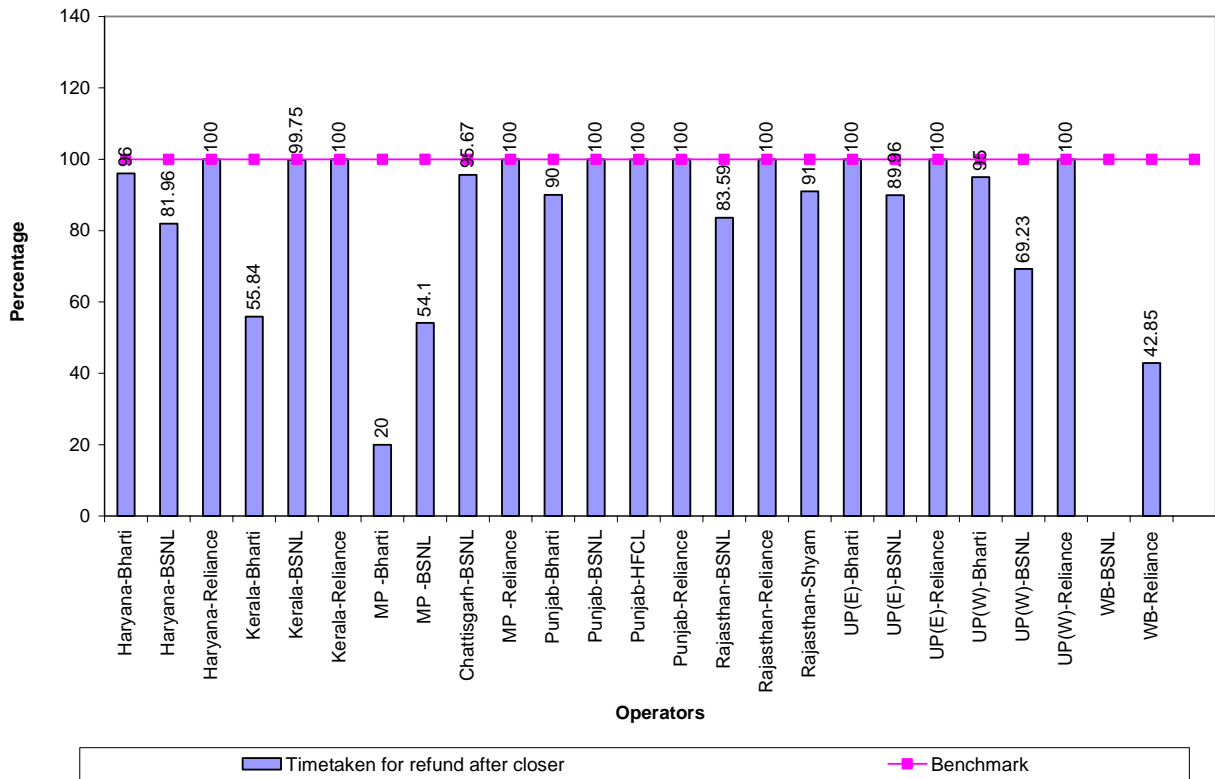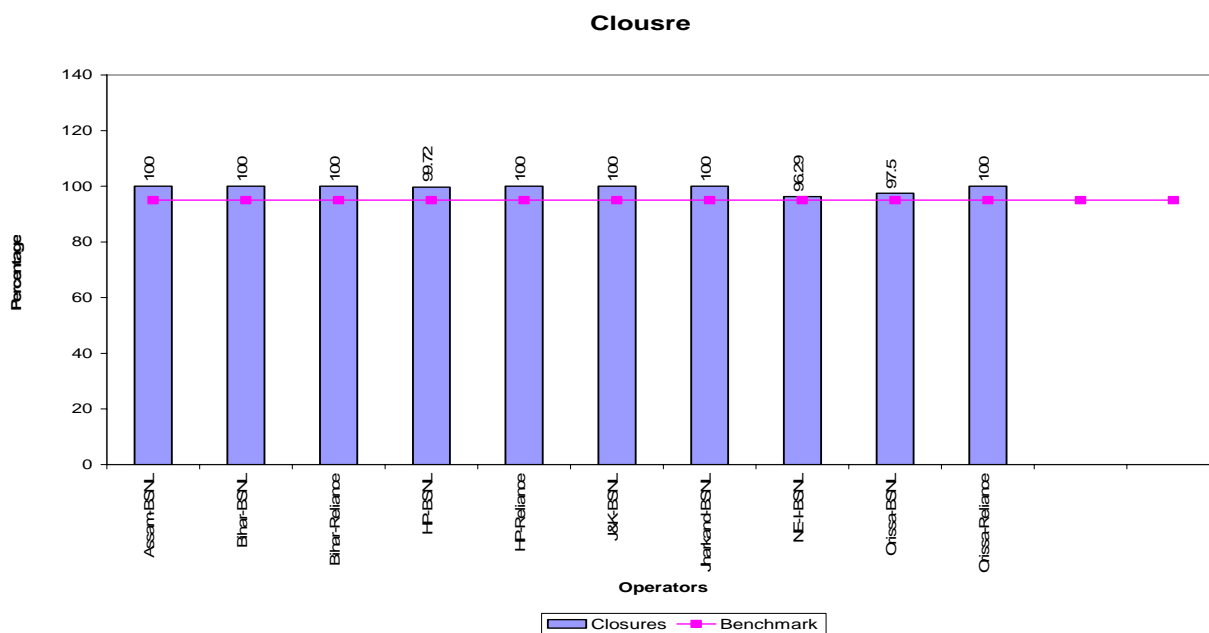Audit was conducted for 10 operators. All operator(s) are meeting the benchmark parameter.

Additional Facility
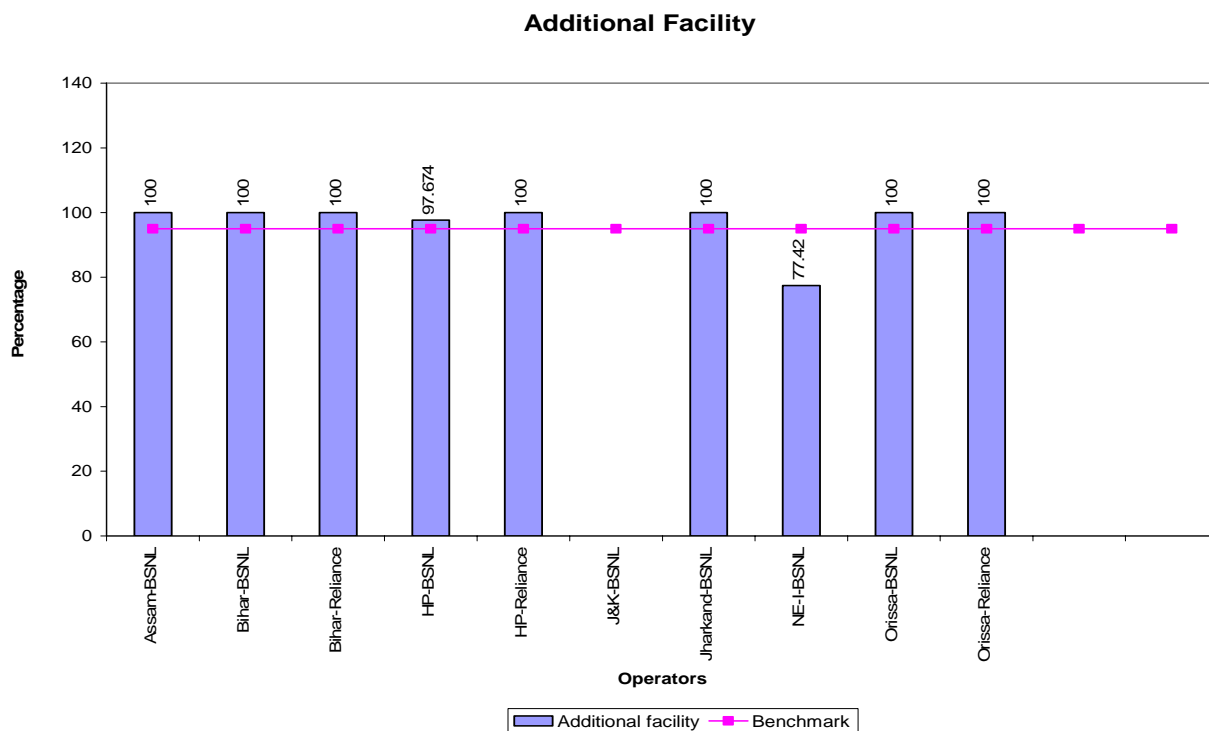
Audit was conducted for 9 operators. One operator(s) are not meeting the benchmark parameter. No incidences were reported for BSNL – J&K

Time taken for refund of deposits after clousre

Audit was conducted for 10 operators. Three operator(s) are not meeting the benchmark parameter.

4.3 CSS – CELLULAR

Satisfied with provision of service-A Circle

Satisfied with provision of service-B Circle

Satisfied with provision of service-C Circle

Satisfied with provision of service-Metro Circle

Satisfied with prepaid billing services-A Circle

Satisfied with prepaid billing services-B Circle

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Satisfied with prepaid billing services-C Circle

Legend: Prepaid — Benchmark

X-axis categories: Assam-Aircell, Assam-Airtel, Assam-BSNL, Assam-Rel Tel, Bihar-Airtel, Bihar-BSNL, Bihar-Rel Tel, Bihar-Tata, HP-Airtel, HP-BSNL, HP-Rel Tel, J&K-Airtel, J&K-BSNL, NE-Aircell, NE-BSNL, NE-Rel Tel, Orissa-Aircell, Orissa-Airtel, Orissa-BSNL, Orissa-Rel Info, Orissa-Rel Tel, Orissa-Tata

Values: 96%, 98%, 90%, 88%, 85%, 68%, 80%, 100%, 98%, 99%, 99%, 97%, 94%, 91%, 96%, 92%, 100%, 89%, 79%, 78%, 91%, 100%

Satisfied with prepaid billing services-Metro Circle

Legend: Prepaid — Benchmark

X-axis categories: Chennai-Aircell, Chennai-Airtel, Chennai-BSNL, Chennai-Hutch, Chennai-Rel Info, Chennai-Tata, Delhi-Airtel, Delhi-Hutch, Delhi-Idea, Delhi-MTNL, Delhi-Rel Info, Delhi-Tata, Kolkata-Airtel, Kolkata-BSNL, Kolkata-Hutch, Kolkata-Rel Info, Mumbai-Airtel, Mumbai-BPL, Mumbai-Hutch, Mumbai-MTNL, Mumbai-Rel Info, Mumbai-Tata

Values: 97%, 97%, 94%, 96%, 95%, 98%, 98%, 99%, 99%, 98%, 99%, 99%, 91%, 98%, 95%, 93%, 98%, 99%, 99%, 98%, 98%, 95%

Satisfied with postpaid billing services-A Circle

Legend: Postpaid — Benchmark

X-axis categories: AP-Airtel, AP-BSNL, AP-Hutch, AP-Idea, AP-Rel Info, AP-Tata, Gujarat-Airtel, Gujarat-BSNL, Gujarat-Hutch, Gujarat-Idea, Gujarat-Rel Info, Gujarat-Tata, Karnataka-Airtel, Karnataka-BSNL, Karnataka-Hutch, Karnataka-Rel Info, Karnataka-Spice, Karnataka-Tata, Maharashtra-Airtel, Maharashtra-BPL, Maharashtra-BSNL, Maharashtra-Idea, Maharashtra-Rel Info, Maharashtra-Tata, TN-Airtel, TN-BPL, TN-BSNL, TN-Rel Info, TN-Tata

Values: 100%, 100%, 92%, 94%, 99%, 100%, 80%, 75%, 94%, 94%, 93%, 98%, 100%, 100%, 100%, 100%, 100%, 100%, 100%, 80%, 99%, 100%, 99%, 99%, 99%, 100%, 98%, 100%, 34%

Satisfied with postpaid billing services-B Circle

Satisfied with postpaid billing services-C Circle

Satisfied with postpaid billing services-Metro Circle

Satisfied with help services-A Circle

Legend: % satisfied with help services — Benchmark

Values: AP-Airtel 64%, AP-BSNL 54%, AP-Hutch 65%, AP-Idea 64%, AP-Rel Info 66%, AP-Tata 64%, Gujarat-Airtel 74%, Gujarat-BSNL 65%, Gujarat-Hutch 79%, Gujarat-Idea 71%, Gujarat-Rel Info 68%, Gujarat-Tata 80%, Karnataka-Airtel 61%, Karnataka-BSNL 60%, Karnataka-Hutch 61%, Karnataka-Rel Info 61%, Karnataka-Spice 60%, Karnataka-Tata 62%, Maharashtra-Airtel 66%, Maharashtra-BPL 58%, Maharashtra-BSNL 59%, Maharashtra-Idea 72%, Maharashtra-Rel Info 73%, Maharashtra-Tata 69%, TN-Airtel 60%, TN-BPL 63%, TN-BSNL 66%, TN-Rel Info 62%, TN-Tata 60%

Satisfied with help services-B Circle

Legend: % satisfied with help services — Benchmark

Values: Haryana-Airtel 70%, Haryana-BSNL 75%, Haryana-Hutch 76%, Haryana-Idea 78%, Haryana-Rel Info 71%, Haryana-Tata 58%, Kerela-Airtel 60%, Kerela-BPL 60%, Kerela-BSNL 60%, Kerela-Idea 60%, Kerela-Rel Info 60%, Kerela-Tata 58%, MP-Airtel 76%, MP-BSNL 75%, MP-Idea 78%, MP-Rel Info 70%, MP-Rel Tel 77%, MP-Tata 79%, Punjab-Airtel 69%, Punjab-BSNL 80%, Punjab-Hutch 70%, Punjab-Rel Info 67%, Punjab-Spice 76%, Punjab-Tata 74%, Rajasthan-Airtel 64%, Rajasthan-BSNL 71%, Rajasthan-Hutch 68%, Rajasthan-Rel Info 66%, Rajasthan-Tata 73%, UP-E-Airtel 68%, UP-E-BSNL 63%, UP-E-Hutch 60%, UP-E-Rel Info 61%, UP-E-Tata 61%, UP-W-Airtel 70%, UP-W-BSNL 58%, UP-W-Hutch 58%, UP-W-Idea 74%, UP-W-Rel Info 64%, UP-W-Tata 69%, WB-Aircell 84%, WB-Airtel 72%, WB-BSNL 61%, WB-Hutch 75%, WB-Rel Tel 71%, WB-Tata 74%

Satisfied with help services-C Circle

Legend: % satisfied with help services — Benchmark

Values: Assam-Aircell 75%, Assam-Airtel 78%, Assam-BSNL 57%, Assam-Rel Tel 60%, Bihar-Airtel 65%, Bihar-BSNL 48%, Bihar-Rel Tel 65%, Bihar-Tata 74%, HP-Airtel 67%, HP-BSNL 66%, HP-Rel Tel 69%, J&K-Airtel 62%, J&K-BSNL 57%, NE-Aircell 74%, NE-BSNL 56%, NE-Rel Tel 61%, Orissa-Aircell 37%, Orissa-Airtel 68%, Orissa-BSNL 57%, Orissa-Rel Info 69%, Orissa-Rel Tel 73%, Orissa-Tata 41%

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Satisfied with help services-Metro Circle

Satisfied with Network Performance-A Circle

Satisfied with Network Performance-B Circle

Satisfied with Network Performance-C Circle

Bar chart titled "Satisfied with Network Performance-C Circle" showing Network Performance (%) against a Benchmark line (~94%). Values: Assam-Aircell 70%, Assam-Airtel 73%, Assam-BSNL 52%, Assam-Rel Tel 54%, Bihar-Airtel 53%, Bihar-BSNL 46%, Bihar-Rel Tel 51%, Bihar-Tata 83%, HP-Airtel 89%, HP-BSNL 91%, HP-Rel Tel 94%, J&K-Airtel 66%, J&K-BSNL 65%, NE-Aircell 69%, NE-BSNL 57%, NE-Rel Tel 60%, Orissa-Aircell 47%, Orissa-Airtel 72%, Orissa-BSNL 55%, Orissa-Rel Info 75%, Orissa-Rel Tel 69%, Orissa-Tata 53%. Legend: Network Performance, Benchmark.

Satisfied with Network Performance-Metro Circle

Bar chart titled "Satisfied with Network Performance-Metro Circle" showing Network Performance (%) against a Benchmark line (~95%). Values: Chennai-Aircell 75%, Chennai-Airtel 73%, Chennai-BSNL 76%, Chennai-Hutch 77%, Chennai-Rel Info 75%, Chennai-Tata 75%, Delhi-Airtel 90%, Delhi-Hutch 90%, Delhi-Idea 85%, Delhi-MTNL 80%, Delhi-Rel Info 88%, Delhi-Tata 78%, Kolkata-Airtel 73%, Kolkata-BSNL 58%, Kolkata-Hutch 73%, Kolkata-Rel Info 76%, Mumbai-Airtel 88%, Mumbai-BPL 91%, Mumbai-Hutch 92%, Mumbai-MTNL 94%, Mumbai-Rel Info 91%, Mumbai-Tata 87%. Legend: Network Performance, Benchmark.

Satisfied with maintainability-A Circle

Bar chart titled "Satisfied with maintainability-A Circle" showing Maintability (%) against a Benchmark line (~95%). Values: AP-Airtel 80%, AP-Idea 83%, Gujarat-Airtel 88%, Gujarat-BSNL 58%, Gujarat-Hutch 100%, Gujarat-Idea 98%, Gujarat-Rel Info 88%, Gujarat-Tata 96%, Karnataka-BSNL 100%, Karnataka-Rel Info 90%, Karnataka-Spice 100%, Maharashtra-BPL 62%, Maharashtra-BSNL 40%, TN-Airtel 100%, TN-BPL 93%, TN-BSNL 95%, TN-Rel Info 100%, TN-Tata 55%. Legend: Maintability, Benchmark.

In case of remaining 11 operators, no answer was given by the respondent.

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Satisfied with maintainability-B Circle

Maintability — Benchmark

In case of remaining 1 operator, no answer was given by the respondent

Satisfied with maintainability-C Circle

Maintability — Benchmark

Satisfied with maintainability-Metro Circle

Maintability — Benchmark

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Satisfied with supplementary services-A Circle

Satisfied with supplementary services-B Circle

Satisfied with supplementary services-C Circle

Satisfied with supplementary services-Metro Circle

Legend: Supplementary Services ■ Benchmark ◆

Values (left to right): Chennai-Aircell 98%, Chennai-Airtel 98%, Chennai-BSNL 95%, Chennai-Hutch 95%, Chennai-Rel Info 99%, Chennai-Tata 96%, Delhi-Airtel 100%, Delhi-Hutch 99%, Delhi-Idea 99%, Delhi-MTNL 100%, Delhi-Rel Info 100%, Delhi-Tata 100%, Kolkata-Airtel 98%, Kolkata-BSNL 98%, Kolkata-Hutch 98%, Kolkata-Rel Info 97%, Mumbai-Airtel 98%, Mumbai-BPL 100%, Mumbai-Hutch 99%, Mumbai-MTNL 99%, Mumbai-Rel Info 99%, Mumbai-Tata 98%

Overall Customer Satisfaction-A Circle

Legend: Overall satisfaction ■ Benchmark ◆

Values: 91%, 82%, 90%, 88%, 92%, 89%, 78%, 70%, 82%, 78%, 75%, 79%, 86%, 88%, 87%, 88%, 88%, 86%, 80%, 89%, 91%, 92%, 93%, 82%, 82%, 84%, 83%, 84%

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Overall Customer Satisfaction-B Circle

Overall Customer Satisfaction-C Circle

Overall Customer Satisfaction-M Circle

Bar chart showing Overall satisfaction and Benchmark across circles:

Circle	Overall satisfaction
Chennai-Aircell	86%
Chennai-Airtel	85%
Chennai-BSNL	83%
Chennai-Hutch	86%
Chennai-Rel Info	85%
Chennai-Tata	87%
Delhi-Airtel	93%
Delhi-Hutch	92%
Delhi-Idea	87%
Delhi-MTNL	84%
Delhi-Rel Info	91%
Delhi-Tata	83%
Kolkata-Airtel	83%
Kolkata-BSNL	77%
Kolkata-Hutch	86%
Kolkata-Rel Info	86%
Mumbai-Airtel	91%
Mumbai-BPL	92%
Mumbai-Hutch	92%
Mumbai-MTNL	93%
Mumbai-Rel Info	92%
Mumbai-Tata	88%

Legend: Overall satisfaction ◆ Benchmark

4.4 CSS – BASIC

Satisfied with provision of service-A Circle

% Satisfied with provision of service ■ Benchmark ◆

Satisfied with provision of service-B Circle

% Satisfied with provision of service ■ Benchmark ◆

Satisfied with provision of service-C Circle

Category	% Satisfied
Assam-BSNL	66%
Bihar-BSNL	63%
Bihar-Rel Info	98%
HP-BSNL	100%
HP-Rel Info	98%
J&K-BSNL	87%
NE-BSNL	77%
Orissa-BSNL	73%
Orissa-Rel Info	96%

% Satisfied with provision of service ■ Benchmark ◆

Satisfied with provision of service-Metro Circle

Category	% Satisfied
Chennai-Airtel	97%
Chennai-BSNL	84%
Chennai-Rel Info	95%
Chennai-Tata	93%
Delhi-Airtel	94%
Delhi-MTNL	86%
Delhi-Rel Info	92%
Delhi-Tata	91%
Kolkata-Airtel	99%
Kolkata-BSNL	79%
Kolkata-Rel Info	98%
Mumbai-Airtel	96%
Mumbai-MTNL	94%
Mumbai-Rel Info	93%
Mumbai-Tata	98%

% Satisfied with provision of service ■ Benchmark ◆

160

Satisfied with billing services-A Circle

Legend: Billing Provison — Benchmark

Satisfied with billing services-B Circle

Legend: Billing Provison — Benchmark

161

Satisfied with billing services-C Circle

Billing Provison values: Assam-BSNL 62%, Bihar-BSNL 46%, Bihar-Rel Info 83%, HP-BSNL 96%, HP-Rel Info 97%, J&K-BSNL 86%, NE-BSNL 60%, Orissa-BSNL 56%, Orissa-Rel Info 59%

Satisfied with billing services-Metro Circle

Billing Provison values: Chennai-Airtel 98%, Chennai-BSNL 88%, Chennai-Rel Info 95%, Chennai-Tata 95%, Delhi-Airtel 83%, Delhi-MTNL 76%, Delhi-Rel Info 82%, Delhi-Tata 86%, Kolkata-Airtel 79%, Kolkata-BSNL 66%, Kolkata-Rel Info 63%, Mumbai-Airtel 79%, Mumbai-MTNL 94%, Mumbai-Rel Info 95%, Mumbai-Tata 97%

Satisfied with help services-A Circle

Legend: % satisfied with help services — Benchmark

Values (left to right): AP-Airtel 85%, AP-BSNL 53%, AP-Rel Info 58%, AP-Tata 60%, Gujarat-BSNL 67%, Gujarat-Rel Info 78%, Gujarat-Tata 76%, Karnataka-Airtel 55%, Karnataka-BSNL 61%, Karnataka-Tata 59%, Mah-BSNL 61%, Mah-Rel Info 75%, Mah-Tata 75%, TN-Airtel 89%, TN-BSNL 88%, TN-Rel Info 82%, TN-Tata 80%

Satisfied with help services-B Circle

Legend: % satisfied with help services — Benchmark

Values (left to right): Haryana-Airtel 72%, Haryana-BSNL 70%, Haryana-Rel Info 88%, Kerala-BSNL 65%, Kerala-Rel Info 73%, MP-Airtel 66%, MP-BSNL 68%, MP-Rel Info 80%, Punjab-Airtel 73%, Punjab-BSNL 77%, Punjab-HFCL 72%, Punjab-Rel Info 75%, Raj-BSNL 55%, Raj-Rel Info 65%, Raj-Shyam 62%, UP(E)-Airtel 60%, UP(E)-BSNL 36%, UP(E)-Rel Info 74%, UP(W)-Airtel 63%, UP(W)-BSNL 65%, UP(W)-Rel Info 73%, WB-BSNL 66%

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Satisfied with help services-C Circle

Circle	%
Assam-BSNL	58%
Bihar-BSNL	78%
Bihar-Rel Info	88%
HP-BSNL	88%
HP-Rel Info	78%
J&K-BSNL	55%
NE-BSNL	62%
Orissa-BSNL	59%
Orissa-Rel Info	73%

Legend: % satisfied with help services — Benchmark

Satisfied with help services-Metro Circle

Circle	%
Chennai-Airtel	63%
Chennai-BSNL	59%
Chennai-Rel Info	69%
Chennai-Tata	67%
Delhi-Airtel	70%
Delhi-MTNL	52%
Delhi-Rel Info	76%
Delhi-Tata	75%
Kolkata-Airtel	71%
Kolkata-BSNL	56%
Kolkata-Rel Info	69%
Mumbai-Airtel	65%
Mumbai-MTNL	54%
Mumbai-Rel Info	62%
Mumbai-Tata	66%

Legend: % satisfied with help services — Benchmark

Satisfied with Network Performance-A Circle

Legend: Network Performance — Benchmark

Values by category:
- AP-Airtel: 100%
- AP-BSNL: 87%
- AP-Rel Info: 83%
- AP-Tata: 83%
- Gujarat-BSNL: 71%
- Gujarat-Rel Info: 69%
- Gujarat-Tata: 69%
- Karnataka-Airtel: 92%
- Karnataka-BSNL: 94%
- Karnataka-Tata: 94%
- Mah-BSNL: 99%
- Mah-Rel Info: 97%
- Mah-Tata: 98%
- TN-Airtel: 99%
- TN-BSNL: 99%
- TN-Rel Info: 99%
- TN-Tata: 99%

Satisfied with Network Performance-B Circle

Legend: Network Performance — Benchmark

Values by category:
- Haryana-Airtel: 92%
- Haryana-BSNL: 91%
- Haryana-Rel Info: 95%
- Kerala-BSNL: 99%
- Kerala-Rel Info: 100%
- MP-Airtel: 95%
- MP-BSNL: 96%
- MP-Rel Info: 81%
- Punjab-Airtel: 100%
- Punjab-BSNL: 95%
- Punjab-HFCL: 98%
- Punjab-Rel Info: 100%
- Raj-BSNL: 92%
- Raj-Rel Info: 93%
- Raj-Shyam: 92%
- UP(E)-Airtel: 89%
- UP(E)-BSNL: 76%
- UP(E)-Rel Info: 90%
- UP(W)-Airtel: 93%
- UP(W)-BSNL: 94%
- UP(W)-Rel Info: 91%
- WB-BSNL: 50%

Satisfied with Network Performance-C Circle

Bars (Network Performance): Assam-BSNL 54%, Bihar-BSNL 88%, Bihar-Rel Info 95%, HP-BSNL 92%, HP-Rel Info 94%, J&K-BSNL 89%, NE-BSNL 56%, Orissa-BSNL 68%, Orissa-Rel Info 68%

Legend: Network Performance — Benchmark

Satisfied with Network Performance-Metro Circle

Bars (Network Performance): Chennai-Airtel 93%, Chennai-BSNL 89%, Chennai-Rel Info 94%, Chennai-Tata 93%, Delhi-Airtel 90%, Delhi-MTNL 82%, Delhi-Rel Info 87%, Delhi-Tata 86%, Kolkata-Airtel 71%, Kolkata-BSNL 70%, Kolkata-Rel Info 73%, Mumbai-Airtel 97%, Mumbai-MTNL 97%, Mumbai-Rel Info 96%, Mumbai-Tata 99%

Legend: Network Performance — Benchmark

Satisfied with maintainability-A Circle

In case of remaining 3 operators, no answer was given by the respondent

Satisfied with maintainability-B Circle

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Satisfied with maintainability-C Circle

Bar values: Assam-BSNL 62%, Bihar-BSNL 87%, Bihar-Rel Info 96%, HP-BSNL 74%, HP-Rel Info 77%, J&K-BSNL 86%, NE-BSNL 71%, Orissa-BSNL 66%, Orissa-Rel Info 87%

Legend: Maintainability — Benchmark

Satisfied with maintainability-Metro Circle

Bar values: Chennai-Airtel 93%, Chennai-BSNL 80%, Chennai-Rel Info 97%, Chennai-Tata 96%, Delhi-Airtel 89%, Delhi-MTNL 87%, Delhi-Rel Info 93%, Delhi-Tata 86%, Kolkata-Airtel 96%, Kolkata-BSNL 82%, Kolkata-Rel Info 86%, Mumbai-Airtel 98%, Mumbai-MTNL 81%, Mumbai-Rel Info 81%, Mumbai-Tata 79%

Legend: Maintainability — Benchmark

Satisfied with supplementary services-A Circle

In case of remaining 1 operator, no answer was given by the respondent

Satisfied with supplementary services-B Circle

In case of remaining 2 operators, no answer was given by the respondent

Satisfied with supplementary services-C Circle

In case of remaining 2 operators, no answer was given by the respondent

Satisfied with supplementary services-Metro Circle
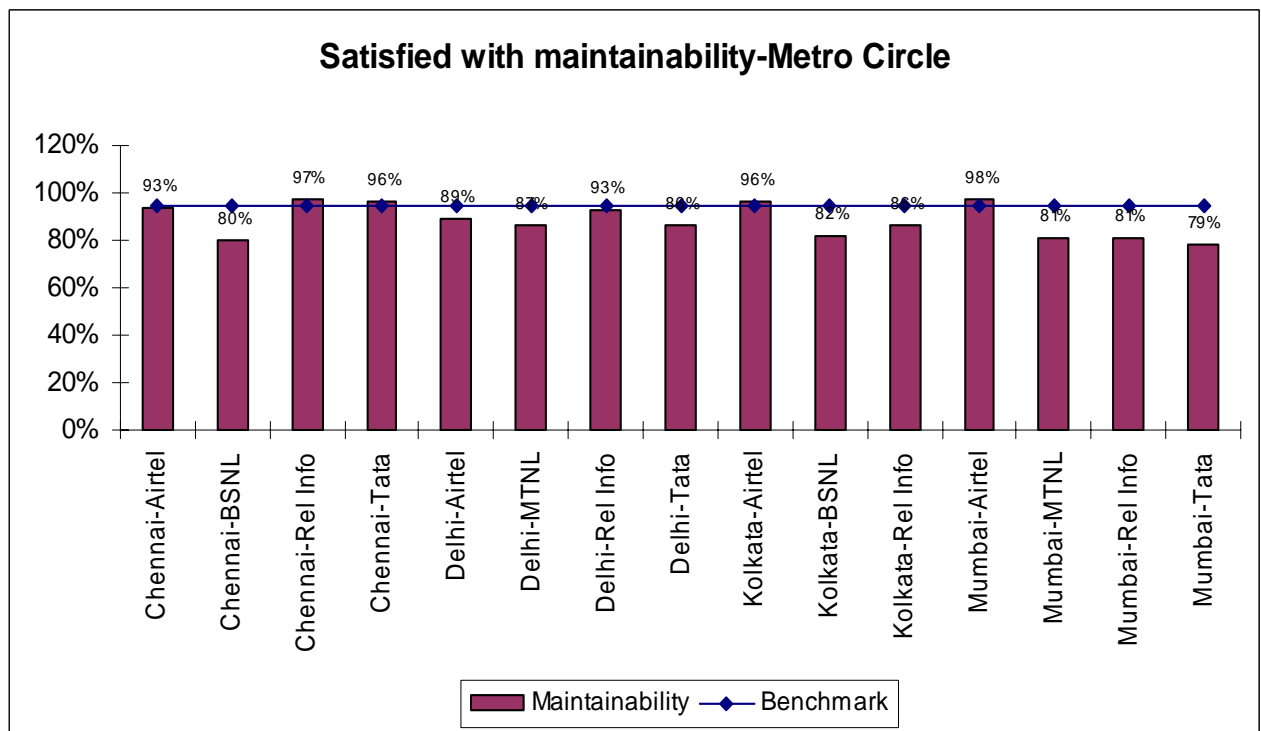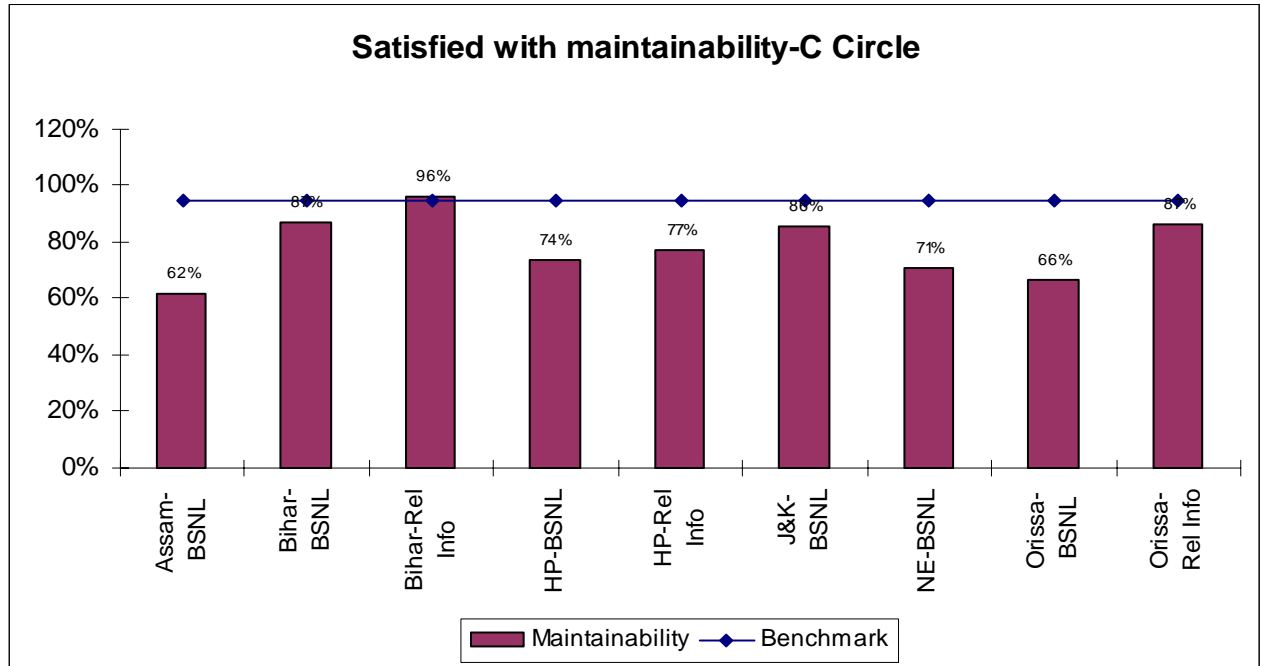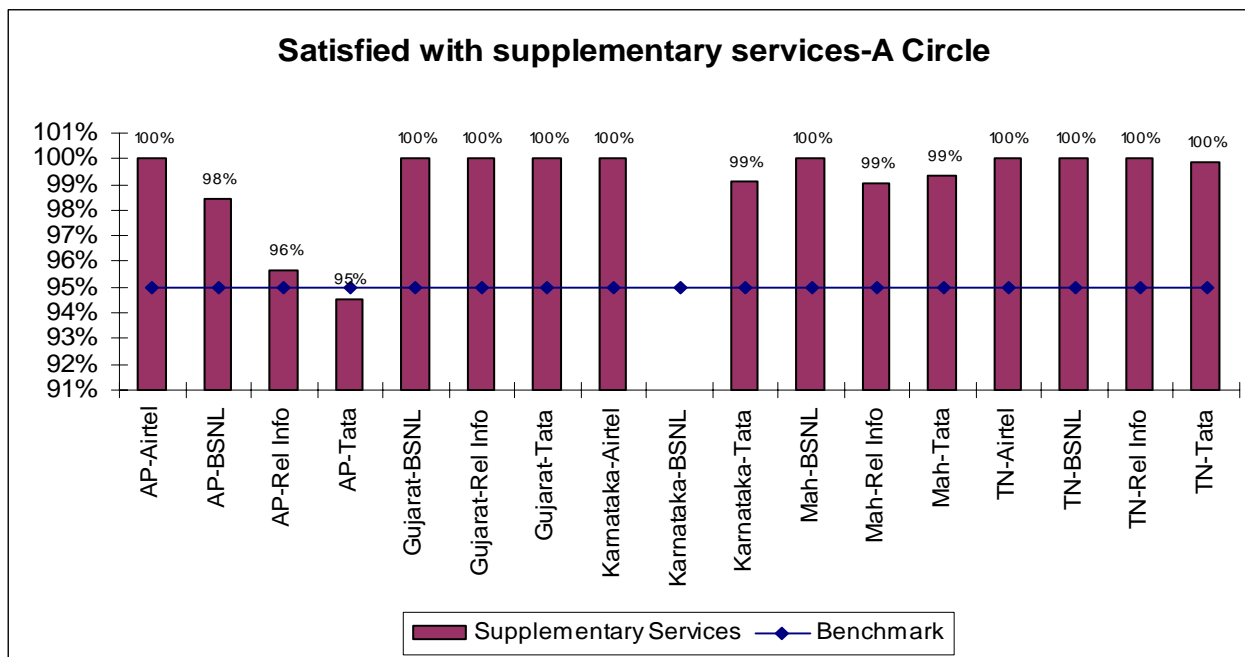
In case of remaining 1 operator, no answer was given by the respondent

Overall Customer Satisfaction-A Circle

Overall satisfaction values: AP-Airtel 99%, AP-BSNL 89%, AP-Rel Info 83%, AP-Tata 85%, Gujarat-BSNL 73%, Gujarat-Rel Info 79%, Gujarat-Tata 79%, Karnataka-Airtel 92%, Karnataka-BSNL 91%, Karnataka-Tata 93%, Mah-BSNL 97%, Mah-Rel Info 96%, Mah-Tata 95%, TN-Airtel 98%, TN-BSNL 98%, TN-Rel Info 97%, TN-Tata 97%

Legend: Overall satisfaction — Benchmark

Overall Customer Satisfaction-B Circle

Overall satisfaction values: Haryana-Airtel 88%, Haryana-BSNL 80%, Haryana-Rel Info 85%, Kerala-BSNL 97%, Kerala-Rel Info 97%, MP-Airtel 91%, MP-BSNL 93%, MP-Rel Info 88%, Punjab-Airtel 95%, Punjab-BSNL 91%, Punjab-HFCL 95%, Punjab-Rel Info 93%, Raj-BSNL 87%, Raj-Rel Info 88%, Raj-Shyam 87%, UP(E)-Airtel 84%, UP(E)-BSNL 76%, UP(E)-Rel Info 88%, UP(W)-Airtel 82%, UP(W)-BSNL 86%, UP(W)-Rel Info 88%, WB-BSNL 65%

Legend: Overall satisfaction — Benchmark

Overall Customer Satisfaction-C Circle

Legend: Overall satisfaction — Benchmark

Values (Overall satisfaction):
- Assam-BSNL: 58%
- Bihar-BSNL: 75%
- Bihar-Rel Info: 92%
- HP-BSNL: 89%
- HP-Rel Info: 93%
- J&K-BSNL: 83%
- NE-BSNL: 61%
- Orissa-BSNL: 63%
- Orissa-Rel Info: 75%

Overall Customer Satisfaction-M Circle

Legend: Overall satisfaction — Benchmark

Values (Overall satisfaction):
- Chennai-Airtel: 93%
- Chennai-BSNL: 86%
- Chennai-Rel Info: 93%
- Chennai-Tata: 93%
- Delhi-Airtel: 87%
- Delhi-MTNL: 79%
- Delhi-Rel Info: 86%
- Delhi-Tata: 85%
- Kolkata-Airtel: 79%
- Kolkata-BSNL: 69%
- Kolkata-Rel Info: 74%
- Mumbai-Airtel: 92%
- Mumbai-MTNL: 91%
- Mumbai-Rel Info: 92%
- Mumbai-Tata: 95%

4.5 List of Exchanges Covered – Basic Services

Sl. No.	Service Area Category	Name of Searvice Area	Name of Service Provider	List of Exchanges audited in Second Quarter (Apr to Jun 06)	Urban /Rural
1	Metro	Delhi	Mtnl	Janakpuri,Hauzkhash,Shahdra,janpath	Urban
2	Metro	Mumbai	Mtnl	Vashi Telephone Exchange,Prabha Devi Exchange,Fountain Telephone Exchange	Urban
3	Metro	Chennai	BSNL	Anna Nagar,.Adyar,Kodambakkam	Urban/ Rural
4	Metro	Kolkata	BSNL	Alipur, Jadavpur, Gopalnagar, Baruipur	Urban
5	A' Circle	Gujarat	B SNL	Palanpur,Unjha,Junagah,Aliabada,Mehal Nagar,Uday Nagar,Veraval main,OCB-Tax Junagadh,Veraval GIDG,Bhral,Balambha,Medi,Chandragadh, Matwa,Keshiya,Hadiyana,Udaynagar,Cuire Line,Jodia,Sidhpur,Visnagar,Patan	Urban
				Majevadi,Junagah,Khadia,Bilkha,Vadal,Junagadh,Supasi,Laiyala,Latipur,Dhinoj,Rajpur,Satlasna,Kukarwada,Sami,BrahmanBada, Nardipur	Rural
6	A' Circle	Karnatka	BSNL	jayanagar,Shankar Puram,Banglore East,Indranagar,Vigaya nagal,S.R nagar	Urban
				Hoskote,Devangodi,tavarekre,sarjapur,Dommasandra,indalwaoi,kanakpala,Khannapatna,Kodhi halli,Bidadi,Rana nagar,Doddahal halli,B.V halli,muduere,Nelamangla,Tippa Sandra,Kuour,Tyamagondlu,motgana hallia,mauadi,Devana Halli,Vijay Pura,Dodda Bala Pura,hanabe,Rajaghats,DBP Industrial	Rural
7	A' Circle	AP	BSNL	Vijayawada Central, Ibrahimpatnam, Pamarru, Arundelpet, Pedakakani	Urban
				Gudlavalleru, Gudivada, Mudinepalli, Ramvarppadu, Ventrapragada, Kanikipadu, Poranki, Ashok Nagar, Guntupalli, Arecherla, Kondrupadu, Nallapadu, Nunna, LAM Exchange	Rural
8	A' Circle	TN	BSNL	Ellesnagar, Suranangalam , Karunbalai	Urban

Sl. No.	Service Area Category	Name of Searvice Area	Name of Service Provider	List of Exchanges audited in Second Quarter (Apr to Jun 06)	Urban /Rural
				Salem, Kodala Nagar, Narayana Valasu, KK Nagar, Palanganatham Exchange, Ponmen, Naganalai Pudukkottai, North Chitrai, Moolappulayan Central, Coimbatore, Selvapurum Coimbatore, K Pudur, Tellakulan Madurai	
				Mayyanoor, Leighbazar, Karumbalai, Reddipatty, Srirangaplyam Salem, Balaji Garden, Sanganoor Exchange Coimbatore, Saibaba Colony Coimbatore, Chittrode, Reddy Pelly Salem, Mayyaneer Ex- salem, Surampetty, Tatabad Coimbatore, Race Course Ex. Coimbatore, Podanur Coimbatore	Rural
9	A' Circle	Maharashtra	BSNL	Kafad, Mohabaleshwar, Panchgani, Karad, Goa, Sgyedi, Mide Satara, Miraj, Rajwada, Marketyard	Urban
				Ozarde, Nagthane, Sonai, Bhilar, Surar, Bhuinj, Mide Taswade, Tambave, Chimangan Knegaon, Amnapur Sangli, Dalanal, Kole, Kamathe Tal Tasgaon, Karabe Digrai, Khandalabavada, Ond, Masur, Burli Sangli, Jath Sangli, Shendi, MIDC Ahmadnagar, Khanderajuri, Karathepiran	Rural
10	B' Circle	WB	BSNL	Diamond Harb, Joynagar	Urban
				Kakdwip, Haripal, Jinpur, Champadanga, Falta, Nimpith, Hoomgarh, Satbankura, Salboni, Dadhika, Sarisa, Budbud, Mankar, Rajbandh	Rural
11	B' Circle	Kerla	BSNL	Ernakulam,Ravipuram,Kalamassery,Fort cochin,AllepeyGandhi nagar,Ampalamugal,alwaye,cusat,Edakuch in,Edapally,Angamally	Urban
				Kizhakamblam,Kercherry,Ampalapuzha,Ko chin OCB	rural
12	B' Circle	MP	BSNL	Jhabura Main Exchange, Mandsaur Main Exchange, Ratlam Main Exchange, Chhatarpur Main Exchange, Betul Main Exchange, Marona Main Exchange, Dashahara Maidan (Ujjain SSA), Dhar Main Exchange, Guna Main Exchange	Urban

Sl. No.	Service Area Category	Name of Searvice Area	Name of Service Provider	List of Exchanges audited in Second Quarter (Apr to Jun 06)	Urban /Rural
				Parvalia, Kakanwani, Rambhapur, Jamuniya Kala, Bhawgarh, Lasudiyada, Sailana, Dharad, Binpak, Khajuraho, Mav Sahaniya, Devpur, Podhar, Athner, Gudgaon, Jigni, Chand Ka Pura, Noorabad Exchange, Panbihar Exchange, Chintaman Jawasia, Tajpur Exchange, Nagda Exchange, Nalcha, Tirla, Patai, Myana Exchange, Rampur Colony	Rural
13	B' Circle	Haryana	BSNL	Ambala,Hisar,Rewari	Urban
				Saha,Kaula,Khudda,Bhuna,Mohabatpur,Sikandarpur,Karnawas,gari bolani,nandrampur bass	Rural
14	B' Circle	Punjab	BSNL	Kunali,Bhatinda,Moun,Bhichu,Ropar	Urban
				Dhoomchheri,Ratangarh,Bela,Wazidpur,Badali,Chontgarh,Zingra,Arson,Rtp,lehari,Gaina,Shekhu,mandiKalra,Sekhpura,,jeada, govindpura,jassipon Wali,Laleana,Talevandi saboo	Rural
15	**B' Circle**	Rajasthan	BSNL	Jodhapur,MI road Ex.(Jodhapur)	
				Bao Exchange,Osn Ex.,Btd Ex.,Sls Ex.,Slk Ex.,Bnr Ex.,Daus Ex.,Jahota,Dausa,Bassi,Jetpora,Chomu	
16	B' Circle	U.P East	BSNL	Luckhnow,allahabad,Baniabagh varanasi,nadesur cantt Varansi,Allahabad(ALR),jaunpur,Lajpat nagar kanpur,Gorakh pur,Raptinagar(Gorakhpur),Raibarali,pharianpur(Kanpur), fajehpur	Urban
17	B' Circle	U.P(W)	BSNL	Boundary road,Shastri nagar,Mussoorie,Rishikesh	Urban
				sardhana,Daurala,Tolly grant,Roni pokhri,Dhalipur,Aturali,Sashi,Klair	Rural
18	C' Circle	H.P.	BSNL	Kullu,Manali,Bhunter	Urban
				Chhanikhot,Kaise,Barshani,Hurla,Garsa,Diyar,Haripur,Palchan, TE-bran.	Rural
19	C' Circle	J&K	BSNL	Anant Nag,Pehalgaon,Maslan	Urban
20	C' Circle	Bihar	BSNL	OCB Main, EWSD Main	Urban
				Nadaul, Beldarichak, Punpunm, Masaurhi, Lai, Maler, Dayalchak, Walmi, simra,	Rural

Sl. No.	Service Area Category	Name of Searvice Area	Name of Service Provider	List of Exchanges audited in Second Quarter (Apr to Jun 06)	Urban /Rural
				Painal, Dhanarua	
21	C' Circle	Assam	BSNL	Dispur	Urban
				Vijayanagar, Boku, Borjar, Rangiya, Dimu	Rural
22	C' Circle	NE	BSNL	OCB-Shillong, Jowai	Urban
				Smit, Mowngap, Ladrymbai, Khliehriat	Rural
23	C' Circle	Orissa	BSNL	OMP, Kkhapuria	Urban
				Salipur, Bahugram, Nischintakaili, Katikata, Phulnakhra, Nadiagurudi, Olatpur, Jajpur Road, Panikaili, Jindal, Korei	Rural
24	C' Circle	Jharkhand	BSNL	Dhurwa, Telco	Urban
				Hazaribag, Karra, Mandar	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 Second Quarter
1	Metro	Delhi	MTNL	Tees Hazari
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	Reliance	Ghaziabad-1
7	Metro	Mumbai	MTNL	MSC Mumbai
8	Metro	Mumbai	Hutch(BPL)	Sahas Prabhadevi Mumbai
9	Metro	Mumbai	Bharti	Malad Mumbai
10	Metro	Mumbai	Tata	Andhari Mumbai
11	Metro	Mumbai	Reliance	Kalyan-1
12	Metro	Chennai	Hutch	Msc-1 Arihant Tower,Anna Salai
13	Metro	Chennai	Bharti	Msc-Santhome
14	Metro	Chennai	Tata	Chennai Msc-2
15	Metro	Chennai	Reliance	Chennai Msc-3
16	Metro	Chennai	Bsnl	Chennai Msc-2
17	Metro	Kolkata	Bsnl	Kolkata Msc-2
18	Metro	Kolkata	Hutch	Kolkata Msc-2

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in Second Quarter
19	Metro	Kolkata	Bharti	Kolkata Msc-2
20	Metro	Kolkata	Tata	Kolkata Msc-2
21	Metro	Kolkata	Reliance	Kolkata Msc-2
22	A 'Circle	A.P.	Bsnl	Msc-2 A.P.
23	A 'Circle	A.P.	Hutch	Msc-Hydrabad
24	A 'Circle	A.P.	Bharti	Msc-2 A.P.
25	A 'Circle	A.P.	Idea	Msc-Vijayawada
26	A 'Circle	A.P.	Tata	Msc-2 A.P.
27	A 'Circle	A.P.	Reliance	Msc-Hydrabad-1
28	A 'Circle	Tamail Nadu	Bharti	Msc-2 Coimbator
29	A 'Circle	Tamail Nadu	Reliance	Msc-2 Coimbator
30	A 'Circle	Karnataka	Spice	Msc-Bangalore
31	A 'Circle	Karnataka	Reliance	Msc2 -Bangalore
32	A 'Circle	Gujarat	Bsnl	Msc-2 Gujarat
33	A 'Circle	Gujarat	Hutch	Msc-Bodakdav
34	A 'Circle	Gujarat	Idea	Msc-Surat
35	A 'Circle	Gujarat	Bharti	Msc-Rajkot
36	A 'Circle	Gujarat	Tata	Msc-Ahmedabad
37	A 'Circle	Gujarat	Reliance	Msc-Rajkot-1
38	A 'Circle	Maharastra	Bsnl	Msc-2
39	A 'Circle	Maharastra	Bharti	Msc-Pune
40	A 'Circle	Maharastra	Idea	Msc-Pune
41	A 'Circle	Maharastra	BPL	Msc-2 Nagpur
42	A 'Circle	Maharastra	Tata	Msc-Kolhapur
43	B'Circle	Haryana	Bsnl	Msc-2-Ambala
44	B'Circle	Haryana	Bharti	Msc- Ambala
45	B'Circle	Haryana	Hutch	Msc- Karnal
46	B'Circle	Haryana	Idea	Msc- Sonipat
47	B'Circle	Haryana	Tata	Msc-Ambala
48	B'Circle	Haryana	Reliance	Msc-Ambala
49	B'Circle	Kerala	Bsnl	Msc-3
50	B'Circle	Kerala	Bharti	Msc-cochin
51	B'Circle	Kerala	Hutch	Msc-2 Cochin
52	B'Circle	Kerala	Idea	Msc-Calicut

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in Second Quarter
53	B'Circle	Kerala	Tata	Msc-Calicut
54	B'Circle	Kerala	Reliance	Msc-Calicut -1
55	B'Circle	M.P.	Bsnl	Msc-2 Bhopal
56	B'Circle	M.P.	Bharti	Msc- Indore
57	B'Circle	M.P.	Reliance telecom	Msc-Raipur
58	B'Circle	M.P.	Idea	Msc-Bhopal
59	B'Circle	M.P.	Tata	Msc-Raipur
60	B'Circle	M.P.	Reliance	Msc-2 Bhopal
61	B'Circle	Punjab	Bsnl	Msc-3 Punjab
62	B'Circle	Punjab	Bharti	Msc-2 Mohali
63	B'Circle	Punjab	Hutch	Msc-2 Mohali
64	B'Circle	Punjab	Spice	Msc-2 Mohali
65	B'Circle	Punjab	HFCL	Msc-2 Mohali
66	B'Circle	Punjab	Reliance	Msc-Jalandhar
67	B'Circle	Punjab	Tata	Msc-Chandigarh
68	B'Circle	Rajasthan	Bharti	Msc-2 Jaipur
69	B'Circle	Rajasthan	Hutch	Msc- Gaurav Tower,Jaipur
70	B'Circle	Rajasthan	Shyam	Msc-Jaipur
71	B'Circle	Rajasthan	Reliance	Msc-2 Jaipur
72	B'Circle	U.P.(East)	Bsnl	Msc -Lucknow
73	B'Circle	U.P.(East)	Bharti	Msc-2-Lucknow
74	B'Circle	U.P.(East)	Hutch	Msc-2-Lucknow
75	B'Circle	U.P.(East)	Reliance	Msc-2 Kanpur
76	B'Circle	U.P(West)	Bsnl	Msc-2 Agra
77	B'Circle	U.P(West)	Bharti	Msc-2 Meerut
78	B'Circle	U.P(West)	Hutch	Msc-2 Meerut
79	B'Circle	U.P(West)	Idea	Msc-2 Meerut
80	B'Circle	U.P(West)	Reliance	Msc-2 Meerut
81	B'Circle	West Bangal	Bsnl	Msc-2
82	B'Circle	West Bangal	Bharti	Msc-Asansol
83	B'Circle	West Bangal	Hutch	Msc-Asansol
84	B'Circle	West Bangal	Dishnet	Msc-Silliguri
85	C' Circle	Assam	Bsnl	Msc-3
86	C' Circle	Assam	Bharti	Nsc-Gawhati

Sl.No.	Service Area Category	Name of Service area	Name of Service Provider	List of Msc's audited in Second Quarter
87	C' Circle	Assam	Reliance	Msc-2 Assam
88	C' Circle	Bihar	Bharti	Msc-patna
89	C' Circle	Bihar	Rel Tel	Msc-Rachi
90	C' Circle	Bihar	Rel Info	Msc-patna
91	C' Circle	H.P	Bsnl	Msc-2
92	C' Circle	H.P	Bharti	Msc-Shimla
93	C' Circle	H.P	Rel Tel	Msc-Shimla
94	C' Circle	H.P	Rel Info	Msc-Shimla
95	C' Circle	H.P	Tata	Msc-Shimla
96	C' Circle	NE	Bharti	Msc-NE
97	C' Circle	NE	Rel Tel	Msc-Shillong
98	C' Circle	J & K	Bsnl	Msc-2
99	C' Circle	J & K	Bharti	Msc-Srinagar
100	C' Circle	J & K	Dishnet	Msc-Jammu
101	C' Circle	Orrisa	Bsnl	Msc-2
102	C' Circle	Orrisa	Bharti	Msc-Bhubaneswar
103	C' Circle	Orrisa	Dishnet	Msc-Guwahati
104	C' Circle	Orrisa	Rel Info	Msc-Bhubaneswar