

Report on

**Assessment of Customer Perception of
Service performed by Cellular Mobile
Telephone Service Providers**

Through

Surveys using Interactive Voice
Response System
(IVRS)

**(Licensed Service Areas of Delhi, Madhya
Pradesh & Karnataka)**

Index

Contents	Page
Executive Summary	3
1. Introduction	5
2. Survey Design and Methodology	6
3. Survey findings	8
4. Comparison with Quality of Service benchmarks	11
5. Conclusion	14
6. Appendix-1 – Questionnaire sets	15
7. Appendix-2 – Detailed analysis of responses question-wise	17

Report on customer satisfaction Survey through IVRS in the Licensed Service Areas of Delhi, Madhya Pradesh and Karnataka

Executive Summary

The TRAI Act, 1997 mandates the Authority to lay down Quality of Service (QoS) standard and to assess the performance of various Telecom Service Providers through conducting periodical survey. There are seven parameters on which the customer perception of service is assessed against the benchmarks such as satisfaction with provision of service, billing performance, network performance, reliability & availability, maintainability, supplementary & value added service, help services, overall service quality. TRAI has been assessing customer perception of service through survey in the traditional ways such as getting feedback through paper based interview, face to face interaction with consumers and also getting feedback through telephonic conversation.

This time as a pilot project, TRAI conducted survey through Interactive Voice Response System (IVRS) in the license service areas of Delhi, Madhya Pradesh and Karnataka, covering all the service providers. The survey includes 12 questions spread through 4 sets of questionnaire for each of the Pre-paid, Post-paid, Mobile Number Portability (MNP) and Do-Not-Disturb (DND) category of customers in two languages; Hindi (for Delhi & Madhya Pradesh) and Kannad (for Karnataka). On account of the limitations in IVRS survey regarding the number of questions that can be put to the customers so that the customer may not abandon the survey midway, no more than 6 questions were put in each questionnaire. The customers were asked Questions and to rate the responses from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

During the survey it was observed that percentage of full responses to the complete questionnaire in Delhi was only 0.67 % of total IVRS survey calls made for this purpose. This percentage in case of Madhya Pradesh was observed as 1.25 % and in case of Karnataka it was observed as 0.72. However, the agency had got required sample size of survey by making a very large numbers of calls.

The response received were analyzed to assess the satisfaction level of consumer regarding provisioning of service, billing performance, network performance, maintainability, VAS service, help service including grievances redressal and overall service quality. The survey also included questions to assess the satisfaction level regarding DND registration & MNP provisioning. On analysis of the responses received, it is seen that most of consumers are dissatisfied with services offered by service providers, however, in case of DND and MNP service, most of the customers were satisfied.

The responses on the various questions were further analysed to determine the satisfaction score of each TSPs against the benchmarks. In this regard, the percentage of satisfactory responses of score 3, 4 & 5 are taken as satisfied level for making comparison to the TRAI benchmarks. It has been observed that, the none of the service providers in the three service areas have achieved the benchmark for customer satisfaction. The level of satisfaction was around 50% of the TRAI benchmark. In Delhi LSA, the satisfaction level is highest for M/s Airtel and the lowest was observed for M/s Reliance Communications Ltd. In Madhya Pradesh and Karnataka, the performances of M/s Reliance Jio, Vodafone, Airtel, BSNL and Idea were comparable. In Madhya Pradesh and Karnataka the lowest level is observed mostly in the network of M/s Reliance Communication Ltd.

1. Introduction

1.1 The TRAI Act, 1997 mandates the Authority to conduct periodical survey of service provided by the service providers. For assessing customer perception of service through survey, TRAI has laid down the following parameters in the Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009:-

Serial Number	Name of Parameter	Benchmark
(a)	customers satisfied with the provision of service	≥ 90 %
(b)	customers satisfied with the billing performance	≥ 95 %
(c)	customers satisfied with network performance, reliability and availability	≥ 95 %
(d)	customers satisfied with maintainability	≥ 95 %
(e)	customers satisfied with supplementary and value added services	≥ 90 %
(f)	customers satisfied with help services including customer grievance redressal	≥ 90 %
(g)	customers satisfied with overall service quality	≥ 90 %

1.2 In accordance with the above provisions in the TRAI Act, 1997 and the Quality of Service Regulations, TRAI had engaged M/S VivaConnect to conduct assessment of customer perception of service performed by cellular mobile telephone service providers through customer satisfaction surveys using Interactive Voice Response System (IVRS) in the Licensed Service Areas of Delhi (including NCR region), Madhya Pradesh and Karnataka.

1.3 The survey covered the following Telecom Service Providers (TSPs) in these service areas:-

Table 1 TSPs covered

S.No	Telecom Service Providers (TSPs)		
	Delhi	Madhya Pradesh	Karnataka
1	Aircel	Airtel	Aircel
2	Airtel	BSNL	Airtel
3	Idea	Idea	BSNL
4	JIO	JIO	Idea
5	MTNL	RCOM	JIO
6	RCOM	TATA	RCOM
7	TATA	Vodafone	TATA
8	Vodafone		Vodafone

2. Survey Design and Methodology:

2.1 IVRS are generally used when one wants to interact with a customer at a very personalized level in an effective way. The customer receives a pre-recorded call and can immediately choose options by pressing the relevant digit. The major limitations in conducting IVRS survey is the chance of getting the call successful and the number of questions that can be put to the customers as the customers are likely to abandon the survey midway in case the questionnaire is lengthy. Therefore, not more than six questions were put in each set of questionnaire.

2.2 The IVRS survey was conducted through 12 questions spread through 4 sets of questionnaires for each of the Pre-paid, Postpaid, Mobile Number Portability (MNP) and Do-Not-Disturb (DND) category of customers in two languages; Hindi (for Delhi & Madhya Pradesh) and Kannad (For Karnataka). The customers were asked the following Questions and to rate the responses from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied:-

Q1) How satisfied are you with the steps taken to address Call Drop issues by the operator?

Q2) How satisfied are you with the Post-paid billing information provided by the operator?

Q3) How satisfied are you with the Customer care service offered by the operator?

Q4) How satisfied are you with the Voice Quality provided by operator during call?

Q5) How satisfied are you with the overall telecom service provided by Operator?

Q6) How satisfied are you with the Mobile Number Portability service from one operator to another operator?

Q7) How satisfied are you with the Data Service offered by the operator?

Q8) How satisfied are you with the Tariff Plans and add-on pack related information provided by the operator?

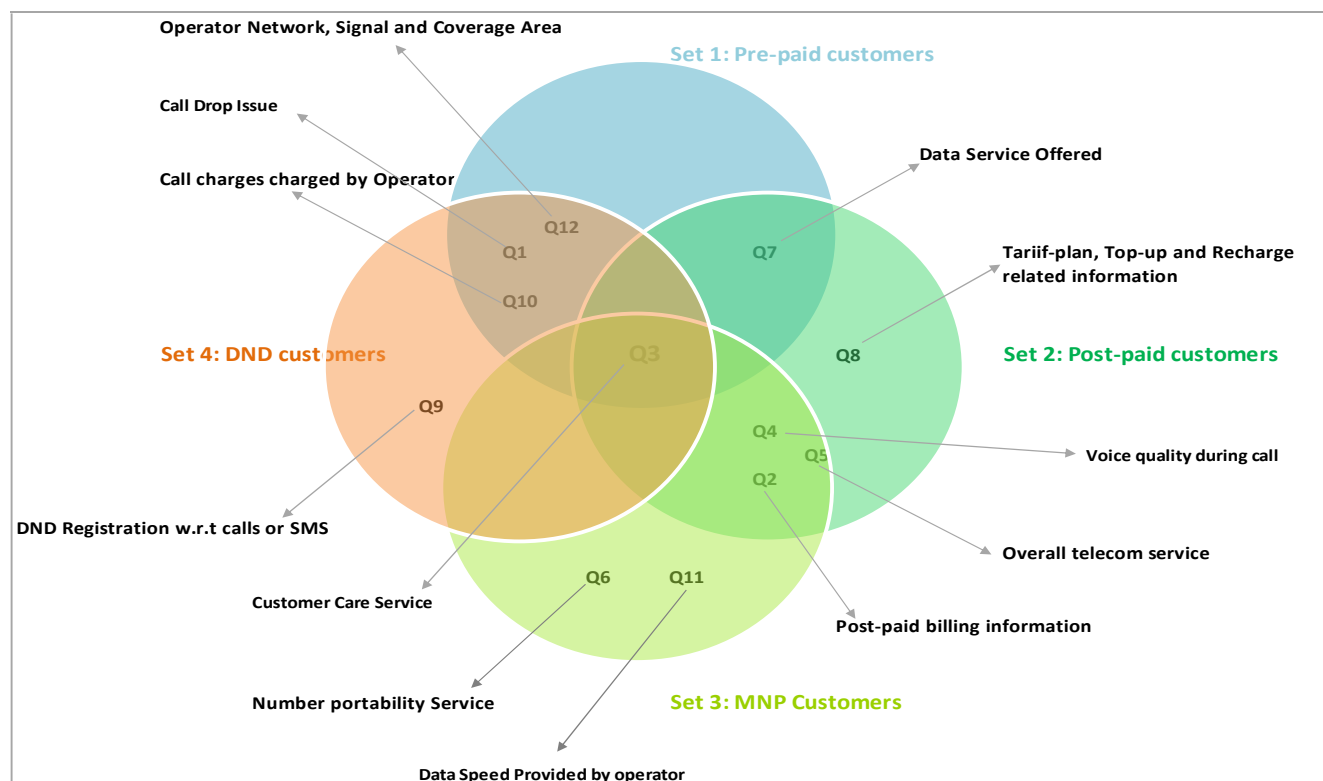
Q9) How satisfied are you with the DND registration with respect to unwanted telemarketing calls or SMS issues?

Q10) How satisfied are you with the Call Charges made by operator?

Q11) How satisfied are you with the Data Speed provided by the operator?

Q12) How satisfied are you with the Operator Network, Signal and Coverage Area provided by the operator?

The detailed four question sets are at **Appendix 1**. The above 4 sets comprised of 12 unique questions based on the services as shown in the below Venn diagram:-



2.3 The survey was taken over a five point scale of satisfaction level where response 1 represents extremely dissatisfied customer and response 5 represents extremely satisfied customers as below:

1. Extremely Dissatisfied
2. Dissatisfied
3. Satisfied
4. Very satisfied
5. Extremely satisfied

The responses 1 and 2 response are considered as dissatisfied customers, response 3 is considered as neutral and responses 4 and 5 are considered as satisfied customers.

2.4 During the survey it was observed that only a few calls from out of the total calls made were getting successful. Further, from out of the few calls that were successful only a very few customers had given full responses to all the questions. Therefore, a very large number of calls had to be made to make the sample size at 97% confidence level with confidence interval of 3%. The details of the calls made, calls that were successful, number of partial responses and number of full responses are given below:-

Service area	Total calls made	Success calls	No. of partial responses	No. of full responses	% Full responses (on success calls)	% Full Responses (on total calls made)
1	2	3	4	5	6	7
Delhi	16,98,355	1,47,935	1,36,581	11,354	7.67%	0.67%
M.P.	9,21,467	1,08,412	96,939	11,473	10.58%	1.25%
Karnataka	17,01,381	1,27,190	1,14,869	12,321	9.69%	0.72%

3. Survey Findings

3.1 The responses of customers, covering all service providers, who have fully answered all the questions are analyzed to arrive at the satisfaction level of customers on various parameters. The question-wise percentage of responses considered as dissatisfied, neutral and satisfied in the LSAs of Delhi, Madhya Pradesh and Karnataka are given below:-

Table showing percentagewise response – Dissatisfactory Response (DR), Neutral Response (NR) and Satisfactory Response (SR)

Questions	Delhi			Madhya Pradesh			Karnataka		
	DR %	NR %	SR %	DR %	NR %	SR %	DR %	NR %	SR %
Step taken to address Call Drop issue	47%	10%	43%	48%	7%	45%	48%	9%	42%
Post-paid billing Information	38%	22%	40%	50%	9%	41%	53%	11%	36%
Customer Care Service	49%	10%	42%	47%	9%	44%	52%	10%	38%
Voice Quality during call	43%	15%	42%	38%	12%	50%	33%	13%	54%
Overall telecom service by Operator	52%	12%	36%	50%	12%	38%	52%	12%	36%

Mobile Number Portability	41%	11%	48%	37%	11%	52%	39%	11%	50%
Operator Data Service	50%	11%	39%	51%	10%	39%	50%	10%	40%
Tariff Plan and add-on pack related information	41%	13%	45%	44%	11%	44%	41%	13%	46%
DND registration w.r.t unwanted calls or SMS	33%	9%	58%	32%	8%	60%	35%	10%	55%
Charges made by operator	43%	9%	48%	49%	8%	43%	45%	9%	46%
Data Speed	60%	13%	27%	62%	10%	27%	67%	11%	23%
Operator Network, Signal and coverage area	63%	8%	29%	58%	7%	35%	65%	8%	27%

3.2 The above Table shows that more than 50% customers are dissatisfied with the services provided in these service areas, except for DND registration in all LSAs, voice quality in Karnataka and Mobile Number Portability in Madhya Pradesh. The worst dissatisfaction is in the two areas of Data Speed and network, signal and coverage.

3.3 The average score of the responses in a scale of 1 to 5 in the three LSAs are given below:-

1.1: Average score of each question across LSA's

Questions	LSA's		
	Delhi	Madhya Pradesh	Karnataka
Step taken to address Call Drop issue	2.91	2.97	2.91
Post-paid billing	2.76	2.8	2.61
Customer Care Service	2.82	2.94	2.69
Voice Quality during call	2.97	3.23	3.4
Overall telecom service by Operator	2.7	2.8	2.86
Mobile Number Portability	3.13	3.27	3.19
Operator Data Service	2.83	2.79	2.81
Tariff Plan and add-on pack related information	3.04	2.98	3.12
DND registration w.r.t unwanted calls or SMS	3.48	3.54	3.27
Charges made by operator	3.07	2.86	3.04
Data Speed	2.39	2.33	2.14
Operator Network, Signal and coverage area	2.33	2.55	2.25

3.4 The operator-wise details of responses against each of the questions in the three service areas are given in Appendix-2 and the average score of each question are given below:-

Delhi

Average Score of Responses across TSP's for Delhi

Questions	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafn
Step taken by operator for addressing Call Drop issues	2.93	3.21	2.94	2.90	2.58	2.59	3.16	2.98
Post-paid billing information	2.40	3.02	2.85	2.59	2.73	2.59	2.89	3.02
Customer Care Service	2.58	3.20	2.82	2.93	2.58	2.51	2.95	2.98
Voice Quality during call	2.99	3.09	3.16	3.01	2.80	2.34	3.22	3.18
Overall telecom Service Provided by Operator	2.52	2.88	2.80	2.87	2.49	2.25	2.91	2.89
Mobile Number Portability	3.07	3.24	3.13	3.43	3.10	2.66	3.29	3.14
Operator Data Service	3.30	3.01	2.62	2.81	2.70	2.27	3.08	2.90
Tariff Plan, Top-up and Recharge related information	2.73	3.03	3.21	3.02	3.15	2.78	3.30	3.13
DND Registration w.r.t unwanted call or SMS	3.55	3.38	3.56	4.04	3.25	3.35	3.59	3.13
Call Charges made by operator	2.91	2.99	2.90	3.64	3.12	3.00	3.18	2.85
Data Speed	1.84	2.72	2.52	2.62	2.13	2.18	2.60	2.54
Operator Network, Signal and coverage area	2.05	3.17	2.39	2.26	1.98	1.87	2.55	2.36

Madhya Pradesh

Average Score of Responses across TSP's for Madhya Pradesh

Questions	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Step taken by operator for addressing Call Drop issues	3.07	2.82	2.96	3.00	2.72	2.98	3.07
Post-paid billing information	2.94	2.84	2.69	2.88	2.76	2.59	2.82
Customer Care Service	3.04	2.83	2.80	3.05	2.67	3.02	3.10
Voice Quality during call	3.31	3.18	3.55	3.50	2.64	3.00	3.32
Overall telecom Service Provided by Operator	2.87	2.73	2.75	3.37	2.46	2.65	2.77
Mobile Number Portability	3.29	3.30	3.24	3.83	2.70	3.32	2.92
Operator Data Service	2.94	2.68	2.79	3.11	2.36	2.65	2.80
Tariff Plan, Top-up and Recharge related information	2.92	3.04	2.99	3.13	2.83	2.77	3.14
DND Registration w.r.t unwanted calls or SMS	3.55	3.37	3.51	3.84	3.47	3.50	3.71
Call Charges made by operator	2.70	2.81	2.83	3.40	2.82	3.02	2.84
Data Speed	2.17	2.20	2.31	3.08	2.25	2.45	1.58
Operator Network, Signal and coverage area	2.93	2.19	2.54	2.21	2.17	2.40	2.78

Karnataka

Average Score of Responses across TSP's for Karnataka

Questions	Aircel	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Step taken by operator for addressing Call Drop issues	2.92	2.82	2.97	2.79	2.98	2.76	3.12	2.92
Post-paid billing information	2.44	2.76	2.74	2.39	2.62	2.67	2.47	2.82
Customer Care Service	2.57	2.65	2.76	2.63	2.81	2.59	2.64	2.86
Voice Quality during call	3.51	3.58	3.48	3.45	3.27	3.13	3.25	3.56
Overall telecom Service Provided by Operator	2.79	2.82	2.95	2.74	3.21	2.73	2.62	3.00
Mobile Number Portability	3.12	3.27	3.16	3.17	3.48	2.92	3.15	3.28
Operator Data Service	3.03	2.70	2.85	2.57	3.26	2.52	2.65	2.91
Tariff Plan, Top-up and Recharge related information	3.21	3.09	3.40	3.16	3.06	3.02	2.89	3.10
DND Registration w.r.t unwanted calls or SMS	3.47	3.36	3.39	3.01	2.50	3.32	3.81	3.29
Call Charges made by operator	3.02	2.93	3.01	2.71	3.50	2.98	3.14	3.02
Data Speed	2.05	2.19	2.01	2.07	2.55	2.07	1.91	2.30
Operator Network, Signal and coverage area	2.09	2.20	2.39	2.30	2.27	2.13	2.34	2.33

4. Comparisons with Quality of Service Benchmarks

4.1 In addition to the above analysis, comparisons of achieved level of percentage of satisfied consumers (response score of 3, 4 and 5) by various TSP's were studied to evaluate the implementation and effectiveness of various identified parameters based on the Quality of Service benchmarks. In total there are 7 parameters defined by TRAI and the analysis for each parameter is based on combining responses to various questions.

4.2 From the responses to the 12 Questions,, asked through four sets of questionnaire, the performance of service providers has been assessed for five out of seven Quality of Service parameters laid down by TRAI for assessing customer perception of service. Satisfaction of customers has not been assessed for the parameters provision of service and provision of supplementary and value added services. In addition to assessment of satisfaction level on five parameters, the survey has also assessed customer perception on Data Services, MNP services, registration for DND services and provision of information related to tariff plan and add-on pack/recharges.

4.3 For the Quality of Service parameters defined by TRAI for assessing customer perception of service, the analysis of performance for each parameter is based on combining the responses to various questions as stated below:

- (i) Customer Satisfied with Billing Performance – Analysis performed based on combining responses for question 2 and 10 relating to pre-paid billing and call charging by operator.
- (ii) Customer Satisfied with Help Services- Analysis performed based on response to question 3 relating to customer care service.
- (iii) Customer Satisfied with Network Performance, Reliability and Availability - Analysis performed based on combining responses for question 4,12 relating to voice quality, Operator Network, Signal and coverage area.
- (iv) Customer Satisfied with Maintainability Services- Analysis performed based on response to question 1 relating to steps taken to address call drop issue.
- (v) Customer Satisfied with Overall Quality of Telephone Service - Analysis performed based on response to question 5 relating to overall quality.

4.4 For other parameters, the customer satisfaction is assessed, based on combining the responses to various questions as stated below:

- (vi) Customer Satisfied with Tariff Plan and add-on pack related information - Analysis performed based on response to question 8 relating to Tariff Plan and add-on pack related information.
- (vii) Customer Satisfied with MNP services-Analysis performed based on response to question 6 relating to Mobile Number Portability.
- (viii) Customer Satisfied with DND services- Analysis performed based on response to question 9 relating to DND registration w.r.t unwanted calls or SMS.
- (ix) Customer Satisfied with Mobile Data/Internet Services - Analysis performed based on combining responses for question 7 and 11 relating to data service and data speed.

4.5 The percentage satisfied responses of score 3, 4 and 5 are taken and compared to the benchmarks in each TSP for each LSA. The first 5 parameters have pre-defined benchmarks and the last 3 parameters have no set benchmark as seen in the table below (red box). For each parameter the highest % is represented in Green and the lowest % is represented in Red.

Delhi LSA

Performance against Quality of Service benchmarks

Parameter	Benchmark	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafone
Customer Satisfied with Billing Performance	≥95%	48.14%	57.51%	51.95%	57.69%	53.06%	50.91%	57.18%	54.69%
Customer Satisfied with Help Services	≥90%	43.59%	61.48%	50.99%	54.28%	45.74%	42.69%	53.25%	56.42%
Customer Satisfied with Network Performance, Reliability and Availability	≥95%	37.72%	58.86%	48.19%	46.49%	41.17%	29.60%	48.89%	48.72%
Customer Satisfied with Maintainability	≥95%	53.35%	58.10%	52.05%	52.38%	43.57%	43.07%	57.85%	55.42%
Customer Satisfied with Overall Quality of Telephone Service	≥90%	41.39%	56.12%	50.24%	52.71%	40.75%	33.63%	52.27%	55.35%
Customer Satisfied with Mobile Data/Internet Services	No Benchmark	42.00%	54.71%	44.08%	52.13%	40.53%	34.05%	51.57%	50.05%
Customer Satisfied with Tariff Plan and add-on pack information	No Benchmark	43.24%	60.18%	61.70%	57.55%	58.77%	50.35%	63.64%	60.61%
Customer Satisfied with MNP services	No Benchmark	55.64%	64.50%	61.51%	68.38%	58.10%	44.64%	61.49%	58.41%
Customer Satisfied with DND	No Benchmark	68.62%	64.92%	67.87%	79.67%	62.12%	64.17%	68.27%	58.97%

Madhya Pradesh LSA

Performance against Quality of Service benchmarks

Parameter	Benchmark	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Customer Satisfied with Billing Performance	≥95%	49.34%	50.64%	47.99%	58.20%	49.09%	50.28%	50.00%
Customer Satisfied with Help Services	≥90%	56.07%	51.28%	49.65%	56.18%	45.61%	55.85%	57.31%
Customer Satisfied with Network Performance, Reliability and Availability	≥95%	54.75%	44.87%	53.55%	51.05%	36.84%	45.90%	56.30%
Customer Satisfied with Maintainability	≥95%	53.80%	50.00%	52.82%	56.37%	45.00%	52.17%	53.63%
Customer Satisfied with Overall Quality of Telephone Service	≥90%	53.95%	47.26%	49.78%	65.68%	40.10%	46.02%	48.23%
Customer Satisfied with Mobile Data/Internet Services	No Benchmark	49.62%	42.82%	44.91%	58.79%	35.30%	43.37%	39.23%
Customer Satisfied with Tariff Plan and add-on pack information	No Benchmark	55.42%	56.84%	54.39%	59.06%	51.36%	52.24%	59.09%
Customer Satisfied with MNP services	No Benchmark	63.54%	63.07%	61.36%	77.78%	47.35%	64.98%	52.25%
Customer Satisfied with DND	No Benchmark	67.68%	64.06%	66.23%	75.00%	64.68%	67.18%	72.43%

Karnataka LSA

Performance against Quality of Service benchmarks

Parameter	Bench mark	Aircel	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Customer Satisfied with Billing Performance	≥95%	50.62%	53.20 %	52.34 %	44.35%	54.91%	50.40%	48.94%	55.45%
Customer Satisfied with Help Services	≥90%	44.60%	48.20 %	50.12 %	44.82%	51.98%	43.54%	46.15%	52.80%
Customer Satisfied with Network Performance, Reliability and Availability	≥95%	44.46%	52.20 %	53.88 %	46.88%	53.24%	42.15%	49.39%	51.97%
Customer Satisfied with Maintainability	≥95%	52.45%	51.07 %	53.58 %	47.13%	55.14%	45.81%	56.23%	52.01%
Customer Satisfied with Overall Quality of Telephone Service	≥90%	51.92%	54.95 %	55.44 %	50.32%	64.04%	48.17%	44.83%	57.97%
Customer Satisfied with Mobile Data/Internet Services	No Bench mark	45.33%	43.15 %	44.06 %	36.61%	56.75%	36.64%	38.00%	47.80%
Customer Satisfied with Tariff Plan and add-on pack information	No Bench mark	61.98%	58.96 %	67.19 %	58.68%	60.90%	57.09%	53.09%	59.81%
Customer Satisfied with MNP services	No Bench mark	59.60%	64.98 %	60.72 %	59.06%	70.22%	51.50%	57.68%	64.62%
Customer Satisfied with DND	No Bench mark	66.24%	64.91 %	64.02 %	54.89%	50.00%	62.52%	74.34%	62.08%

5. Conclusion

5.1 The survey shows that none of the service providers have met the Quality of Service benchmarks for the five prescribed parameters for which customer perception of service is assessed. The satisfaction level is highest in the case of DND services and MNP services. In Delhi LSA, the satisfaction level is highest in the case of M/s Airtel and the lowest level is observed mostly in the network of M/s Reliance Communications Ltd. In Madhya Pradesh and Karnataka, the performances of M/s Reliance Jio, Vodafone, Airtel, BSNL and Idea are comparable. In Madhya Pradesh and Karnataka the lowest level is observed mostly in the network of M/s Reliance Communications Ltd.

Questionnaires

The 4 sets of question

Set 1: For Pre-paid customers

Q1) How satisfied are you with the steps taken to address Call Drop issues by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q2) How satisfied are you with the Operator Network, Signal and Coverage Area provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q3) How satisfied are you with the Data Service offered by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q4) How satisfied are you with the Call Charges made by operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q5) How satisfied are you with the Customer care service offered by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Set 2: For Post-paid customers

1) How satisfied are you with the overall telecom service provided by Operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q2) How satisfied are you with the Data Service by the Operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q3) How satisfied are you with the Voice Quality provided by operator during call? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q4) How satisfied are you with the Tariff Plans and add-on pack related information provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q5) How satisfied are you with the Post-paid billing information provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q6) How satisfied are you with the Customer-care service offered by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Set 3: For MNP customers

Q1) How satisfied are you with the overall telecom service provided by Operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q2) How satisfied are you with the Data Speed provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q3) How satisfied are you with the Voice Quality provided by operator during call? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q4) How satisfied are you with the Mobile Number Portability service from one operator to another operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q5) How satisfied are you with the Post-Paid billing information provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q6) How satisfied are you with the Customer-care service provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Set 4: For DND customers

Q1) How satisfied are you with the steps taken to address the Call issues by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q2) How satisfied are you with the Operator network, signal, and coverage area provided by the operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q3) How satisfied are you with the DND registration with respect to unwanted telemarketing calls or SMS issues? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

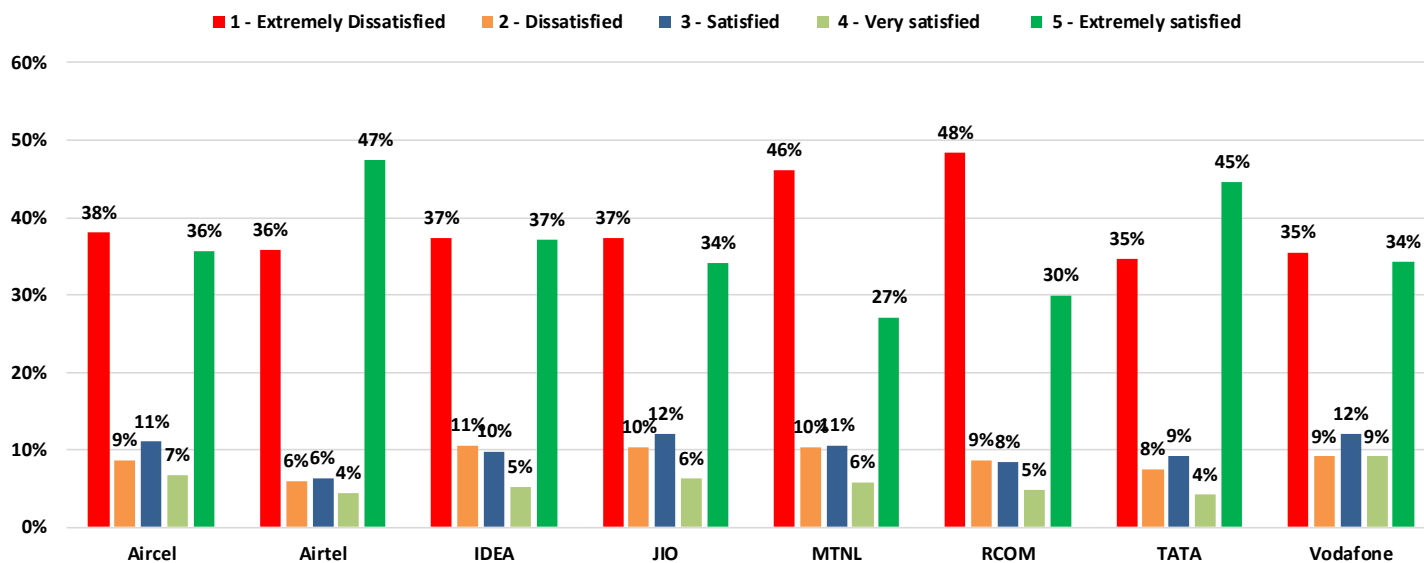
Q4) How satisfied are you with the Call Charges made by operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Q5) How satisfied are you with the Customer care service offered by operator? Please rate from 1 to 5 where 1 is extremely dissatisfied and 5 is extremely satisfied.

Detailed Survey Analysis: Customer Perception question-wise split by TSP for each LSA

Delhi LSA

Delhi - % responses received for addressing "Call Drop Issues" for each TSP

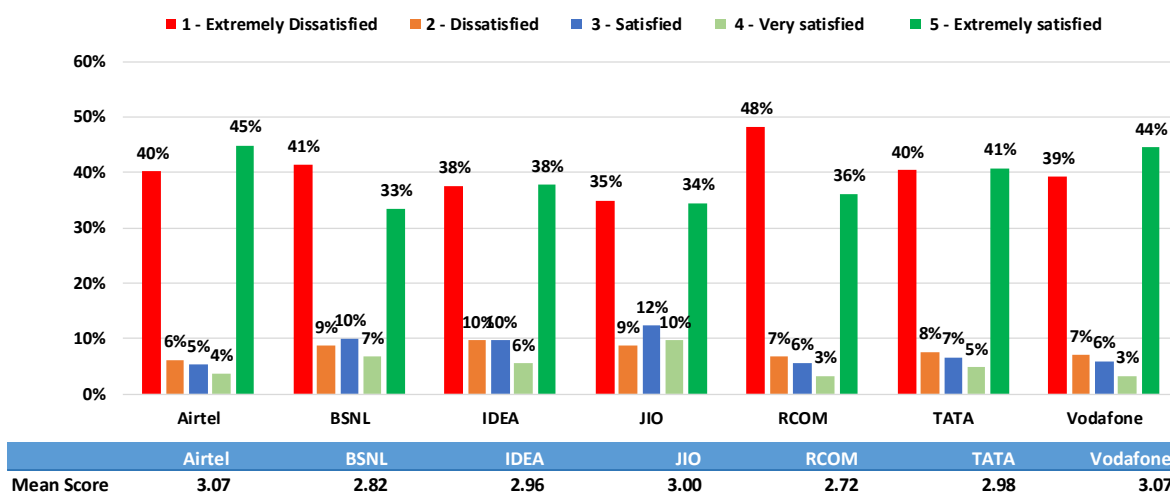


	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafone
Mean Score	2.93	3.21	2.94	2.90	2.58	2.59	3.16	2.98

Madhya Pradesh LSA

Responses received:

MP - % responses received for addressing "Call Drop Issues" for each TSP

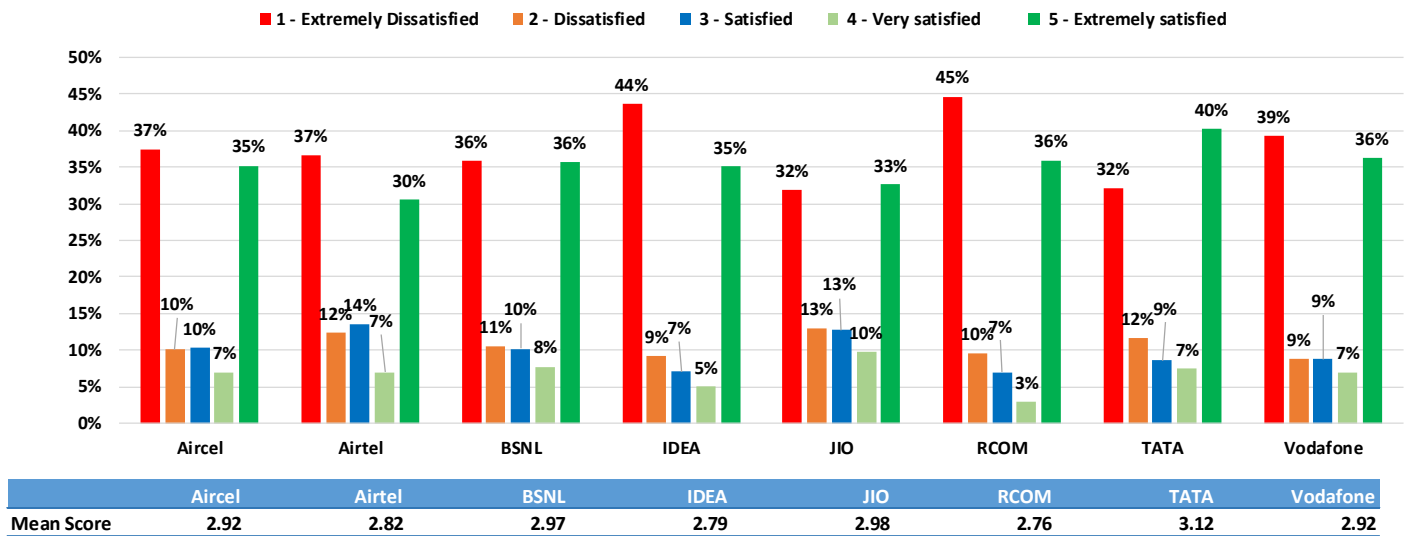


	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Mean Score	3.07	2.82	2.96	3.00	2.72	2.98	3.07

Karnataka LSA

Responses received:

KA - % responses received for addressing "Call Drop Issues" for each TSP

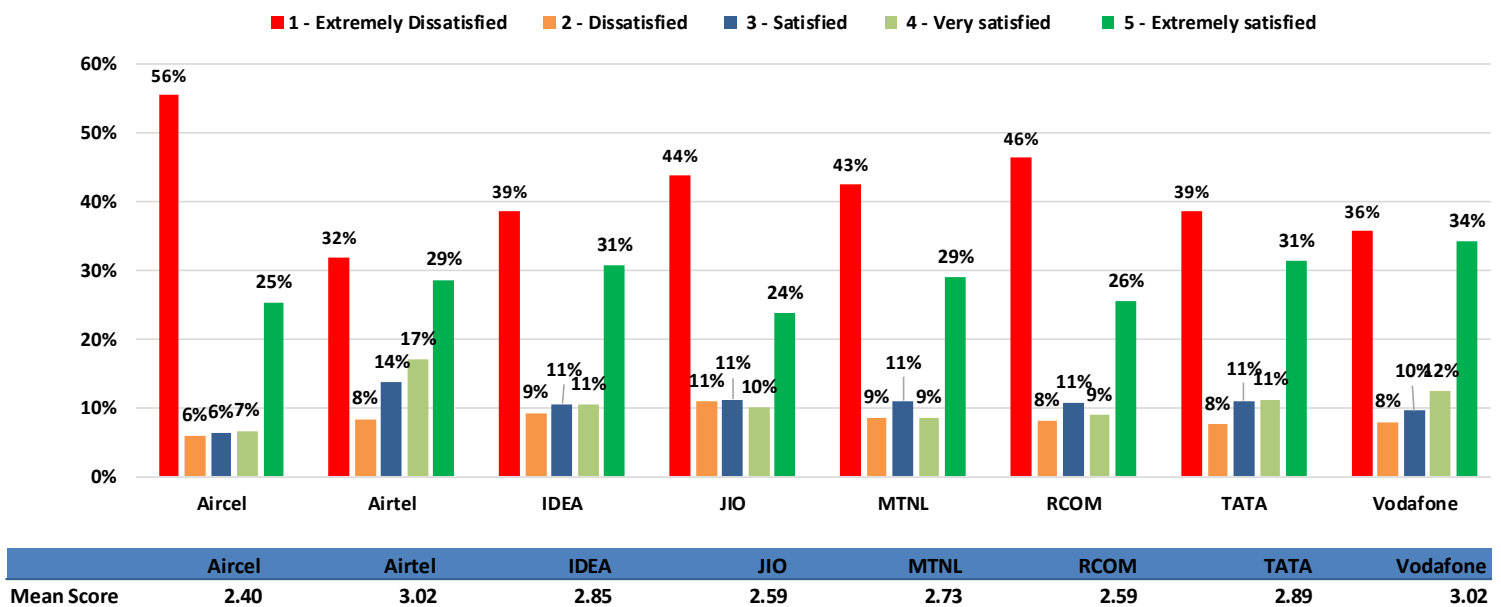


Q2: How satisfied are you with the Post-Paid billing information provided by the operator?

Delhi LSA

Responses received:

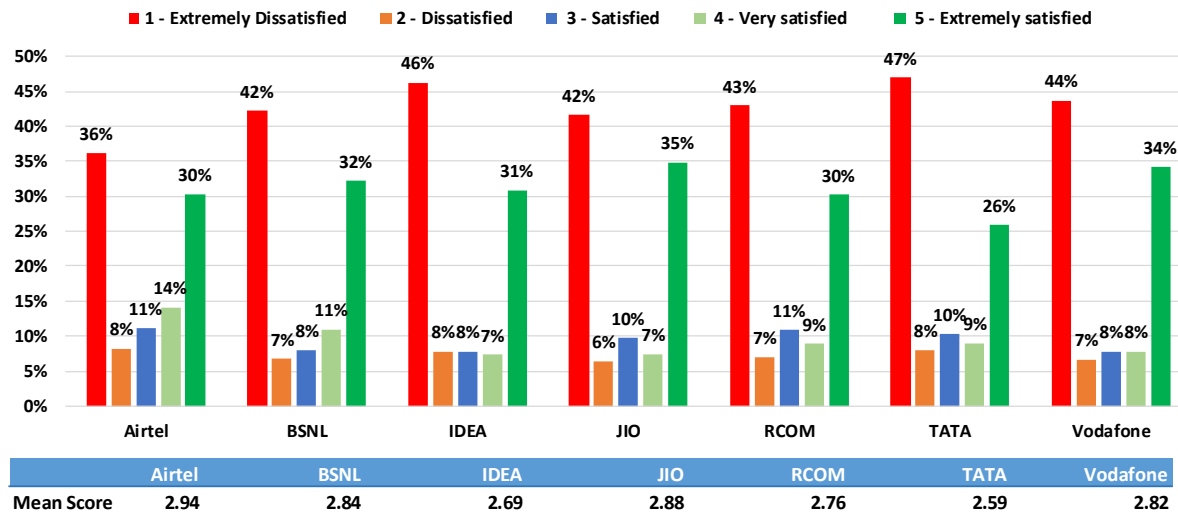
Delhi - % responses received for "Post-paid billing information" for each TSP



Madhya Pradesh LSA

Responses received:

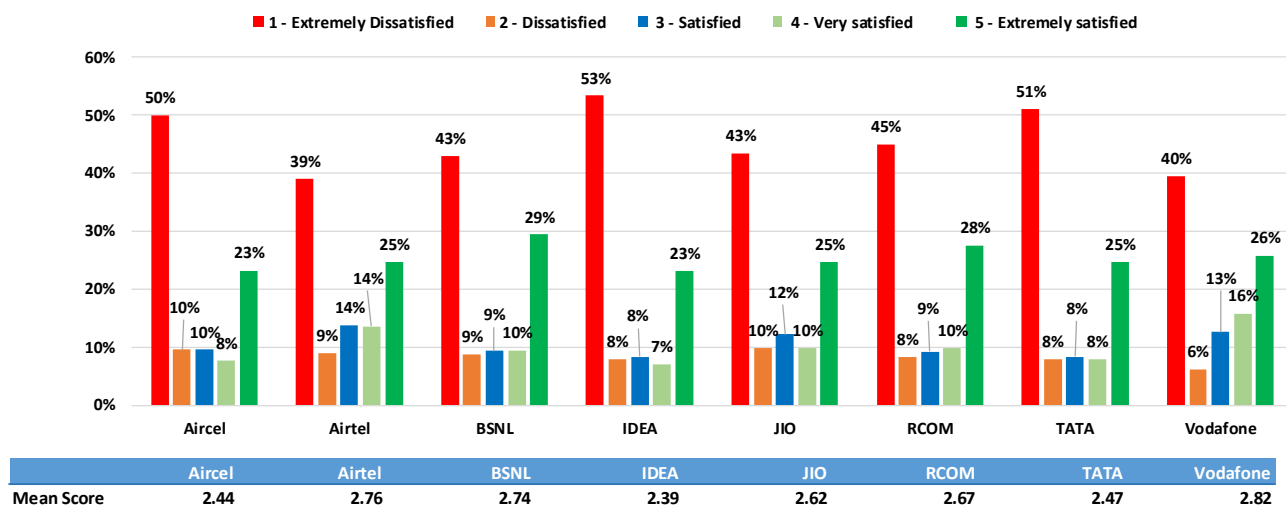
Graph 8.5.2.3: MP - % responses received for "Post-paid billing information" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Post-paid billing information" for each TSP

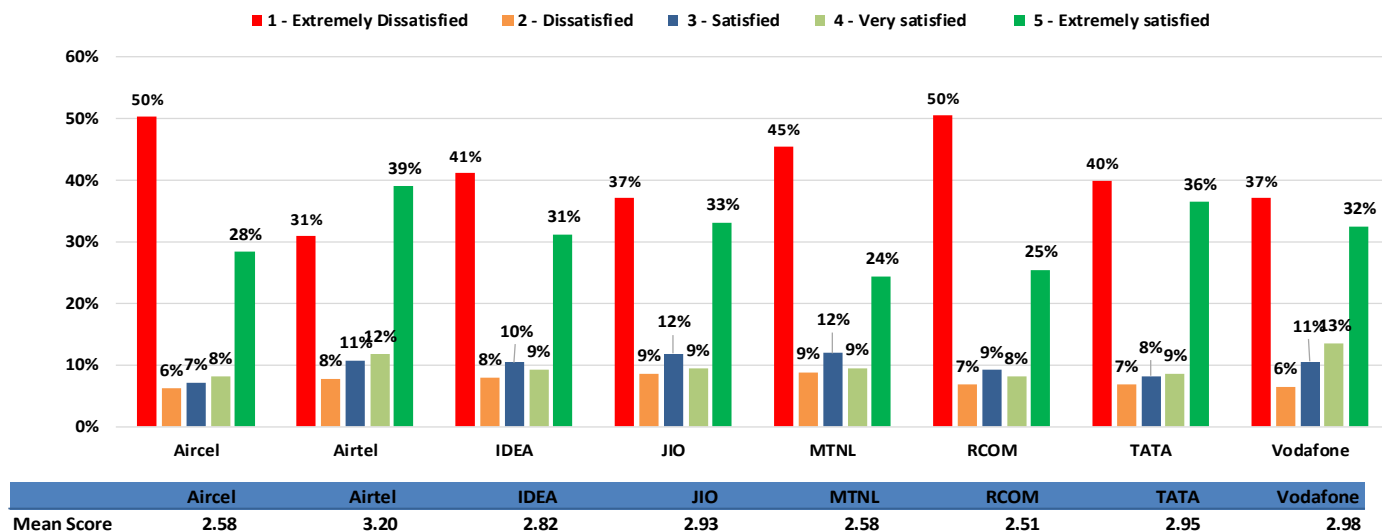


Q3: How satisfied are you with the Customer care service offered by the operator?

Delhi LSA

Responses received:

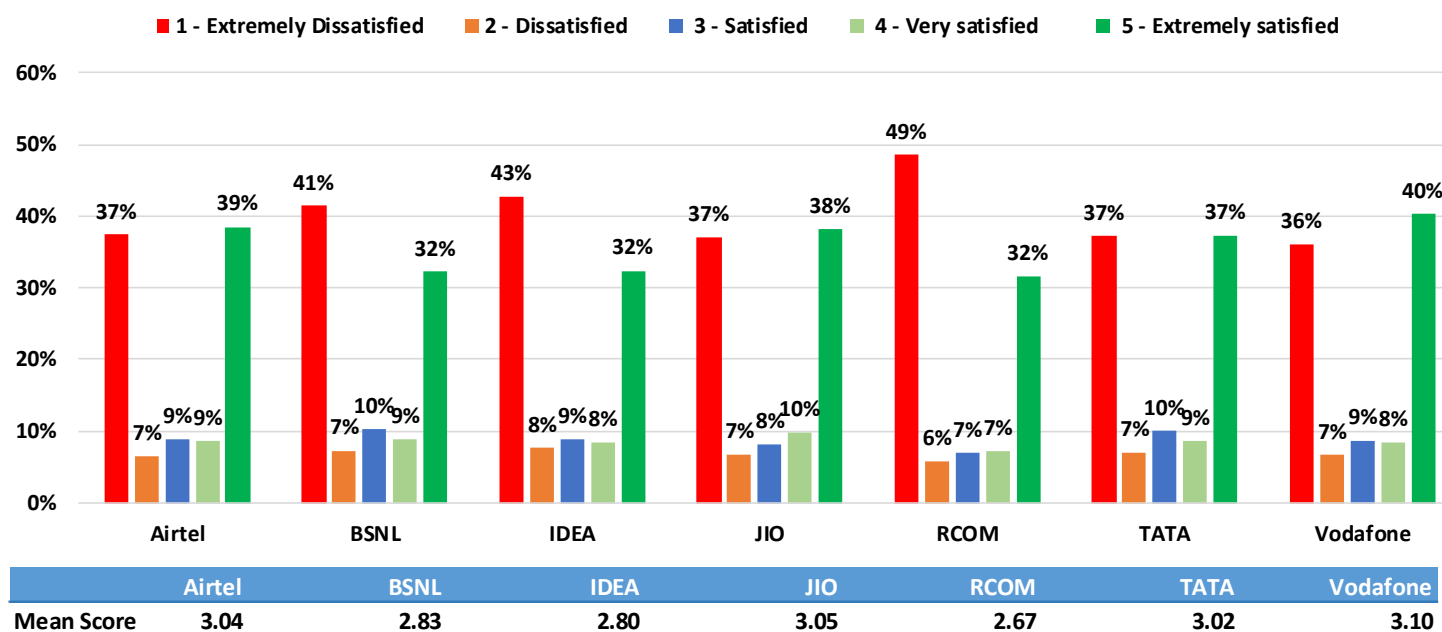
Delhi - % responses received for "Customer Care Service" for each TSP



Madhya Pradesh LSA

Responses received:

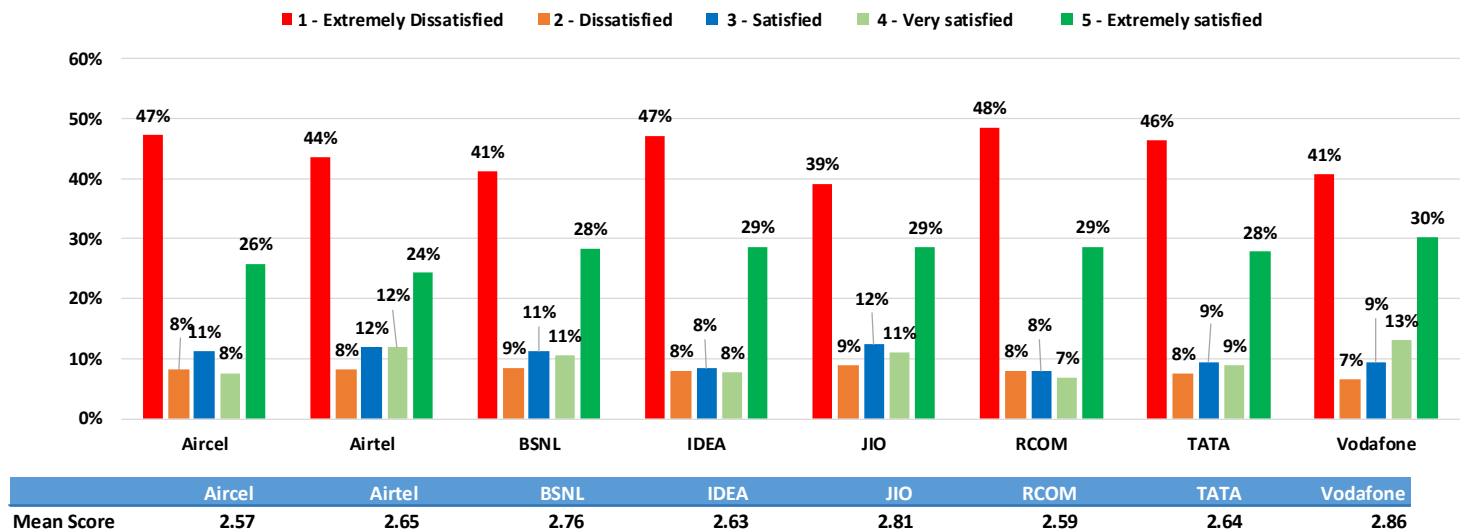
MP - % responses received for "Customer Care Service" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Customer Care Service" for each TSP

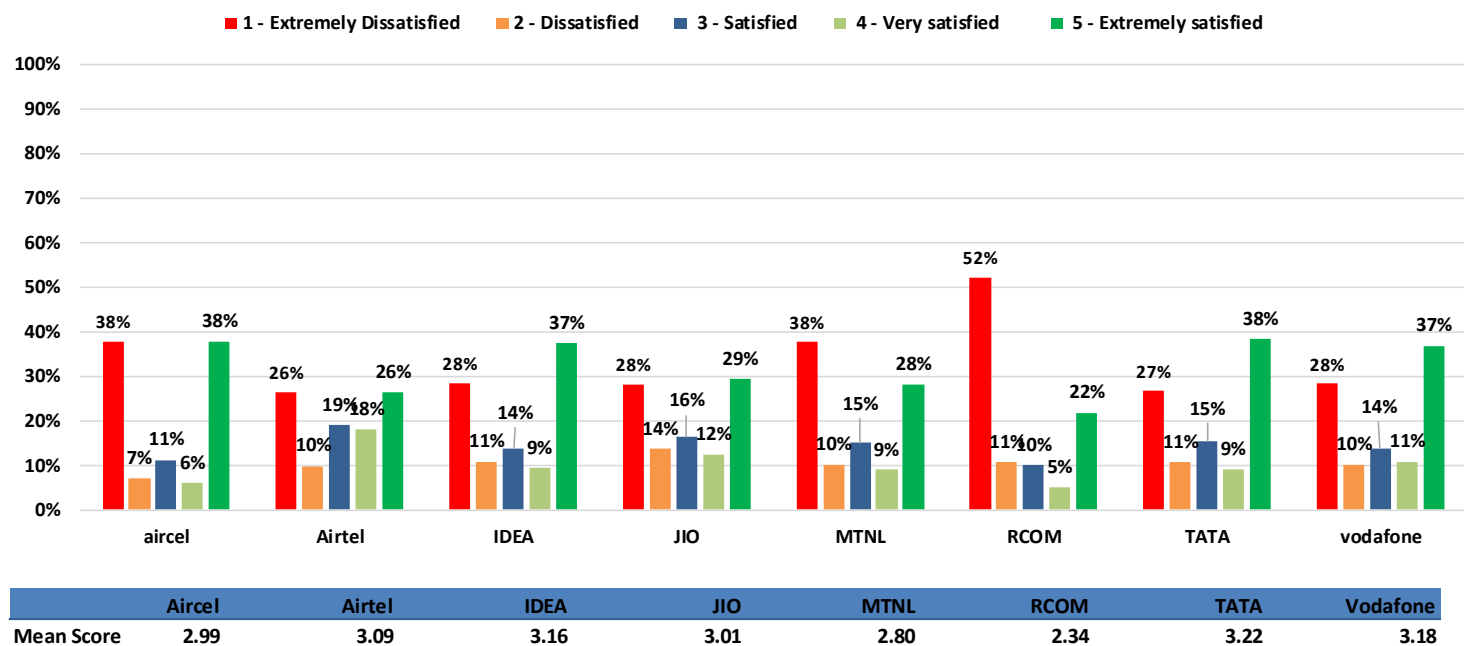


Q4: How satisfied are you with the Voice Quality provided by operator during call?

Delhi LSA

Responses received:

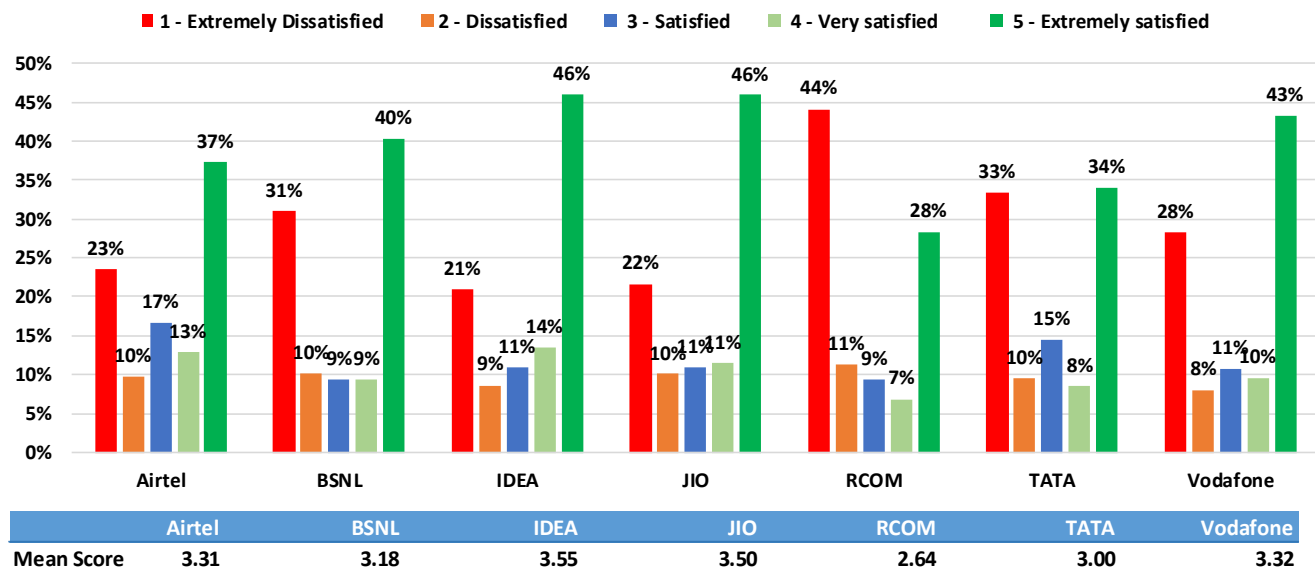
Delhi - % responses received for "Voice Quality during call" for each TSP



MP LSA

Responses received:

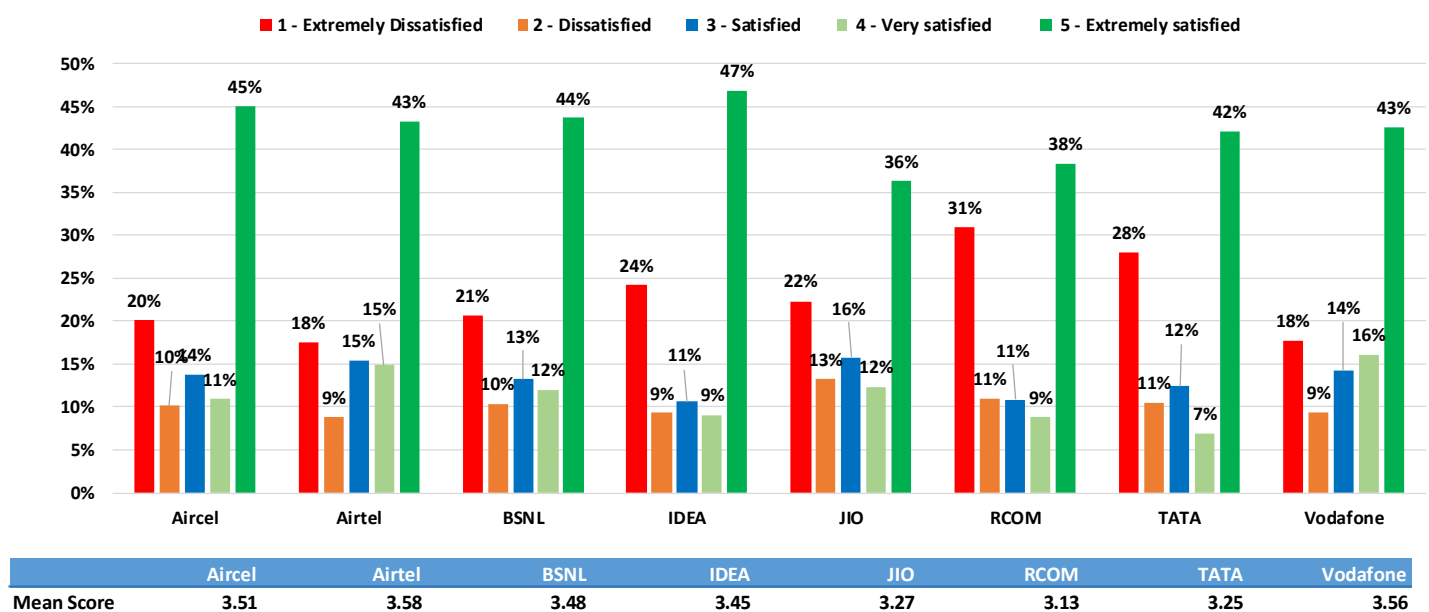
MP - % responses received for "Voice Quality during call" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Voice Quality during call" for each TSP

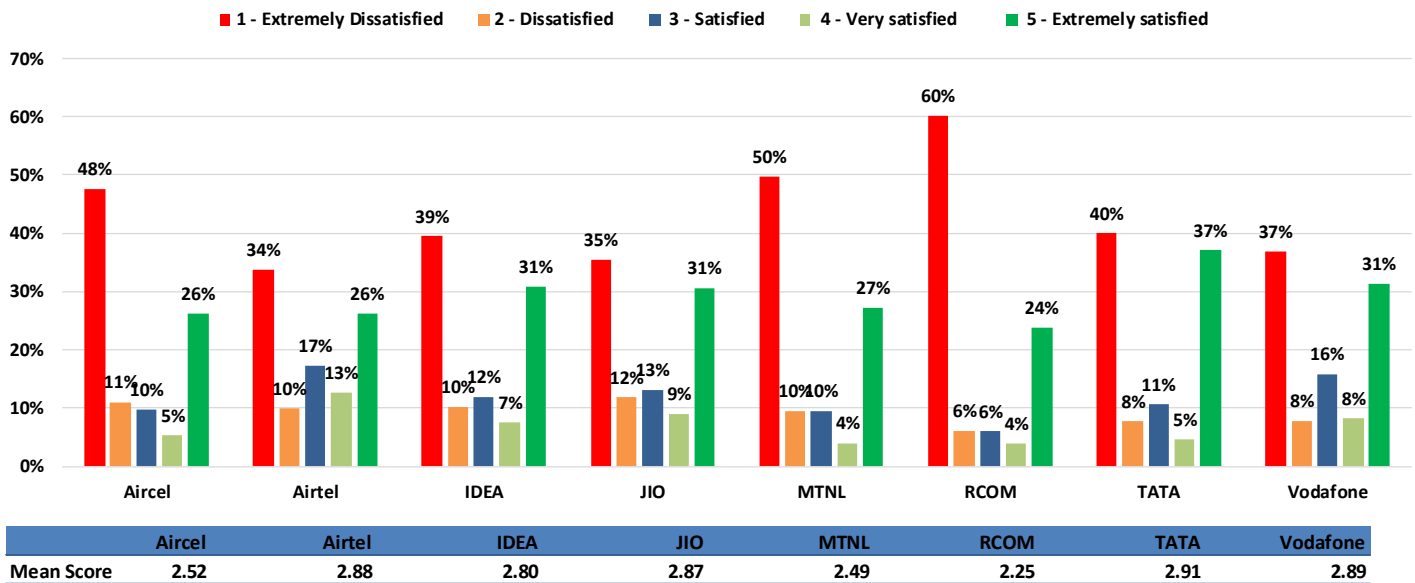


Q5: How satisfied are you with the overall telecom service provided by Operator?

Delhi LSA

Responses received:

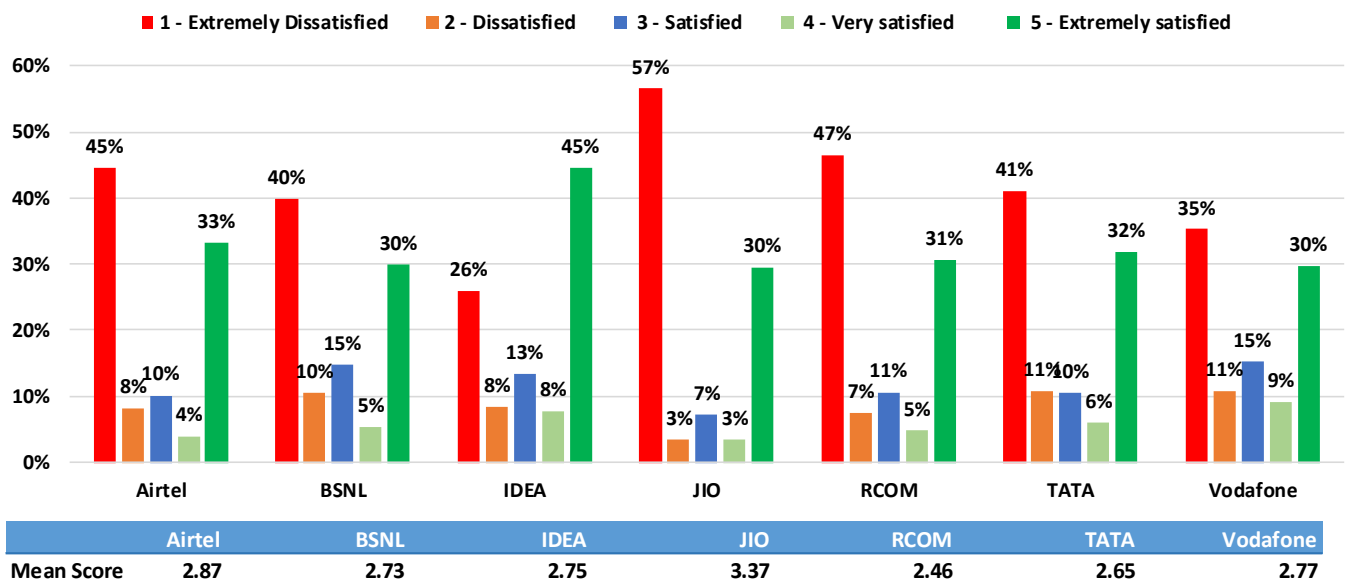
Delhi - % responses received for "Overall telecom service" for each TSP



Madhya Pradesh LSA

Responses received:

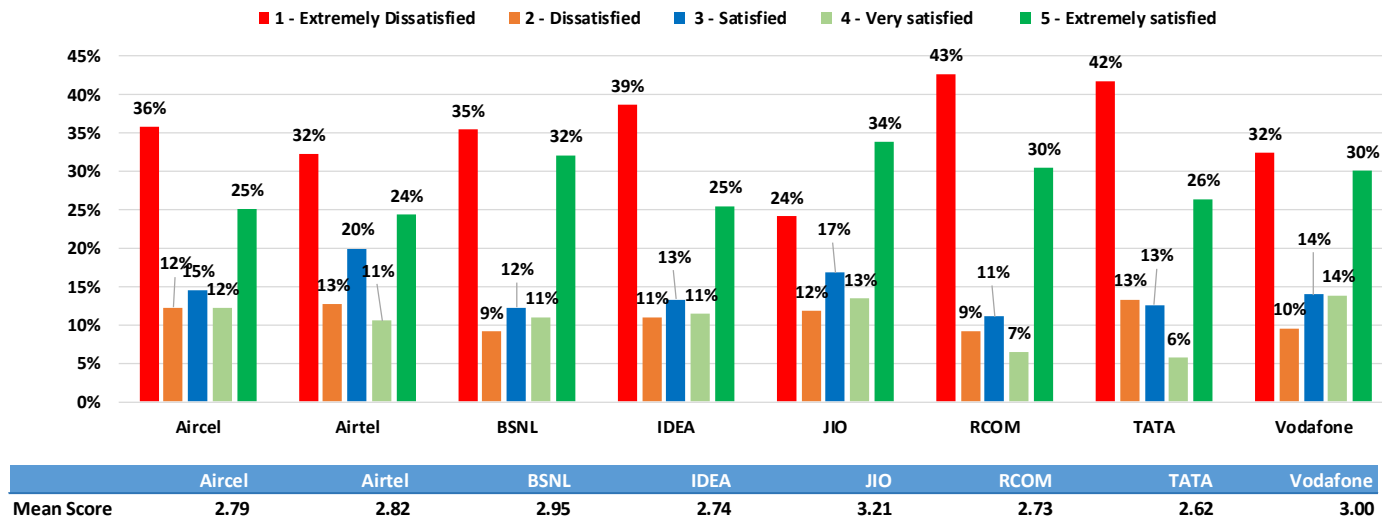
MP - % responses received for "Overall telecom service" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Overall telecom service" for each TSP

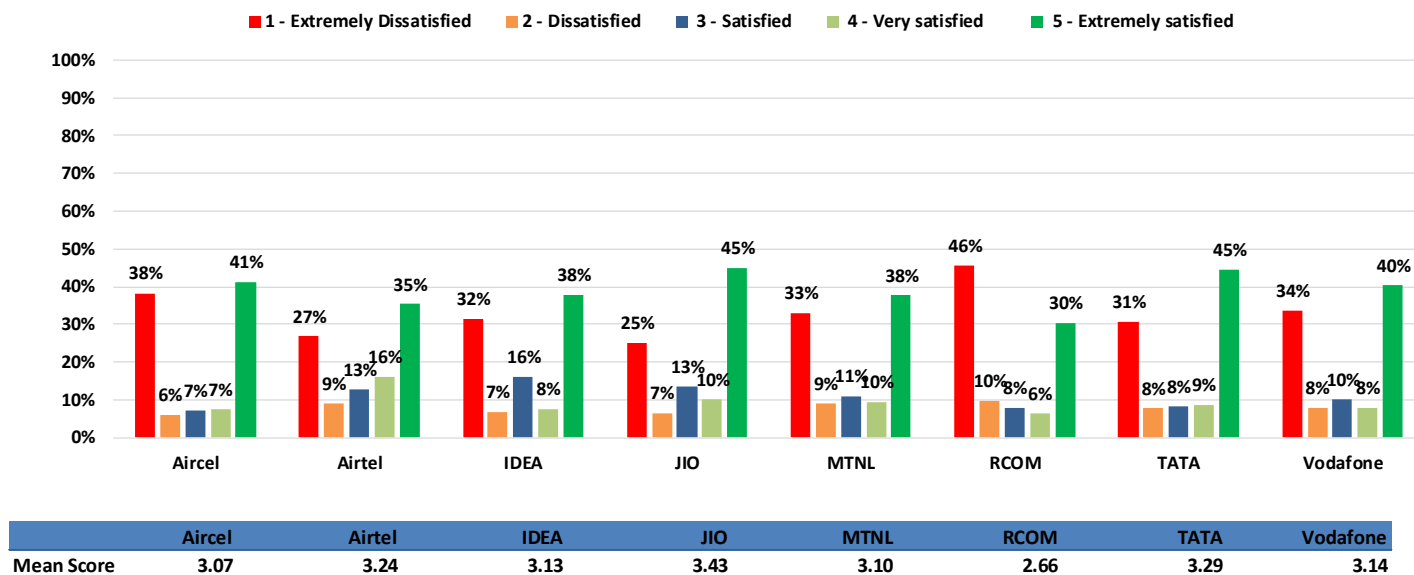


Q6: How satisfied are you with the Number Portability Service from one operator to another operator?

Delhi LSA

Responses received:

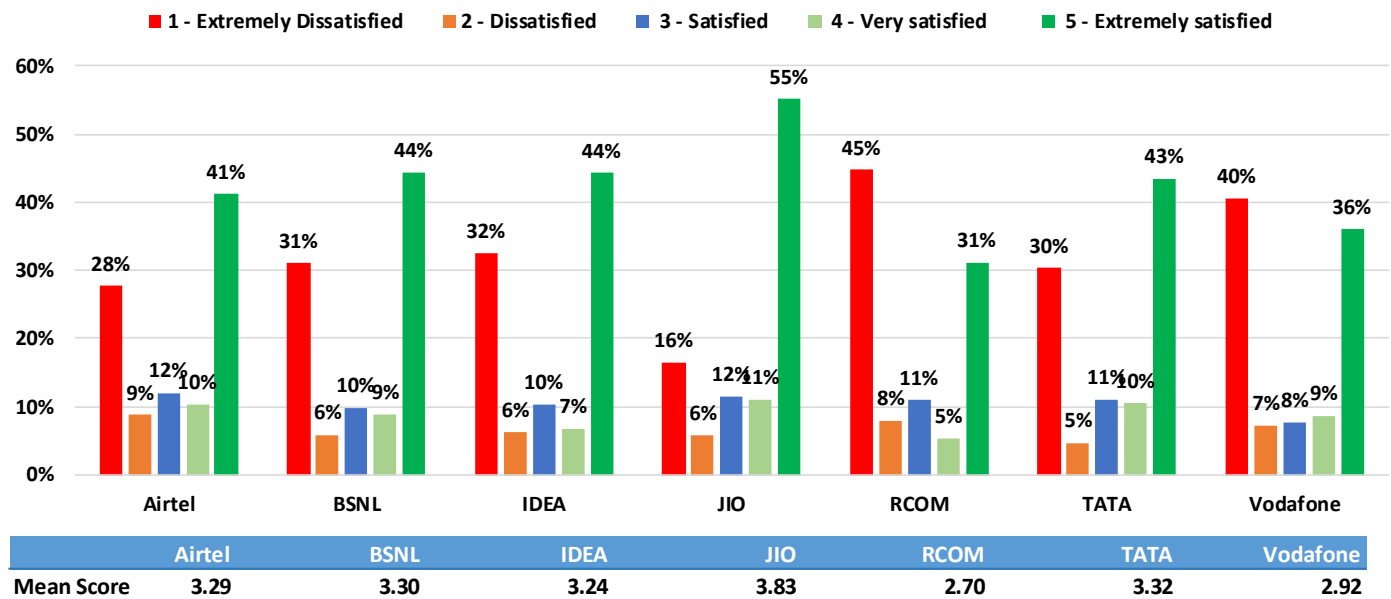
Delhi - % responses received for "Mobile No. portability service" for each TSP



Madhya Pradesh LSA

Responses received:

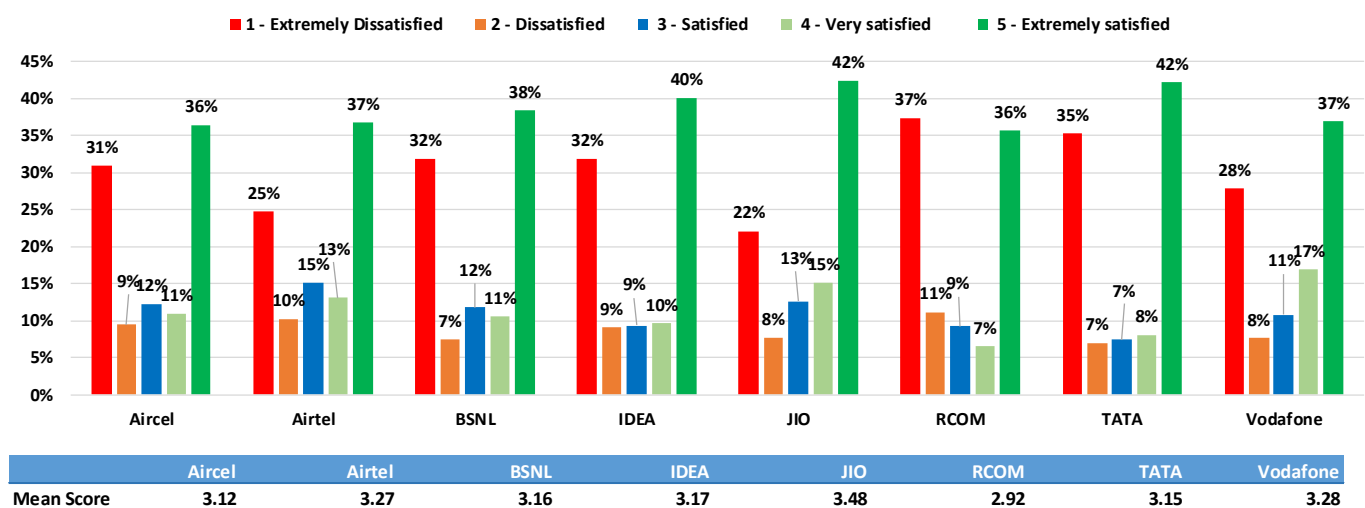
MP - % responses received for "Mobile No. portability service" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Mobile No. portability service" for each TSP

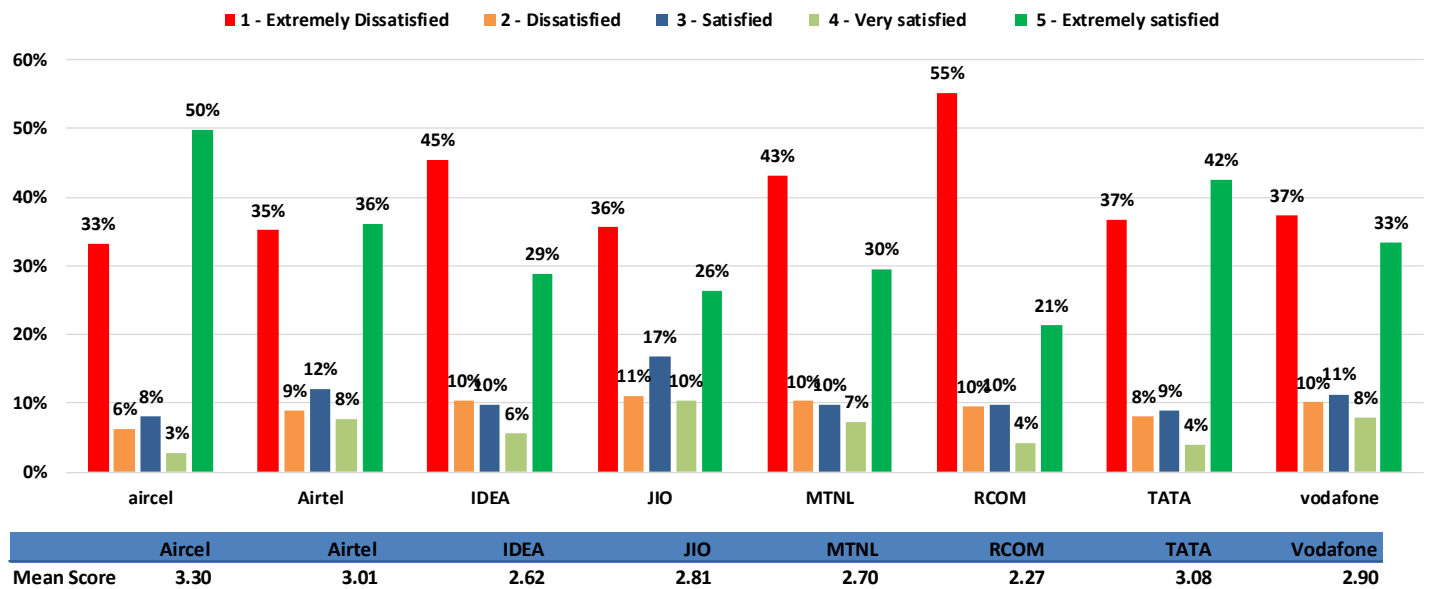


Q7: How satisfied are you with the Data Service offered by the Operator?

Delhi LSA

Responses received:

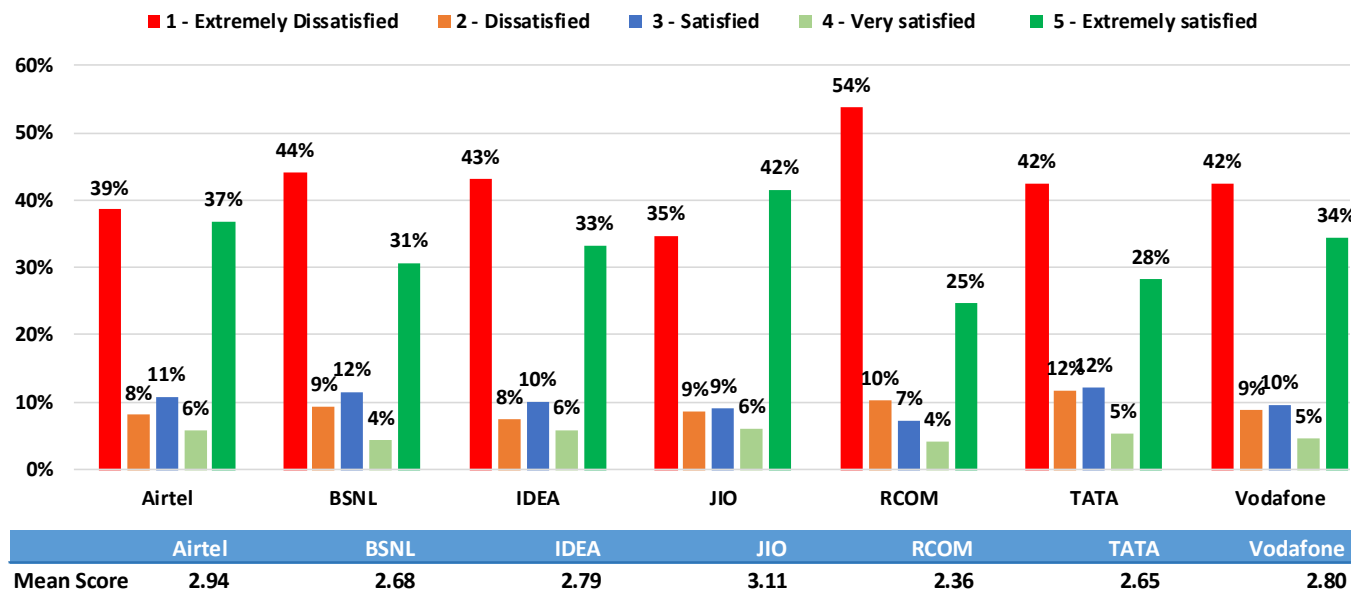
Delhi - % responses received for "Data Service" for each TSP



Madhya Pradesh LSA

Responses received:

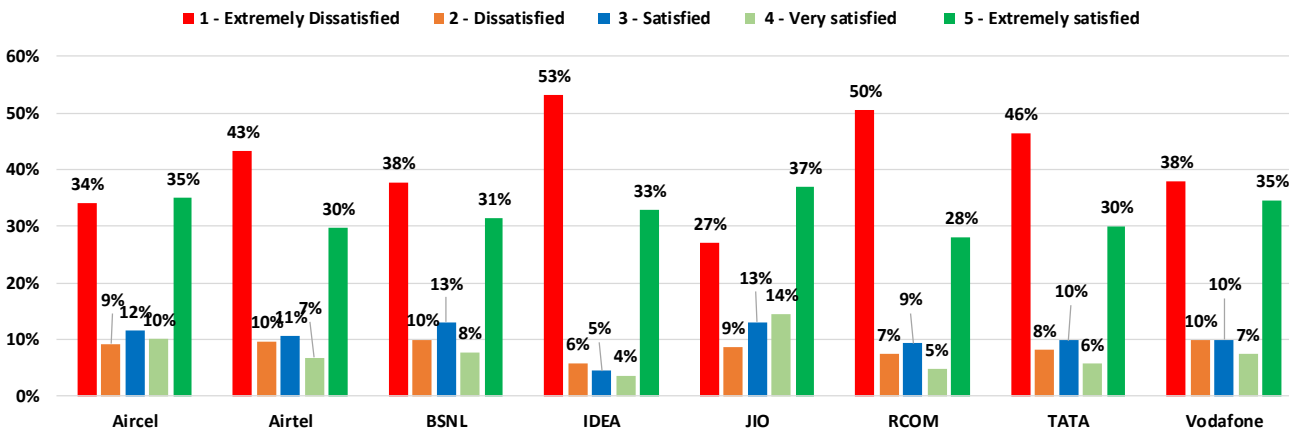
MP - % responses received for "Data Service" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Data Service" for each TSP



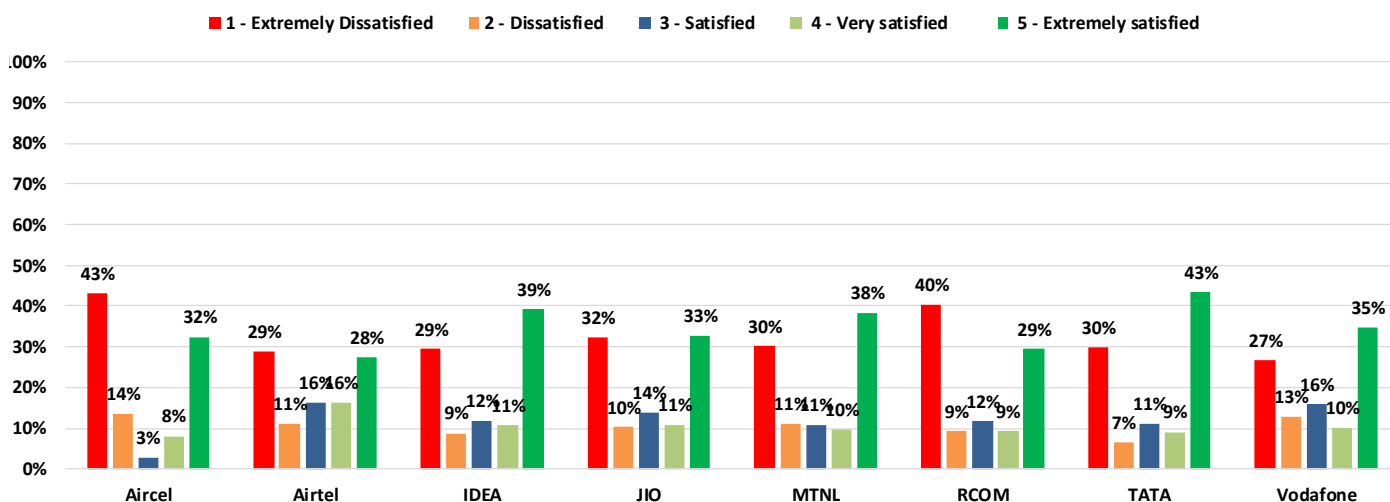
	Aircel	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Mean Score	3.03	2.70	2.85	2.57	3.26	2.52	2.65	2.91

Q8: How satisfied are you with the Tariff Plans and add-on pack related information provided by the operator?

Delhi LSA

Responses received:

Delhi - % responses received for "Tariff Plans and add-on pack related information" for each TSP

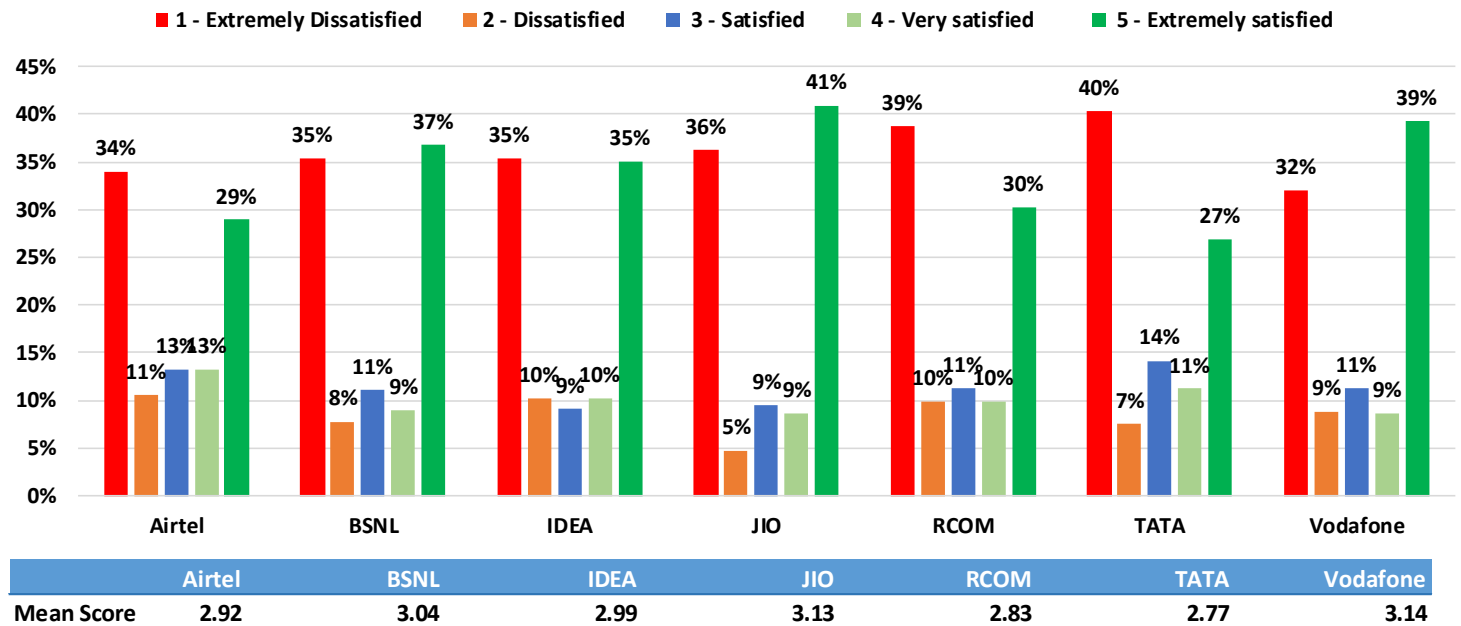


	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafone
Mean Score	2.73	3.03	3.21	3.02	3.15	2.78	3.30	3.13

Madhya Pradesh LSA

Responses received:

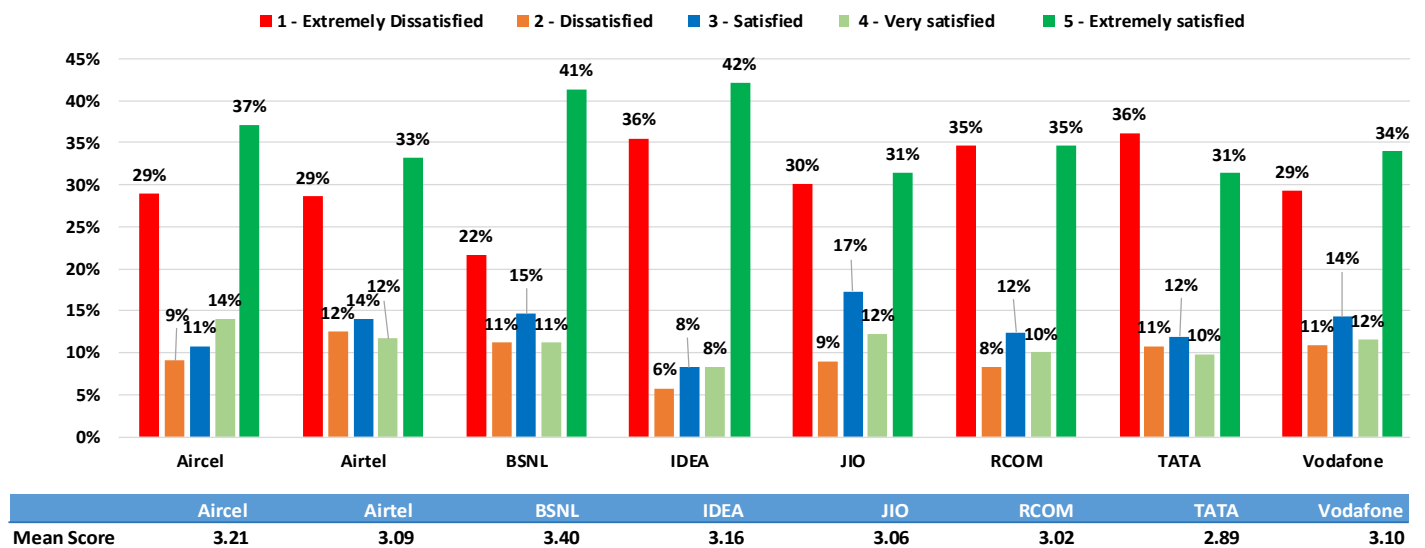
MP - % responses received for "Tariff Plans and add-on pack related information" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Tariff Plans and add-on pack related information" for each TSP

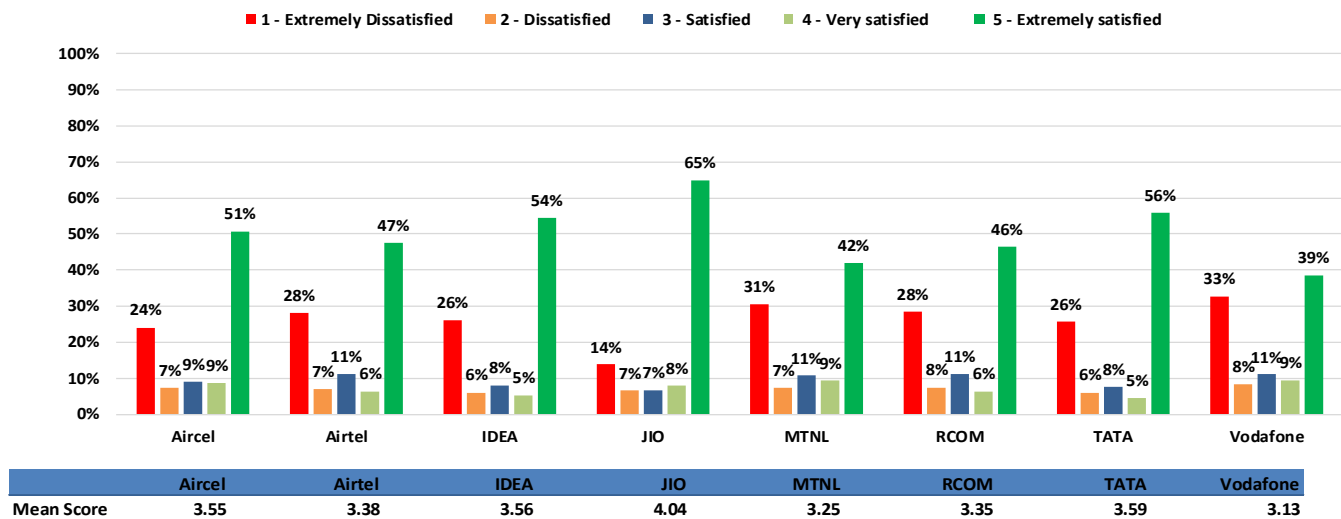


Q9: How satisfied are you with the DND registration with respect to unwanted telemarketing calls or SMS issues?

Delhi LSA

Responses received:

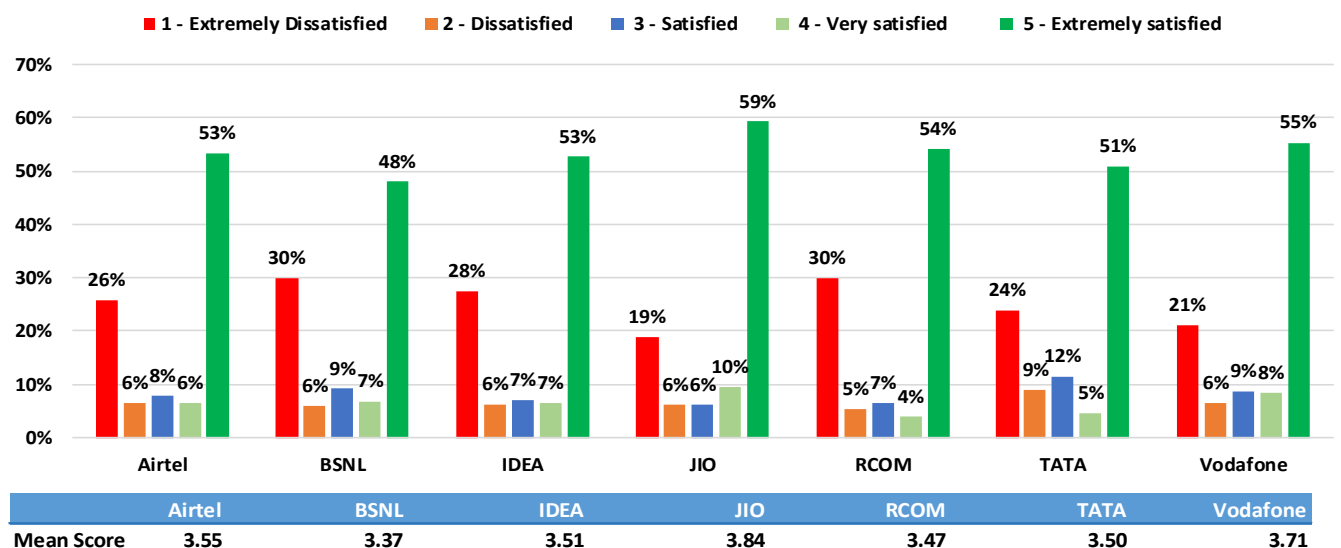
Delhi - % responses received for "DND registration w.r.t calls or SMS" for each TSP



Madhya Pradesh

Responses received:

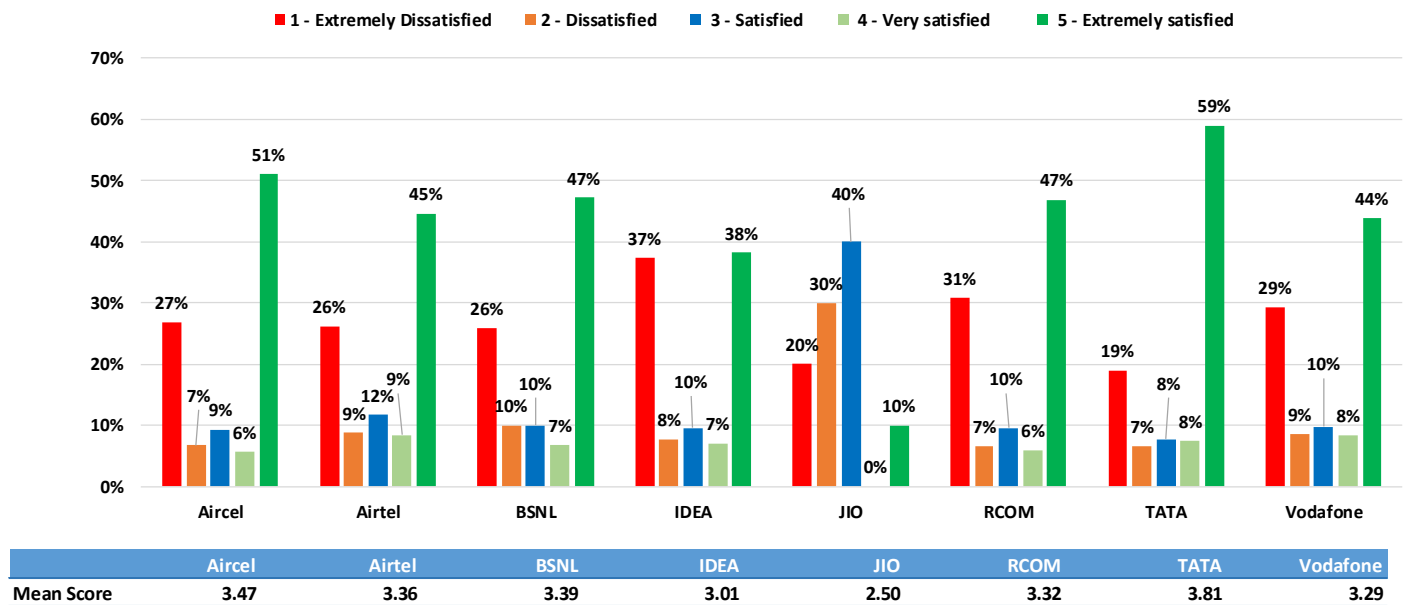
MP - % responses received for "DND registration w.r.t calls or SMS" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "DND registration w.r.t calls or SMS" for each TSP

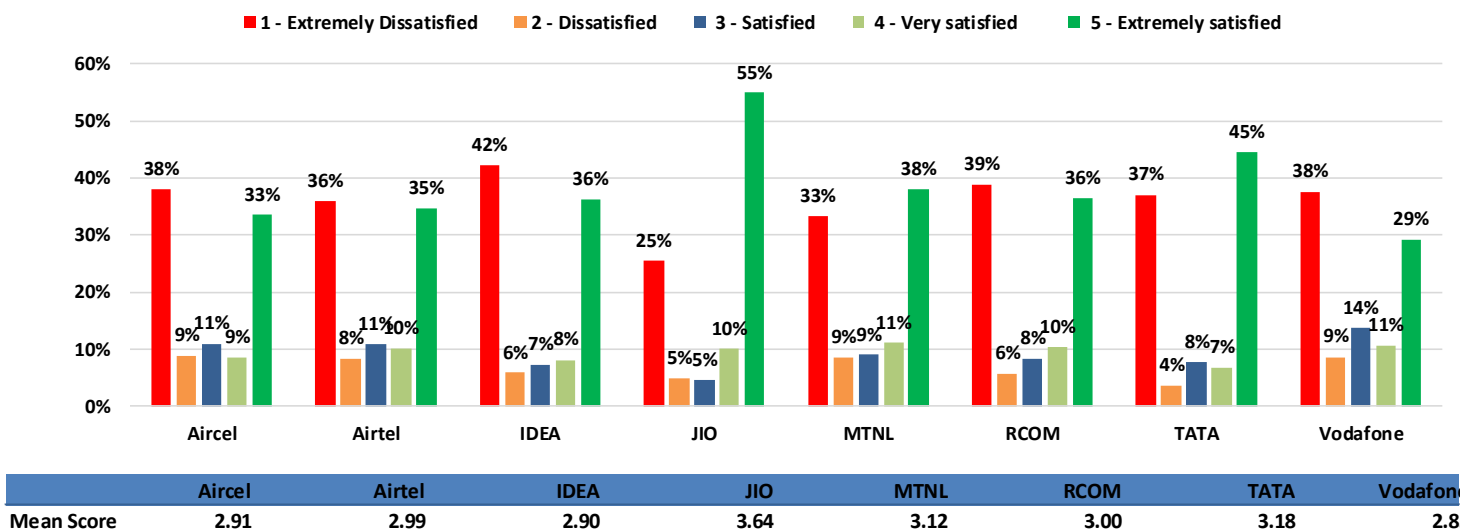


Q10: How satisfied are you with the Call Charges made by operator?

Delhi LSA

Responses received:

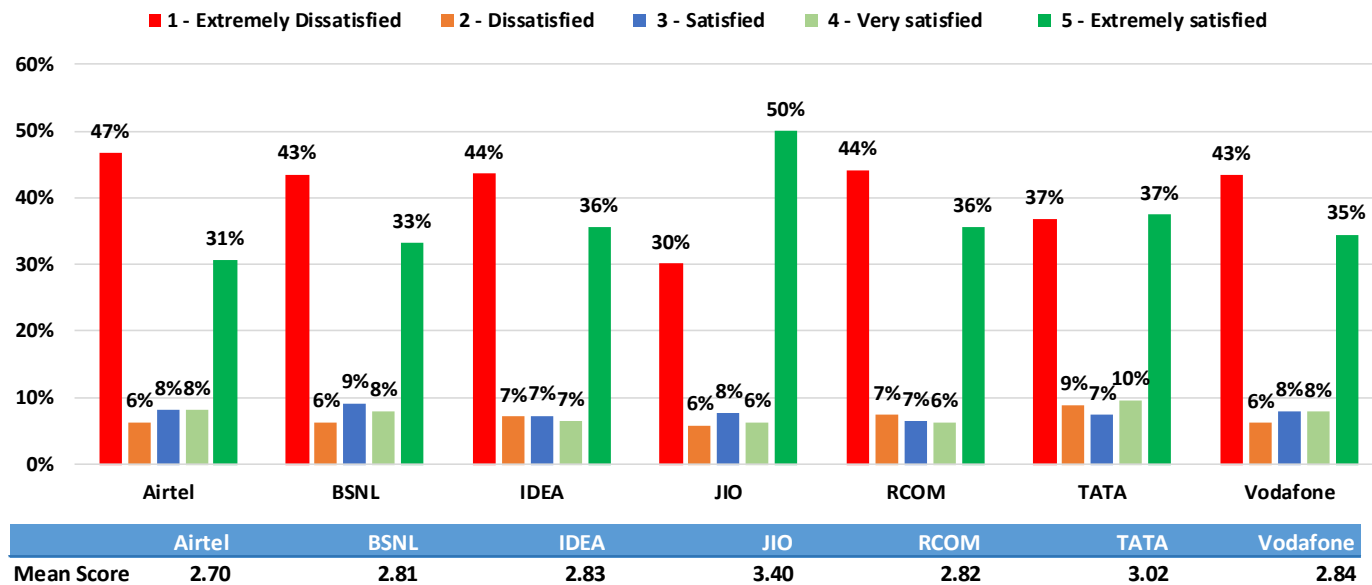
Delhi - % responses received for "Call charges made by operator" for each TSP



Madhya Pradesh LSA

Responses received:

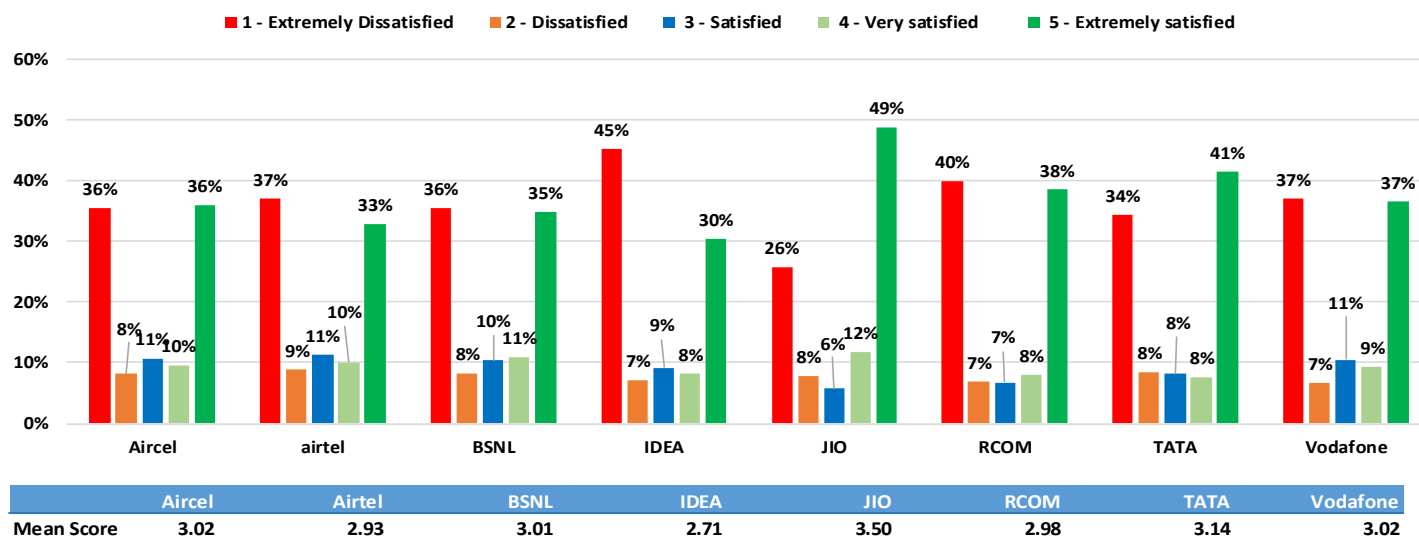
MP - % responses received for "Call charges made by operator" for each TSP



Karnataka LSA

Responses received:

KA - % responses received for "Call charges made by operator" for each TSP

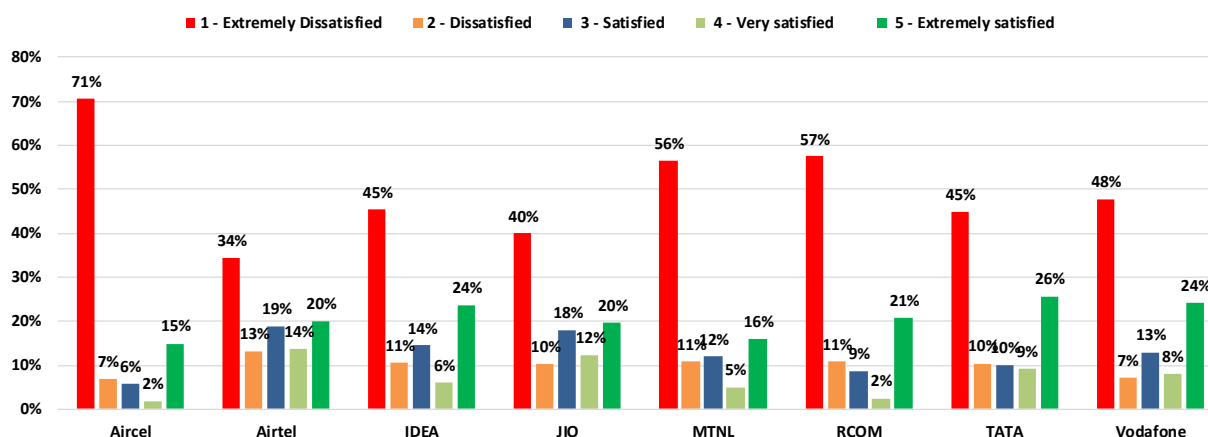


Q11: How satisfied are you with the Data Speed provided by the operator?

Delhi LSA

Responses received:

Delhi - % responses received for "Data Speed" for each TSP

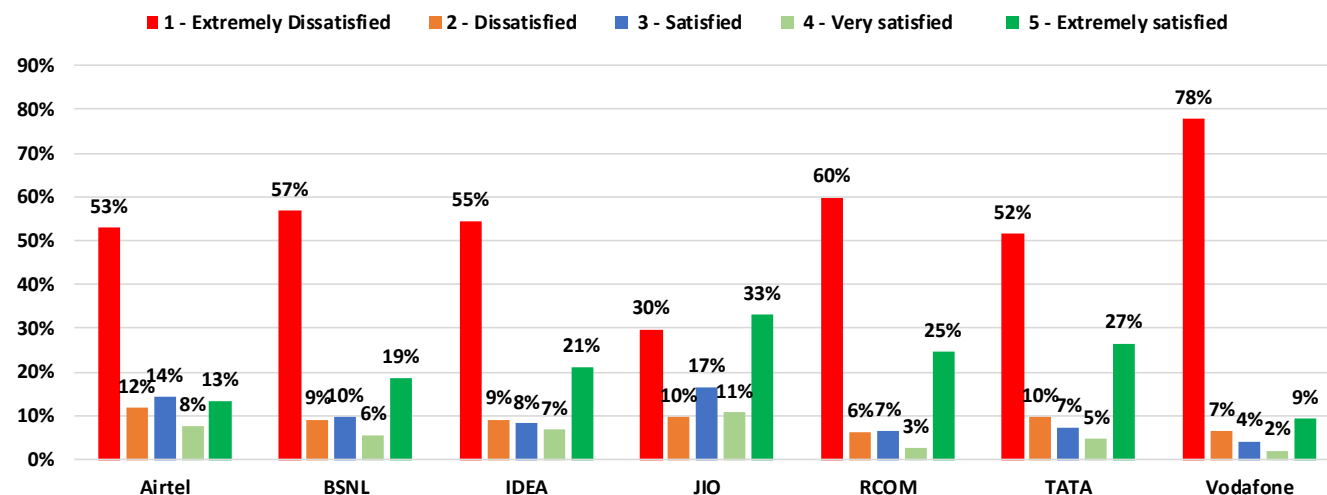


	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafone
Mean Score	1.84	2.72	2.52	2.62	2.13	2.18	2.60	2.54

Madhya Pradesh LSA

Responses received:

MP - % responses received for "Data Speed" for each TSP

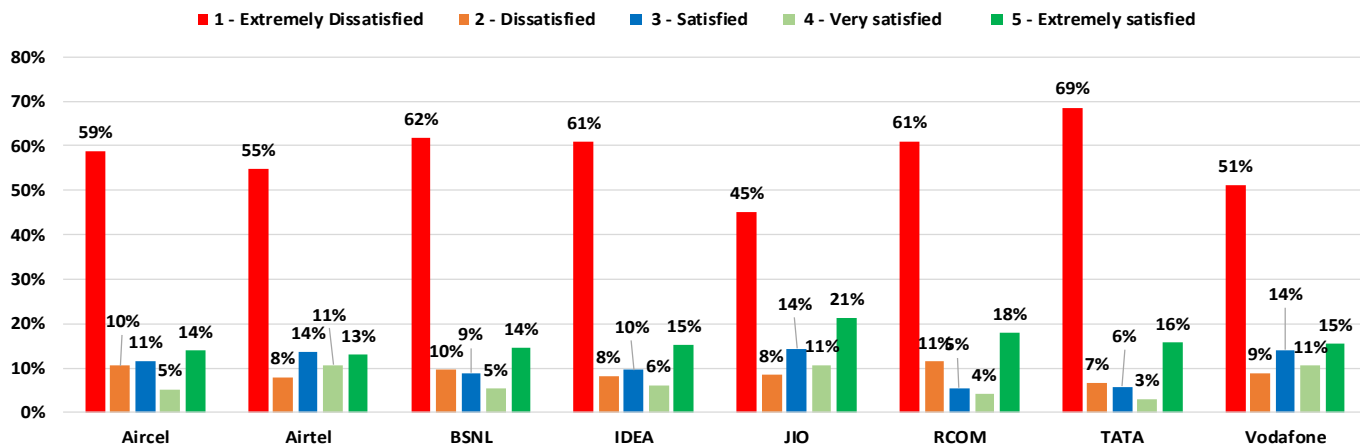


	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Mean Score	2.17	2.20	2.31	3.08	2.25	2.45	1.58

Karnataka LSA

Responses received:

KA- % responses received for "Data Speed" for each TSP



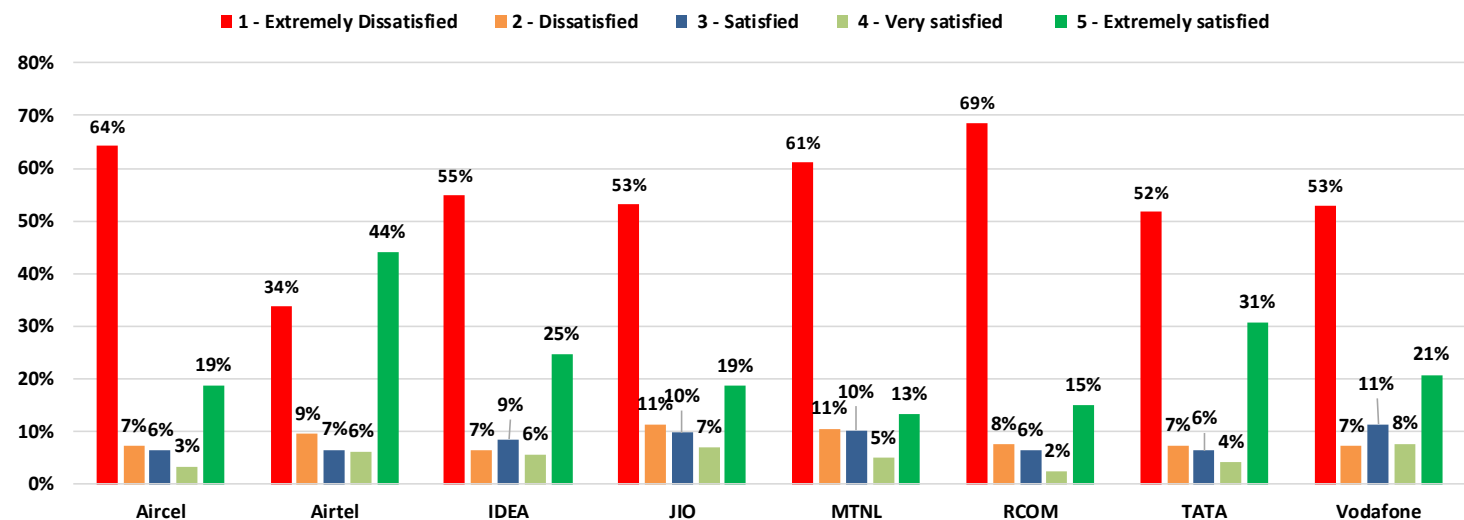
	Aircel	Airtel	BSNL	IDEA	JIO	RCOM	TATA	Vodafone
Mean Score	2.05	2.19	2.01	2.07	2.55	2.07	1.91	2.30

Q12: How satisfied are you with the Operator network, signal, and coverage area provided by the operator?

Delhi LSA

Responses received:

Delhi - % responses received for "Operator Network, Signal and Coverage area" for each TSP

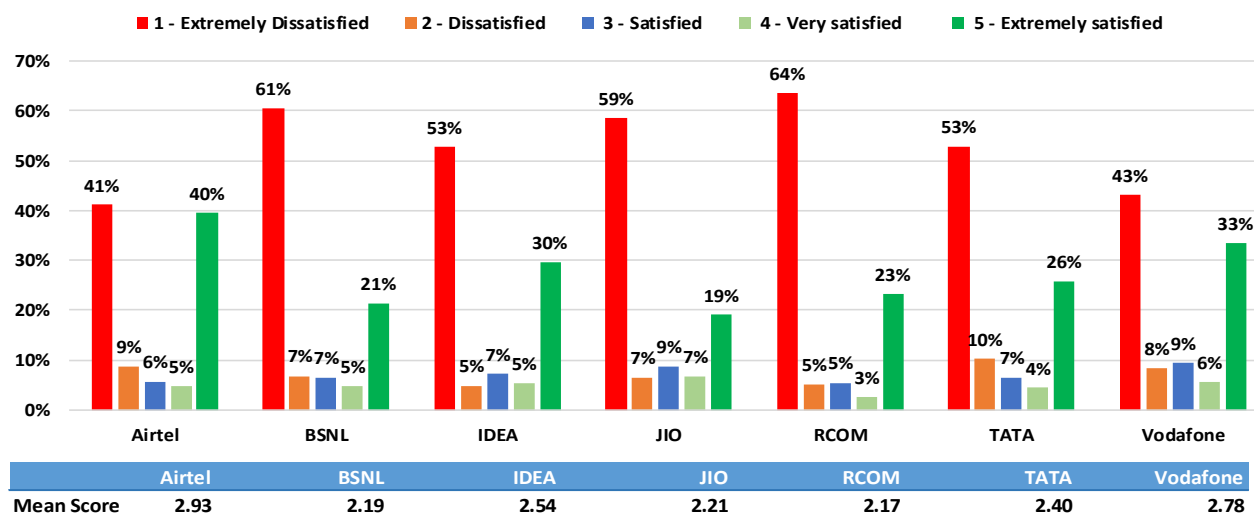


	Aircel	Airtel	IDEA	JIO	MTNL	RCOM	TATA	Vodafone
Mean Score	2.05	3.17	2.39	2.26	1.98	1.87	2.55	2.36

Madhya Pradesh LSA

Responses received:

MP - % responses received for "Operator Network, Signal and Coverage area" for each TSP



Karnataka LSA

KA - % responses received for "Operator Network, Signal and Coverage area" for each TSP

