Nigeria Consumer Satisfaction Survey Final Report
Final Report Part 2: Data Analysis

For

Nigeria Communications Commission (NCC)

Submitted by

NCC Consumer Satisfaction Survey (NCC CSS) Team:
Commonwealth Telecommunications Organisation (CTO)
Decision Support Consulting Ltd
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This Report is a formal deliverable for the Nigerian Nationwide Consumer Satisfaction Survey Project. It is the second part of the final deliverable for the project, which called for the CTO and Partners, Seals Ltd, Telecom Advisory Services and Decision Support (the NCC CSS team) to work with the NCC's Consumer Affairs Bureau to survey 50,000 Nigerian ICT users, analyse the results and provide a final report to the NCC. The project also calls on the NCC CSS team develop a Consumer Satisfaction Index that the NCC will use to record and assess levels of consumer satisfaction. This report should be read with the Final Report Part 1: Overview, as it presents the full analysis, including the disaggregation by demographic descriptors that are not found in the Overview report.

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Acknowledgements

The NCC CSS team is extremely appreciative of the instrumental role the Nigerian Communications Commission (NCC), most notably the Commission's Consumer Affairs Bureau (CAB), has played in the successful delivery of this project. In addition to initiating the project and contracting the members of the NCC CSS team, the CAB team has provided guidance and advice throughout the project.

The CAB team worked collaboratively with the NCC CSS team, playing key roles in the development of the survey instrument, the design of the sampling framework, as well as the administration and the monitoring of all field work. Its unwavering commitment to the project was evident throughout the process. Indeed, the successful completion of the project would not have been possible without the constant, committed and measured input of the NCC CAB team.

About the NCC Consumer Affairs Bureau

The Nigerian Communications Commission's Consumer Affairs Bureau (CAB) was created in September 2001. It is charged with the responsibility to protect the rights, privileges and interests of telecommunications consumers. It drives the Commission's work to ensure that the following expectations of consumers are met: access to robust services; affordability and availability of service; transparent tariff regime; redress when wronged and compensation when wrongly billed/loss of service.

Amongst other things, the CAB strives to empower consumers through awareness programmes; develop policy and regulatory interventions on consumer awareness; facilitate remedial action for dissatisfied consumers; facilitate efficient consumer-operator interactions for complaints management; and collaborate with consumer advocacy groups, among others.

Roles and Responsiblities of the The NCC Customer Satisfaction Survey Team

The Commonwealth Telecommunications Organisation (CTO) was contracted as lead consultant and was responsible for the coordination of the survey. The CTO was also responsible for the administration of the survey in the North Central and North East Geopolitical Zones.

The CTO is the oldest and largest Commonwealth organisation in the field of ICTs. With a history dating back to 1901, it brings together Commonwealth & non-Commonwealth governments, regulators, operators, technology providers and civil society organisations, in multi-stakeholder partnerships. www.cto.int

Its mission is to promote, facilitate and guide members in using ICTs to deliver effective development interventions and it delivers its mandate through research & consultancies, training, and conferences. The CTO uses its experience and expertise to support members in leveraging ICTs to advance socio-economic development in order to emancipate, enrich, equalise and empower all peoples within the Commonwealth and beyond.

Decision Support Consulting Limited was contracted to administrate the survey in the South West Zone. Decision Support was eh founded in 1997 as an independent professional, full-service research agency and is based in Nigeria. Established by individuals with extensive experience in the industry and regular exposure to new developments in research, Decision Support combines global learning with local knowledge to build strong Brands across the African market.

A full-service research agency with over 12 years experience Decision Support service areas spread across West Africa. Core services are: Consumer Research; Business to Business Research; and Social Research. Decision Support collaborates with well-established and renowned research bodies and aims to continually lead by offering professional research solutions for marketing and social accountability by Clients with interest in Africa.

Telecom Advisory Services (TAS) was contracted to administrate the survey in the South South and North West Zones. TAS is the telecommunication consulting firm of choice in West Africa with its origins in the Netherlands. TAS has grown quite significantly since our arrival in Africa in Q4 2007. The company currently serves many of the largest GSM, CDMA, Wimax and Data service providers in Africa, Middle East and Europe. It offers various services ranging from Strategy to Operational Efficiency, RFP management, business process improvement, research and analysis, surveys, etc. With well seasoned professionals that have over 15 years of experience in the telecommunication industry, we are poised to deliver high quality results using methodologies and techniques that have been tested and proven over time. Telecom Advisory Services Ltd consultants have gained experience in these areas at top telcos and ISPs including Vodafone, KPN, Belgacom, Nortel Networks, Celtel/Zain/Airtel, Mcel, Brasil Telecom, Meditel, MTN, Starcomms, Zoom Mobile, Nokia Siemens, Swift networks, Mobitel, Oduatel, among others. www.telecomadvisory.com.ng

Seals Consultants were contracted to administrate the survey in the South East Zone. Seals Consultants came into being as a subsidiary of Seal Limited which was incorporated in November 1996. With a mission of becoming a foremost financial and management consulting firm within and outside Nigeria, Seals is most diligent, efficient and effective in delivering on its consultancy services which have widened dramatically to include research, training and human capital development as well as conferences, seminars and workshops. While Chief Cyril Eneh, a retired Federal Permanent Secretary is Chairman of Seals, Mr Onyebuchi Anih is the Managing Consultant.

Introduction

This report is the second part of a two-part final deliverable for the Nigerian Consumer Satisfaction Survey Project. It has been prepared by the Commonwealth Telecommunications Organisation (CTO), Decision Support, Telecom Advisory Services and Seals Ltd for the Nigerian Communications Commission (NCC).

The project called on the CTO, Decision Support, Telecoms Advisory Services and Seals Consultants Ltd, the NCC CSS team, to survey 50,000 Nigerian ICT users, analyse the data, and report on the results. The Project also called on the NCC CSS team to develop a NCC Consumer Satisfaction Index for the Commission and provide suggestions in respect of how the NCC may improve services and compensation/remedies for consumers.

The purpose of this report, Part 2 of the Final Report, is to provide readers with the detailed analysis of the data collected during the survey phase of the project. Indeed, the full analysis within this report includes a disaggregation by demographic descriptors that have not been brought forward into the Overview report.

This report also describes in full the methodology used to construct the Consumer Satisfaction and Customer Care indices. It is recommended that this section of the final report is read following a review of the Final Report Part 1: Overview, which is the first part of the Final Report. It provides a summary of the key findings outlined in this report and the NCC CSS team's suggestions for improving services and compensation/remedies for consumers.

This report is structured as follows:

Part 1 summarises the background to the project.

Part 2 describes the methodology employed during the project, including the survey approach, the weighting exercise undertaken during data analysis and the rationale for the data analysis. It also details how the various Customer Satisfaction and Customer Care Indices were developed.

Part 3 outlines the questionnaire and sampling design.

Part 4 presents the data sets that were collected from each geo-political zone and the FCT. It describes the number of valid records, the geographic distribution of the sample, the distribution of samples by demographics, and the ICTs that were used by the respondents.

Part 5 describes the survey data relating to mobile phones, including the results of the data analysis. It also presents the Customer Satisfaction and Customer Care Indices for mobile.

Part 6 describes the survey data relating to fixed line phones, including the results of the data analysis. It also presents the Customer Satisfaction and Customer Care Indices for fixed line.

Part 7 describes the survey data relating to public access phones, including the results of the data analysis. It also presents the Customer Satisfaction and Customer Care Indices for public access phones.

Part 8 describes the survey data relating to Internet, including the result of the data analysis. It also presents the Customer Satisfaction and Customer Care Indices for Internet.

Part 9 describes the survey data relating to customer rights.

1. Background

The Consumer Satisfaction survey was designed to ascertain the quality of service and level of satisfaction for voice and data services, and to develop a NCC consumer satisfaction index. The survey was also designed to ascertain consumer complaints profile and consumer experience of the complaints management services, and to determine consumer awareness of their rights. Findings from the survey provide the basis for suggestions for how services may be improved and remedies and compensation.

The NCC CSS team gathered primary data from nearly 50,000 consumers from all six geo-political zones in Nigeria, through face to face interviews. The data includes perceptions of telecommunications services, focussed on attitude type evaluations.

The survey was designed to be representative of the population of the country as a whole. Although a randomised cluster sampling approach was originally proposed, NCC requested a more straight forward quota sampling approach be used.

The survey (questionnaire, sampling methodology, and data entry tool) were designed by the NCC CSS team. The Field work undertaken in each zone was completed by individual members of the team. The CTO was responsible for administering the survey in the North Central and North East zones; Decision Support was responsible for administration in the South West zone; TAS was responsible for both the South South and North West zone; and Seals was given responsibility for the South East zone. Following the completion of data collection, each team submitted data for centralised analysis. This report presents findings from the analysis of the data sets.

2. Methodology

2.1. Survey approach

The methodology is based on concepts from the American Customer Satisfaction Index (ACSI) model, which considers quality, value and expectations as key aspects of customer satisfaction. The construct has two features of particular interest:

- Customer satisfaction is best measured as a latent variable (a composite variable based on several measurable variables), as it is difficult to measure directly.
- It has a forward looking component, looking beyond current levels of satisfaction to on-going behaviours that are a consequence of levels of satisfaction e.g. loyalty.

As customer service is a key feature of the NCC Guidelines[1] , the methodology has sought to find ways in which the element of customer service can be incorporated into customer satisfaction, as shown in Figure 1 (Page 7).

[1] Nigerian Communications Act (No. 19 of 2003), Quality of Service Regulations, 2012.

Figure 1 Construct for survey methodology

Core telecommunications services have been treated separately, so separate indices have been calculated for each of the following services:

- Mobile phones;
- Fixed line phones;
- Public access;
- Internet;

2.2. Weighting

2.2.1. Purpose

The sampling design was based on the population frame, taking account of gender, age, and rural/urban context. The samples returned did not adhere to the sampling design, so a weighting has been applied in order to make the frequency statistics arising from the data more representative of the population of the country.

As highlighted in preliminary reports, it proved difficult to collect the data strictly according to age and gender groups due to nature of society in some areas of Nigeria. For example, in some enumeration areas with large Islamic populations it was difficult for male enumerators to approach potential female respondents. The teams also faced security issues in some areas so, given that the field teams' safety was of paramount importance, field plans were changed as necessary to minimise any exposure to danger.

2.2.2. Calculating weights

The population pyramid for adults in Nigeria is presented in Figure 2 (Page 8). The sampling design reflected this population distribution; note that the number of age categories in the design was reduced to six. Given a rural:urban split of 50:50, the sampling design proportions to be applied to each zone are presented in Table 1 (Page 8).

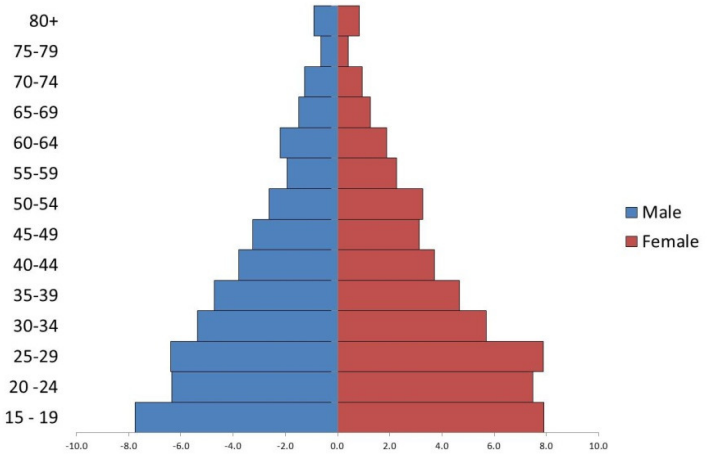


Figure 2 Population pyramid (aged 15 years and over)[2]

Table 1 Proportions of strata in sampling design

			Male (%)	Female (%)
rural	Age group	15 - 19	3.87	3.96
		20 - 24	3.17	3.74
		25 - 29	3.19	3.94
		30 - 39	5.04	5.19
		40 - 49	3.52	3.43
		50 +	5.51	5.44
	Total		24.30	25.70
urban	Age group	15 - 19	3.87	3.96
		20 - 24	3.17	3.74
		25 - 29	3.19	3.94
		30 - 39	5.04	5.19
		40 - 49	3.52	3.43
		50 +	5.51	5.44
	Total		24.30	25.70

The proportions of strata achieved in samples from each zone differed from the design (population) proportions in Table 1 (Page 8). For example, the differences between design and sample proportions from North East zone are illustrated in Figure 3 (Page 9).

[2] Data from National Population Commission (NPC) [Nigeria] and ICF Macro. 2009. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro.

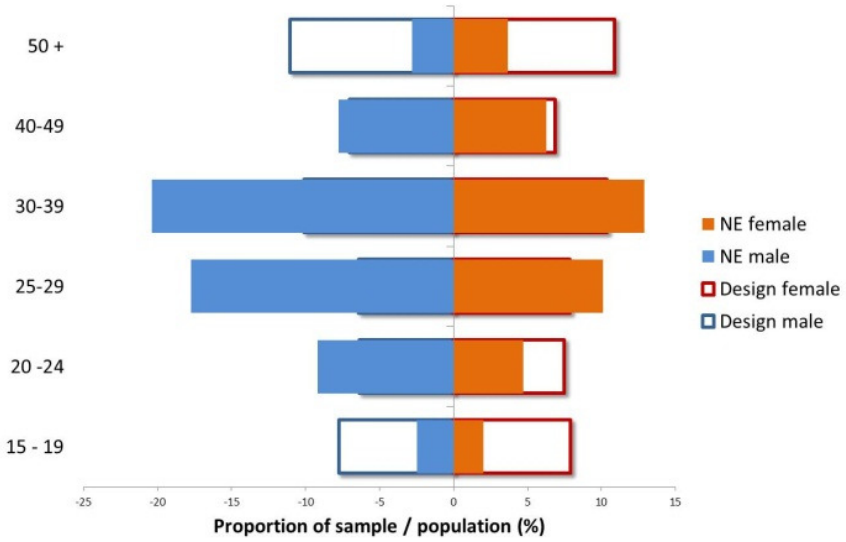


Figure 3 Design distribution of ages by gender, and distribution of preliminary data – North East Zone

When considering figures for a given zone, the distributions according age, gender, and urban / rural context as described above need to be considered. However, when considering figures for the sample as a whole, the distribution of population across zones has also been taken into consideration so the figures can better represent the population of the nation as a whole.

Table 2 Distribution of population and sample by zone

Zone	Population[3]	Proportion of national population	Proportion of sample[4]
North West	35,915,467	25.6	16.1
South South	21,044,081	15.0	17.4
South West	27,722,432	19.7	16.1
South East	16,431,555	11.7	16.8
North Central	20,339,956	14.5	17.1
North East	18,984,299	13.5	16.4
Total	140,437,790		

In order to compensate for over or underrepresentation of any given stratum, Individual case weights, w, have been applied. These addressed distributions according to age, gender, rural/urban context, and population by zones, and were calculated according to the formula:

[3] National Population Commission, Nigeria (http://www.population.gov.ng/index.php/state-population)
[4] Weighted for age, gender, and rural/urban context

$$w = \frac{proportion\ of\ stratum\ in\ population}{proportion\ of\ stratum\ in\ sample}$$

Note that all figures given in the analysis are based on weighted data, except where stated otherwise.

2.3. Analysis

Tables present weighted data for each zone, which is adjusted for age, gender and rural/urban distributions. They also present data for the country (whole sample), which is adjusted for the population distribution across zones.

Responses to the attitudinal questions have been converted to a unipolar scale to give a score from 0 to 100, where 0 represents very poor and 100 represents very good performance. Charts and comparisons (e.g. disaggregation according to gender, age etc.) are based on the means of these unipolar scores.

For example, Table 3 (Page 10) presents the full detail of responses to the question (weighted) including those who did not answer the question. These responses have then been recoded as a score from 0 (very poor) to 100 (very good). The mean scores have then been calculated for each zone and presented as a chart (Figure 4 – Page 11). These charts summarise data from several questions, and in this example, the question in Table 3 (Page 10) is represented by the cluster entitled "call quality – own network".

Table 3 Overall quality of calls on own network (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	3.5	6.2	3.8	2.7	2.7	1.5	2.2
poor	13.6	13.1	16.2	15.5	18.7	9.0	9.8
no opinion	6.7	6.4	11.0	3.9	2.5	4.9	12.3
good	60.6	63.2	59.3	56.7	60.3	63.5	60.2
very good	13.8	8.8	8.5	20.7	14.4	18.3	12.5
don't know	1.0	1.3	0.8	0.5	0.4	1.3	1.9
Did not answer	0.8	1.0	0.3	0.0	1.0	1.5	1.1
Total	100	100	100	100	100	100	100

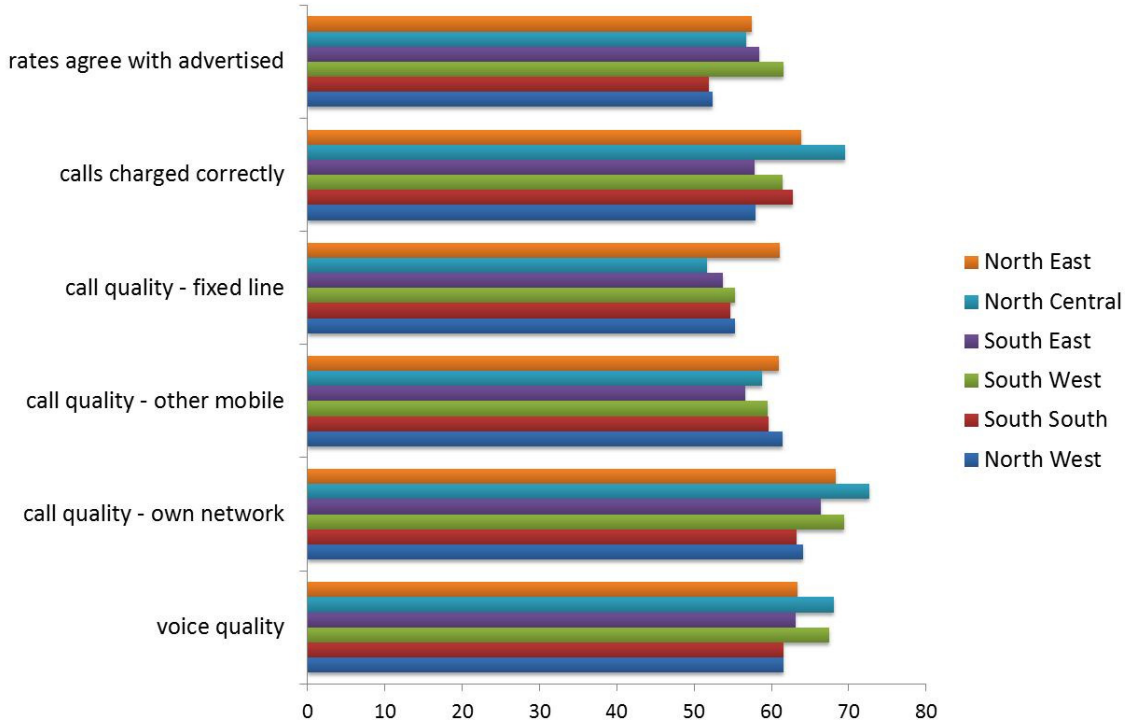


Figure 4 Summary scores (means) - voice calling

Note that the disaggregation tables used to determine the influence of groupings on variables include mean figures only for those groupings where the differences were statistically significant i.e. where differences were not significant, the figures are omitted. When looking at the influence of groupings, the analysis has used non-parametric statistical tests (Mann-Whitney U test or Kruskal-Wallace H test) to test for differences between independent groups. Generally, only differences with a probability of 95% or greater have been taken to indicate a relationship i.e. statistical significance is taken to be represented by $p =<0.05$.

Correlations have also been used to identify relationships within the data. Spearman rank order correlation coefficients have been presented, but only those for which the associated p value was 0.05 or less (i.e. probability of 95% or greater), and the coefficient itself was 0.1 or greater.

2.4. Composite Customer Satisfaction Index

2.4.1. Description of approach

A separate analysis of satisfaction has been conducted for each type of service. In addition to a stated satisfaction indicator, a composite index of customer satisfaction gives a more holistic reflection of the customer experience. The methodology is based on the American Customer Satisfaction Index (ACSI) model, which considers quality, value and expectations as key aspects of customer satisfaction (Figure 1 – Page 7).

The construct is predicated on the view that customer satisfaction is a complex construct that is too subtle to measure directly e.g. by simply asking the question. The methodology explores ways in which groups of questions relate to each other to provide measures of underlying constructs (latent variables).

For each service, the questionnaire includes specific indicators for:

- Expectations – "to what extent is the quality of services in line with your expectations?"
- Value – "overall, how would you rate the value for money offered by the services you pay for?"
- Satisfaction – "overall, how satisfied are you with your [service provider]?"
- Intention – "how likely are you to change to an alternative operator (in the next year)?"

Other attitudinal questions explore aspects of:

- quality of service
- customer care.

2.4.2. Scoring

Attitudinal questions in the questionnaire have followed two likert scales:

Scale					
Frequency	never	rarely	sometimes	often	Almost always
score	0	1	2	3	4
Rating	Very poor	poor	No opinion	Good	Very good
score	-2	-1	0	1	2

The following conversions have been made in order to create unipolar scores (0 - 100) for each indicator:

Scale					
Frequency score	4	3	2	1	0
Rating score	-2	-1	0	1	2
Converted score	0	25	50	75	100

Both unipolar scores and calculated indices adhere to the convention that higher score reflect better service.

2.4.3. Constructing indices - Mobile

Identifying constructs (Mobile)

The questions on complaints handling are 'optional', having been answered only by those respondents who had made a complaint in the last year (40% of respondents who answered

mobile phone questions). The NCC Customer Satisfaction Index (CSI) has been calculated on the basis of only those questions that all respondents were in a position to answer[5]; the abridged groupings are presented in Table 4 (Page 13):

1. Primary service (call quality & charging)
2. Recharge service
3. Convenience

Table 4 Abridged grouping of variables - Mobile

	Primary service	Recharge service	Convenience
Cronbach α[6]	0.817	0.872	0.558
voice quality	●	-	-
call quality - own network	●	-	-
call quality - other mobile	●	-	-
calls charged correctly	●	-	-
rates agree with advertised	●	-	-
SMS charged correctly	●	-	-
availability of recharge service	-	●	-
correct amount added	-	●	-
time for credit to appear	-	●	-
ability to check balance	-	●	-
loss of service	-	-	●
wrong number	-	-	●
get cut off	-	-	●
unable to send SMS	-	-	●
receive SMS spam	-	-	●

- means **not applicable**

Scores for each of the three latent variables were calculated as the mean of the scores of each of the component variables (as indicated in Table 4 – Page 13).

The relationships between factors (latent variables) and specific indicators are presented in Figure 5 (Page 14) below. It can be seen that stated indicators (Expectations and Value) correlate closely with stated Satisfaction; composite indices with the exception of 'convenience' also correlate with stated Satisfaction.

[5] N.B. Quality of call to fixed line networks has also been omitted on the basis that relatively few respondents answered the question.

[6] Cronbach's alpha estimate gives a measure of the degree to which a number of variables are interrelated. Most references suggest a value of 0.7 or greater represents an acceptable degree of internal consistency, although others suggest that values below 0.7 can be acceptable when dealing with psychological constructs (as in this instance).

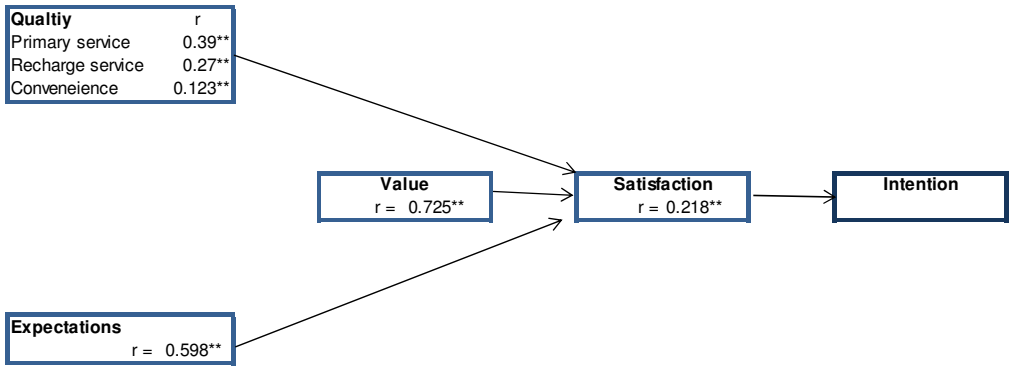


Figure 5 Relationships between constructs (correlation coefficients) - Mobile service

Creating the Composite satisfaction index (Mobile)

A second factor analysis was conducted to identify those indicators and latent variables that comprise a construct for customer satisfaction. Convenience did not appear to be an important determinant of satisfaction, and was omitted from the calculation of the composite satisfaction index. This is consistent with the relationships evident in Figure 5 above (Page 14). The composite satisfaction index score was calculated as the mean of the two latent variables and two stated variables as indicated in Table 5 below (Page 14). This is partially a "mean of means" approach, given that the two latent variables are themselves means of a number of component indicators.

Table 5 Summary of factor analysis for Satisfaction - Mobile Service

	Satisfaction
Cronbach α	0.726
Primary service (call quality + charging) Recharge service Expectations Perceived value	• • • •

The relationships between both latent variables and stated indicators, and the composite satisfaction index are presented in Figure 6 (Page 15). All four component indices correlate with composite satisfaction, as would be expected. Note that the composite satisfaction index correlates closely with stated satisfaction, and that it also correlates with stated intention, implying that higher levels of satisfaction do indeed result in weaker intention to change provider.

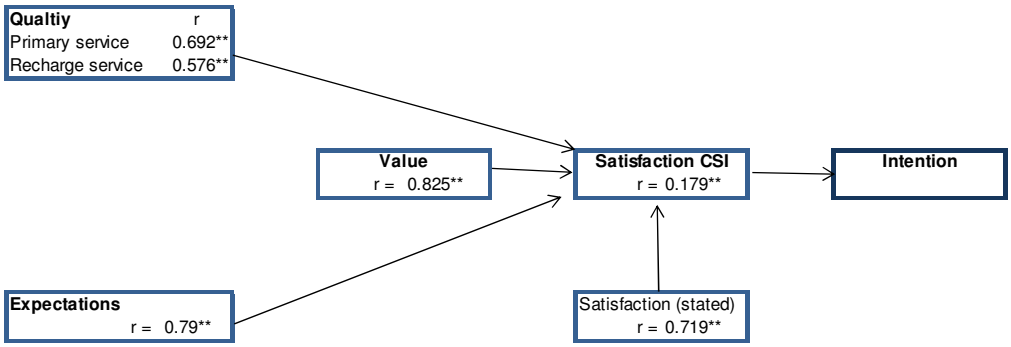


Figure 6 Relationships between constructs and Composite Satisfaction Index (correlation coefficients) - Mobile service

Supplementary Customer Care Index

Customer care is clearly of importance to NCC, but it has not been included in the NCC CSI because only a limited number of respondents (those who have made a complaint in the last year) were in a position to answer those questions relating to the experience of complaints handling. A supplementary Customer Care Index has been calculated as the mean of the following indicators:

- ease of finding number
- time to answer
- IVR service
- staff
- resolution of complaint
- time to resolve

This group has a reasonable degree of internal consistency (Cronbach α = 0.558). Figure 7 below (Page 15) indicates that for those respondents who have answered the customer care questions, the customer care index correlates closely with the composite satisfaction index.

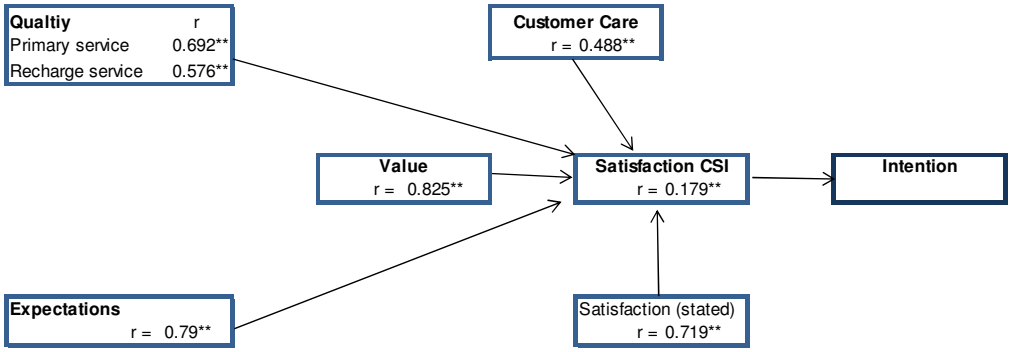


Figure 7 Relationships between constructs (including Customer Care) and Composite Satisfaction Index (correlation coefficients) - Mobile service

2.4.4. Constructing indices – Fixed

Identifying constructs (Fixed)

The questions on complaints handling are 'optional', having been answered only by those respondents who had made a complaint in the last year (40% of respondents who answered fixed phone questions). The NCC Customer Satisfaction Index (CSI) has been calculated on the basis of only those questions that all respondents were in a position to answer; the abridged groupings are presented in

Table 6 below (Page 16):

1. Primary service (call quality & charging)
2. Convenience

Table 6 Grouping of variables - Fixed

	Primary service	Convenience
Cronbach α	0.857	0.757
voice quality	•	-
call quality - fixed networks	•	-
call quality - mobile networks	•	-
calls charged correctly	•	-
rates agree with advertised	•	-
loss of service	-	•
wrong number	-	•
get cut off	-	•

- means **not applicable**

Scores for each of the three latent variables were calculated as the mean of the scores of each of the component variables (as indicated in

Table 6 above – Page 16).

The relationships between latent variables and stated indicators are presented in Figure 8 (Page 17) below. It can be seen that stated indicators (Expectations and Value) correlate closely with stated Satisfaction, as do the composite indices. Note that there is an inverse correlation between satisfaction and intention. This is somewhat counterintuitive and suggests that motivation to change to an alternative provider is motivated by factors other than satisfaction.

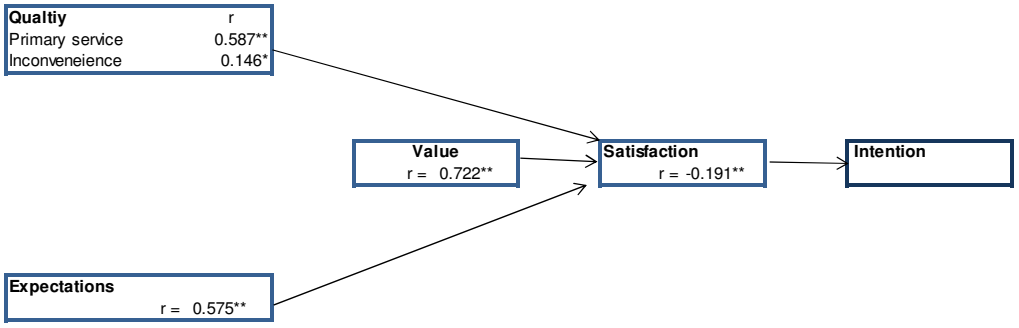


Figure 8 Relationships between constructs (correlation coefficients) - Fixed service

Creating the Composite satisfaction index (Fixed)

A second factor analysis was conducted to identify those indicators and latent variables that comprise a construct for customer satisfaction. Convenience did not appear to be an important determinant of satisfaction, and was omitted from the calculation of the composite satisfaction index. This is consistent with the relationships evident in Figure 8 (Page 17) in which the correlation between convenience and satisfaction (stated) is weak. The composite satisfaction index score was calculated as the mean of one latent variables and two stated variables as indicated in

Table 7 (Page 17).

Table 7 Summary of factor analysis for Satisfaction - Fixed Service

	Satisfaction
Cronbach α	0.765
Primary service (call quality + charging)	•
Expectations	•
Perceived value	•

The relationships between both latent variables and stated indicators, and the composite satisfaction index are presented in Figure 9 (Page 18). All three component indices correlate with composite satisfaction, as would be expected. Note that the composite satisfaction index correlates closely with stated satisfaction. Again, the composite satisfaction index correlates inversely with stated intention.

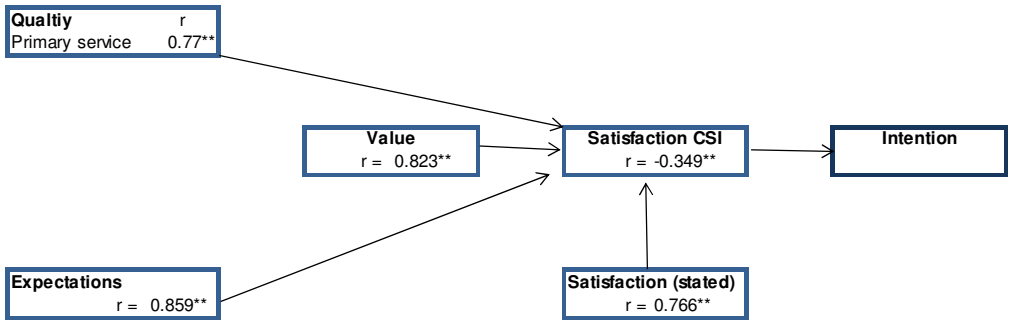


Figure 9 Relationships between constructs and Composite Satisfaction Index (correlation coefficients) - Fixed service

Supplementary Customer Care Index

Customer Care is clearly of importance to NCC, but it has not been included in the NCC CSI because only a limited number of respondents were in a position to answer those questions relating to the experience of complaints handling (those who had made a complaint in the last year). A supplementary index has been calculated as the mean of the following indicators:

- ease of finding number
- time to answer
- IVR service
- staff
- resolution of complaint
- time to resolve

This group has a high degree of internal consistency (Cronbach α = 0.889). Figure 10 (Page 18) indicates that for those respondents who have answered the customer care questions, the customer care index correlates closely with the composite satisfaction index.

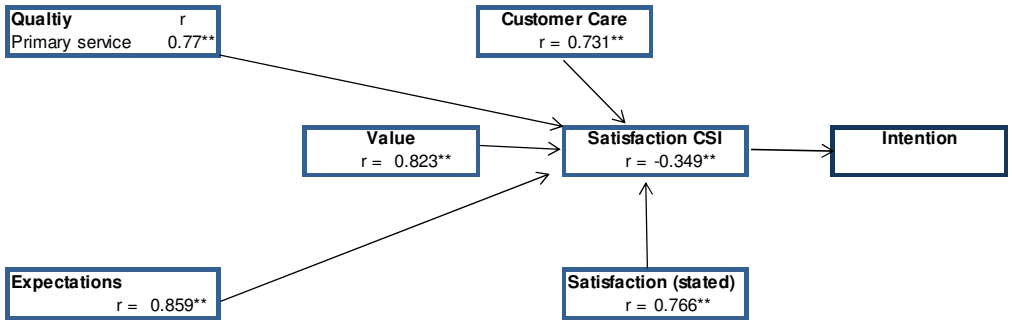


Figure 10 Relationships between constructs (including Customer Care) and Composite Satisfaction Index (correlation coefficients) - Fixed service

2.4.5. Constructing Indices – Public Access

Identifying constructs (Public Access)

Factor analysis confirms that the attitudinal variables fall into two categories, as summarised in Table 8 below (Page 19):

1. Voice quality
2. Convenience

Table 8 Grouping of variables – Public Access

	Voice quality	Convenience
Cronbach α	n/a	0.592
voice quality	•	-
loss of service	-	•
wrong number	-	•
get cut off	-	•
Unable to send SMS	-	•

- means **not applicable**

Two thirds of public phone users did not use SMS, so the 'unable to send SMS' indicator has not been used in calculating the latent variable representing convenience issues.

The relationships between latent variables and specific indicators are presented in Figure 11 below (Page 19). It can be seen that stated indicators (Expectations and Value) correlate closely with stated Satisfaction, as does voice quality. Note that although stated satisfaction correlates closely with intention to get own handset / SIM (in the next year), it does not correlate with predicted change in use of public phones (over the next year), suggesting that intensity of use of public access is not influenced by the quality of the customer experience.

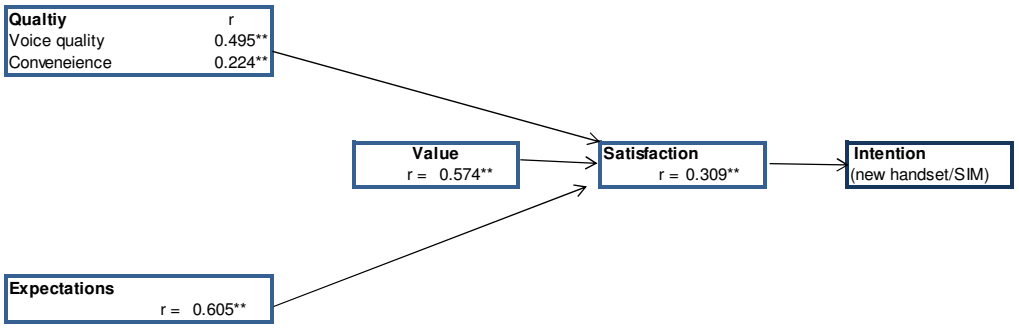


Figure 11 Relationships between constructs (correlation coefficients) – Public Access

Creating the Composite satisfaction index (Public Access)

A second factor analysis was conducted to identify those indicators and latent variables that comprise a construct for customer satisfaction. Convenience did not appear to be an important determinant of satisfaction, and was omitted from the calculation of the composite satisfaction index. This is consistent with the relationships evident in Figure 11 above (Page 19), in which the correlation between convenience and satisfaction (stated) is relatively weak. The composite satisfaction index score was calculated as the mean of one latent variables and two stated variables as indicated in Table 9 below (Page 20).

Table 9 Summary of factor analysis for Satisfaction – Public Access

	Satisfaction
Cronbach α	0.65
Voice quality Expectations Perceived value	• • •

The relationships between both latent variables and specific indicators, and the composite satisfaction index are presented in Figure 12 below (Page 20). All three component indices correlate with composite satisfaction, as would be expected. Note that the composite satisfaction index correlates closely with stated satisfaction. The composite satisfaction index correlates with intention to get own handset / SIM (in the next year).

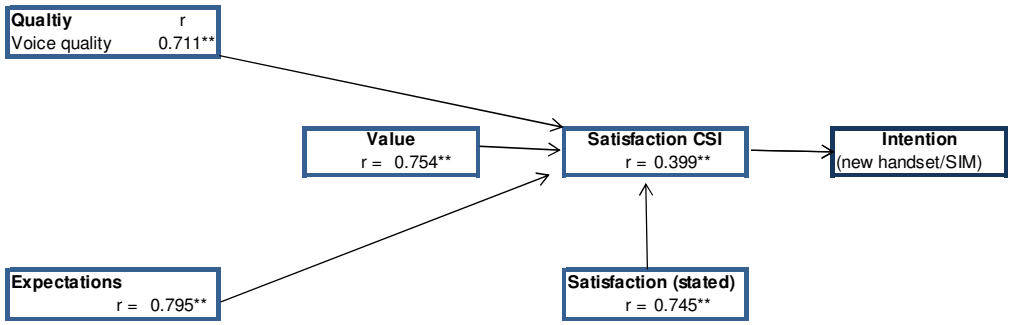


Figure 12 Relationships between constructs and Composite Satisfaction Index (correlation coefficients) – Public Access

2.4.6. Constructing indices – Internet

Identifying constructs (Internet)

Factor analysis confirms that the attitudinal variables fall into only two categories, as summarised in

Table 10 (Page 20) below:

1. Primary service (speed, charging, complaints handling)

2. Convenience

Table 10 Grouping of variables - Internet

	Primary service	Convenience
Internet speed	●	-
Voice call quality (VOIP)	●	-
Video streaming quality	●	-
Internet/email charged correctly	●	-
rates agree with advertised	●	-
loss of service	-	●
get cut off	-	●
resolution of complaint	●	-
time to resolve	●	-

- means **not applicable**

While most of these questions have been answered by most respondents, some are 'optional'. For example, only around 60% of internet respondents had used VOIP or video streaming services, and only around a half had made a complaint in the last year meaning that most respondents did not provide any data on complaints handling. For this reason, the NCC Customer Satisfaction Index (CSI) has been calculated on the basis of only those questions that all respondents were in a position to answer; the abridged groupings are presented in Table 11 below (Page 21).

Table 11 Abridged grouping of variables – Internet

	Primary service	Convenience
Cronbach α	0.746	0.751
Internet speed	●	-
Internet/email charged correctly	●	-
rates agree with advertised	●	-
loss of service	-	●
get cut off	-	●

- means **not applicable**

Scores for both latent variables were calculated as the mean of the scores of each of the component variables (as indicated in Table 11 above - Page 21).

The relationships between latent variables and specific indicators are presented in Figure 13 below (Page 21). It can be seen that stated indicators (Expectations and Value) correlate closely with stated Satisfaction, as does the primary service latent variable. The latent variable representing Convenience correlates relatively weakly with stated satisfaction.

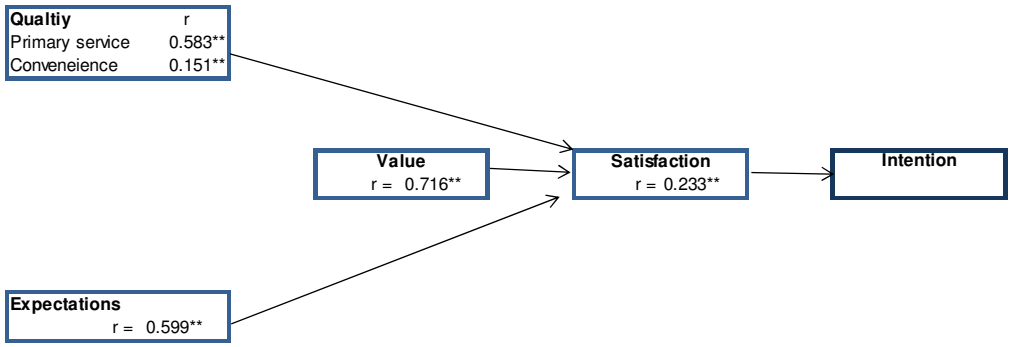


Figure 13 Relationships between constructs (correlation coefficients) - Internet

Creating the Composite satisfaction index (Internet)

A second factor analysis was conducted to identify those indicators and latent variables that comprise a construct for customer satisfaction. Convenience did not appear to be an important determinant of satisfaction, and was omitted from the calculation of the composite satisfaction index. This is consistent with the relationships evident in Figure 13 (Page 21), which showed a weak correlation between convenience and stated satisfaction. The composite satisfaction index score was calculated as the mean of the single latent variable and two stated variables as indicated in Table 12 below (Page 22).

Table 12 Summary of factor analysis for Satisfaction - Internet

	Satisfaction
Cronbach α	0.801
Primary service (speed + charging) Expectations Perceived value	• • •

The relationships between both latent variables and specific indicators, and the composite satisfaction index are presented in Figure 14(Page 22). All three component indices correlate with composite satisfaction, as would be expected. Note that the composite satisfaction index correlates closely with stated satisfaction, and that it also correlates with stated intention, implying that higher levels of satisfaction do indeed result in weaker intention to change ISP.

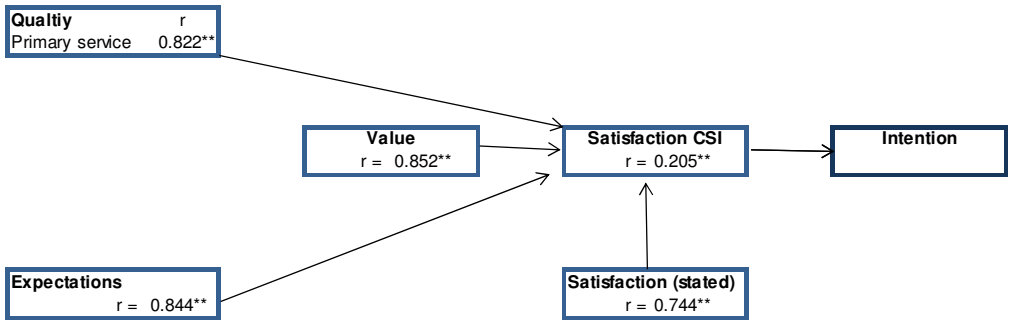


Figure 14 Relationships between constructs and Composite Satisfaction Index (correlation coefficients) - Internet

Supplementary Customer Care Index

Customer Care is clearly of importance to NCC, but it has not been included in the NCC CSI because only a limited number of respondents were in a position to answer those questions relating to their experience of complaints handling (those who had made a complaint in the last year). A supplementary index has been calculated as the mean of the following indicators:

- resolution of complaint
- time to resolve

This group has a high degree of internal consistency (Cronbach α = 0.782). Figure 15 below (Page 23) indicates that for those respondents who have answered the customer care questions, the customer care index correlates closely with the composite satisfaction index.

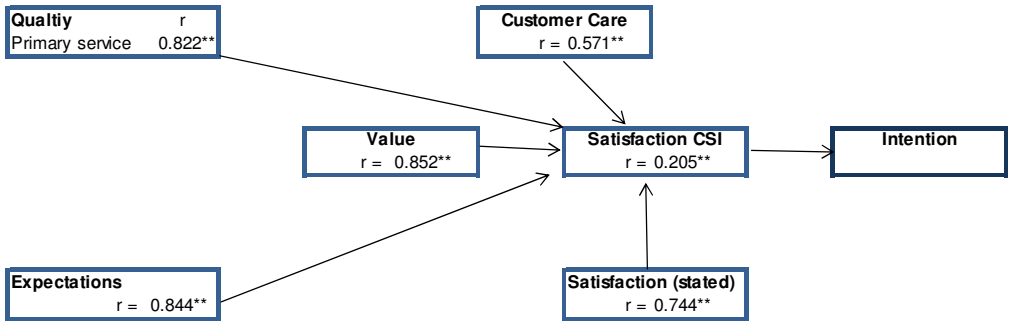


Figure 15 Relationships between constructs (including Customer Care) and Composite Satisfaction Index (correlation coefficients) - Internet

3. Survey Design

3.1. Questionnaire Design

Although mobile penetration rates are relatively high (73.5%), it was proposed that a sizable minority of the population would make sole use of public access to telecommunications. In order to generate data pertinent to universal access provision, the methodology was

designed to canvas not only phone subscribers (both mobile and fixed), but also public access users. A single questionnaire, comprising five sections, was designed to gather data on all telecommunications services (Annex AQuestionnaire):

- Mobile phones – including optional sections:
  - value added services
  - pre-paid account recharge service
  - complaints
- Fixed line phones – including optional sections:
  - complaints
- Public access
- Internet – including optional sections:
  - complaints
- Customer rights.

In order to restrict the time required of any respondent, enumerators navigated through the questionnaire using the logic presented in Figure 16 (Page 25). Questions in each section fell into the following categories:

- Descriptors – describe the personal circumstances of respondents (rural/urban context, gender, age, socio-economic classification[7];
- Patterns of use of telecommunications services – services used, , providers used, intensity of use;
- Detailed indicators – covering salient features of the consumer experience; these are either frequency indicators (e.g. perceptions of frequency of loss of service, getting cut off), or altitudinal indicators (e.g. views on quality of service, accuracy of charging). Modules address optional services accessed only by certain consumers (e.g. value added services, complaints handling).
- Inevitably, the questionnaire design was a compromise between gathering detailed data of interest, and keeping it short enough in order to minimise respondent fatigue and to be administered within consultants' budgets.

[7] Constraints on the number of questions meant it was not possible to include questions that would enable an objective assessment of socio-economic status, so a simple subjective assessment by the enumerator was used as a compromise.

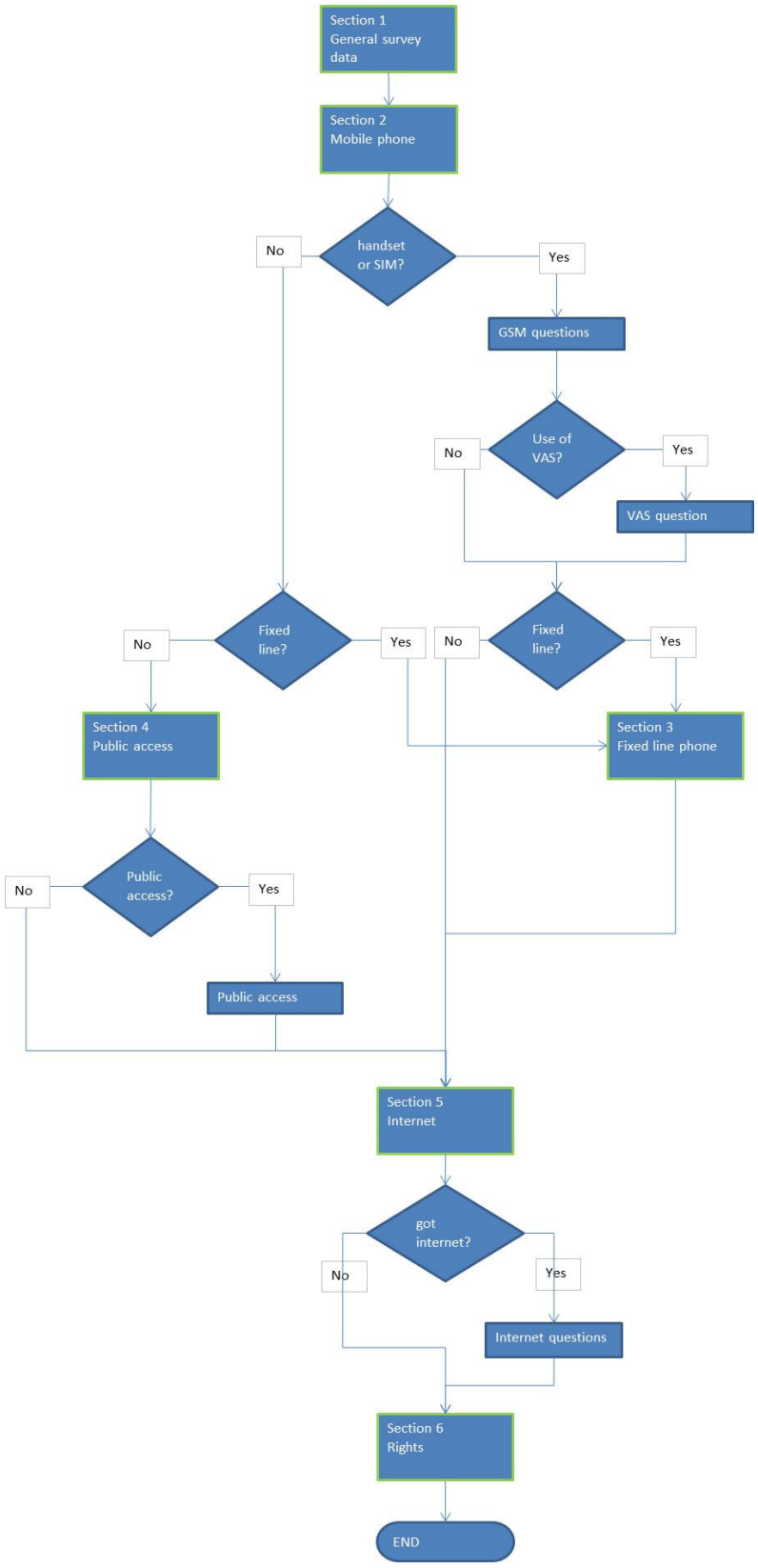


Figure 16 ICT selection logic for questionnaire

The project timescales provided an opportunity to pilot the questionnaire briefly. Between the 9th and 12th July, the CTO and Selected Consultants undertook a pilot of the questionnaire in order to assess its appropriateness, especially in terms of whether it met the objectives of data collection. A limited number of questionnaires were administered in the widest geographical area possible within each Geo-Political zone and the FCT.

Following the pilot, the NCC Survey team submitted reports that detailed the number of questionnaires administered, the average time it took to deliver each questionnaire, and an indication of which questions posed the most difficulties to the enumerators administering them and respondents answering them.

3.2. Sampling design

The sample was drawn from the population of adults (15 years and over). In order to eliminate "null" responses, the sample was drawn from the population of telecommunications service users, defined as "those who have made some use of voice or data communications within the previous 3 months".

It was originally proposed to use a randomised cluster sampling design, but NCC requested a simpler quota sampling approach. This is a non-probability sampling approach that is particularly popular with market research samples without the expense involved in collecting random samples. The large sample size, coupled with the fact that it was drawn from across the country, means that results are likely to be reasonably representative of the overall population, at least in terms of characteristics used to design the quotas.

Quotas were designed to reflect the key demographics of the population - area (rural/urban), gender and age. Although this was a non-probability sampling method, a degree of randomness was introduced in the selection of geographical areas from which the sample was to be drawn.

Each zone was regarded as an individual domain, so equal sample sizes were specified for each zone. It was beyond the scope of the budget to sample from clusters throughout each zone, so a multi-stage sampling process was required. It was proposed to use Local Government Areas (LGAs) as the first level of sampling. Within each zone, a manageable number of LGAs were selected randomly - two urban LGAs and one rural LGA from each state i.e. roughly 18 LGAs per zone (given an average of roughly six states per zone). See Annex 2 for the detail of LGAs that the sample was drawn from. Within each LGA, Enumeration Areas (EAs) were to be selected randomly as the second level of sampling.[8]

[8] At the request of the NCC, the Decision Support field team administering the survey in the South West Zone did not take equal numbers from each of its designated States. A full breakdown of the samples drawn from the South West Zone can be reviewed in the Interim Report submitted by Decision Support on the 18.09.2012.

4. Data Sets

4.1. Number of Valid Records

Data sets were received from each of the selected consultants – see Table 13 (Page 27)

Table 13 Summary of records received

Consultant	Zones	Records received
Decision Support	South West	8,413
CTO	North Central and North East	16,794
SEALS	South East Zone	8,132
Telecom Advisory Services	North West and South South	16,800
Total		50,139

Data records were deleted for the following reasons:

- Respondents had answered none of the questions relating to any of the telecommunications services;
- Records had been entered more than once (duplicates)
- Records were clearly duplicates from the key data content (even if the serial numbers were different);
- Multiple fields had erroneous data entered (not within the expected coding range).

The number of records deleted from each data set is summarised in Table 14 below (Page 27).

Table 14 Summary of records deleted

	Not used services	Entered more than once	Duplicates	Erroneous data entry	Total records deleted	Valid records
Decision Support	566	0	267	0	833	7,580
CTO	273	22	389	3	687	16,107
SEALS	35	13	4	0	52	8,080
Telecom Advisory Services	107	1	557	21	686	16,114
Total						47,881

Each of the data fields was checked for spurious data falling outside of the expected coding range. Erroneous data was either deleted or corrected where the error was evident; the number of edits made to date from each section is presented in Table 15 below (Page 27).

Table 15 Number of records edited

	Mobile	Fixed	Public Access	Internet	Rights
ICT Decision Support	6	3	0	0	0
CTO	5	0	0	0	0
SEALS	0	0	0	0	0
TAS	105	2	0	7	7

Table 16 below (Page 28) presents, for each service, the proportion of records for which all key questions[9] have been answered, which gives an indication of how diligent enumerators have been in asking questions in each section. The proportion of complete records is consistent across all sections with the exception of the fixed phone section.

Table 16 Proportion of complete records (% of whole sample)

	Answered at least 1 question	Answered all key questions	Proportion of complete records (%)
Mobile	45918	35786	77.9
Fixed	419	202	48.2
Public access	2298	1898	82.6
Internet	12940	10441	80.7

4.2. Geographical Distribution of Samples

Table 17 (Page 28) gives the total sample size gathered from each zone, and indicates which consultant was responsible for conducting the field surveys in each zone.

Table 17 Distribution of sample by Zone

		CONSULTANT				Total
		ICTDS	CTO	SEALS	TAS	
GEO-POLITICAL ZONE	North West	0	0	0	7845	7845
	South South	0	0	0	8269	8269
	South West	7580	0	0	0	7580
	South East	0	0	8080	0	8080
	North Central	0	8252	0	0	8252
	North East	0	7855	0	0	7855
Total		7580	16107	8080	16114	47881

A breakdown of the sample by state is given in Table 18 below (Page 28).

Table 18 Distribution of sample across states

		Number of records	Proportion of total sample
North West		7845	16.4%
	Jigawa	1159	2.4%
	Kaduna	1196	2.5%
	Kano	846	1.8%
	Katsina	1193	2.5%
	Kebbi	1199	2.5%
	Sokoto	1059	2.2%

[9] This excludes optional questions that not all respondents would be expected to answer e.g. VAS questions.

	Zamfara	1193	2.5%
South South		8269	17.3%
	Akwa Ibom	1397	2.9%
	Bayelsa	1384	2.9%
	Cross River	1398	2.9%
	Delta	1394	2.9%
	Edo	1321	2.8%
	Rivers	1375	2.9%
South West		7580	15.8%
	Ekiti	794	1.7%
	Lagos	2583	5.4%
	Ogun	944	2.0%
	Ondo	919	1.9%
	Osun	888	1.9%
	Oyo	1452	3.0%
South East		8080	16.9%
	Enugu	1685	3.5%
	Abia	1660	3.5%
	Imo	1659	3.5%
	Ebonyi	1600	3.3%
	Anambra	1476	3.1%
North Central		8252	17.2%
	Kwara	1208	2.5%
	Plateau	1204	2.5%
	FCT	1203	2.5%
	Nasarawa	1191	2.5%
	Niger	1188	2.5%
	Benue	1169	2.4%
	Kogi	1089	2.3%
North East		7855	16.4%
	Adamawa	1355	2.8%
	Bauchi	1289	2.7%
	Borno	1389	2.9%
	Gombe	1280	2.7%
	Taraba	1404	2.9%
	Yobe	1138	2.4%

4.3. Distribution of Samples by Demographics

The sampling was designed to reflect the key demographics of the population:

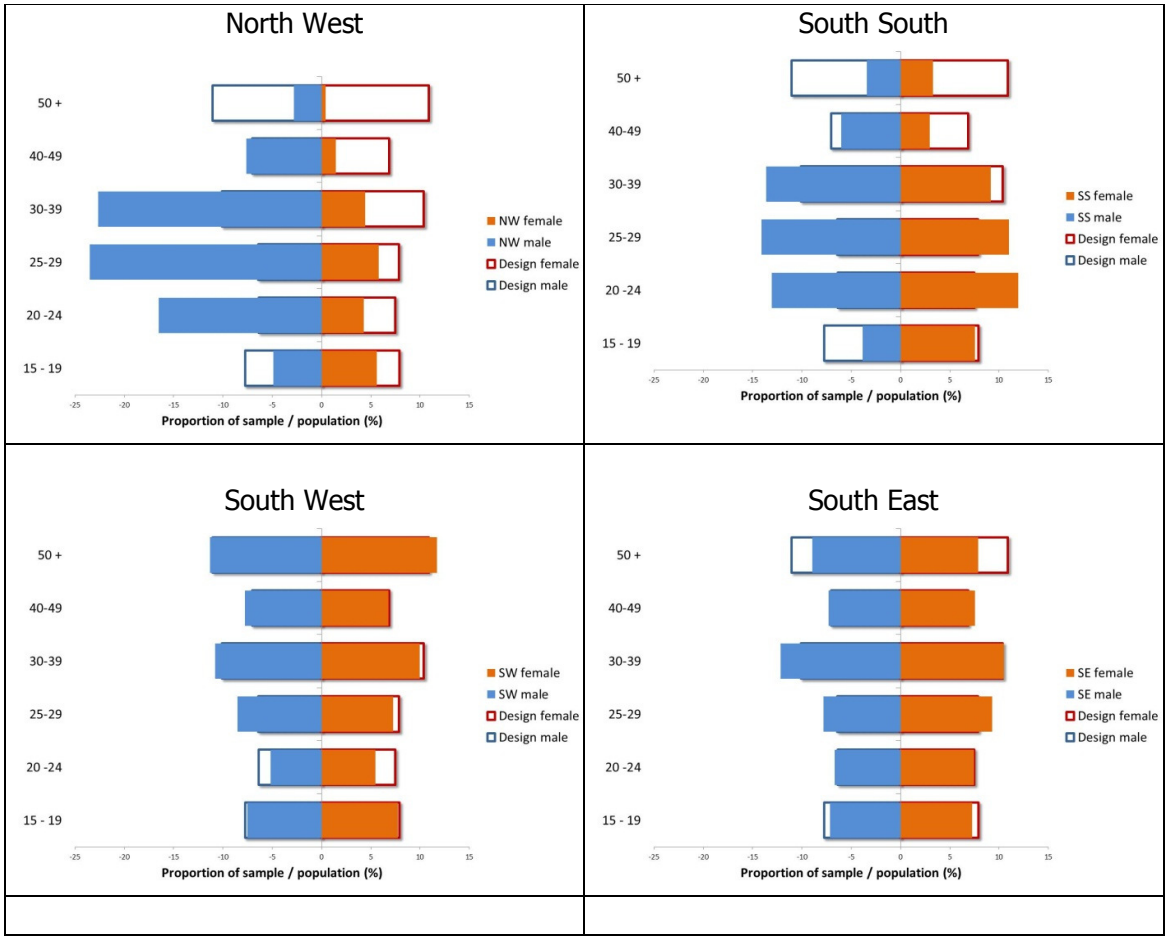
- Rural / urban location
- Gender
- Age.

The target sample proportions to be achieved for each zone are presented in Table 19 (Page 30); these figures were to be split equally between rural and urban areas.

Table 19 Design sample proportions by demographics

Age	Male (%)	Female (%)
15 - 19	7.7	7.9
20 -24	6.3	7.5
25-29	6.4	7.9
30-39	10.1	10.4
40-49	7.0	6.9
50 +	11.0	10.9
Total	48.6	51.4

It can be seen from Figure 17 (Page 31) below that this distribution was achieved in South West and South East zones. The elderly and the young tended to be underrepresented in the other zones, and achieving a gender balance was clearly a major problem in North West zone.



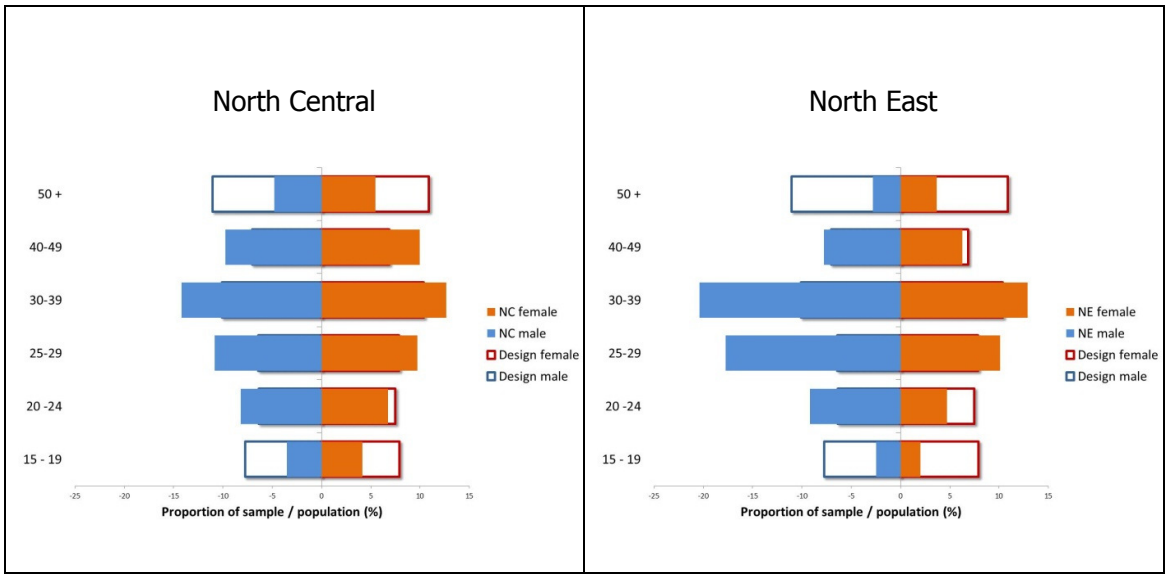


Figure 17 - Distribution of samples by key demographics - by Zone

4.4. Telecommunications Services Used

The most reliable indicator of whether a respondent was a service user was whether they had answered any of the questions relating to that service. On this basis, the proportion of the sample that used each of the services is presented in Table 20 below (Page 31)[10]. It can be seen that substantial proportions of the sample from South South and North West zones made use of public phones, whereas the proportion from South West zone was low; note that this closely reflects the socio-economic status of respondents from these zones. The proportion of respondents using the internet was highest in North East zone and lowest in North West zone. Fixed line use was low throughout, but lowest in South East and North Central zones.

Table 20 Proportion of sample (in each zone) using services (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
Mobile	95.9	93.7	91.2	98.6	96.8	96.3	99.2
Fixed	0.9	1.5	1.2	1.1	0.3	0.3	0.9
Public Access	4.8	7.3	9.2	0.8	3.7	3.9	3.7
Internet	27.0	16.3	23.6	24.3	27.9	30.7	39.3

The Venn diagram presented in Figure 18 below (Page 32) shows the overlap of services used. If respondents used mobile or fixed phones, then they were to be guided through these and the internet sections of the questionnaire (following the logic in Figure 16 – Page 25). If they used neither mobile nor fixed phones, then they were to be guided through the public access and internet sections i.e. public access users were intended to be exclusive users of public access, rather than casual users of public access facilities who used it in

[10] N.B. data presented in this section has not been weighted.

addition to a private phone. The groups identified in Figure 18 (Page 32) account for 99.2% of the whole sample, the remainder being accounted for public access users who also used mobile or fixed phones.

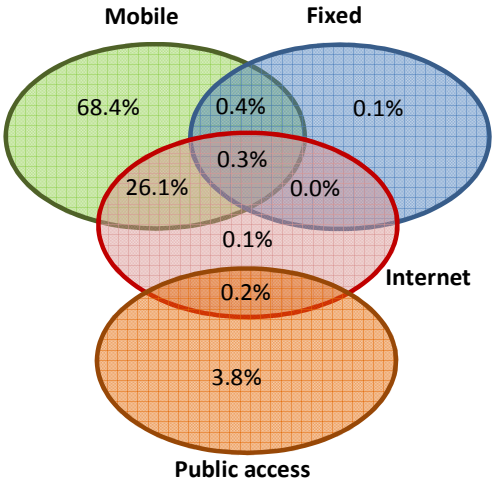


Figure 18 Multiple use of services - venn diagram (% of whole sample)

5. Mobile Phones

5.1. Survey Data

5.1.1. Descriptors - Mobile

Overall, 96% of the sample answered questions on mobile phone use (N = 45,918). The rural / urban balance (49.5:50.5 rural:urban), gender balance (49.4:50.6 male:female), and age profile (Figure 19 below – Page 32) all closely match that of the sampling design (based on weighted data).

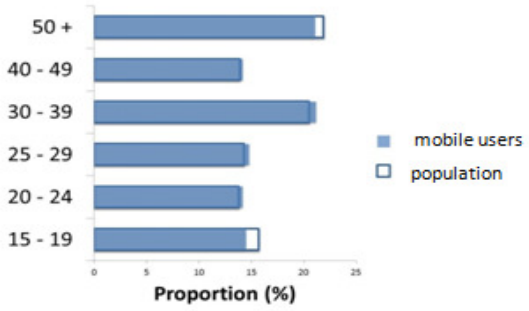


Figure 19 Age profile of mobile phone users (and population)

The distribution of socio-economic status of respondents is presented in Table 21 (Page 33).

Table 21 Socio-economic status of mobile phone users (and whole sample)

	Mobile phone users (%)	Whole sample (%)
lower class	43.5	45.8
middle class	40.3	38.6
upper class	15.6	14.9
Did not answer	0.6	0.7
Total	100	100

In terms of subscriber numbers, MTN was the clear market leader, followed by Globacom and Airtel. Only in SE zone was the trend different, where Etisalat was the second most popular operator. Airtel appeared to be particularly popular in North East zone. Note that respondents commonly had more than one SIM card, so the figures in Table 22 (Page 33) sum to more than 100%.

Table 22 Proportion of mobile phone users subscribing to networks (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
Etisalat	12.8	15.7	5.9	14.1	20.2	9.4	9.7
M-Tel	0.5	0.5	0.1	0.8	0.2	0.2	0.8
Globacom	18.6	16.3	14.1	25.7	14.1	21.5	17.3
Airtel	18.1	17.5	13.0	21.1	16.9	9.8	29.8
MTN	66.9	63.5	68.1	64.9	86.9	67.5	56.7
Other	0.7	1.3	0.2	0.9	0.5	0.4	0.5
Total	118	115	101	128	139	109	115

Table 23 below (Page 33), on the other hand, gives a breakdown of the network respondents used most (so the proportions sum to 100%). Note that the proportion of respondents using M-Tel and 'other' operators was relatively small, so these have generally been omitted from narrative interpretation of the data.

Table 23 Principal network used by mobile phone users (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
Etisalat	8.1	12.7	5.6	7.1	7.1	7.5	5.6
M-Tel	0.2	0.2	0.1	0.5	0.0	0.1	0.1
Globacom	13.3	10.1	13.6	18.1	5.2	18.1	13.2
Airtel	13.9	14.6	12.5	14.7	7.9	7.2	25.0
MTN	62.6	60.4	67.8	58.8	79.0	64.1	51.2
Other	0.5	1.0	0.2	0.6	0.2	0.4	0.3
Did not answer	1.4	0.9	0.1	0.1	0.6	2.5	4.7
Total	100	100	100	100	100	100	100

Table 24 below (Page 34) shows that the intensity of mobile phone use reflected the socio-economic status of the samples from each zone, with those respondents from higher socio-economic status groups using the phone more. However, the differences are modest.

Table 24 Intensity of mobile phone use (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
less than once a week	5.3	7.6	5.1	3.1	5.5	6.5	3.3
1 or more times a week	14.9	20.4	16.2	9.9	11.5	12.6	17.2
1 or more times a day	78.7	70.5	77.3	87.0	82.4	78.9	78.5
Did not answer	1.1	1.5	1.4	0.0	0.6	1.9	1.0
Total	100	100	100	100	100	100	100

The vast majority of mobile phones that were the subject of the interview were registered to the respondent themselves – see Table 25 below (Page 34).

Table 25 Person the mobile phone was registered to (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
you	85.1	78.7	84.8	88.9	90.8	90.8	84.5
family member	6.4	8.3	4.9	6.6	3.8	3.8	6.2
friend	4.1	5.5	6.4	2.7	3.0	3.0	3.9
employer	2.4	4.9	2.3	0.7	1.1	1.1	2.5
other	0.6	1.0	0.4	0.3	0.3	0.3	1.3
not registered	0.8	0.7	0.9	0.8	0.4	0.4	1.0
Did not answer	0.5	0.9	0.2	0.0	0.7	0.7	0.7
Total	100	100	100	100	100	100	100

Almost all the accounts are pre-paid – see Table 26 below (Page 34).

Table 26 Type of mobile phone accounts (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
pre-paid	95.8	92.9	97.4	97.1	96.9	96.1	96.2
post-paid	2.1	2.5	1.6	2.9	0.9	1.7	2.0
Did not answer	2.1	4.5	1.0	0.0	2.3	2.2	1.9
Total	100	100	100	100	100	100	100

5.1.2. Views on voice calling - Mobile

Overall, 68% felt that the voice quality of calls was good or very good, compared with only 19% who felt the quality was poor or very poor. Views on voice quality appear to be similar across most zones except North Central and South West where it was rated more highly.

Table 27 Views on voice quality of calls (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	3.0	4.6	2.3	2.5	3.1	2.0	2.9
poor	15.7	15.0	18.2	14.7	21.5	14.0	12.9
no opinion	11.4	12.9	15.6	7.2	5.3	7.0	20.5
good	58.3	58.3	57.4	61.6	56.9	61.1	52.7
very good	9.7	5.1	5.6	13.9	11.2	14.1	9.4
Did not answer	1.8	4.0	0.9	0.0	2.0	1.7	1.5
Total	100	100	100	100	100	100	100

The quality of calls to other networks appears to be poorer than the quality of on-net calls (Table 28 – Page 35 and Table 29 – Page 35).

Table 28 Overall quality of calls on own network (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	3.5	6.2	3.8	2.7	2.7	1.5	2.2
poor	13.6	13.1	16.2	15.5	18.7	9.0	9.8
no opinion	6.7	6.4	11.0	3.9	2.5	4.9	12.3
good	60.6	63.2	59.3	56.7	60.3	63.5	60.2
very good	13.8	8.8	8.5	20.7	14.4	18.3	12.5
don't know	1.0	1.3	0.8	0.5	0.4	1.3	1.9
Did not answer	0.8	1.0	0.3	0.0	1.0	1.5	1.1
Total	100	100	100	100	100	100	100

Table 29 Overall quality of calls on other mobile networks (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	5.5	7.2	4.8	5.8	6.1	4.3	3.4
poor	20.9	16.5	18.6	24.9	28.3	22.2	17.2
no opinion	10.4	5.8	16.6	5.0	4.8	14.7	20.0
good	48.3	51.0	47.9	52.4	48.6	42.5	43.7
very good	10.3	11.0	8.9	10.8	8.6	10.8	11.0
don't know	1.6	1.1	1.4	1.3	2.0	2.1	2.1
Did not answer	3.2	7.5	1.8	0.0	1.7	3.4	2.7
Total	100	100	100	100	100	100	100

The quality of calls to fixed line networks is poorer still (Table 30 below – Page 36). Note that over 20% of respondents from North West zone did not answer the question on quality of calls to fixed line networks, compared with 0% from South West, indicating that calling fixed line phones is linked to socio-economic status and location i.e. where fixed lines are available.

Table 30 Overall quality of calls on fixed line networks (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	6.2	9.0	3.2	6.5	3.5	8.9	3.6
poor	14.4	8.6	11.5	22.9	16.6	16.8	10.4
no opinion	18.3	9.3	41.2	10.8	14.6	18.1	24.8
good	29.8	29.4	25.4	38.2	24.9	25.4	31.6
very good	6.6	5.1	4.2	7.9	4.1	7.2	11.1
don't know	16.5	17.9	8.8	13.7	27.5	18.6	14.6
Did not answer	8.2	20.7	5.7	0.0	8.8	5.0	3.8
Total	100	100	100	100	100	100	100

Overall, two thirds of respondents felt that the correctness of charging(accuracy of billing) of calls was good or very good (Table 31 below – Page 36); there was little variation across zones, with the exception of North Central , where the proportion was higher.

Table 31 Rating of correct charging of calls to mobile account (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	6.5	10.8	5.2	6.0	7.2	3.3	4.2
poor	19.6	17.6	21.8	24.3	26.6	12.2	15.4
no opinion	5.7	7.0	8.2	3.3	2.7	4.3	8.5
good	52.6	51.8	43.6	49.6	51.5	59.9	60.7
very good	13.2	8.9	19.5	16.1	10.1	17.2	8.5
don't know	1.4	1.5	1.1	0.7	0.7	2.5	1.8
Did not answer	1.1	2.4	0.7	0.0	1.2	0.7	1.0
Total	100	100	100	100	100	100	100

On the other hand, less than one half of respondents felt that the alignment of charges and advertised rates was good or very good (Table 32 below – Page 36). Again, non-response rates were highest in North West zone. Zones where alignment with advertised rates appeared to be a particular problem were North West and South South.

Table 32 Rating of agreement of mobile charges with rates advertised (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.6	5.1	3.7	5.9	4.7	4.8	2.8
poor	21.5	22.8	27.5	18.5	22.3	22.2	16.1
no opinion	15.2	10.9	24.0	6.8	9.5	18.7	26.8
good	37.5	26.4	34.0	48.4	46.2	37.9	36.2
very good	7.9	6.7	4.1	12.2	8.0	9.6	5.9
don't know	7.8	10.5	4.7	8.2	7.1	4.7	9.7
Did not answer	5.5	17.5	2.0	0.0	2.2	2.2	2.6

Total	100	100	100	100	100	100	100

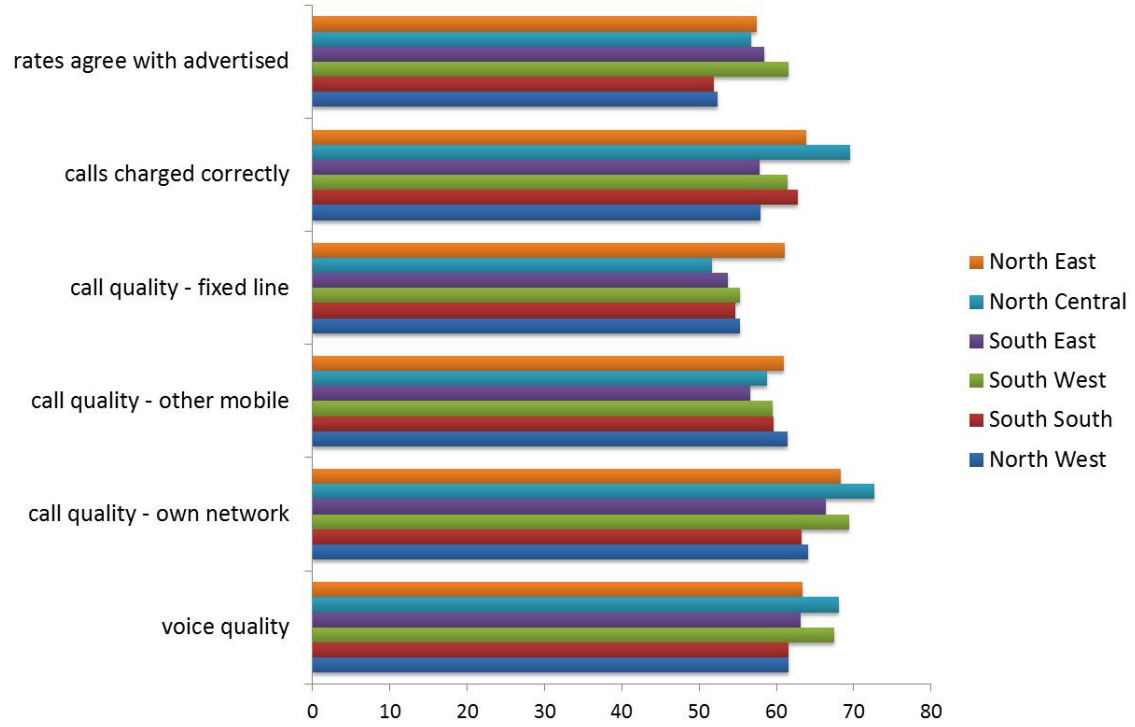


Figure 20 Summary scores (means) - voice calling

Scores for all indicators were higher among urban respondents, but the greatest difference was in the correct charging of calls (58.8 and 65.0 for rural and urban respondents respectively). Differences between men and women were marginal. Some indicators showed a weak trend of increasing with age e.g. views on voice quality, call quality on own network, calls charged correctly. Differences between middle class and upper class respondents were marginal, but scores registered by lower class respondents were considerably lower. There was a consistent trend for scores to be highest among the most intensive users. Scores for voice quality and quality of on-network calls were similar across all operators. It was only on quality of calls to other mobile and to fixed networks that MTN scores were lower. On charging issues, MTN scores were lowest and Globacom and Etisalat were highest.

Table 33 Disaggregated scores for voice calling

	voice quality	call quality - own network	call quality - other mobile	call quality - fixed line	calls charged correctly	rates agree with advertised
Rural/urban						
rural	63.1	65.7	58.7	53.7	58.8	54.8

urban	65.4	68.8	60.7	57.0	65.0	58.2
Gender						
male	64.3	-	59.1	56.1	62.2	56.8
female	64.2	-	60.3	54.7	61.5	56.2
Age group						
15 - 19	65.6	68.1	59.6	56.7	61.7	57.9
20 - 24	62.1	65.3	58.9	55.2	59.9	56.8
25 - 29	63.7	66.1	58.5	55.4	61.4	56.7
30 - 39	63.6	66.5	59.8	55.6	62.1	56.7
40 - 49	64.4	68.5	61.5	56.0	62.8	55.5
50 +	65.6	68.6	60.0	54.0	62.8	55.7
Socio-economic status						
lower class	61.4	63.7	57.5	53.2	58.1	52.4
middle class	66.5	70.3	61.7	56.8	65.6	58.8
upper class	66.3	69.6	61.1	57.5	62.9	61.3
Frequency of use						
less than once a week	55.4	57.0	50.8	52.0	56.7	50.0
1 or more times a week	59.2	60.9	56.2	49.4	54.4	53.0
1 or more times a day	65.9	69.2	61.0	56.9	63.7	57.6
Principal operator						
Etisalat	64.8	68.2	63.1	60.7	65.5	60.9
M-Tel	64.1	58.4	60.4	59.4	61.8	58.1
Globacom	64.6	68.2	62.0	57.6	65.2	59.1
Airtel	64.1	67.7	60.7	59.3	63.0	56.8
MTN	64.1	66.8	58.5	53.1	60.4	55.3
Other	60.3	64.2	59.6	55.6	58.9	52.4

- means **not applicable**

5.1.3. Network reliability - Mobile

Network availability (Table 34 – Page 39) appeared to be best in South West and South South zones, and poorest in South East.

Table 34 "How often do you usually experience loss of service (no mobile signal, no signal bars etc.)?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	17.0	23.1	12.4	19.0	14.5	12.3	15.4
rarely	23.7	9.8	39.9	29.5	21.7	26.7	21.5
sometimes	48.8	56.6	39.2	43.0	48.4	49.6	53.1
often	6.5	4.9	6.6	6.4	10.4	7.7	5.0
almost always	3.2	3.7	1.8	2.1	4.7	2.9	4.3
Did not answer	0.7	1.9	0.2	0.0	0.3	0.7	0.8
Total	100	100	100	100	100	100	100

Wrong numbers appeared to be more of a problem in North East, South South and North West zones.

Table 35 "How often do you get connected to the wrong number when you dial?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	23.9	23.1	13.3	31.8	30.3	27.0	15.9
rarely	27.6	13.8	41.2	32.1	29.9	32.0	24.1
sometimes	41.8	53.3	36.2	31.9	34.4	36.9	53.4
often	5.1	6.8	8.6	3.6	3.6	2.9	4.6
almost always	1.0	1.8	0.4	0.6	0.7	0.6	1.4
Did not answer	0.7	1.2	0.3	0.0	1.1	0.7	0.6
Total	100	100	100	100	100	100	100

Getting cut off was more of a problem in South South and North East zones Table 36 – Page 39.

Table 36 "How often do you get cut off in the middle of a call?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	14.1	16.0	10.9	20.0	14.7	9.6	9.8
rarely	22.0	17.1	24.7	29.6	25.4	21.0	14.8
sometimes	50.5	54.8	37.4	41.6	48.6	57.2	63.9
often	10.6	7.8	23.8	7.7	8.5	10.0	8.5
almost always	1.7	1.6	2.9	1.1	1.7	1.4	2.0
Did not answer	1.1	2.7	0.3	0.0	1.1	0.7	1.0
Total	100	100	100	100	100	100	100

Nearly two thirds of respondents reported having to dial twice or more to get through, and the proportion was higher in North West, South South and North East zones (Table 37 – Page 40).

Table 37 "How often do you need to dial a number before you get through?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
once	34.2	28.2	27.9	39.7	40.5	41.3	29.9
twice	39.9	42.0	41.5	40.1	34.0	40.9	38.8
3 - 5 times	20.4	21.5	25.8	17.3	18.8	14.1	25.8
more than 5 times	4.8	7.1	4.6	2.9	5.7	3.3	4.7
Did not answer	0.6	1.1	0.3	0.0	1.0	0.4	0.8
Total	100	100	100	100	100	100	100

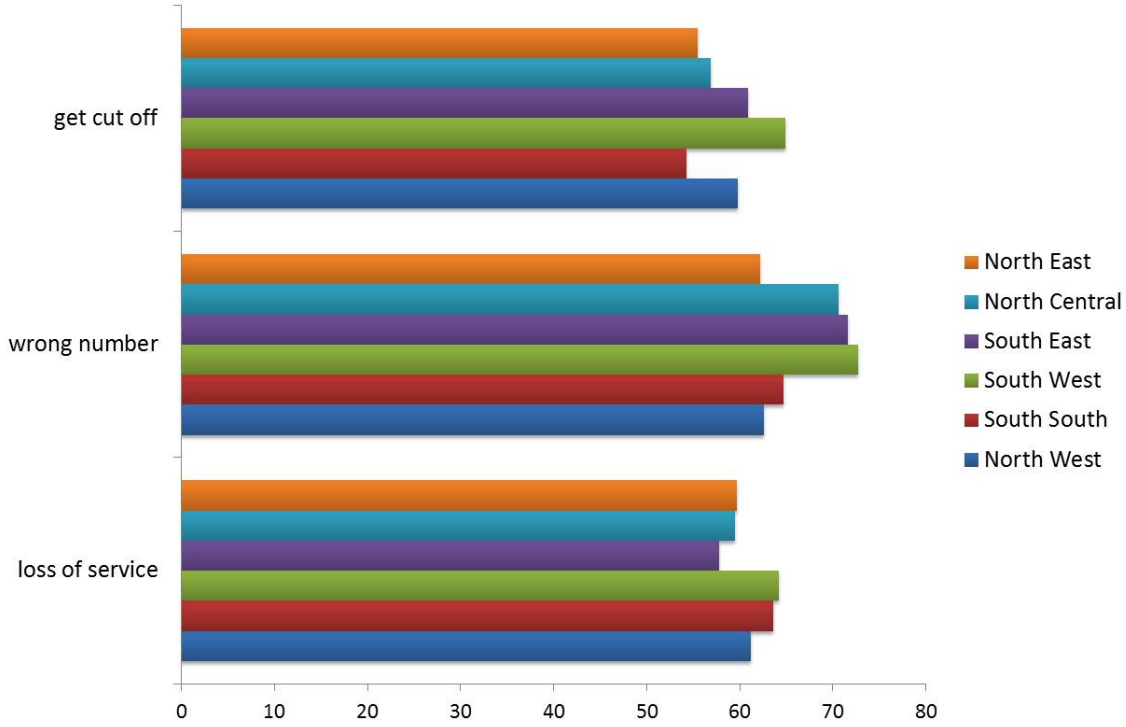


Figure 21 Summary scores (means) - network reliability

Scores among urban respondents were higher, especially for getting connected to a wrong number. Differences between men and women were marginal. The poorest scores were consistently registered by the 25-29 years age group. There was a trend for scores to increase with socio-economic status. Perceptions concerning the frequency of getting cut off were more or less consistent across all frequency of use categories. However, high intensity users appeared to have a more positive view of the frequency of wrong numbers, and low intensity users had a more positive view of loss of service incidents. M-Tel scored highest for

loss of service (and MTN poorest). The spread across operators of scores was smaller for both wrong numbers and getting cut off, but Airtel scores were lowest.

Table 38 Disaggregated scores for network reliability

	Loss of service	Wrong number	Get cut off
Rural/urban			
rural	60.9	65.9	58.5
urban	61.6	68.5	59.8
Gender			
male	-	67.5	59.4
female	-	66.9	58.9
Age group			
15 - 19	61.2	69.1	61.3
20 - 24	62.1	67.5	58.9
25 - 29	60.1	65.3	57.4
30 - 39	61.8	66.4	59.1
40 - 49	61.6	67.0	59.4
50 +	61.0	67.8	59.1
Socio-economic status			
lower class	59.4	64.4	58.3
middle class	62.1	68.8	59.1
upper class	64.5	70.8	61.8
Frequency of use			
less than once a week	63.4	65.8	59.4
1 or more times a week	58.0	64.2	60.8
1 or more times a day	61.7	67.9	58.9
Principal operator			
Etisalat	62.8	67.7	59.8
M-Tel	66.6	67.2	61.6
Globacom	62.3	68.5	59.4
Airtel	61.0	64.5	57.6
MTN	60.9	67.5	59.3
Other	61.3	63.5	61.4

- means **not applicable**

5.1.4. Views on SMS

Spam was felt most acutely in South South zone, as were problems with service availability (inability to send an SMS) (Table 39 – Page 42).

Table 39 "How often are you unable to send SMS?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	15.5	25.1	4.9	20.3	19.2	8.9	6.9
rarely	23.7	16.5	26.3	28.1	27.6	25.4	21.7
sometimes	39.7	40.9	40.4	24.2	36.2	47.2	55.0
often	11.3	7.3	18.7	13.8	8.1	11.4	9.6
almost always	3.7	2.9	4.9	5.4	2.2	3.3	3.3
don't use	4.4	4.2	4.2	8.3	5.3	1.5	1.8
Did not answer	1.6	3.2	0.7	0.0	1.5	2.3	1.8
Total	100	100	100	100	100	100	100

Unsolicited SMS messages (spam) appeared to be quite commonplace, as only 23% of the whole sample said they never or rarely received unsolicited messages (Table 40 – Page 42). Note that respondents were not asked to give any kind of value judgement on unsolicited SMS messages, so although the analysis has assumed that the quality of service was inversely related to the frequency of receiving unsolicited message (i.e. not receiving unsolicited messages was a good thing), there may be exceptions to this e.g. disaster warnings by SMS.

Table 40 "How often do you receive unsolicited SMS?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	10.0	14.5	3.3	9.4	8.8	9.1	11.7
rarely	13.1	14.2	8.2	17.3	12.3	11.9	11.7
sometimes	30.2	30.1	22.7	23.3	28.9	41.9	36.7
often	24.0	11.0	46.1	26.0	24.2	22.4	22.9
almost always	17.2	19.7	16.0	21.8	21.9	9.9	10.9
don't use	2.5	4.5	1.6	2.2	1.0	1.3	3.3
Did not answer	3.0	6.0	2.1	0.0	3.0	3.5	2.8
Total	100	100	100	100	100	100	100

The correct charging of SMS was rated highly – overall, over 70% rated it as good or very good (Table 41 – Page 43).

Table 41 "How would you rate charges: SMS are charged correctly" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.7	9.7	3.6	3.3	2.9	2.7	2.8
poor	13.7	14.7	18.3	16.4	14.6	6.3	10.3
no opinion	6.3	8.6	8.9	2.9	2.7	4.6	9.5
good	56.7	49.2	55.1	53.9	59.0	64.6	64.9
very good	13.9	11.0	10.1	18.5	16.0	18.3	9.6
don't know	2.9	1.8	3.1	4.9	3.4	2.2	1.7
Did not answer	1.9	5.0	0.9	0.0	1.3	1.3	1.3
Total	100	100	100	100	100	100	100

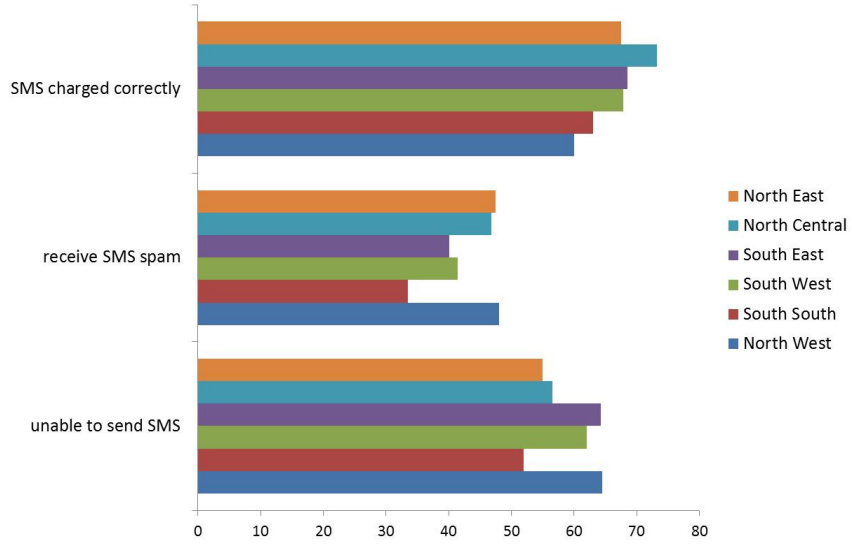


Figure 22 Summary scores (means) - SMS

The correct charging of SMS was scored lower in rural areas, but unsolicited SMS appeared to be regarded as more of a problem by urban respondents. Differences between men and women were marginal. There was a trend for unsolicited SMS to be regarded as more of a problem with increasing age, with the exception of the oldest age group. Scores tended to be highest among the youngest age group. Scores for correct charging were lowest among lower class respondents, but unsolicited messages were regarded as more of a problem among middle and upper class respondents. Least intensive users appear unable to send an SMS most often – note that this may reflect factors not necessarily associated with the network e.g. availability of literate assistant. Perceptions of the frequency of receiving unsolicited SMS messages are considerably higher among the most intensive group of users. Scores for all indicators were high among Etisalat subscribers.

Table 42 Disaggregated scores for SMS services

	Unable to send SMS	Receive SMS spam	SMS charged correctly
Rural/urban			
rural	58.9	44.0	63.4
urban	60.3	42.6	68.8
Gender			
male	60.2	43.8	66.2
female	59.0	42.8	66.0
Age group			
15 - 19	61.6	46.6	68.5
20 - 24	59.3	44.9	65.5
25 - 29	58.1	43.4	65.8
30 - 39	58.9	42.3	65.9
40 - 49	58.2	40.2	65.6
50 +	61.2	43.0	65.7
Socio-economic status			
lower class	60.4	44.2	62.0
middle class	58.4	42.5	69.8
upper class	60.5	42.4	68.1
Frequency of use			
less than once a week	54.5	53.1	61.6
1 or more times a week	59.1	54.2	57.3
1 or more times a day	60.0	40.6	68.1
Principal operator			
Etisalat	61.7	47.0	66.7
M-Tel	53.7	46.8	64.5
Globacom	58.8	43.3	67.6
Airtel	58.1	42.5	66.2
MTN	59.9	42.9	65.7
Other	59.7	48.5	61.2

5.1.5. Views on Value Added Services

Overall, almost one third of respondents used their mobile phone to access value added services[11]; this proportion was similar across zones with the exception of North West zone, where it was only 13% (Table 43 – Page 45).

Table 43 "Do you use your mobile phone to access information or value added services?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
no	69.3	81.9	62.6	70.9	61.9	64.7	63.4
yes	28.5	12.8	36.8	29.1	36.9	32.8	34.6
Did not answer	2.2	5.3	0.6	0.0	1.2	2.5	1.9
Total	100	100	100	100	100	100	100

Table 44 "How often have you had difficulty accessing VAS?" - among VAS users (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	8.8	11.4	5.3	13.9	9.4	4.7	8.1
rarely	22.3	10.0	25.2	35.7	20.2	13.4	21.1
sometimes	53.7	59.2	54.7	37.7	52.7	67.3	56.0
often	9.2	8.1	10.6	9.9	9.8	10.1	5.8
almost always	2.9	4.5	2.6	2.8	2.3	2.3	3.2
Did not answer	3.3	6.8	1.6	0.0	5.6	2.2	5.8
Total	100	100	100	100	100	100	100

Table 45 "How would you rate charges: info/VAS are charged correctly?" - among VAS users (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.4	4.4	6.6	4.0	5.6	3.0	2.6
poor	19.0	21.7	28.9	14.8	23.8	13.5	12.7
no opinion	10.5	8.6	15.2	6.1	8.1	14.4	10.6
good	46.6	38.8	36.9	53.7	47.0	43.9	55.3
very good	11.4	6.5	8.9	14.9	11.1	14.3	10.5
don't know	6.3	12.9	2.7	6.4	3.3	8.2	6.8
Did not answer	1.8	7.1	0.8	0.0	1.1	2.7	1.4
Total	100	100	100	100	100	100	100

[11] Information or value added services e.g. downloads, mobile banking etc.

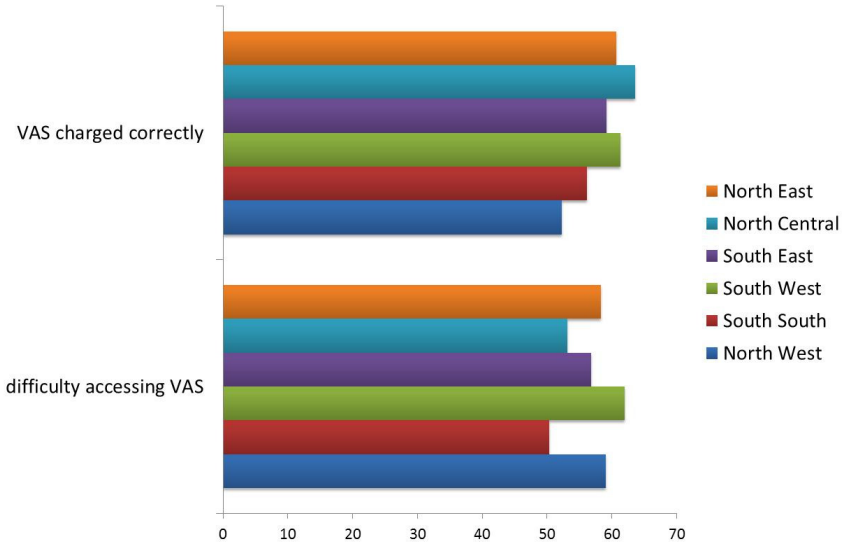


Figure 23 Summary scores (means) – VAS

Rural respondents registered lower scores for the correct charging for VAS. Women registered slightly lower scores. Scores tended to be highest among the youngest age group. Differences between middle class and upper class respondents were marginal, but scores registered by lower class respondents were lower. Low intensity users expressed least difficulty accessing VAS services, but they were most likely to feel that services were not charged correctly. Etisalat subscribers scored both indicators highly, and MTN subscribers rated them poorly.

Table 46 Disaggregated scores for Value Added Services

	Difficulty accessing VAS	VAS charged correctly
Rural/urban		
rural	-	56.9
urban	-	60.3
Gender		
male	56.6	59.3
female	55.4	57.9
Age group		
15 - 19	59.1	60.6
20 - 24	55.5	58.6
25 - 29	55.5	58.1
30 - 39	55.8	58.4
40 - 49	54.0	57.8
50 +	55.9	58.4
Socio-economic status		
lower class	54.9	54.4
middle class	56.5	61.9
upper class	57.3	61.0
Frequency of use		
less than once a week	60.0	52.3
1 or more times a week	56.9	54.3
1 or more times a day	55.4	59.9
Principal operator		
Etisalat	57.2	61.8
M-Tel	54.9	60.0
Globacom	55.8	60.3
Airtel	57.8	58.4
MTN	55.5	57.7
Other	57.2	57.9

- means **not applicable**

5.1.6. Recharge Service (pre-paid accounts)

Across the four indicators, the recharge service (for pre-paid account holders) was rated highly – around 80% rated the various aspects as good or very good. Only the ability to check account balance was rated slightly lower (Table 50 – Page 49). There was a pattern of high ratings in North Central, South East and South West zones, and poorer ratings in North West and South South zones.

Table 47 How would you rate: availability of recharge service - among pre-paid account holders (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	2.5	4.4	2.3	2.0	1.4	1.4	2.1
poor	11.2	17.1	15.6	9.7	8.1	6.8	6.3
no opinion	5.1	6.0	7.0	1.2	1.4	2.2	13.4
good	56.6	56.8	47.6	61.7	60.3	54.2	57.6
very good	22.3	10.9	25.2	25.1	27.5	33.5	18.0
don't know	0.7	0.8	0.3	0.2	0.4	0.8	1.5
Did not answer	1.7	4.0	2.0	0.0	0.9	1.1	1.2
Total	100	100	100	100	100	100	100

Table 48 How would you rate: correct amount is added to your account balance - among pre-paid account holders (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	2.4	5.2	2.5	1.3	0.9	1.7	1.3
poor	9.1	13.3	15.4	8.6	6.3	3.7	4.5
no opinion	5.7	7.5	6.8	1.4	1.6	2.6	14.6
good	57.5	57.6	55.1	61.3	58.2	54.4	56.5
very good	22.6	11.1	17.4	27.0	31.6	34.7	20.0
don't know	0.8	0.7	0.8	0.4	0.3	1.6	1.4
Did not answer	1.9	4.6	2.1	0.0	1.1	1.4	1.7
Total	100	100	100	100	100	100	100

Table 49 How would you rate: time taken for credit to appear on your account - among pre-paid account holders (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	2.2	3.2	2.8	1.6	1.3	2.2	1.5
poor	11.1	15.3	17.6	10.5	9.8	5.0	6.0
no opinion	6.7	7.6	6.1	1.5	2.1	7.9	16.0
good	55.8	54.5	48.0	61.9	59.8	52.4	56.9
very good	21.0	12.9	21.9	24.1	25.3	29.3	16.2
don't know	1.1	0.9	1.4	0.4	0.7	1.6	1.8
Did not answer	2.2	5.5	2.2	0.0	1.1	1.5	1.7
Total	100	100	100	100	100	100	100

Table 50 How would you rate: ability to check your account balance - among pre-paid account holders (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	3.0	4.5	2.9	3.1	1.1	2.9	2.0
poor	12.4	15.5	20.1	10.4	11.4	9.4	6.6
no opinion	7.3	8.0	7.3	1.6	1.6	10.5	16.5
good	54.6	53.1	51.0	59.3	58.3	50.5	54.5
very good	19.2	12.4	14.9	25.3	25.8	23.4	15.4
don't know	1.3	1.6	1.5	0.3	0.6	1.9	1.9
Did not answer	2.3	4.9	2.5	0.0	1.3	1.5	3.0
Total	100	100	100	100	100	100	100

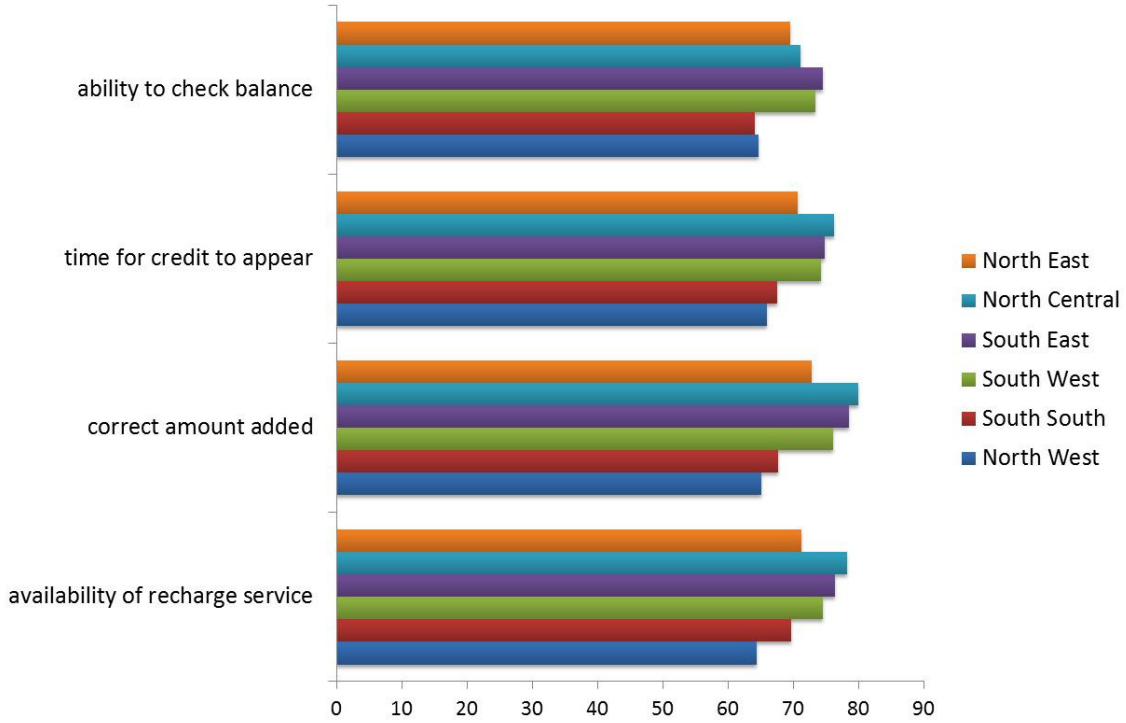


Figure 24 Summary scores (means) - recharge service

Scores registered by rural respondents were consistently lower than those of urban respondents. Women registered slightly lower scores across all indicators. Scores were consistently highest among the youngest age group, but among other age groups, there was a trend for scores to increase with age for both availability of the recharge serve and adding correct amount to the account. Scores were consistently highest among middle class respondents, slightly lower among upper class respondents, and considerably lower among lower class respondents. Scores were mostly lowest among MTN subscribers, although the spread of scores across operators was small.

Table 51 Disaggregated scores for recharge services (pre-paid accounts)

	Availability of recharge service	Correct amount added	Time for credit to appear	Ability to check balance
Rural/urban				
rural	69.5	70.4	69.0	67.4
urban	74.1	75.1	73.5	71.2
Gender				
male	72.4	73.2	72.0	69.9
female	71.2	72.3	70.4	68.7
Age group				
15 - 19	73.3	74.8	73.5	71.1
20 - 24	69.9	71.7	70.6	68.5
25 - 29	70.7	71.8	70.4	68.0
30 - 39	71.6	72.4	70.8	69.4
40 - 49	71.8	72.7	71.1	69.4
50 +	72.8	73.1	71.1	69.5
Socio-economic status				
lower class	68.0	68.8	67.5	65.9
middle class	75.4	76.4	74.7	72.1
upper class	73.2	74.4	72.9	71.9
Frequency of use				
less than once a week	64.1	64.5	64.0	63.2
1 or more times a week	62.7	64.6	63.1	61.8
1 or more times a day	74.1	74.9	73.3	71.2
Principal operator				
Etisalat	72.6	73.3	72.6	71.5
M-Tel	78.0	75.6	75.4	71.4
Globacom	72.3	74.2	72.7	70.7
Airtel	72.0	72.1	71.1	70.0
MTN	71.5	72.5	70.7	68.5
Other	65.8	64.6	67.3	63.1

5.1.7. Complaints Handling - Mobile

Overall, one third of respondents had made a complaint in the last year (Table 52 – Page 52). The frequency of complaints (in the last year) does not appear to be linked to any particular feature of service provision, with one exception – more sophisticated consumers, who use their phone to access VAS, tended to complain more frequently (r_s = 0.227, p = 0.000).

Table 52 "How often have you made a complaint in the last year?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	64.0	68.9	65.4	69.2	59.1	50.2	65.5
once	14.2	9.4	18.8	12.0	17.2	19.6	13.0
2 - 5 times	12.8	6.5	10.7	12.6	14.5	22.0	15.2
more than 5 times	4.8	3.7	3.2	6.2	6.2	5.5	4.0
Did not answer	4.2	11.5	1.9	0.0	3.1	2.7	2.3
Total	100	100	100	100	100	100	100

The highest level of complaints was registered in North Central zone. Across all zones, complaints were most commonly lodged by phone (Table 53 – Page 52).

Table 53 "How did you usually contact Customer Services?" - among those who made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
by phone	89.6	84.5	81.0	90.2	91.0	95.4	92.9
visit to Customer Care centre	7.9	12.3	13.5	8.9	6.5	3.0	5.0
Did not answer	2.5	3.2	5.5	0.9	2.4	1.6	2.1
Total	100	100	100	100	100	100	100

Overall, complaints most commonly concerned problems with recharging and with charging and billing (Table 54 – Page 53).

Table 54 "The last time you made a complaint, what was it about?" – among those who made a complaint (%), by zone

	Whole sample	North West	South South	South West	South East	North Central	North East
Incorrect charging / billing	20.1	19.6	19.0	31.6	19.4	10.8	20.4
Inability to make / receive voice calls	13.8	6.6	14.9	12.1	15.6	14.6	19.8
Request for Value Added service	8.7	1.7	11.2	5.9	8.9	13.9	8.8
Time to resolve an existing complaint	4.8	1.2	5.0	5.0	4.4	6.2	6.4
Blackberry complaint	2.3	0.6	4.5	3.3	1.1	1.9	2.3
Inability to recharge	22.4	40.6	18.5	20.0	20.0	24.9	9.6
paying a bill	2.5	1.1	4.4	1.1	2.5	2.5	3.9
SMS	5.7	7.4	5.5	4.2	3.5	6.7	6.8
Data complaint	4.5	2.3	1.6	5.5	6.7	5.0	5.4
other	11.3	12.9	7.9	10.9	14.4	9.9	12.8
Did not answer	3.9	6.1	7.4	0.2	3.5	3.6	3.8
Total	100	100	100	100	100	100	100

Incorrect charging / billing appeared to be of particular concern in South West zone, and among Airtel subscribers (Table 55 – Page 53); inability to recharge was the leading concern in North West zone.

Table 55 "The last time you made a complaint, what was it about?" – among those who made a complaint (%), by operator

	Whole sample	Etisalat	Globacom	Airtel	MTN
Incorrect charging / billing	20.1	17.9	20.5	25.4	19.0
Inability to make / receive voice calls	13.8	11.2	11.5	13.1	14.8
Request for Value Added service	8.7	12.5	9.6	6.2	8.7
Time to resolve an existing complaint	4.8	3.8	4.8	5.4	4.8
Blackberry complaint	2.3	2.2	2.1	2.1	2.4
Inability to recharge	22.4	24.8	22.4	19.1	23.0
paying a bill	2.5	1.9	3.5	3.0	2.3
SMS	5.7	5.3	7.0	5.6	5.4
Data complaint	4.5	6.8	4.8	4.0	4.3
other	11.3	8.7	10.2	12.6	11.6
Did not answer	3.9	4.8	3.6	3.4	3.8
Total	100	100	100	100	100

Among those who made a complaint, poorest ratings for aspects of the complaints handling process were given to time to answer their call (Table 57 – Page 54) and to the time taken to resolve their complaint (Table 61 – Page 55). Ratings for both indicators were low in North Central zone. The staff that people talked to (e.g. polite, knowledgeable) got the highest ratings in all zones.

Table 56 "How would you rate aspects of complaints handling: finding the right number to call?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	5.5	8.0	3.0	6.1	5.4	6.0	3.8
poor	17.1	17.4	15.3	19.0	22.1	15.7	13.0
no opinion	7.0	5.2	21.2	4.1	3.8	3.6	6.8
good	54.8	55.8	44.5	50.9	52.6	60.4	63.1
very good	12.4	7.9	9.5	19.1	12.4	11.9	11.4
don't know	1.1	3.0	1.3	0.7	0.9	0.6	0.7
Did not answer	2.1	2.8	5.1	0.0	2.8	1.8	1.3
Total	100	100	100	100	100	100	100

Table 57 "How would you rate aspects of complaints handling: time taken to answer call?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	21.4	12.1	12.3	50.4	21.2	13.8	11.8
poor	24.3	27.9	18.9	0.0	37.1	40.4	22.4
no opinion	8.2	5.4	16.4	2.5	2.9	12.6	9.2
good	35.0	42.0	34.6	36.3	29.9	24.8	46.8
very good	7.2	6.2	10.0	10.0	5.5	4.5	7.6
don't know	1.1	2.0	0.9	0.8	0.8	1.4	0.6
Did not answer	2.9	4.4	7.0	0.0	2.7	2.6	1.6
Total	100	100	100	100	100	100	100

Table 58 "How would you rate aspects of complaints handling: effectiveness of IVR service?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	11.4	6.8	3.4	27.2	7.3	11.9	5.4
poor	14.2	18.1	9.8	0.0	26.4	20.6	12.7
no opinion	9.7	7.2	19.2	6.4	6.5	9.5	10.7
good	46.5	47.1	37.3	46.5	46.0	43.8	59.8
very good	12.8	10.1	21.4	18.2	8.7	10.1	7.3
don't know	2.3	5.6	1.8	1.8	1.9	1.6	1.7
Did not answer	3.1	5.1	7.1	0.0	3.2	2.5	2.3
Total	100	100	100	100	100	100	100

Table 59 "How would you rate aspects of complaints handling: staff you talked to?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.9	2.8	1.9	12.3	1.8	1.7	8.0
poor	6.9	12.3	13.4	0.0	9.4	3.6	6.9
no opinion	5.6	5.2	11.9	3.9	2.8	3.8	7.6
good	47.9	48.3	38.5	49.1	55.3	48.3	47.4
very good	29.2	20.8	22.9	33.3	27.5	38.6	26.1
don't know	1.8	4.1	3.0	1.4	0.6	1.1	1.2
Did not answer	3.6	6.6	8.3	0.0	2.7	2.9	2.7
Total	100	100	100	100	100	100	100

Table 60 "How would you rate aspects of complaints handling: resolution of your complaint?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	12.5	8.2	6.2	28.5	4.5	9.8	13.2
poor	15.6	17.2	13.8	0.0	24.9	20.4	21.0
no opinion	10.1	5.8	16.5	4.1	3.6	16.1	13.4
good	42.4	41.3	37.8	47.3	48.0	40.8	38.1
very good	14.0	16.6	14.4	19.3	16.0	8.7	9.8
don't know	1.2	0.8	2.3	0.9	0.3	1.2	1.9
Did not answer	4.2	9.9	9.0	0.0	2.7	3.1	2.5
Total	100	100	100	100	100	100	100

Table 61 "How would you rate aspects of complaints handling: time to resolve your complaint?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	21.9	6.9	11.8	38.1	9.8	32.1	22.0
poor	18.3	22.0	25.6	0.0	33.9	16.1	20.3
no opinion	6.3	4.8	13.8	4.1	4.0	4.7	8.1
good	34.5	33.6	25.9	41.6	36.7	34.3	32.2
very good	11.9	15.0	8.4	15.4	11.9	8.3	12.8
don't know	1.4	1.4	2.5	0.7	0.6	1.4	2.3
Did not answer	5.6	16.3	11.9	0.0	3.1	3.2	2.2
Total	100	100	100	100	100	100	100

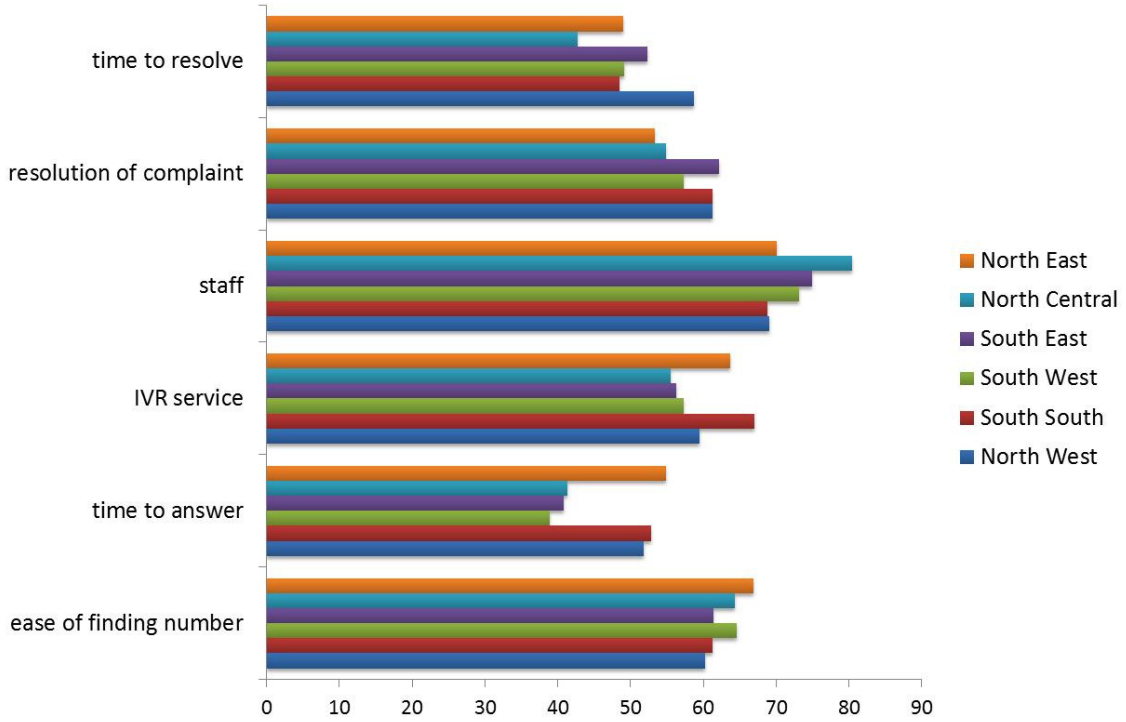


Figure 25 Summary scores (means) - complaints handling

There is some evidence that the customer care experienced through Customer Care centres was more timely – see Figure 26 (Page 56).

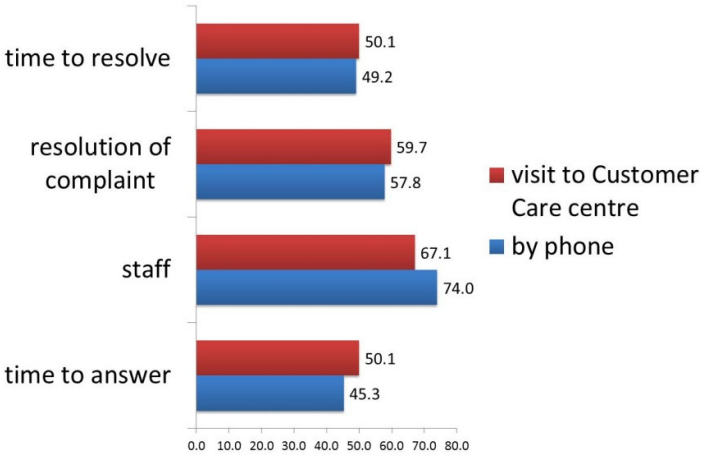


Figure 26 Rating of customer care experienced through call centres and Customer Care centres (whole sample)

Only for certain indicators were scores lower among rural respondents – satisfactory and timely resolution of complaints, and quality of staff. Men rated the IVR service more poorly than women did, and women rated the quality of staff more poorly. No clear trends with age were evident. Scores for time to answer decrease with socio-economic status, yet scores for time taken to resolve the complaint increase with socio-economic status. Finding the right number to call, and the quality of staff were scored lowest by lower class respondents. Overall, least intensive users tended to rate aspects of the complaints

handling process more poorly. Etisalat subscribers rated all aspects of complaints handling highly.

Table 62 Disaggregated scores for complaints handling

	ease of finding number	time to answer	IVR service	staff	resolution of complaint	time to resolve
Rural/urban						
rural	-	-	59.1	72.1	55.8	47.7
urban	-	-	59.6	74.4	59.9	50.9
Gender						
male	-	-	58.5	74.1	-	-
female	-	-	60.2	72.7	-	-
Age group						
15 - 19	62.3	45.7	57.3	73.2	55.0	46.0
20 - 24	60.9	47.1	60.8	73.4	59.6	51.4
25 - 29	62.7	44.4	59.8	73.7	59.8	49.6
30 - 39	63.1	44.5	57.7	72.6	57.8	50.2
40 - 49	63.8	47.6	61.5	73.8	58.8	50.7
50 +	67.0	47.5	60.3	73.9	57.7	48.9
Socio-economic status						
lower class	60.2	47.4	58.3	71.3	57.6	48.3
middle class	65.1	46.2	60.0	75.4	58.2	49.3
upper class	64.9	42.6	60.0	72.3	58.5	51.6
Frequency of use						
less than once a week	50.7	46.3	-	62.3	53.0	43.9
1 or more times a week	59.2	49.4	-	66.5	55.4	49.7
1 or more times a day	65.0	45.2	-	75.6	58.9	49.6
Principal operator						
Etisalat	-	49.9	63.2	75.7	64.3	56.6
M-Tel	-	38.3	45.5	61.7	61.7	52.0
Globacom	-	48.0	62.2	74.4	60.0	51.0
Airtel	-	48.5	63.3	70.5	54.9	49.0
MTN	-	44.7	57.6	73.6	57.5	48.2
Other	-	44.8	62.5	71.5	58.9	55.2

- means **not applicable**

5.1.8. Key Satisfaction Indicators - Mobile

Perceived value for money offered by services paid for (Table 64 – Page 58) was rated higher than the extent to which the quality of services was in line with expectations (Table 63 - Page 58). Note that perceived value was highest in North West zone, in which intensity of use was lowest (Table 24 – Page 34) and which has the lowest socio-economic status. The gap between perceived quality of services and fulfilment of expectations is greatest in North East and North Central zones (Table 63 – Page 58).

There was a trend across all four indicators for scores to be lowest in North East zone, and highest in South East and North West zones.

Table 63 "To what extent is the quality of services in line with your expectations?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
much lower	6.7	9.0	3.2	5.7	5.3	5.5	10.2
lower	29.7	19.6	31.9	32.1	29.5	31.6	39.5
in line	31.1	27.1	35.9	28.1	27.0	43.5	28.0
higher	21.8	23.0	21.6	27.9	29.2	12.2	14.8
much higher	3.2	2.9	3.3	4.9	5.2	1.5	1.3
don't know	2.8	5.6	1.4	1.3	1.0	1.8	3.8
Did not answer	4.7	12.8	2.6	0.0	2.8	3.8	2.3
Total	100	100	100	100	100	100	100

Table 64 "Overall, how would you rate the value for money offered by the services you pay for?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.8	4.9	4.0	4.4	6.2	5.3	4.7
poor	26.0	15.8	26.1	32.7	29.0	28.2	28.9
no opinion	10.2	11.1	13.2	4.8	4.4	10.1	18.3
good	46.8	46.1	48.3	51.1	48.9	48.1	37.4
very good	4.8	4.0	4.7	6.0	8.0	2.6	3.8
don't know	2.3	3.9	1.0	1.1	0.7	1.9	4.5
Did not answer	5.1	14.2	2.7	0.0	2.9	3.9	2.3
Total	100	100	100	100	100	100	100

Table 65 "Overall, how satisfied are you with your mobile operator?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very dissatisfied	3.8	4.2	2.3	3.1	4.9	4.5	4.3
dissatisfied	26.2	19.5	27.2	31.1	28.4	25.2	28.5
no opinion	11.1	12.5	12.6	4.3	3.9	13.0	21.6
satisfied	49.7	46.7	51.4	55.4	52.8	51.2	40.3
very satisfied	4.6	4.6	4.1	6.1	7.1	2.2	3.0
Did not answer	4.6	12.4	2.4	0.0	2.9	3.8	2.3
Total	100	100	100	100	100	100	100

Table 66 "How likely are you to change to an alternative operator (in next year)?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very likely	8.1	4.9	7.2	17.3	7.0	3.9	6.1
likely	27.0	15.5	26.6	44.8	24.1	21.4	29.5
no opinion	15.9	24.7	16.8	4.5	8.1	14.2	25.3
unlikely	31.0	25.9	38.1	24.0	41.3	38.6	26.0
very unlikely	6.6	8.4	4.7	6.1	12.9	3.3	4.4
don't know	6.3	6.9	3.7	3.2	3.3	14.5	6.3
Did not answer	5.0	13.7	2.8	0.0	3.2	3.9	2.6
Total	100	100	100	100	100	100	100

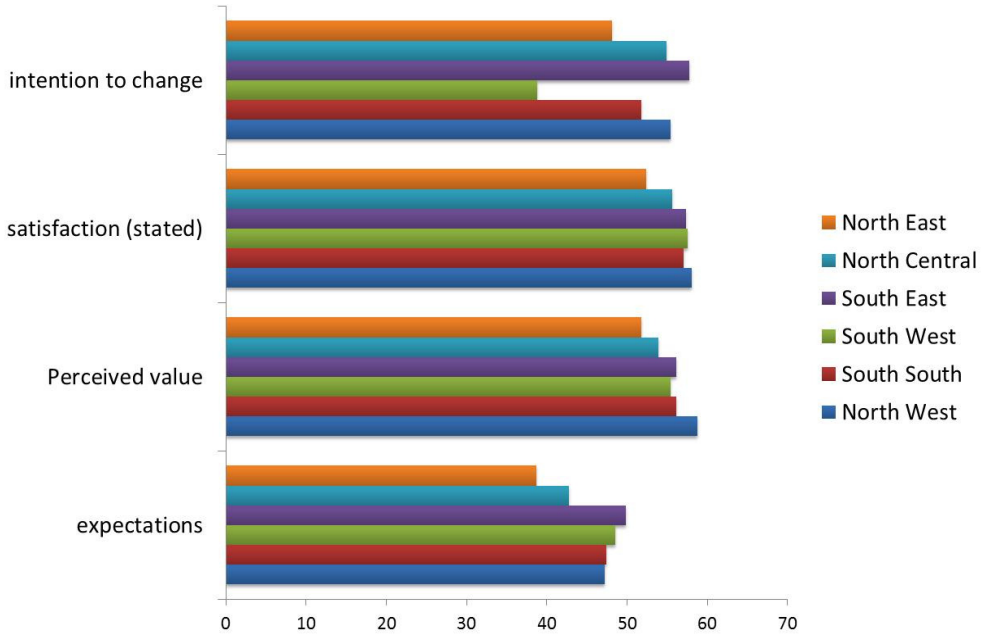


Figure 27 Summary scores (means) - satisfaction statements

It can be seen from Table 67 (Page 60) below (whole sample) that both expectations and perceived value correlated closely with stated satisfaction, suggesting that these three indicators were related to a single attribute. The question on intention to change to an alternative operator (in the next year) provided a cross-check on satisfaction, on the basis that satisfied customers will be less likely to change (or express a willingness to change) than dissatisfied customers. Table 67 (Page 60) confirms that this relationship was indeed evident in the data set as a whole. However, despite relatively high scores for the other indicators, the intention score was clearly lowest in South West zone. Investigation of relationships within each zone confirms that the expressed intention to change operator is only weakly (and inversely) linked to stated satisfaction in South West zone. The finding that customers with higher levels of satisfaction expressed a greater likelihood of changing operator suggests that change is driven by factors other than satisfaction.

Table 67 Relation of satisfaction statements with Stated Satisfaction (Spearman correlation coefficients) - by zone

	Whole sample	North West	South South	South West	South East	North Central	North East
Intention to change	0.218**	0.149**	0.327**	-0.151**	0.425**	0.449**	0.328**
Expectations	0.598**	0.486**	0.644**	0.57**	0.667**	0.633**	0.622**
Perceived value	0.725**	0.605**	0.749**	0.749**	0.733**	0.775**	0.758**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

All satisfaction indicators were higher among urban respondents. Scores were marginally higher among men, with the exception of intention to change to an alternative operator, suggesting that women were more reluctant to change operator than men. The youngest age group registered highest scores for expectations, while scores for intention to change to an alternative operator were lowest among the 25 – 39 years age groups.

Overall, scores for satisfaction indicators increased with socio-economic status, with the exception of intention to change to an alternative operator, which exhibited an opposite trend; this suggests that higher status customers are more willing to change, irrespective of the level of service enjoyed. Indicators were rated highest among most intensive users, with the exception of intention to change, which showed only a modest spread of scores. Stated satisfaction was highest among Etisalat subscribers, , as were scores for alignment of services with expectations, and intention to change. Scores for these indicators tended to be lowest among MTN subscribers, with the exception of intention to change operator, indicating that MTN subscribers remain relatively loyal.

Table 68 Disaggregated scores for key satisfaction indicators

	Expectations	Perceived value	Satisfaction (stated)	Intention to change
Rural/urban				
rural	43.2	52.9	53.9	49.3
urban	48.7	58.2	59.1	51.3
Gender				
male	46.5	56.0	56.7	49.4
female	45.5	55.2	56.3	51.1
Age group				
15 - 19	47.3	56.6	58.6	51.3
20 - 24	45.9	54.2	55.9	50.6
25 - 29	45.8	55.5	56.5	49.1
30 - 39	45.9	55.3	56.5	49.1
40 - 49	45.7	55.5	56.6	50.2
50 +	45.5	56.2	55.5	51.5
Socio-economic status				
lower class	43.5	53.8	54.0	52.1
middle class	47.0	56.8	58.3	50.8
upper class	49.7	57.1	58.9	44.1
Frequency of use				
less than once a week	41.7	53.3	52.1	48.0
1 or more times a week	40.1	49.8	51.7	50.8
1 or more times a day	47.3	56.8	57.7	50.3
Principal operator				
Etisalat	47.9	57.9	59.5	52.7
M-Tel	50.2	47.9	56.4	38.5
Globacom	46.8	56.4	57.5	49.2
Airtel	46.1	58.0	57.3	47.6
MTN	45.4	54.5	55.7	50.9
Other	47.1	59.8	57.4	50.4

5.1.9. Summary of Scores - Mobile

The mean scores presented in Figure 28 (Page 62) indicate that, overall, the most positive aspect of service provision was the recharge service. Note that scores for VAS and complaints are based on respondents who have used VAS and who had made a complaint in the last year i.e. they were subsets of the whole sample.

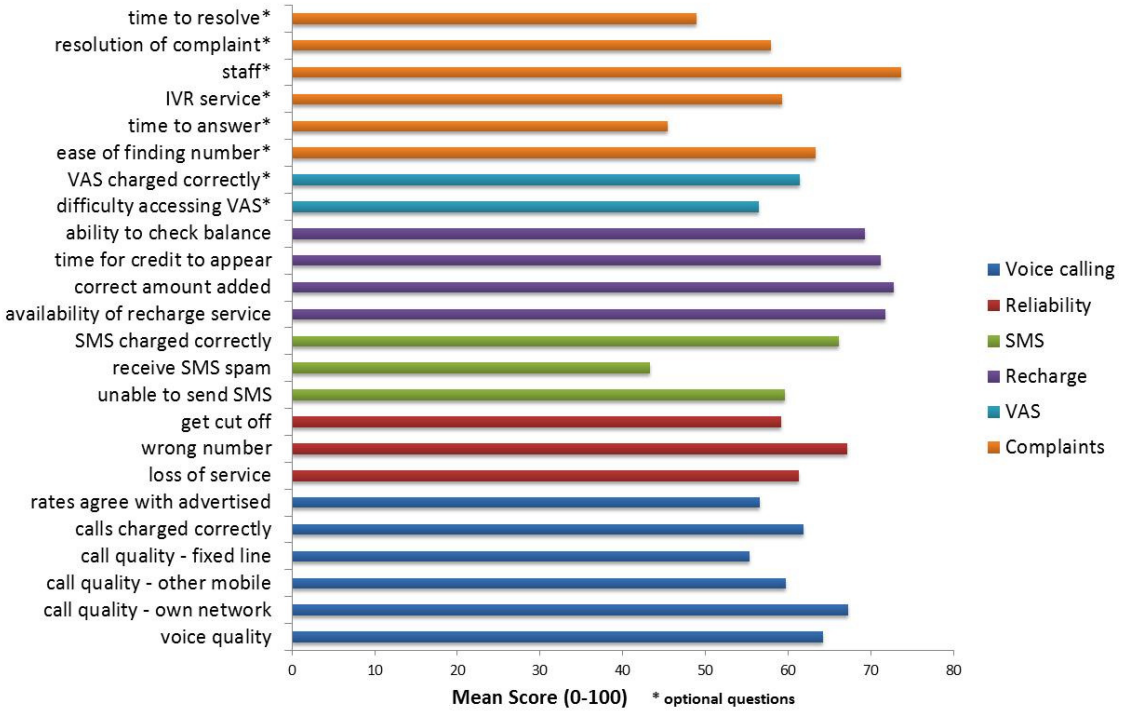


Figure 28 Mean scores by categories of enquiry (whole sample) - Mobile

5.2. Customer Satisfaction Index

5.2.1. Calculating Customer Satisfaction Index (CSI) - Mobile

Composite variables have been calculated for each of the constructs used in the NCC CSI - Mobile:

1. Primary service (call quality & charging)
2. Recharge service
3. Convenience

Mean scores for these and the statement variables are presented in Table 69 (Page 63). This indicates that satisfaction was lowest in North East zone, but roughly the same across all the other zones. Note that scores for intention to change to alternative provider (which provides a cross-check on satisfaction) was also lower in North East zone, but it was considerably lower still in South West zone. This suggests that customers in South West zone, although satisfied with their existing service, believed they could get even better service from an alternative operator. However, there was no evidence that the expectations gap (or any of the other variables for that matter) were lower in South West zone.

Table 69 Mean scores for Key Satisfaction variables - by zone

Mean scores (0-100)	Whole sample	North West	South South	South West	South East	North Central	North East
Primary Service (composite)	62.7	58.3	60.6	64.6	61.8	67.1	64.3
Recharge service (composite)	71.4	65.1	67.3	74.6	76.3	76.6	71.4
Convenience (composite)	58.3	60.3	53.5	61.0	59.1	58.2	55.8
Expectations (stated)	55.6	58.7	56.2	55.5	56.1	53.9	51.8
Perceived value (stated)	56.5	58.0	57.1	57.6	57.4	55.6	52.3
Satisfaction (stated)	62.7	58.3	60.6	64.6	61.8	67.1	64.3
Intention to change (stated)	71.4	65.1	67.3	74.6	76.3	76.6	71.4

The Customer Satisfaction Index was calculated as the mean of the following key variables:

- Primary service (call quality + charging)
- Recharge service
- Expectations
- Perceived value

For those respondents who had made a complaint (in the last year), the Customer Care Index was calculated as the mean of the six variables relating to complaints handling.

Mean scores for the whole sample were 59.1 ± 0.2 (95% confidence interval) and 58.2 ± 0.4 (95% confidence interval) for the Customer Satisfaction Index and Customer Care Index respectively; the breakdown by zones is presented in Figure 29 (Page 64). This shows that

customer satisfaction was lowest in North West and North East zones. It is interesting to note that the Customer Care Index was relatively high in both of these zones, and the Customer Care Index was lowest in South West zone, which enjoyed the highest Customer Satisfaction Index score. This suggests that in zones where service was poor, customers expressed greater appreciation for the support they were given.

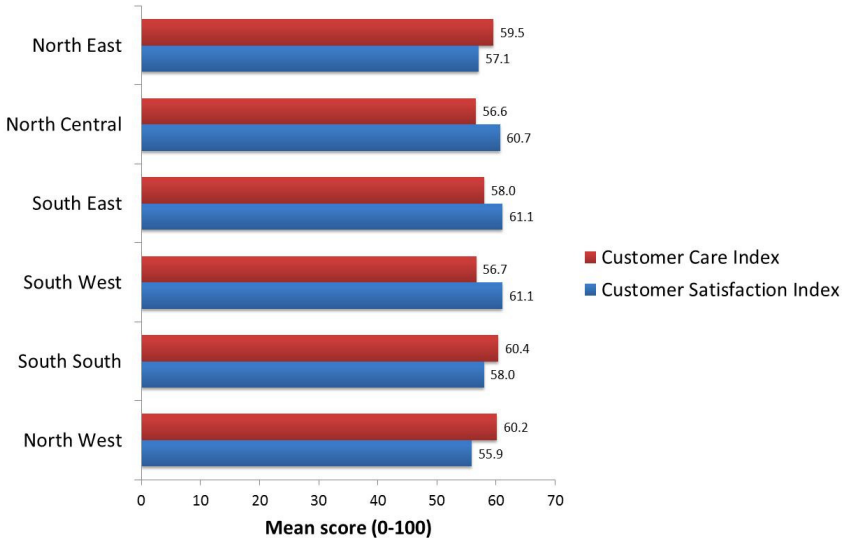


Figure 29 Customer Satisfaction Index and Customer Care Index - by zone

5.2.2. CSI, CCI, Demographics and Phone Use - Mobile

Comparing the calculated values of the NCC Customer Satisfaction and Customer Care indices between key groupings (Table 70 – Page 65) shows some interesting characteristics:

- Customer satisfaction scores were higher in urban areas, whereas differences in the NCC Customer Care index - Mobile were marginal;
- Differences between men and women were marginal;
- There was a trend of increasing NCC CSI scores - Mobile with age (although the trend was weak).
- The spread of NCC CSI scores - Mobile across operators was only 3.1 points– from 58.2 (MTN) to 61.3 (Etisalat) – see Table 70. Note that MTN is by far the most commonly used operator, yet it received the lowest NCC CSI scores - Mobile. The spread of NCC CCI scores - Mobile (excluding M-Tel) was also modest (4.6) - ranging from 57.4 (MTN) to 62.0 (Etisalat).

Table 70 Disaggregated scores for composite indices

	Customer Satisfaction Index	Customer Care Index
Area		
rural	56.5	57.4
urban	61.8	58.9
Gender		
male	59.8	-
female	58.4	-
Age group		
15 - 19	60.3	56.2
20 - 24	58.0	58.9
25 - 29	58.8	58.3
30 - 39	59.0	57.8
40 - 49	59.3	59.1
50 +	59.4	59.5
Socio-economic status		
lower class	55.9	57.0
middle class	61.4	59.2
upper class	61.2	58.2
Frequency of use		
less than once a week	53.6	51.1
1 or more times a week	52.1	56.6
1 or more times a day	60.8	59.0
Operator		
Etisalat	61.3	62.0
M-Tel	60.3	52.5
Globacom	60.8	59.9
Airtel	60.1	58.8
MTN	58.2	57.4

- means **not applicable**

When looking at differences in NCC CSI scores - Mobile between demographic groupings on a zone by zone basis, the following were evident (Table 71 – Page 66):

- The gap between NCC CSI scores - Mobile in rural and urban areas was greatest in North West zone;
- Only in North West zone was the difference between men and women sizeable;
- The spread of scores across age groups was lowest in South West zone, and high in North West and South South zones – in North West zone NCC CSI score - Mobile was lowest among the oldest age group (50 years and over), yet in South South zone this group registered the highest NCC CSI scores - Mobile;

Table 71 Customer Satisfaction Index – disaggregated by zone

	North West	South South	South West	South East	North Central	North East
Rural/urban						
rural	49.5	54.0	59.1	59.5	-	55.1
urban	61.9	62.0	63.2	62.9	-	59.2
Gender						
male	59.3	-	-	-	-	57.8
female	52.7	-	-	-	-	56.5
Age group						
15 - 19	60.4	56.9	-	60.2	61.2	58.9
20 - 24	56.8	54.1	-	59.4	58.7	55.6
25 - 29	58.5	55.6	-	60.7	59.8	57.4
30 - 39	56.9	56.0	-	61.3	61.1	55.8
40 - 49	56.3	59.7	-	63.0	60.2	54.5
50 +	50.4	63.2	-	62.1	61.9	59.3
Operator						
Etisalat	57.4	58.5	66.3	67.2	62.6	56.4
M-Tel	50.5		64.0	-	-	-
Globacom	61.1	59.4	60.9	67.5	62.2	56.6
Airtel	58.9	59.8	62.6	65.6	59.4	57.1
MTN	53.9	57.4	60.0	59.7	60.1	56.5

- means **not applicable**

When looking at differences in NCC CCI – Mobile scores between demographic groupings on a zone by zone basis (Table 72 – Page 67), the following were evident:

- The gap between NCC CCI - Mobile in rural and urban areas was greatest in South South zone; only in North Central was a higher index registered by rural respondents;
- Only in North East zone did men register a higher NCC Customer Care Index score than women;
- The spread of scores across age groups was highest in North West and South South zones;
- Etisalat scored well in North West and North Central zones, Globacom in South East and North East zones, and Airtel in South South zone; differences in South West zone were not significant.

Table 72 Customer Care Index – disaggregated by zone

	North West	South South	South West	South East	North Central	North East
Rural/urban						
rural	57.5	55.3	-	56.1	57.9	-
urban	62.4	63.5	-	59.7	55.3	-
Gender						
male	-	-	-	-	-	60.5
female	-	-	-	-	-	58.5
Age group						
15 - 19	63.5	56.2	-	56.2	52.5	57.1
20 - 24	61.3	54.0	-	57.9	59.2	63.4
25 - 29	57.4	58.8	-	59.8	57.3	58.7
30 - 39	56.6	60.0	-	58.4	57.7	58.2
40 - 49	58.9	64.6	-	59.1	58.1	58.1
50 +	66.5	66.5	-	57.2	56.6	60.4
Operator						
Etisalat	69.1	55.3	-	60.4	62.9	58.2
M-Tel	-	-	-	-	-	-
Globacom	60.4	61.4	-	63.4	60.1	62.6
Airtel	59.2	64.6	-	59.6	58.9	57.3
MTN	59.1	59.9	-	57.4	54.8	59.7

- means **not applicable**

6. Fixed Phones

6.1. Survey Data

6.1.1. Descriptors - Fixed

Overall, 0.9% of the sample answered the fixed phone questions (N=419), but it can be seen from Table 73 (Page 68) that most of these were drawn from three zones (North West, South South and South West). The small sample sizes within each zone make it difficult to

draw any conclusions on differences between zones; the analysis has, therefore, been conducted on the data set as a whole.

Table 73 Distribution of fixed phone users across zones

	Frequency	Percent
North West	119	28.4
South South	97	23.2
South West	84	20.0
South East	23	5.5
North Central	26	6.2
North East	70	16.7
Total	419	100.0

Fixed phone users were predominantly from urban areas - the rural / urban distribution was 39.9:60.1 (rural:urban). The gender balance was 46.9:53.1 (male:female), which is close to the population balance (48.6:51.4). The age profile of fixed phone users was skewed towards younger age groups (see

Figure 30 – Page 68).

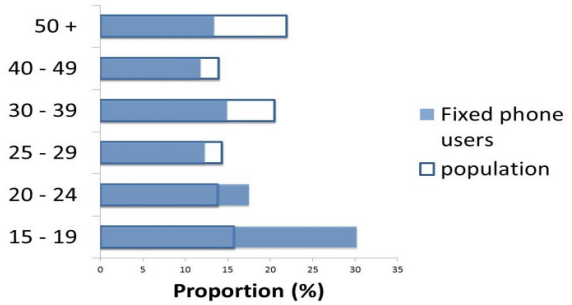


Figure 30 Age profile of fixed phone users (and population)

The socio-economic status of fixed phone users was only slightly higher than that of the sample as a whole (Table 74 – Page 68).

Table 74 Socio-economic status of fixed phone users (and whole sample)

	Fixed phone users (%)	Whole sample (%)
lower class	44.1	45.8
middle class	31.0	38.6
upper class	24.0	14.9
Did not answer	0.9	0.7
Total	100	100

In terms of subscriber numbers, Visafone and MTN-VGC appeared to be most popular (

Table 75 – Page 69).

Table 75 Proportion of fixed phone users subscribing to providers (%)

	Whole sample
Intercellular	4.8
Multilinks	7.3
NITEL	3.2
Starcomms	9.2
Visafone	18.8
Zoom	1.5
Globacom	5.2
MTN-VGC	14.5
Other	11.4
Total	75.9

Some respondents indicated they had more than one fixed line, so they were asked to identify their principal provider (Table 76 – Page 69). This table shows that the sample sizes for some providers are small, so any comparison between providers should be treated with caution.

Table 76 Principal provider used by fixed phone users (%)

	Frequency	Percent
Intercellular	17	4.0
Multilinks	31	7.1
NITEL	14	3.2
Starcomms	39	9.0
Visafone	77	17.7
Zoom	7	1.5
Globacom	22	5.1
MTN-VGC	57	13.1
Other	49	11.4
don't know	5	1.1
Did not answer	117	26.8
Total	435	100

Nitel is the only fixed line operator that uses copper wire to provide services. The other fixed line operators use an appropriate mix of other technologies, including GSM, CDMA, and fibre.[12]

[12] Note that that fixed line in this context means both traditional fixed line providers (i.e. copper wire services) and those providers of fixed wireless phones.

Table 77 (Page 70) shows that there is a sizable minority of fixed phone users that uses the phone infrequently (less than once a week).

Table 77 Intensity of fixed phone use (%)

	Whole sample
less than once a week	11.8
1 or more times a week	27.7
1 or more times a day	34.5
Did not answer	26.0
Total	100.0

Less than half of fixed phones that were the subject of the interview were registered to the respondent themselves – see Table 78 (Page 70). Over two thirds of accounts were pre-paid – see Table 79 (Page 70).

Table 78 Person the fixed phone was registered to (%)

	Whole sample
you	41.8
family member	16.9
friend	10.3
employer	7.6
other	1.3
not registered	2.7
Did not answer	19.5
Total	100

Table 79 Type of fixed phone accounts (%)

	Whole sample
pre-paid	62.7
post-paid	16.6
Did not answer	20.7
Total	100

6.1.2. Views on Voice Calling - Fixed

Overall, 49% felt that the voice quality of calls was good or very good, compared with only 21% who felt the quality was poor or very poor (Table 80 – Page 70).

Table 80 Views on voice quality of calls (%)

	Whole sample

very poor	7.6
poor	13.0
no opinion	10.9
good	35.9
very good	13.2
Did not answer	19.4
Total	100

Views on the quality of calls specifically to fixed line networks closely matches this – 48% felt the quality was good or very good, compared with 21% who felt it was poor or very poor (Table 81 – Page 71).The response rate to the question on quality of calls to mobile networks (Table 81 - Page 71) was lower, but among those who did answer, a higher proportion felt the quality was good or very good.

Table 81 Overall quality of calls – fixed phones

	on fixed line networks (%)	on mobile networks (%)
very poor	4.1	6.4
poor	16.5	10.1
no opinion	10.0	7.5
good	35.8	33.9
very good	11.8	11.7
don't know	1.8	1.7
Did not answer	19.9	28.6
Total	100	100

42% felt that the accuracy of charging of calls was good or very good, compared with 28% who felt it was poor or very poor (Table 82 – Page 71). Similarly, the proportion of respondents that felt the alignment of charges with advertised rates was good or very good (34%) was higher than the proportion who felt it was poor or very poor (21%) (Table 82 - Page 71).

Table 82 Rating of fixed phone charges (%)

	Correct charging of calls	Agreement of charges with rates advertised
very poor	8.0	5.6
poor	20.1	15.7
no opinion	6.1	13.3
good	32.2	23.3
very good	10.0	10.6
don't know	3.2	3.3
Did not answer	20.4	28.2

Total	100	100

Only the differences in scores for voice quality of calls and the correct charging of calls were significantly higher among urban respondents. Differences in the scores registered by men and women were not significant. Perceptions on the quality of calls to mobile networks were highest among the youngest age group. Overall, scores for these indicators increased with higher socio-economic status. Scores among low intensity users were lowest, and for some indicators, there was a trend for scores to drop off again among the most intensive users. Visafone, the operator with the greatest number of subscribers in the sample, was scored highest on voice quality and the correct charging of calls.

Table 83 Disaggregated scores for voice calling

	voice quality	call quality - fixed networks	call quality - mobile networks	calls charged correctly	rates agree with advertised
Rural/urban					
rural	55.6	-	-	51.3	-
urban	64.0	-	-	58.3	-
Gender					
male	-	-	-	-	-
female	-	-	-	-	-
Age group					
15 - 19	-	-	69.2	-	-
20 - 24	-	-	54.5	-	-
25 - 29	-	-	57.1	-	-
30 - 39	-	-	61.1	-	-
40 - 49	-	-	61.5	-	-
50 +	-	-	62.6	-	-
Socio-economic status					
lower class	55.2	57.7	-	50.6	50.5
middle class	64.1	58.9	-	52.8	58.4
upper class	65.2	68.5	-	64.6	61.5
Intensity of use					
less than once a week	52.8	47.5	54.3	-	-
1 or more times a week	64.3	61.7	65.3	-	-
1 or more times a day	61.4	66.3	63.8	-	-
Principal operator					
Intercelluar	42.6	43.3	40.7	25.3	39.4
Multilinks	40.4	49.5	42.1	50.2	39.9
NITEL	38.2	29.6	47.9	23.9	32.6
Starcomms	64.9	66.3	62.4	66.2	65.9
Visafone	72.9	69.1	67.7	66.0	61.4
Zoom	-	-	-	-	-
Globacom	55.6	42.6	78.6	55.1	70.2
MTN-VGC	70.4	66.4	61.1	57.7	60.9

- means **not applicable**

6.1.3. Network Reliability - Fixed

Perceptions of a range of indicators representing network reliability were similar (Table 84 – Page 73), and suggest that only around one third of users never or rarely experienced problems.

Table 84 Perceptions on frequency of network problems

	Loss of service (%)	Wrong number (%)	Get cut off (%)
never	14.2	17.3	18.2
rarely	20.0	19.0	19.9
sometimes	36.7	36.2	32.3
often	8.1	5.0	9.3
almost always	2.1	3.3	.7
Did not answer	19.0	19.3	19.6
Total	100	100	100

Over half of respondents felt that they had to dial a number more than once (Table 85 – Page 73).

Table 85 "How often do you need to dial a number before you get through?" (%)

	Whole sample
once	28.5
twice	30.1
3 - 5 times	16.0
more than 5 times	5.4
Did not answer	19.9
Total	100

Differences in scores between urban and rural respondents were not significant; neither were differences between men and women, or differences between age groups. Scores for getting cut off were highest (i.e. dropping the line was perceived to be infrequent) among lower status respondents (Table 86 – Page 74), and also among high intensity phone users (note that status correlates only weakly with intensity of use $r_s = 0.113$, $p = 0.045$). Scores were lowest among the middle class group, and the middle intensity of use group. Among the operators with larger numbers of subscribers, Starcomm appeared to perform slightly better than Visafone on loss of service and dropping lines. MTN-VGC registered considerably lower scores for all indicators.

Table 86 Disaggregated scores for network reliability

	loss of service	wrong number	get cut off
Socio-economic status			
lower class	-	-	69.7
middle class	-	-	57.7
upper class	-	-	62.7
Intensity of use			
less than once a week	-	65.5	63.1
1 or more times a week	-	51.4	58.4
1 or more times a day	-	71.7	67.4
Principal operator			
Intercelluar	54.6	55.2	52.8
Multilinks	69.9	67.0	67.3
NITEL	70.3	63.6	73.0
Starcomms	65.5	71.7	68.5
Visafone	62.7	71.0	63.5
Zoom	0.0	0.0	0.0
Globacom	70.5	65.2	67.1
MTN-VGC	50.1	55.9	53.7

6.1.4. Complaints Handling - Fixed

Overall, one third of respondents had made a complaint in the last year (Table 87 – Page 74).

Table 87 "How often have you made a complaint in the last year?" (%)

	Whole sample
never	41.3
once	15.9
2 - 5 times	14.3
more than 5 times	8.0
Did not answer	20.4
Total	100

Complaints were most commonly lodged by phone (Table 88 – Page 74).

Table 88 "How did you usually contact Customer Services?" - among those who made a complaint (%)

	Whole sample

by phone	69.4
visit to Customer Care centre	24.6
Did not answer	6.0
Total	100

Overall, complaints most commonly concerned problems with charging and billing (Table 89 – Page 75).

Table 89 "The last time you made a complaint, what was it about?" – among those who made a complaint (%)

	Whole sample
Incorrect charging / billing	24.5
Inability to make / receive voice calls	14.0
SMS	13.8
Disconnection	7.6
Inability to recharge	6.8
paying a bill	5.5
Time to resolve an existing complaint	2.8
Data complaint	1.7
other	6.1
Did not answer	17.0
Total	100

However, Table 90 (Page 75) suggests that complaints were linked not only to charging and voice quality issues, but also to network reliability issues.

Table 90 Links between indicators and Frequency of complaints (Spearman correlation coefficients)

Indicator	Correlation coefficient
Intensity of fixed line phone use	
Type of account (fixed)	
How often do you need to dial a number	0.198**
voice quality	
call quality - fixed networks	-0.198**
call quality - mobile networks	
calls charged correctly	-0.118*
rates agree with advertised	
loss of service	-0.243**
wrong number	-0.263**
get cut off	-0.217**
How often have you made a complaint in the last year	-
How did you usually contact Customer Services	-
ease of finding number	-

time to answer	-0.179*
IVR service	-
staff	-
resolution of complaint	-
time to resolve	-

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
- means **not applicable**

Among those who made a complaint, poorest ratings were given to time to answer their call and ease of finding the right number to call (Table 91 – Page 76). The staff that people talked to (e.g. polite, knowledgeable) got the highest ratings.

Table 91 "How would you rate aspects of complaints handling?" - among those who had made a complaint (%)

	finding the right number to call	time taken to answer call	effectiveness of IVR service	staff you talked to	resolution of your complaint	time to resolve your complaint
very poor	6.4	8.6	5.5	7.9	5.8	5.5
poor	20.3	18.2	10.9	6.2	14.4	13.8
no opinion	14.4	12.1	16.5	12.1	10.3	14.5
good	25.8	26.1	23.8	39.0	34.7	32.8
very good	17.0	13.5	20.1	10.2	12.3	7.1
don't know	3.5	2.2	2.5	2.9	1.2	3.2
Did not answer	12.5	19.3	20.7	21.8	21.4	23.1
Total	100	100	100	100	100	100

The comparison made in Figure 31 (Page 76) suggests that experience of complaints handling through call centres was considerably better than the experience of visiting customer care centres.

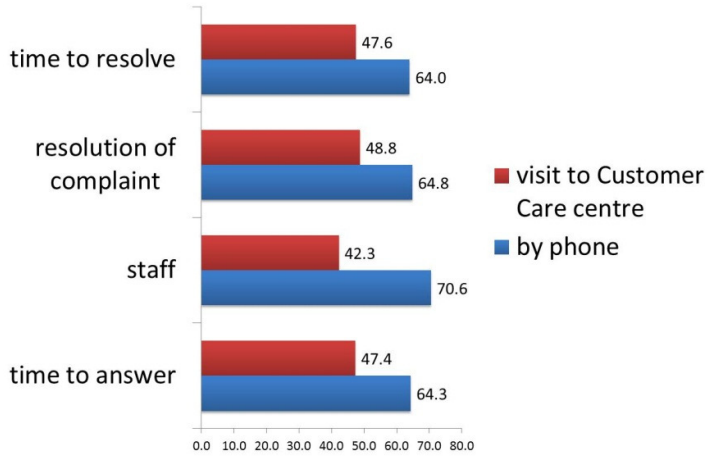


Figure 31 Rating of customer care experienced through call centres and Customer Care centres (whole sample)

Differences between rural and urban respondents were not significant, and neither were most differences according to gender and socio-economic status. Women scored the time taken to resolve complaints lower than men, and the highest socio-economic status group registered the poorest score for IVR services (Table 92 – Page 77). Intensity of use categories showed a consistent trend such that the intermediate group (one or more times a week) registered the highest scores.

Table 92 Disaggregated scores for complaints handling

	ease of finding number	time to answer	IVR service	staff	resolution of complaint	time to resolve
Gender						
male	-	-	-	-	-	63.5
female	-	-	-	-	-	54.1
Age group						
15 - 19	-	73.4	-	-	-	-
20 - 24	-	47.0	-	-	-	-
25 - 29	-	52.0	-	-	-	-
30 - 39	-	65.2	-	-	-	-
40 - 49	-	56.4	-	-	-	-
50 +	-	54.1	-	-	-	-
Socio-economic status						
lower class	-	-	62.8	-	-	-
middle class	-	-	71.3	-	-	-
upper class	-	-	58.3	-	-	-
Intensity of use						
less than once a week	54.3	50.7	59.8	45.8	51.9	-
1 or more times a week	67.1	67.5	74.3	68.6	69.0	-
1 or more times a day	55.0	52.0	48.5	61.9	55.5	-
Principal operator						
Intercelluar	21.1	-	-	-	-	-
Multilinks	36.7	58.0	44.9	49.7	45.4	42.6
NITEL						
Starcomms	63.2	58.4	53.2	66.7	66.0	65.0
Visafone	55.3	55.8	70.2	76.4	72.7	69.2
Zoom						
Globacom	69.3	61.3	67.0	74.9	60.9	43.7
MTN-VGC	82.9	76.4	78.2	74.1	75.3	66.8

- means **not applicable**

6.1.5. Key Satisfaction Indicators - Fixed

Perceived value for money offered by services paid for (Table 94 – Page 78) was rated higher than the extent to which the quality of services was in line with expectations (

Table 93 – Page 78).

Note that although only 19% indicated that they were not satisfied overall, twice as many respondents (38%) indicated that they were likely to change to an alternative operator, implying that some people who were satisfied (or at least not dissatisfied) were also likely to change.

Table 93 "To what extent is the quality of services in line with your expectations?" (%)

	Whole sample
much lower	6.7
lower	24.1
in line	6.6
higher	28.0
much higher	9.2
don't know	4.3
Did not answer	21.1
Total	100

Table 94 "Overall, how would you rate the value for money offered by the services you pay for?" (%)

	Whole sample
very poor	3.2
poor	15.0
no opinion	9.3
good	28.6
very good	9.5
don't know	4.3
Did not answer	30.1
Total	100

Table 95 "Overall, how satisfied are you with your fixed line operator?" (%)

	Whole sample
very dissatisfied	2.9
dissatisfied	16.0
no opinion	13.6
satisfied	36.4
very satisfied	9.1
Did not answer	22.0
Total	100

Table 96 "How likely are you to change to an alternative operator (in next year)?" (%)

	Whole sample
very likely	8.6

likely	29.4
no opinion	13.9
unlikely	10.7
very unlikely	6.6
don't know	8.6
Did not answer	22.1
Total	100

It can be seen from Table 97 (Page 79) (whole sample) that both expectations and perceived value correlated closely with stated satisfaction, confirming that these were both key aspects of satisfaction. Although the question on intention to change to an alternative operator (in the next year) correlates with stated satisfaction, the correlation is negative, implying that respondents who were satisfied expressed a greater likelihood of changing operator. This counterintuitive finding suggests that intention to change operator is driven by factors other than the level of satisfaction with existing operator.

Table 97 Relation of satisfaction statements with Stated Satisfaction (Spearman correlation coefficients)

	Whole sample
Intention to change	-0.191**
Expectations	0.575**
Perceived value	0.722**

* Correlation is significant at the 0.05 level (2-tailed).

Differences between rural/urban and gender groups were not significant. Stated satisfaction decreases with increasing age (Table 98 below – Page 80). Poorer scores among lower socio-economic status groups for how the service matches expectations suggests that more sophisticated consumers (assumed to be better educated) had more modest expectations of what an operator could provide. A similar trend was evident when comparing intensity of use categories – scores were lowest among those who used phones only infrequently. Among operators with larger numbers of subscribers, MTN-VGC registered highest scores for all indicators except intention to change provider; it was followed by Visafone and Starcomms.

Table 98 Disaggregated scores for key satisfaction indicators

	Satisfaction (stated)	Intention to change (stated)	Expectations (stated)	Perceived value (stated)
Age group				
15 - 19	66.1	-	-	-
20 - 24	64.9	-	-	-
25 - 29	58.2	-	-	-
30 - 39	60.5	-	-	-
40 - 49	55.2	-	-	-
50 +	52.4	-	-	-
Socio-economic status				
lower class	-	-	47.4	-
middle class	-	-	54.1	-
upper class	-	-	59.7	-
Intensity of use				
less than once a week	52.7	-	39.2	49.2
1 or more times a week	63.1	-	57.8	62.5
1 or more times a day	64.0	-	55.7	61.7
Principal operator				
Intercelluar	46.6	59.3	36.2	47.3
Multilinks	52.7	54.6	44.9	52.4
NITEL	0.0	0.0	0.0	0.0
Starcomms	60.7	30.1	59.8	58.9
Visafone	62.0	30.7	60.9	62.4
Zoom	0.0	0.0	0.0	0.0
Globacom	54.4	55.8	33.8	52.1
MTN-VGC	70.2	39.0	63.6	77.3

- means **not applicable**

6.1.6. Summary of Scores - Fixed

The mean scores presented in Figure 32 (Page 81) indicate that, overall, the most positive aspect of service provision was the network reliability. Correct charging of calls stood out as a poorly rated issue. Note that scores for complaints were based on respondents who had made a complaint in the last year i.e. they are subsets of the whole sample.

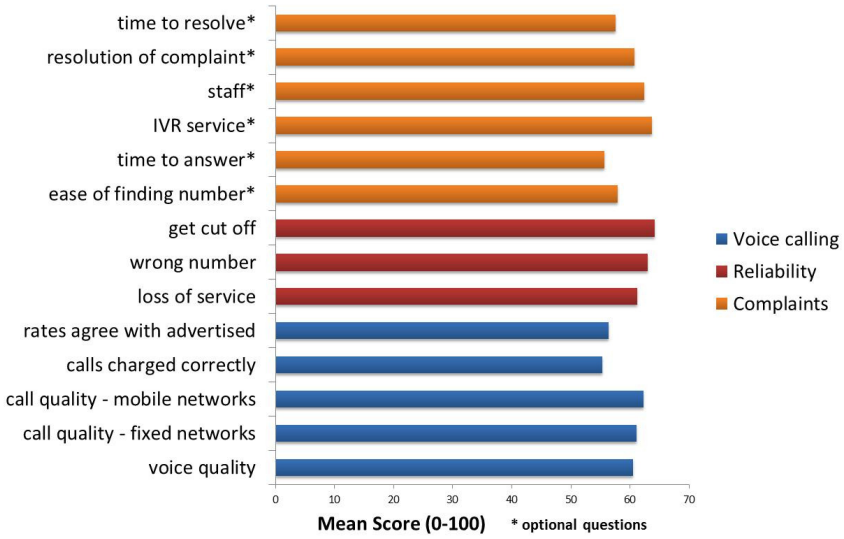


Figure 32 Mean scores by categories of enquiry (whole sample) - Fixed

6.2. Customer Satisfaction Index

6.2.1. Calculating NCC Customer Satisfaction Index (CSI) - Fixed

Composite variables have been calculated for each of the constructs used in the NCC CSI - Fixed:

4. Primary service (call quality & charging)
5. Convenience

Mean scores for these and the statement variables are presented in Table 99 (Page 81).

Table 99 Mean scores for Key Satisfaction variables

Mean scores (0-100)	Whole sample
Primary Service (composite)	59.5
Convenience (composite)	63.0
Perceived value (stated)	60.0
Expectations (stated)	53.0
Satisfaction (stated)	60.5

Intention to change (stated)	41.8

The NCC Customer Satisfaction Index - Fixed was calculated as the mean of the following key variables:

- Primary service (call quality + charging)
- Expectations
- Perceived value

For those respondents who had made a complaint (in the last year), the NCC Customer Care Index - Fixed was calculated as the mean of the six variables relating to complaints handling.

Mean scores for the whole sample were 59.7 and 61.8 for the NCC Customer Satisfaction Index - Fixed and NCC Customer Care Index - Fixed respectively.

6.2.2. CSI, CCI and Key Demographics - Fixed

No significant differences were evident between categories within rural / urban, gender, or age groups. The following differences can be seen from Table 100 (Page 82):

- Customer satisfaction scores were lowest among the lower class respondents; customer care scores, on the other hand, were lowest among upper class respondents;
- Both customer satisfaction and customer care scores were lowest among infrequent users;
- MTN-VGC achieved the highest scores for both customer satisfaction and customer care. Scores for Visafone and Starcomms were similar for both indices.

Table 100 Disaggregated scores for composite indices

	Customer Satisfaction Index	Customer Care Index
Socio-economic status		
lower class	52.2	62.9
middle class	63.0	65.3
upper class	62.1	56.1
Intensity of use		
less than once a week	47.6	49.1
1 or more times a week	61.0	68.1
1 or more times a day	62.5	55.7
Principal operator		
Intercelluar	40.5	-
Multilinks	45.6	41.9
NITEL	-	-
Starcomms	65.7	67.1
Visafone	64.3	66.1
Zoom	-	-
Globacom	-	63.3

MTN-VGC	70.0	76.3

- means **not applicable**

7. Public Access Phones

7.1. Survey Data

7.1.1. Descriptors – Public access

Of those respondents that answered the public access questions, 18% had also answered the mobile phone questions, and 3% had answered the fixed phone questions. The public access section was intended to capture views of people who did not own their own phone, and relied exclusively on public access facilities, so these phone owners were excluded from the analysis. The analysis was based on a sample size of 1,888, or 3.9% of the whole sample. Table 101 (Page 83) shows that most public access users were drawn from South South and North West zones, and few were drawn from North East and South West zones. The small sample sizes within these zones make it difficult to make comparisons between all zones, so the analysis has been conducted on the data set as a whole.

Table 101 Distribution of fixed phone users across zones[13]

	Frequency	Percent
North West	497	26.3
South South	718	38.0
South West	63	3.3
South East	260	13.8
North Central	307	16.3
North East	43	2.3
Total	1888	100.0

Respondents who used public phones exclusively were predominantly from rural areas - the rural / urban distribution was 58.4:41.6 (rural:urban). The gender balance was 36.1:63.9 (male:female), so it was clearly women who made greater use of public means of access. Figure 33 (Page 84) shows clearly that it was predominantly the young and the elderly that made most use of public phones.

[13] Not weighted

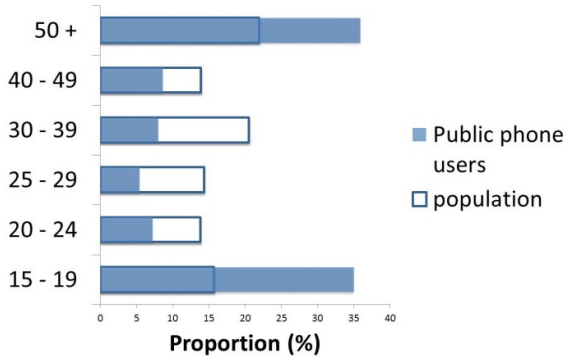


Figure 33 Age profile of public phone users (and population)

The socio-economic status of public phone users was considerably lower than that of the sample as a whole (Table 102 – Page 84).

Table 102 Socio-economic status of public phone users (and whole sample)

	Public phone users (%)	Whole sample (%)
lower class	84.5	45.8
middle class	10.7	38.6
upper class	3.6	14.9
Did not answer	1.2	0.7
Total	100	100

Manned public phones were the most commonly used means of access, followed by borrowing a privately owned handset (Table 103 – Page 84).

Table 103 Principal means of accessing a public phone (%)

	Whole sample
borrow from friend, neighbour, relative	36.3
manned public shop/ kiosk	40.9
unmanned kiosk	20.7
other	1.3
don't use a phone	.4
Did not answer	0.4
Total	100

Over a quarter of respondents used the phone less than once a week, and only 11% used it every day (Table 104 – Page 84).

Table 104 Intensity of public phone use (%)

	Whole sample
less than once a week	27.1
1 or more times a week	60.6

1 or more times a day	11.2
Did not answer	1.0
Total	100.0

7.1.2. Views on Voice Calling – Public access

Overall, 55% felt that the voice quality of calls was good or very good, compared with only 26% who felt the quality was poor or very poor (Table 105 – Page 85).

Table 105 Views on voice quality of calls (%)

	Whole sample
very poor	7.5
poor	18.8
no opinion	17.9
good	44.3
very good	10.4
Did not answer	1.0
Total	100

Voice quality was felt to be better among urban respondents (Table 106 – Page 85). Perceptions on voice quality increased with increasing age. The highest socio-economic status group had the most positive views on voice quality. Voice quality was regarded as poorest among those using mainly unmanned kiosks. Differences according to gender were not significant.

Table 106 Disaggregated scores for voice calling

	voice quality
Rural/urban	
rural	51.5
urban	66.9
Gender	
male	-
female	-
Age group	
15 - 19	44.0
20 - 24	58.3
25 - 29	56.2
30 - 39	60.7
40 - 49	69.1
50 +	68.4
Socio-economic status	
lower class	57.7
middle class	54.6
upper class	71.6

Intensity of use	
less than once a week	-
1 or more times a week	-
1 or more times a day	-
Means of access	
borrow from friend, neighbour, relative	61.2
manned public shop/ kiosk	61.1
unmanned kiosk	45.5

- means **not applicable**

7.1.3. Network reliability – Public access

Loss of service was perceived to occur most frequently, and getting connected to the wrong number least frequently - Table 107 (Page 86).

Table 107 Perceptions on frequency of network problems

	Loss of service (%)	Wrong number (%)	Get cut off (%)
never	20.4	32.0	21.5
rarely	14.2	20.8	24.8
sometimes	52.0	40.4	44.7
often	11.6	6.0	7.4
almost always	1.2	.4	1.0
Did not answer	0.8	0.4	0.6
Total	100	100	100

Nearly three quarters of respondents felt they needed to dial a number more than once before getting through (Table 108 – Page 86).

Table 108 "How often do you need to dial a number before you get through?" (%)

	Whole sample
once	26.3
twice	54.4
3 - 5 times	14.0
more than 5 times	4.8
Did not answer	0.5
Total	100

60% of public phone users use SMS (

Table 109 – Page 87), and of these, only one third never or rarely experienced difficulties in sending SMS.

Table 109 "How often are you unable to send SMS?" (%)

	Whole sample
never	10.0
rarely	11.6
sometimes	27.8
often	9.4
almost always	1.5
Don't use	39.3
Did not answer	0.4
Total	100

Perceptions of network reliability tended to be higher among urban respondents, although the frequency of wrong numbers was higher among urban respondents (Table 110 – Page 87). Where differences were significant, women tended to have a poorer view of indicators. Although differences were significant, no clear trends could be seen linking scores to age. Scores for loss of service and wrong numbers were lowest among the lowest socio-economic status group, yet scores for getting cut off were highest. Scores for all four indicators were highest among lowest frequency phone users. Scores were lowest among respondents using unmanned public kiosks.

Table 110 Disaggregated scores for network reliability

	loss of service	wrong number	get cut off	Unable to send SMS
Rural/urban				
rural	58.4	70.3	62.4	-
urban	63.0	68.5	67.9	-
Gender				
male	-	71.8	65.5	59.4
female	-	68.3	64.2	57.1
Age group				
15 - 19	59.0	72.4	65.7	59.9
20 - 24	58.0	69.8	58.8	54.9
25 - 29	56.6	67.9	63.3	62.2
30 - 39	57.2	66.7	61.0	58.8
40 - 49	61.1	72.9	68.7	60.0
50 +	63.2	66.8	65.0	55.9
Socio-economic status				
lower class	59.9	68.9	65.2	-
middle class	60.4	73.0	60.5	-
upper class	70.3	74.0	63.7	-
Intensity of use				
less than once a week	68.0	75.3	74.8	70.8
1 or more times a week	57.2	67.2	59.8	52.2

1 or more times a day	57.9	67.0	64.7	60.4
Means of access				
borrow from friend, neighbour, relative	61.4	74.1	66.3	-
manned public shop/ kiosk	63.1	70.2	66.9	-
unmanned kiosk	53.5	62.0	59.2	-

- means **not applicable**

7.1.4. Key Satisfaction Indicators – Public access

On balance, more respondents felt that the quality of services fell short of their expectations – 37% felt it was lower or much lower compared with 27% who felt it was higher or much higher (

Table 111 – Page 88).

Table 111 "To what extent is the quality of services in line with your expectations?" (%)

	Whole sample
much lower	4.8
lower	32.0
in line	29.1
higher	21.6
much higher	5.1
don't know	5.3
Did not answer	2.1
Total	100

Perceptions of value for money were more balanced, but still negative overall (Table 112 – Page 88).

Table 112 "Overall, how would you rate the value for money offered by the services you pay for?" (%)

	Whole sample
very poor	6.9
poor	28.8
no opinion	28.5
good	25.2
very good	5.3
don't know	5.2
Did not answer	0.2
Total	100

However, when it comes to stated satisfaction, more people were satisfied or very satisfied (

Table 113 – Page 89).

Table 113 "Overall, how satisfied are you with the phone services you use?" (%)

	Whole sample
very dissatisfied	2.8
dissatisfied	31.9
no opinion	22.9
satisfied	36.7
very satisfied	3.1
Did not answer	2.6
Total	100

Overall, 31% said their use of public phones was likely to decrease (in the next year) whereas 27% said their use was likely to increase (Table 114 – Page 89). Note that this does not necessarily reflect their experience of using public phones, but is more likely to reflect their intention to become handset owners (which may provide a more accurate reflection of their overall view of telephone services) – 45% said that there were likely to get their own handset (in the next year) - Table 115 (Page 89).

Table 114 "How is your use of this public phone likely to change over the next year?" (%)

	Whole sample
greatly decrease	7.9
decrease	23.0
no change	29.1
increase	22.2
greatly increase	4.6
don't know	12.5
Did not answer	0.8
Total	100

Table 115 "How likely are you to get your own handset (mobile or fixed) or SIM (in next year)?" (%)

	Whole sample
very unlikely	2.8
unlikely	9.2
no opinion	29.7
likely	27.2
very likely	17.6
don't know	11.0
Did not answer	2.5
Total	100

It can be seen from Table 116 (Page 90) (whole sample) that both expectations and perceived value correlated closely with stated satisfaction, confirming that these were both key aspects of satisfaction. Intention to get a handset also correlated with stated satisfaction, suggesting that people's experience of using public phones (including privately owned handsets) is influential in their decision to subscribe

Table 116 Relation of satisfaction statements with Stated Satisfaction (Spearman correlation coefficients)

	Whole sample
Intention to get own handset	0.319**
Expectations	0.6**
Perceived value	0.581**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Scores were generally higher among urban respondents, with the exception of perceived value, which reflects the premium value of communications in remote locations. Although women were more likely to feel that services did not meet their expectations, their potential use of public phones in the future was higher than that of men. All indicators exhibited a trend of increasing scores with increasing age. Scores were highest among the highest socio-economic status group, with the exception of intended change in use of public phones, but this was likely to represent a shift towards personal handset ownership, which was highest among the upper class group. Intention to get a handset was also highest among the most intensive public phone users. Stated satisfaction, perceived value for money, and intention to get a handset were all lowest among users of unmanned kiosks; this paints a picture of a dissatisfied group that feel they are overcharged, yet are unable or unwilling to invest in a handset; note that intensity of phone use is similar across different means of access.

Table 117 Disaggregated scores for key satisfaction indicators

	Satisfaction (stated)	intended change in use (stated)	Intention to get handset (stated)	Expectations (stated)	Perceived value (stated)
Rural/urban					
rural	50.5	45.1	61.2	-	49.6
urban	52.6	51.9	67.4	-	46.2
Gender					
male	-	46.0	-	48.8	-
female	-	48.9	-	46.6	-
Age group					
15 - 19	43.7	44.4	57.0	41.0	42.3
20 - 24	47.6	43.7	61.0	46.6	49.3
25 - 29	51.9	44.1	61.3	50.5	49.1
30 - 39	54.9	44.8	63.6	45.1	53.7
40 - 49	57.2	48.1	80.4	51.7	50.6
50 +	57.6	53.5	68.8	52.9	52.0

Socio-economic status					
lower class	50.7	48.2	62.6	-	47.0
middle class	51.4	50.8	67.0	-	50.8
upper class	67.1	35.2	79.9	-	67.1
Intensity of use					
less than once a week	53.9	35.8	62.3	41.5	38.1
1 or more times a week	49.2	53.7	63.7	48.3	51.5
1 or more times a day	55.6	48.6	67.0	54.1	53.5
Means of access					
borrow from friend, neighbour, relative	49.5	54.2	69.6	-	51.1
manned public shop/ kiosk	54.7	43.7	65.2	-	47.5
unmanned kiosk	47.7	44.8	51.1	-	43.5

- means **not applicable**

7.2. Customer Satisfaction Index

7.2.1. Calculating NCC Customer Satisfaction Index (CSI) – Public access

A composite variable was calculated for the convenience construct used in the NCC CSI – Public Access. Mean scores for this and the statement variables are presented in Table 118 (Page 91).

Table 118 Mean scores for Key Satisfaction variables

Mean scores (0-100)	Whole sample
Voice quality (single indicator)	57.9
Convenience (composite)	64.8
Perceived value (stated)	48.2
Expectations (stated)	47.4
Satisfaction (stated)	51.4
Intention to get handset (stated)	63.8

The NCC Customer Satisfaction Index – Public access was calculated as the mean of the following key variables:

- Voice quality
- Expectations
- Perceived value

The mean score for the whole sample was 51.0 ± 0.8 (95% confidence interval).

7.2.2. NCC CSI, Demographics and Public phone use – Public access

The following characteristics were evident from Table 119 (Figure 92) :

- Scores among urban respondents were slightly higher than those registered by rural respondents;

- Scores for the NCC CSI – Public access increased with increasing age;
- Scores were lowest among respondents from the lowest socio-economic status category;
- Scores increased with increasing frequency of use;
- Respondents who mainly used unmanned kiosks registered lowest levels of satisfaction.

Differences between men and women were not significant.

Table 119 Disaggregated scores for customer satisfaction index

	NCC CSI
Rural/urban	
rural	49.2
urban	53.5
Age group	
15 - 19	42.5
20 - 24	50.4
25 - 29	51.7
30 - 39	52.7
40 - 49	58.3
50 +	57.6
Socio-economic status	
lower class	50.3
middle class	51.5
upper class	62.7
Intensity of use	
less than once a week	46.1
1 or more times a week	52.0
1 or more times a day	55.3
Means of access	
borrow from friend, neighbour, relative	52.5
manned public shop/ kiosk	52.6
unmanned kiosk	44.3

8. Internet

8.1. Survey Data

8.1.1. Descriptors - Internet

Overall, 27% of the sample answered questions on internet use (N = 12,940). Internet users were predominantly urban - the rural / urban distribution was 37:63 (rural:urban). The gender balance was 51.6:48.8 (male:female), which is close to the population balance (48.6:51.4). The age profile of internet users was skewed towards younger age groups (Figure 34 – Page 93).

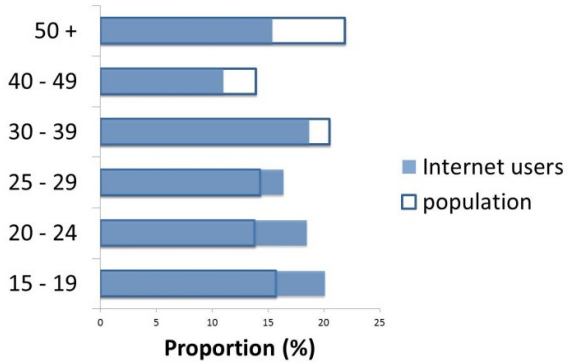


Figure 34 Age profile of internet users (and population)

The distribution of socio-economic status of respondents is presented in Table 120 below (Page 93). It can be observed that the socio-economic status of internet users was generally higher than that of the sample as a whole.

Table 120 Socio-economic status of internet users (and whole sample)

	Internet users (%)	Whole sample (%)
lower class	21.5	45.8
middle class	59.6	38.6
upper class	18.2	14.9
Did not answer	0.7	0.7
Total	100	100

A clear majority of users accessed the internet through mobile devices (other than a Blackberry) e.g. smartphone, iPad (Table 121- Page 94).

Table 121 Means of accessing the internet (% of internet users in each zone)

	Whole sample	North West	South South	South West	South East	North Central	North East
Home PC / laptop	12.5	5.7	9.9	20.0	14.3	14.4	9.6
Blackberry	18.0	25.6	9.7	21.7	7.6	15.4	23.7
Other mobile device	63.8	52.2	71.5	66.0	76.0	67.0	54.0
Cybercafe	18.6	14.4	13.0	20.4	35.3	21.0	10.8
Total	112.9	97.9	104.1	128.1	133.2	117.8	98.1

Though a much smaller proportion used them as their main means of access (Table 122 – Page 94), a substantial proportion of respondents made use of cybercafés (Table 121 – Page 94), suggesting that cybercafés continue to be of value even to people with private means of access

Table 122 Principal means of accessing the internet (% of internet users in each zone)

	Whole sample	North West	South South	South West	South East	North Central	North East
home PC or laptop	7.6	3.2	7.8	12.7	6.3	6.9	7.5
Blackberry	16.2	24.9	9.2	17.7	6.2	13.3	22.2
other mobile device	61.1	50.6	70.0	62.7	70.1	64.7	52.0
cybercafe	8.5	9.2	11.7	6.9	13.6	7.1	4.8
Did not answer	6.6	12.1	1.3	0.0	3.7	7.9	13.4
Total	100	100	100	100	100	100	100

In terms of customer accounts, MTN appear to be the dominant internet service provider (ISP) (Table 123 – Page 94). Etisalat, Airtel and Globacom each have roughly one fifth of MTN's number of subscribers. This pattern is fairly consistent across all zones. For the purposes of comparison, only these major ISPs have been used.

Table 123 Internet service provider

	Whole sample	North West	South South	South West	South East	North Central	North East
Airtel*	10.7	14.6	14.1	14.8	5.2	4.5	10.4
Direct on PC	1.8	0.3	1.4	6.0	1.6	0.2	0.8
Etisalat*	11.0	14.8	6.8	13.4	12.6	9.2	9.3
Globacom*	9.4	10.2	6.3	8.8	2.3	13.3	13.1
Hyperia	0.5	0.3	1.1	1.2	0.1	0.1	0.1
IPNX	0.2	0.0	0.5	0.4	0.1	0.0	0.1
Mobitel	0.1	0.1	0.0	0.1	0.1	0.3	0.2
MTN*	54.3	50.8	53.8	43.6	65.9	61.8	53.3

MTS	0.3	0.4	0.7	0.0	0.4	0.1	0.1
multilinks	0.7	0.0	1.2	1.9	1.1	0.1	0.1
NITEL	0.4	0.0	0.6	1.7	0.0	0.1	0.0
Starcomm	1.3	2.3	0.9	3.7	0.3	0.2	0.1
Swift wireless	0.4	0.0	0.2	1.6	0.1	0.0	0.2
VGCom	0.1	0.0	0.5	0.2	0.0	0.0	0.0
Visafone	0.4	0.2	0.9	0.4	0.6	0.3	0.0
Zoom Mobile	0.2	0.0	0.9	0.3	0.1	0.0	0.0
other	0.7	0.2	1.9	0.4	0.8	0.5	0.8
don't know	3.2	1.7	7.3	1.7	5.8	2.2	1.7
Did not answer	4.3	4.2	1.1	0.0	2.9	7.0	9.5
Total	100	100	100	100	100	100	100

* major ISP, used for making comparison in analysis.

It is clear from Table 124 (Page 95) that most users spend less than N3,000 per month. Note that over one half of users in North West zone were either unaware of their expenditure or declined to answer the question.

Table 124 Estimated monthly expenditure on internet / email

	Whole sample	North West	South South	South West	South East	North Central	North East
less than N3,000	64.7	33.0	76.6	69.1	73.2	68.0	67.8
N3,001 to N10,000	10.4	6.8	12.1	20.8	8.4	8.5	5.1
over N10,000	1.9	1.6	2.5	2.8	1.7	2.0	0.8
don't know	12.3	21.2	6.8	7.3	11.8	11.4	15.5
Did not answer	10.7	37.4	2.0	0.0	5.0	10.2	10.9
Total	100	100	100	100	100	100	100

When responses to estimated expenditure were expressed as a proportion of all valid and informed responses (i.e. excluding 'don't know' and non responses), the patterns of expenditure were similar across zones (Table 125 – Page 95). Expenditure appeared to be highest in South West zone and lowest in North Central and North East zones.

Table 125 Estimated monthly expenditure on internet / email (valid and informed responses only)

	Whole sample	North West	South South	South West	South East	North Central	North East
less than N3,000	84.0	79.8	84.0	74.6	87.9	86.6	92.0
N3,001 to N10,000	13.5	16.5	13.2	22.4	10.1	10.9	6.9
over N10,000	2.4	3.7	2.8	3.0	2.0	2.6	1.1
Total	100	100	100	100	100	100	100

8.1.2. Views on internet quality

Overall, perceptions on internet speeds were balanced - 41% felt that the speed of their internet connection was fast or very fast, compared with 44% who felt it was slow or very slow (Table 126 – Page 96). Perceived internet speed appeared to be relatively high in

South West zone, and slow in North West zone; opinion appeared to be balanced in other zones.

Table 126 Views on speed of internet connection (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very slow	6.5	8.8	3.2	4.6	7.7	7.3	7.2
slow	37.9	41.0	41.6	35.4	40.3	40.5	31.6
no opinion	11.2	17.5	11.0	4.8	6.6	8.5	18.2
fast	35.8	23.6	36.4	48.6	37.3	35.9	31.2
very fast	4.8	4.5	5.8	6.5	5.4	3.7	3.4
Did not answer	3.7	4.5	2.0	0.0	2.8	4.1	8.4
Total	100	100	100	100	100	100	100

Two additional questions were used to check the speed of internet connections – the quality of voice calls (VOIP, handling audio only), and the quality of video streaming, which is more bandwidth intensive. Use of the internet for making voice calls shows some interesting features (Table 127 – Page 96):

- Overall, nearly two thirds of internet users appeared to have used the internet for making voice calls.
- VOIP use is greatest in North East and North West zones (smallest proportion of 'not used'); these zones registered the lowest NCC mobile CSI scores, so it may be that VOIP was being used as an alternative means of communication where mobile service was poor. Conversely, VOIP use was lowest in South West zone, where NCC mobile CSI was highest.
- Perceived quality of voice calling when using VOIP was highest in North West zone, and poor in North East and North Central zones.

Table 127 Quality of voice calls made on the internet (%)

	Whole sample	North West	South South	South West	South East	N.Central	North East
very poor	3.2	4.9	2.3	2.8	2.1	3.3	3.5
poor	14.7	8.2	13.0	16.4	13.8	17.3	17.7
no opinion	12.8	11.3	12.5	5.2	10.8	20.8	16.1
good	25.6	39.4	27.0	25.4	23.8	18.9	21.0
very good	3.8	2.4	3.8	4.2	3.5	3.8	4.6
not used	36.2	29.4	39.6	46.1	42.9	32.0	28.7
Did not answer	3.7	4.3	1.8	0.0	3.0	3.9	8.4
Total	100	100	100	100	100	100	100

Features of respondents' experience of video streaming experiences include:

- Overall, nearly two thirds of internet users appeared to have used the internet for streaming video (Table 128 – Page 97); note that the same proportion of internet

users take advantage of voice calling and video streaming services. Use of video streaming was lowest in South South zone.

- Overall, consumers' experience of video steaming appeared to be good – 29% said it was good or very good compared with 16% who rated it as poor or very poor. This was consistent across all zones with the exception of South South zone, where views were more balanced.

Table 128 Quality of video streaming over the internet (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	3.7	6.5	2.6	2.9	3.9	2.8	3.5
poor	12.6	10.5	13.4	15.0	13.6	12.4	10.9
no opinion	13.6	17.3	10.6	5.2	10.9	21.3	16.5
good	24.3	30.1	16.5	26.8	24.7	22.2	24.7
very good	5.1	3.8	3.8	6.5	5.5	5.5	5.0
not used	37.2	28.0	51.4	43.6	38.6	31.7	31.5
Did not answer	3.5	3.8	1.7	0.0	2.7	4.0	7.9
Total	100	100	100	100	100	100	100

Overall, 59% felt that the accuracy of charging was good or very good, compared with 21% who felt it was poor or very poor (Table 129 – Page 97). South East zone had the highest proportion of respondents who felt it was poor or very poor.

Table 129 Rating of correct charging of internet / email (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.8	7.1	3.5	4.5	6.7	3.9	3.8
poor	16.6	9.7	11.3	20.0	24.5	18.0	15.7
no opinion	15.6	24.4	29.9	5.9	9.0	14.5	13.1
good	52.1	44.3	46.4	62.6	51.9	52.5	51.9
very good	6.8	7.5	7.2	7.1	5.4	6.5	7.0
Did not answer	4.1	6.9	1.7	0.0	2.5	4.6	8.5
Total	100	100	100	100	100	100	100

A large proportion of users from North West zone did not answer the question on how well internet/email charges agreed with advertised rates, which suggests that respondents in this zone may not have been aware of advertised rates. However, among those who did answer the question, the scores were the most positive of all zones.

Table 130 Rating of agreement of internet/email charges with rates advertised (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	4.3	3.1	2.5	5.3	6.2	3.6	4.8
poor	15.6	8.3	12.6	19.4	21.3	16.4	15.2
no opinion	19.3	8.0	31.5	12.3	14.4	24.9	24.5

good	42.9	32.5	40.9	55.9	46.6	41.2	38.8
very good	7.2	8.4	9.4	7.1	5.7	6.6	6.1
Did not answer	10.7	39.8	3.1	0.0	5.8	7.2	10.6
Total	100	100	100	100	100	100	100

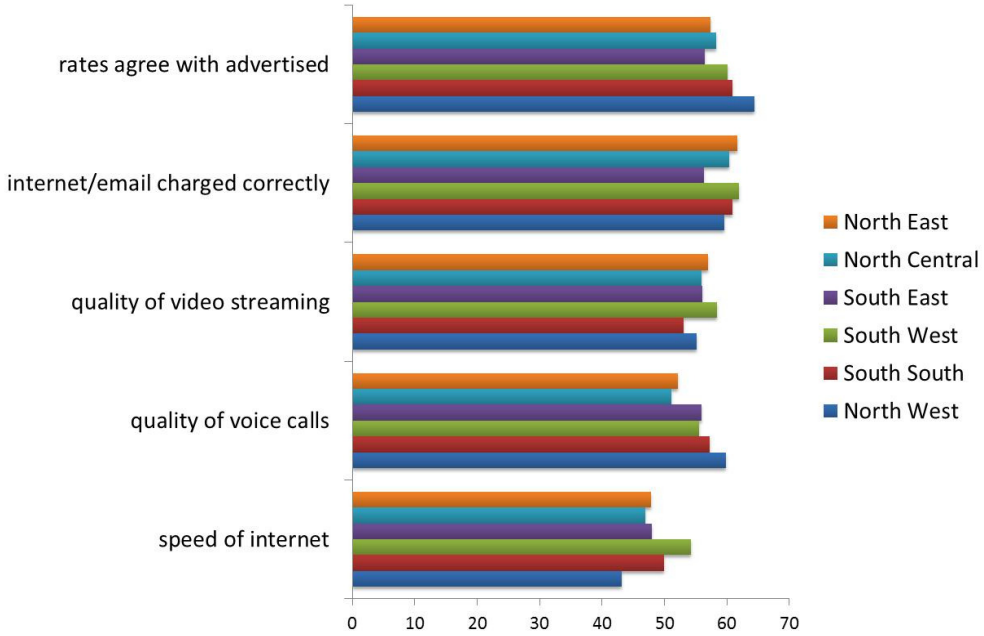


Figure 35 Summary scores (means) – internet quality

Although differences in ratings for speed of internet connections were not significant, scores for the quality of VOIP and video streaming were higher among urban respondents. Men were marginally more critical of internet speeds than women. There is a general trend for scores to be highest among middle aged groups (25 to 39 years) and to drop off with increasing age. Scores for all indicators were higher among middle class respondents than among lower class respondents. There was a consistent trend among all indicators for scores to decrease with increasing expenditure on internet / email i.e. more intensive users were more critical of the quality of the service.

Scores for internet speed were highest among users of mobile devices (other than a Blackberry), but quality of voice calls and video streaming were rated most highly by Blackberry users. Views on charging issues (correct charging and agreement with advertise rates) were most positive among users of mobile devices and Blackberries. Scores for internet speed were highest among Etisalat subscribers, and lowest among MTN subscribers (with a large spread of 10 points). Scores for the quality of voice calling and video streaming were highest among Airtel and Etisalat subscribers. Scores for the two charging issues were also highest among Etisalat subscribers, and lowest among Airtel and MTN subscribers.

Table 131 Disaggregated scores for internet quality (unipolar scores, range 0-100)

	speed of internet	quality of voice calls	quality of video streaming	internet/e mail charged correctly	rates agree with advertised
Rural/urban					
rural	-	54.0	53.9	-	58.2
urban	-	55.7	57.4	-	59.9
Gender					
male	48.0	-	-	-	-
female	49.2	-	-	-	-
Age group					
15 - 19	49.7	54.5	54.6	60.4	60.3
20 - 24	48.7	54.9	56.9	60.3	58.9
25 - 29	49.3	56.6	58.7	61.3	60.0
30 - 39	50.2	55.7	55.6	60.9	59.2
40 - 49	46.7	54.7	55.6	59.2	57.8
50 +	45.5	53.4	55.4	59.3	58.6
Socio-economic status					
lower class	-	54.4	53.5	58.4	58.0
middle class	-	56.1	57.0	61.3	59.4
upper class	-	53.1	56.6	59.5	60.6
Expenditure (monthly)					
less than N3,000	49.9	54.6	-	61.3	59.4
N3,001 to N10,000	48.4	52.6	-	56.0	57.0
over N10,000	43.0	47.2	-	51.2	55.1
Means of access					
home PC or laptop	47.4	50.7	54.5	57.0	56.1
Blackberry	49.0	57.2	58.2	60.5	58.4
other mobile device	50.0	55.0	56.3	61.2	60.3
cybercafe	42.7	52.8	52.3	54.8	54.4
ISP					
Airtel	48.9	58.0	57.4	60.7	59.7
Etisalat	57.4	58.5	58.6	66.8	65.7
Globacom	50.6	54.8	56.3	62.8	62.2
MTN	46.9	54.7	56.2	59.4	58.1

- means **not applicable**

8.1.3. Network reliability - Internet

Network availability appeared to be poorest in North West and South East zones (Table 132 – Page 100).

Table 132 "How often do you experience loss of service (internet/email service not available)?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	9.7	6.4	7.6	9.7	6.3	8.8	16.9
rarely	25.8	9.6	36.2	33.6	21.7	27.3	24.4
sometimes	51.4	75.9	47.3	45.3	53.4	45.7	44.9
often	7.9	3.4	6.7	9.8	12.4	12.3	3.8
almost always	1.9	1.6	1.0	1.7	3.7	1.4	2.1
Did not answer	3.4	3.1	1.2	0.0	2.5	4.4	8.0
Total	100	100	100	100	100	100	100

Respondents from North West zone felt they got cut off most frequently (Table 133 – Page 100).

Table 133 "How often do you get cut off in the middle of using the internet?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	9.7	7.7	7.8	12.7	8.0	7.2	13.2
rarely	27.2	9.0	49.3	33.0	24.5	22.6	25.5
sometimes	47.8	62.3	34.1	43.7	50.3	49.2	47.7
often	10.3	14.8	6.4	9.4	12.4	15.7	4.2
almost always	1.9	3.5	1.4	1.2	2.6	1.5	1.7
Did not answer	3.1	2.7	1.1	0.0	2.2	3.7	7.7
Total	100	100	100	100	100	100	100

No zones stood out as showing particular problems with the number of log-in attempts needed (Table 134 – Page 100), although performance in North West zone appeared to be slightly poorer.

Table 134 "How many log-in attempts do you need to make before successfully getting online?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
one	24.1	16.3	17.9	25.6	26.1	27.6	28.8
two	42.0	48.5	52.5	45.1	38.6	35.4	34.4
3 - 5 times	24.7	28.4	24.7	23.3	27.3	24.5	21.5
more than 5 times	6.0	3.6	3.1	6.0	5.8	8.7	7.6
Did not answer	3.3	3.2	2.0	0.0	2.2	3.7	7.8
Total	100	100	100	100	100	100	100

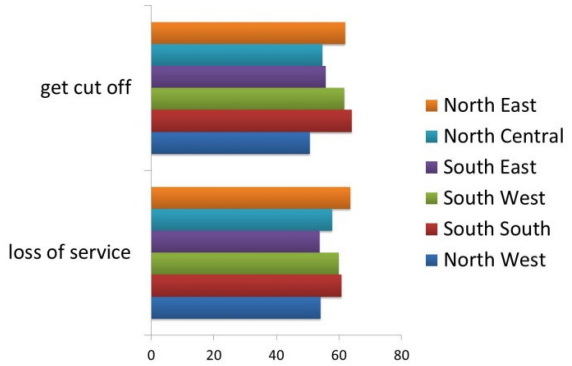


Figure 36 Summary scores (means) - network reliability

Urban users perceived loss of service and getting cut off to occur more frequently i.e. lower scores. Differences according to gender were not significant. Perceptions of reliability issues were generally more positive among the 30 to 49 year old age groups. Users from the highest socio-economic status group appeared to have a more negative view of the frequency of getting cut off; least intensive users had the most positive views. Scores for both indicators were highest among Blackberry users, and lowest among cybercafé users. Scores for both indicators were highest among Etisalat subscribers, and lowest among MTN subscribers.

Table 135 Disaggregated scores for network reliability (unipolar scores, range 0-100)

	loss of service	get cut off
Rural/urban		
rural	61.7	60.2
urban	56.9	57.3
Gender		
male	-	-
female	-	-
Age group		
15 - 19	58.9	58.4
20 - 24	57.4	56.4
25 - 29	57.3	57.0
30 - 39	60.1	59.4
40 - 49	59.3	60.1
50 +	59.2	59.7
Socio-economic status		
lower class	-	58.0
middle class	-	59.4
upper class	-	55.7
Expenditure (monthly)		
less than N3,000	-	60.5
N3,001 to N10,000	-	56.7
over N10,000	-	58.5
Means of access		

home PC or laptop	59.6	58.9
Blackberry	63.0	59.5
other mobile device	58.2	58.9
cybercafe	54.4	53.6
ISP		
Airtel	59.3	59.2
Etisalat	61.2	60.6
Globacom	59.5	58.1
MTN	58.1	57.9

- means **not applicable**

8.1.4. Complaints Handling - Internet

Overall, nearly one half of respondents had made a complaint in the last year (Table 136 – Page 102). The highest level of complaints was registered in North Central zone, and the lowest level was in North West zone.

Table 136 "How often have you made a complaint in the last year?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
never	50.4	75.2	49.2	46.9	64.8	38.0	36.6
once	20.3	5.6	25.4	24.2	16.6	23.8	23.7
2 - 5 times	19.1	10.9	19.9	18.9	11.4	23.3	26.7
more than 5 times	6.0	2.5	3.2	10.0	4.3	10.7	3.9
Did not answer	4.2	5.9	2.2	0.0	2.9	4.2	9.2
Total	100	100	100	100	100	100	100

Among those who made a complaint, ratings of both the resolution of the complaint and the time taken to resolve the complaint were similar (Table 137 – Page 102 and Table 138 – Page 103). For both indicators, highest scores were registered in North Central, and lowest scores in North West zones.

Table 137 "How would you rate aspects of complaints handling: resolution of your complaint?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	6.2	13.8	1.4	8.7	8.8	4.1	6.0
poor	27.2	38.7	29.4	28.2	30.5	22.9	24.4
no opinion	14.6	5.7	41.3	6.4	8.4	10.2	14.0
good	39.3	29.4	20.2	48.6	44.8	36.3	45.9
very good	8.8	1.2	6.0	7.4	4.0	20.7	5.2
don't know	1.8	2.8	0.7	0.5	0.8	3.6	2.2
Did not answer	2.1	8.4	1.0	0.3	2.7	2.3	2.3
Total	100	100	100	100	100	100	100

The frequency of complaints (in the last year) was linked to both bandwidth indicators (quality of voice calls and video streaming), but not to perceived speed of internet connection (Table 139 – Page 103). It was also linked to the number of log-in attempts needed, indicating that this is an issue of importance to customers.

Table 138 "How would you rate aspects of complaints handling: time to resolve your complaint?" - among those who had made a complaint (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	7.6	17.5	3.4	7.9	12.1	7.2	6.0
poor	23.7	22.6	24.8	30.7	30.0	19.8	17.7
no opinion	18.6	6.8	44.2	7.7	8.4	17.5	20.6
good	32.9	23.7	15.3	46.8	38.0	36.0	28.9
very good	7.3	2.4	8.2	5.6	5.6	11.1	7.0
don't know	2.6	3.5	2.9	0.9	1.0	4.4	2.9
Did not answer	7.2	23.5	1.1	0.3	5.0	4.1	17.0
Total	100	100	100	100	100	100	100

Table 139 Links between indicators and Frequency of complaints (Spearman correlation coefficients)

Indicator	Correlation coefficient
Monthly expenditure	-
Number of log-in attempts needed	0.176**
speed of internet	-
quality of voice calls	-0.167**
quality of video streaming	-0.115**
internet/email charged correctly	-
rates agree with advertised	-
loss of service	-
get cut off	-
How often have you made a complaint in the last year	-
resolution of complaint	-
time to resolve	-

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

- means **not applicable**

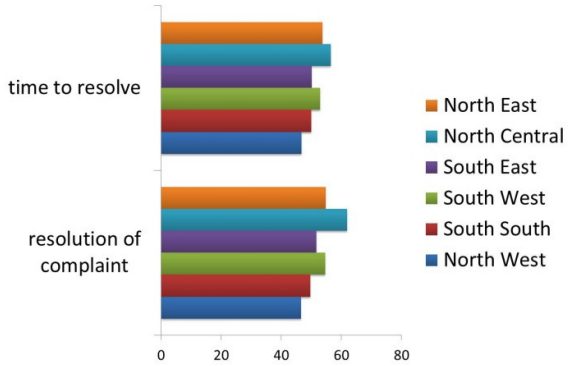


Figure 37 Summary scores (means) - complaints handling

Differences between rural and urban users, and between men and women were not significant. Scores for both indicators were highest among the 25 – 29 years age group, then fell off with increasing age. Scores were lowest among the lowest socio-economic status group. Views on the satisfactory resolution of complaints were most critical among the most intensive users. Scores on both issues were highest among Blackberry users. Scores for users of mobile devices (other than Blackberry) were interesting – scores for resolution of complaints were high, but scores for the time taken to resolve complaints was relatively low. Scores for both indicators were highest among Globacom subscribers. The lowest scores for time taken to resolve complaints were registered by MTN subscribers.

Table 140 Disaggregated scores for complaints handling (unipolar scores, range 0-100)

	resolution of complaint	time to resolve
Age group		
15 - 19	55.5	53.4
20 - 24	55.0	53.1
25 - 29	56.1	54.4
30 - 39	53.4	52.9
40 - 49	50.7	51.7
50 +	52.3	48.4
Socio-economic status		
lower class	50.5	48.5
middle class	55.0	53.0
upper class	54.6	54.9
Expenditure (monthly)		
less than N3,000	53.8	-
N3,001 to N10,000	53.0	-
over N10,000	47.5	-
Means of access		
home PC or laptop	52.1	52.8
Blackberry	54.3	55.1
other mobile device	54.3	51.3
cybercafe	52.3	51.9

ISP		
Airtel	54.1	54.6
Etisalat	53.9	54.7
Globacom	56.0	55.4
MTN	54.5	51.1

- means **not applicable**

8.1.5. Key Satisfaction indicators - Internet

Scores for all four indicators were highest in North West zone, and lowest scores tended to be registered in North Central zone.

Table 141 "To what extent is the quality of services in line with your expectations?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
much lower	5.2	7.8	3.3	4.7	5.4	3.8	6.0
lower	28.8	19.0	24.3	29.0	34.2	42.1	24.5
no opinion	15.4	10.7	24.2	12.0	9.0	14.0	21.5
higher	37.5	43.6	41.1	46.3	40.1	30.7	25.9
much higher	5.6	10.2	3.5	6.1	5.1	1.9	6.4
don't know	3.1	3.1	2.1	1.9	1.2	3.3	6.3
Did not answer	4.4	5.5	1.6	0.0	5.1	4.2	9.3
Total	100	100	100	100	100	100	100

Table 142 "Overall, how would you rate the value for money offered by the services you pay for?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very poor	5.4	3.5	3.3	4.6	7.1	7.3	6.5
poor	22.9	10.7	16.0	25.7	26.4	31.4	24.8
no opinion	11.9	3.9	26.1	9.8	5.6	7.3	17.9
good	48.5	66.2	45.6	50.8	48.0	41.9	40.8
very good	5.2	5.0	5.5	7.5	7.5	3.3	3.1
don't know	2.6	3.6	1.0	1.6	1.3	4.0	3.5
Did not answer	3.5	7.2	2.5	0.0	4.1	4.8	3.5
Total	100	100	100	100	100	100	100

Table 143 "Overall, how satisfied are you with your ISP?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very dissatisfied	4.5	3.8	2.4	5.2	5.1	7.0	3.4
dissatisfied	25.0	10.9	32.7	26.7	29.1	28.1	23.0
no opinion	12.2	8.1	12.0	9.5	6.8	12.1	21.8
satisfied	49.4	61.4	44.9	51.7	47.7	45.5	45.5
very satisfied	5.1	6.1	6.1	6.8	7.0	2.6	2.6
Did not answer	3.9	9.6	1.9	0.0	4.2	4.7	3.7

Total	100	100	100	100	100	100	100

Scores for intention to change ISP were outstandingly low in South West zone (i.e. people expressed a high likelihood of changing ISP in the next year) (Table 144 below – Page 106); this was despite relatively high satisfaction scores in this zone (Table 143 above – Page 105). Note that respondents from this zone had the highest mean socio-economic status (for the whole sample, not just internet users), so this may reflect an awareness of entitlement to change rather than any sense of disappointment with their current ISP.

Table 144 "How likely are you to change to an alternative ISP (in next year)?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
very likely	8.6	1.9	5.2	22.5	8.3	4.5	6.5
likely	27.0	14.4	26.3	39.4	23.9	27.1	27.3
no opinion	16.9	35.4	16.8	11.4	10.6	10.2	18.0
unlikely	29.4	28.3	39.9	17.4	36.1	35.2	24.8
very unlikely	7.5	7.3	5.9	5.2	12.8	8.9	6.2
don't know	5.7	4.5	3.5	4.0	4.6	9.3	7.4
Did not answer	4.9	8.2	2.4	0.0	3.8	4.8	9.8
Total	100	100	100	100	100	100	100

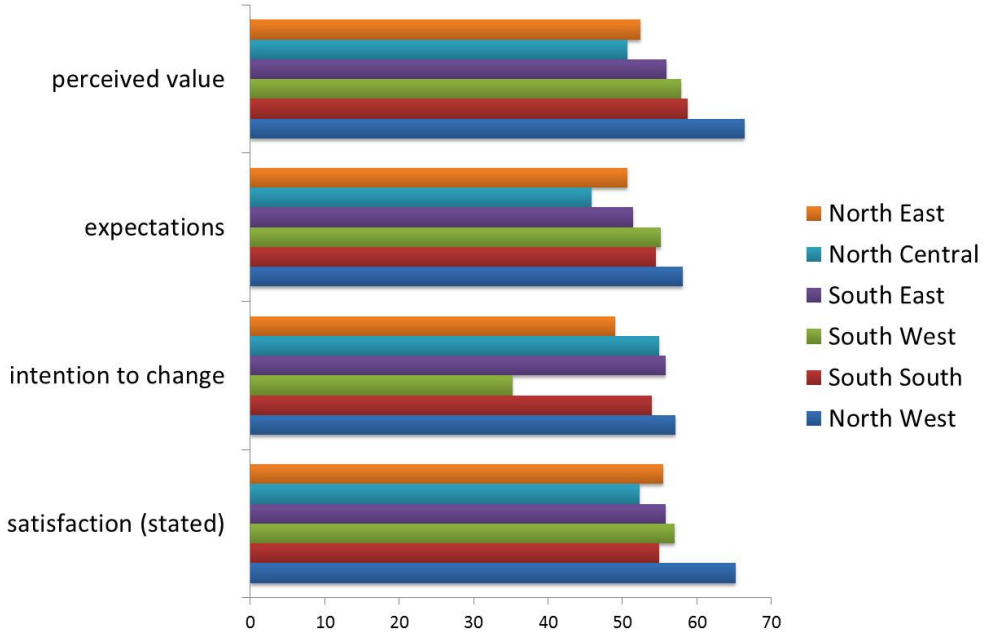


Figure 38 Summary scores (means) - satisfaction statements

It can be seen from Table 145 (Page 107) that both expectations and perceived value correlated closely with stated satisfaction, confirming that these were both key aspects of satisfaction. The question on intention to change to an alternative ISP (in the next year) was intended to provide a cross-check on satisfaction, on the basis that satisfied customers would be less likely to change (or express a willingness to change) than dissatisfied

customers. Table 145 (Page 107) confirms that this relationship held for the data set as a whole, and for most zones. However, despite moderate scores for the other indicators, the intention score was clearly lowest in South West zone. Investigation of relationships within each zone confirmed that the expressed intention to change ISP in South West zone correlated with stated satisfaction, but inversely i.e. people who were more satisfied expressed a higher likelihood of changing ISP (lower score).

Table 145 Relation of satisfaction statements with Stated Satisfaction (Spearman correlation coefficients) - by zone

	Whole sample	North West	South South	South West	South East	North Central	North East
Intention to change	0.233**	0.114**	0.546**	-0.212**	0.515**	0.282**	0.225**
Expectations	0.599**	0.442**	0.658**	0.631**	0.668**	0.597**	0.521**
Perceived value	0.716**	0.722**	0.739**	0.731**	0.774**	0.722**	0.585**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Scores for how services matched expectations, and perceived value were higher among urban respondents, yet scores for intention to change ISP were lower among this group (indicating higher likelihood of changing). Women appeared to be marginally more reluctant to change ISP. Stated satisfaction appeared to be highest among the 25-39 years age groups, then to drop off with increasing age; scores for intention to change ISP roughly matched this trend, with the oldest age group expressing strongest likelihood of changing ISP. All indicators were linked to socio-economic status; although stated satisfaction, perceived value, and views on the expectations gap were all more positive among higher status groups, the likelihood of changing ISP appeared stronger among these groups. Scores for all indicators decreased with increasing monthly expenditure i.e. higher intensity users were more critical of services (scores tended to be highest among respondents who did not know their monthly expenditure). Although stated satisfaction scores were highest among Blackberry users, they also appeared most likely to change to an alternative ISP. Scores were highest among Etisalat subscribers, and lowest among MTN subscribers, with the exception of intention to change, which suggested that Airtel subscribers were most likely to change ISP.

Table 146 Disaggregated scores for key satisfaction indicators (unipolar scores, range 0-100)

	satisfaction (stated)	intention to change	expectations	perceived value
Rural/urban				
rural	-	50.4	51.2	55.1
urban	-	49.9	53.3	57.6
Gender				
male	-	49.4	-	-
female	-	50.7	-	-
Age group				
15 - 19	56.8	50.6	52.0	56.8
20 - 24	56.7	50.0	53.9	56.9
25 - 29	58.0	51.4	53.1	57.1
30 - 39	57.2	51.1	52.4	57.2

40 - 49	55.2	50.1	50.4	55.6
50 +	55.2	46.6	52.8	56.2
Socio-economic status				
lower class	54.4	55.5	50.8	54.9
middle class	56.5	49.3	52.2	56.6
upper class	59.7	45.9	55.4	59.3
Expenditure (monthly)				
less than N3,000	55.9	50.2	51.4	55.5
N3,001 to N10,000	54.2	47.4	51.3	54.9
over N10,000	49.5	43.8	45.4	46.4
Means of access				
home PC or laptop	54.6	47.2	50.1	52.2
Blackberry	58.1	47.1	53.3	56.3
other mobile device	56.9	51.1	53.2	57.4
cybercafe	54.5	51.8	46.5	55.0
ISP				
Airtel	57.1	48.7	53.6	57.6
Etisalat	61.8	51.2	56.5	62.5
Globacom	58.3	52.5	53.7	57.3
MTN	55.6	50.2	52.1	55.6

- means **not applicable**

8.1.6. Summary of scores - Internet

The mean scores presented in Figure 39 (Page 108) indicate that, overall, the most positive aspect of service provision was network reliability, yet speed of internet connections stand out as an area of concern to users. Note that scores for complaints were based on respondents who had made a complaint in the last year i.e. they were subsets of the whole sample.

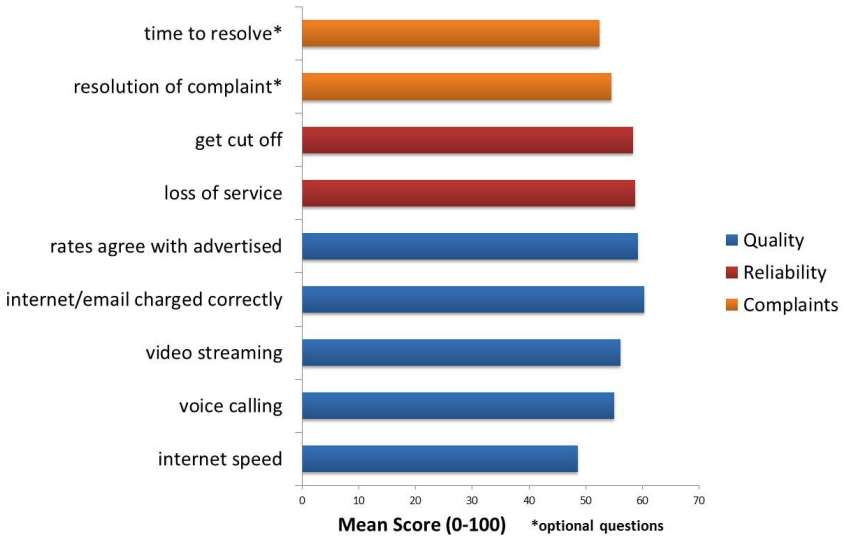


Figure 39 Mean scores by categories of enquiry (whole sample) - Internet

8.2. Customer Satisfaction Index

8.2.1. Calculating NCC Customer Satisfaction Index (CSI) - Internet

Composite variables have been calculated for each of the constructs used in the CSI:

1. Primary service (internet speed & charging)
2. Convenience

Mean scores for these and the statement variables are presented in Table 147 (Page 109). This indicates that satisfaction was lowest in North Central zone, but roughly the same across all the other zones except North West zone, where it was highest by a considerable margin. Primary service scores were lowest in South East zone, and the composite convenience indicator was lowest in North West zone.

Table 147 Mean scores for Key Satisfaction variables - by zone

Mean scores (0-100)	Whole sample	North West	South South	South West	South East	North Central	North East
Primary Service (composite)	56	58	57	59	53	55	56
Convenience (composite)	59	52	62	61	55	56	63
Perceived value (stated)	57	66	59	58	56	51	52
Expectations (stated)	53	58	54	55	51	46	51
Satisfaction (stated)	57	65	55	57	56	52	55
Intention to change ISP (stated)	50	57	54	35	56	55	49

The NCC Customer Satisfaction Index - Internet was calculated as the mean of the following key variables:

- Primary service (internet speed & charging)
- Expectations
- Perceived value

For those respondents who had made a complaint (in the last year), the NCC Customer Care Index - Internet was calculated as the mean of the two variables relating to complaints handling.

Mean scores for the whole sample were 54.7 ± 0.4 (95% confidence interval) and 53.0 ± 0.6 (95% confidence interval) for the NCC Customer Satisfaction Index - Internet and NCC Customer Care Index - Internet respectively; the breakdown by zones is presented in Figure 40 (Page 110). This shows that customer satisfaction was lowest in North Central zone. It is interesting to note that the NCC Customer Care Index - Internet was clearly highest in this zone. Similarly, the NCC Customer Care Index - Internet was lowest in North West zone, which enjoyed the highest NCC Customer Satisfaction Index - Internet score. This suggests that in zones where service was poor, customers expressed greater appreciation for the support they were given.

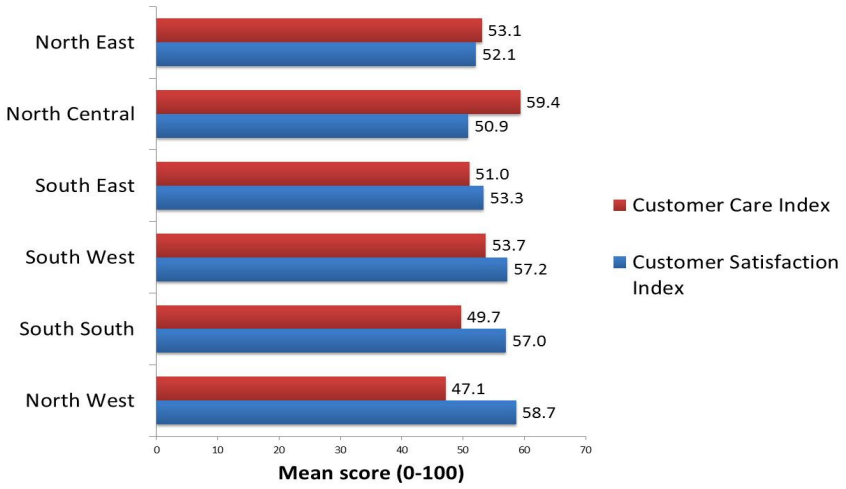


Figure 40 Customer Satisfaction Index and Customer Care Index - by zone

8.2.2. CSI, CCI, Demographics, and Internet characteristics - Internet

Comparing the calculated values of the NCC Customer Satisfaction and Customer Care indices - Internet (Table 148 – Page 110) shows some interesting characteristics:

- Differences between rural and urban respondents were not significant;
- The NCC Customer Satisfaction Index -Internet was slightly higher among women;
- Although the NCC Customer Satisfaction Index -Internet did not show any clear trend with age, the NCC Customer Care Index - Internet dropped off among older age groups;
- Both indices appeared to be linked to socio-economic status, being weaker among lower status groups;
- Both indices were also linked to monthly expenditure (reflecting intensity of use), such that higher intensity users were more critical of services;
- Users of mobile devices (other than Blackberry) registered the highest Customer Satisfaction scores, but low Customer Care scores; both indices were lowest among cybercafé users;
- The NCC Customer Satisfaction Index - Internet Score was highest among Etisalat subscribers, followed by Globacom subscribers, who also registered the highest NCC Customer Care Index - Internet scores; both indices were lowest among MTN subscribers.

Table 148 Disaggregated scores for composite indices

	Customer Satisfaction Index	Customer Care Index
Gender		
male	54.1	-
female	55.4	-
Age group		
15 - 19	54.3	54.5
20 - 24	54.6	53.6

25 - 29	55.0	55.0
30 - 39	55.6	53.4
40 - 49	53.7	51.7
50 +	54.6	49.4
Socio-economic status		
lower class	53.6	49.3
middle class	54.7	53.8
upper class	56.3	55.0
Expenditure (monthly)		
less than N3,000	54.8	53.0
N3,001 to N10,000	54.1	51.7
over N10,000	46.9	48.6
Means of access		
home PC or laptop	51.9	52.7
Blackberry	53.2	54.5
other mobile device	55.9	52.6
cybercafe	50.7	52.1
ISP		
Airtel	55.3	54.8
Etisalat	60.7	54.4
Globacom	56.9	55.6
MTN	53.5	52.5

- means **not applicable**

When looking at differences in NCC CSI - Internet between groupings on a zone by zone basis, the following were evident (Table 149 – Page 112):

- Internet NCC CSI - Internet scores were higher among rural respondents in South South and North Central zones, but higher among urban respondents in North West and North East zones i.e. no consistent trend;
- Only in two zones was the trend for women to register higher Internet NCC CSI scores evident;
- Trends with age were different in each zone: in North West zone NCC CSI – Internet was highest among the youngest age group, then declined with increasing age, in South South and South West zones NCC CSI - Internet was highest among the middle age groups, in North Central and North East zones, NCC CSI - Internet was highest among the oldest age group;
- Only in South East zone was NCC CSI - Internet highest among Blackberry users, in most other zones it was highest among users of other mobile devices, except North West zone where cybercafé users scored particularly highly.
- NCC CSI - Internet was highest among Etisalat subscribers in North West, South West, South East and North East zones, and among Globacom subscribers in South South and North Central zones.

Table 149 Customer Satisfaction Index - disaggregated by zone

	North West	South South	South West	South East	North Central	North East
Rural/urban						
rural	51.1	60.6	-	-	52.6	47.6
urban	61.8	55.5	-	-	49.5	55.4
Gender						
male	-	-	-	52.1	-	51.2
female	-	-	-	54.9	-	53.4
Age group						
15 - 19	63.7	53.1	57.0	-	50.9	51.9
20 - 24	60.2	54.8	59.6	-	49.2	50.3
25 - 29	56.4	57.8	59.3	-	50.1	51.9
30 - 39	57.6	63.3	57.2	-	52.2	51.4
40 - 49	56.8	57.5	55.1	-	48.3	48.2
50 +	52.4	54.4	54.8	-	55.1	57.5
Means of access						
home PC or laptop	57.6	50.4	52.9	55.8	45.7	-
Blackberry	52.7	54.5	54.7	58.6	50.6	-
other mobile device	60.0	58.9	59.4	53.4	51.6	-
cybercafe	60.6	50.5	51.1	49.0	42.4	-
ISP						
Airtel	56.7	54.4	60.8	61.9	47.7	47.0
Etisalat	61.8	59.0	63.4	68.5	53.6	54.5
Globacom	60.8	62.9	61.3	65.3	54.1	50.7
MTN	57.2	58.0	57.3	49.1	49.8	52.3

- means **not applicable**

When looking at differences in NCC CCI – Internet scores between groupings on a zone by zone basis, the following were evident (Table 150 – Page 112):

- NCC CCI – Internet was higher among urban respondents in North West and North East zones, but higher among rural respondents in South East zone i.e. no consistent trend;
- The oldest age group in North West zone stands out as having a particularly low NCC CCI – Internet score (this may merit further research);
- There were some interesting contrasts according to principal means of access – NCC CCI - Internet scores were low among users of all mobile devices in North West zone, yet in North Central zone CCI scores were high among mobile device users;
- NCC CCI - Internet scores were highest among Etisalat subscribers in South East and North East zones, and among Globacom and Airtel subscribers in North West zone, and Globacom subscribers in South South zone.

Table 150 Customer Care Index - disaggregated by zone

	North West	South South	South West	South East	North Central	North East

Rural/urban						
rural	34.0	-	-	56.7	-	50.2
urban	56.6	-	-	47.4	-	55.1
Age group						
15 - 19	53.6	50.6	-	-	62.3	-
20 - 24	54.1	52.3	-	-	56.8	-
25 - 29	53.0	50.0	-	-	61.2	-
30 - 39	47.1	50.5	-	-	60.7	-
40 - 49	53.7	49.3	-	-	53.0	-
50 +	27.0	47.2	-	-	58.9	-
Means of access						
home PC or laptop	69.8	52.4	-	-	50.2	57.5
Blackberry	45.7	53.4	-	-	58.1	56.3
other mobile device	42.7	48.9	-	-	61.9	50.3
cybercafe	69.3	51.9	-	-	48.0	51.4
ISP						
Airtel	55.6	52.4	-	54.3	-	51.6
Etisalat	43.0	51.2	-	65.1	-	56.7
Globacom	55.1	57.6	-	57.9	-	48.8
MTN	43.2	48.0	-	47.7	-	53.9

- means **not applicable**

9. Customer Rights

9.1. Responses

Over 99% of respondents answered questions on customer rights (N=47,687). The analysis is, therefore, based on the entire data set.

The five questions on rights are presented in Table 151 (Page 114) along with the correct responses and associated references from the NCC Quality of Services regulations.

Table 151 Customer rights questions and references from regulations

	Correct response	Quality of services regulations, 2012 (Schedule 1)			
What is the maximum time you should wait at a customer care centre to be attended to?	30 mins	Waiting time to be physically attended to by relevant staff at customer care centers	Customer Care Services KPIs	3.2 Customer Care Centre	1
If you tell your operator that you cannot read a recharge PIN, how long should they take to load your credit?	1 hour	Inability to load credit from an over-scratched card	Wireless Service KPIs	2.1 Account Complaint	17
If you want to speak to an agent when calling customer care, what is the maximum time you should wait?	5 mins	Where a customer decides to speak to a live agent, the maximum duration allowed on the queue/IVR should be 5 minutes before answer.	Customer Care Services KPIs	3.1 Call Centre	1
How long can you go without using a SIM before you lose the number?	1 year	A Subscriber line may be deactivated if it has not been used, within six (6) months, for a Revenue Generating Event (RGE). If the situation persists for another 6 months the subscriber may lose his/her number, except for Network related fault inhibiting an RGE	Wireless Service KPIs	2.2 Disconnection of Subscribers	36
Can you opt out of getting unsolicited SMS?	yes	The service provider must provide an option for the subscriber to"opt out" of receiving such messages where the messages originates from the service provider or its third party business partners.	Wireless Service KPIs	2.2 Miscellaneous Complaints	23

Responses to the questions are presented in Table 152 to Table 156 (Pages 115 - 116) (the correct responses are highlighted). Responses need to be treated with care because it is unlikely that respondents will have any direct knowledge of the quality of service regulations (introduced in the preamble to the questions). It is likely that responses have, therefore, been based on a combination of beliefs and expectations. Beliefs may be based on experience (e.g. how long they usually have to wait), hearsay (from discussion with peers),

or information disseminated by operators. These are closely linked to expectations e.g. how long they feel is reasonable to wait.

It is safe to say that the 'don't know' and 'did not answer' responses reflect a lack of awareness of an issue. Table 157 (Page 116)indicates that lack of awareness is most acute concerning the ability to opt out of unsolicited SMSs and this is the case across all zones. There is also relatively high lack of awareness concerning number portability and the period of inactivity before losing a number. Overall, respondents in North West zone appeared to be least aware, and respondents in South South and South West zones were most aware.

Among respondents that gave a valid response (i.e. answered the question and gave a response other than 'don't know'), the proportion giving the 'correct' answer probably represents the extent to which beliefs and expectations currently align with the provisions in the Quality of Service regulations. Figures in Table 158 (Page 117) suggest that the discrepancy was greatest for the time to load credit when PIN is overscratched[14]. Moreover, figures in Table 153 (Page 115) suggest the majority view was that this should be done within 30 minutes. It is interesting to note that views on waiting time at a customer care centre were shorter than the period of 30 minutes given in the regulations (Table 152 – Page 115), but views on time to wait to speak to an agent at a call centre corresponded with the regulations (Table 154 – Page 116). Overall, views of respondents from South South zone corresponded most closely with provisions in the regulations, and the discrepancy between views and regulations was greatest among respondents from North Central zone.

Table 152 "What is the maximum time you should wait at a customer care centre to be attended to?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
15 mins	44.7	31.6	34.7	54.7	51.3	55.4	40.5
30 mins	28.8	25.4	46.5	27.9	24.2	21.7	26.6
1 hour	7.7	10.5	10.5	6.5	5.0	6.2	7.3
no limit	8.4	9.7	3.1	4.0	8.7	8.3	16.5
don't know	9.9	21.5	4.3	6.8	10.0	8.1	8.6
Did not answer	0.7	1.4	0.8	0.0	0.8	0.3	0.5
Total	100	100	100	100	100	100	100

Table 153 "If you tell your operator that you cannot read a recharge PIN, how long should they take to load your credit?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
15 mins	37.7	18.1	21.9	52.2	52.3	50.9	31.1
30 mins	31.9	31.2	52.1	26.7	23.9	24.5	32.6
1 hour	11.0	17.9	16.6	12.2	4.6	6.9	8.0

[14] N.B. the proportion of respondents giving correct or incorrect answers to the question on opting out of unsolicited SMSs cannot be compared with the other questions because it had only 2 possible responses rather than 4, so the probability of getting the correct answer simply by chance was higher.

no limit	9.0	11.3	4.5	3.0	8.9	8.3	18.0
don't know	9.8	20.3	4.1	6.0	9.6	9.2	9.9
Did not answer	0.6	1.1	0.8	0.0	0.8	0.1	0.5
Total	100	100	100	100	100	100	100

Table 154 "If you want to speak to an agent when calling customer care, what is the maximum time you should wait?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
1 min	17.7	7.6	10.5	20.5	22.4	20.0	25.0
5 mins	37.4	34.6	37.0	55.6	40.7	33.7	23.6
15 mins	24.7	22.3	41.6	15.2	17.4	25.4	25.0
no limit	10.2	14.3	5.6	3.7	9.8	10.6	17.3
don't know	9.4	19.8	4.3	5.0	8.7	9.9	8.6
Did not answer	0.7	1.4	1.0	0.0	1.0	0.4	0.6
Total	100	100	100	100	100	100	100

Table 155 "How long can you go without using a SIM before you lose the number?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
1 month	10.1	9.6	3.8	12.4	12.7	11.4	11.0
3 months	18.7	23.8	10.6	26.1	14.2	17.4	20.8
6 months	29.1	29.5	44.8	34.1	25.1	19.2	21.9
1 year	19.5	6.0	31.4	18.3	26.1	13.0	21.4
don't know	21.2	28.9	7.5	9.1	20.2	37.8	23.4
Did not answer	1.4	2.1	1.8	0.0	1.6	1.1	1.4
Total	100	100	100	100	100	100	100

Table 156 "Can you opt out of getting unsolicited SMS?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
no	42.5	42.0	30.0	53.0	53.2	46.2	31.1
yes	25.8	20.2	49.9	32.9	22.9	10.6	18.2
don't know	30.8	36.3	19.1	14.1	22.8	42.6	49.8
Did not answer	0.8	1.5	1.0	0.0	1.1	0.5	0.9
Total	100	100	100	100	100	100	100

Table 157 Lack of awareness of rights (proportion of respondents) (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
maximum waiting time (Customer Care Centre)	10.6	22.9	5.1	6.8	10.8	8.4	9.1

time to load credit (spoiled PIN)	10.4	21.4	4.9	6.0	10.4	9.3	10.4
maximum waiting time (Call Centre)	10.1	21.2	5.3	5.0	9.7	10.3	9.2
period before losing number	22.6	31.0	9.3	9.1	21.8	38.9	24.8
opt out of unsolicited SMS	31.6	37.8	20.1	14.1	23.9	43.1	50.7
aware of number portability	22.3	34.0	13.6	10.1	18.0	27.4	30.9

Table 158 Correct knowledge of rights (proportion of respondents) (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
maximum waiting time (Customer Care Centre)	28.8	25.4	46.5	27.9	24.2	21.7	26.6
time to load credit (spoiled PIN)	11.0	17.9	16.6	12.2	4.6	6.9	8.0
maximum waiting time (Call Centre)	37.4	34.6	37.0	55.6	40.7	33.7	23.6
period before losing number	19.5	6.0	31.4	18.3	26.1	13.0	21.4
opt out of unsolicited SMS	25.8	20.2	49.9	32.9	22.9	10.6	18.2

Two additional questions were used to test levels of awareness of number portability and the NCC contact number. Responses to the question on number portability need to be interpreted carefully, given the fact that at the time of the survey, number portability was not available. The 18% respondents who said they were aware of number portability (Table 159 – Page 117) must have either been answering in abstract terms (i.e. they were familiar with the concept), or been misinformed. Either way, the figures provide a baseline for future reference. Awareness of the issue appeared remarkably high in South South zone.

Table 159 "Are you aware of number portability (keep your number if you change to an alternative operator)?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
no	59.8	47.3	42.3	75.0	73.0	64.9	57.2
yes	17.8	18.7	44.0	14.9	9.0	7.8	11.9
don't know	21.6	32.4	12.7	10.1	17.3	27.1	30.1
Did not answer	0.7	1.6	0.9	0.0	0.7	0.3	0.8
Total	100	100	100	100	100	100	100

Similarly, a remarkably high proportion of respondents from South South zone (42%) were aware of the NCC toll-free contact number; this is so much higher than the other zones (typically around 5%) that the overall mean of 11% masks low levels of awareness in most of the country (Table 160 – Page 117).

Table 160 "Are you aware of the toll-free number you can use to contact the NCC Contact Centre?" (%)

	Whole sample	North West	South South	South West	South East	North Central	North East
no	88.0	95.1	57.0	91.5	95.7	96.2	93.6
yes	11.3	3.7	41.8	8.5	3.4	3.4	5.9
Did not answer	0.7	1.2	1.2	0.0	0.9	0.4	0.5

Total	100	100	100	100	100	100	100

9.2. Key Demographics

Table 161 (Page 118) presents a breakdown of level of awareness concerning the five customer rights issues by each of the key demographic descriptors. Figures given are the proportion of respondents who gave a valid response, irrespective of whether the answer given was 'correct' i.e. who answered the question and gave a response other than 'don't know'. Overall, differences between different groups were modest, with a few exceptions:

- Men appeared to be more aware than women;
- The over 50s age group was less aware;
- The lowest socio-economic status group was clearly least aware.

Table 161 Level of awareness of Customer rights issues (% of respondents making valid response)

	maximum waiting time (Customer Care Centre)	time to load credit (over-scratched PIN)	maximum waiting time (Call Centre)	period before losing number	opt out of unsolicited SMS
Rural/urban					
rural	-	87.8	-	78.0	66.3
urban	-	86.5		75.6	69.7
Gender					
male	-	88.1	-	77.8	-
female	-	86.2	-	75.8	-
Age group					
15 - 19	87.4	87.3	88.7	79.9	72.4
20 - 24	88.9	88.9	88.9	76.2	68.3
25 - 29	89.7	89.7	90.4	77.0	70.9
30 - 39	88.7	89.2	89.4	77.1	67.6
40 - 49	86.2	86.8	86.7	74.3	65.7
50 +	83.2	82.7	83.3	76.0	64.7
Socio-economic status					
lower class	82.7	83.1	83.7	74.5	62.7
middle class	91.2	90.8	91.2	77.9	71.3
upper class	91.2	91.6	91.9	82.1	77.1

- means **not applicable**

Table 162 (Page 119) presents a breakdown of the proportion of respondents whose views corresponded with the provisions of the regulations, by key demographic descriptors. Socio-economic status demonstrated an interesting trend such that a higher proportion of lower class respondents correctly identified the maximum waiting time at a Customer Care Centre, yet a higher proportion of upper class respondents correctly identified the maximum waiting time for agents at a call centre. This reflects a greater willingness to wait among lower status groups, which brings them more into line with the stipulated waiting time at Customer Care centres than the high status group. However, because a greater proportion of respondents in the low status group are willing to wait more than 5 minutes to speak to an agent at a call centre, the proportion registering an accurate response was lowest.

Table 162 Accuracy of knowledge on Customer rights issues (% of respondents making correct response)

	maximum waiting time (Customer Care Centre)	time to load credit (over-scratched PIN)	maximum waiting time (Call Centre)	period before losing number	opt out of unsolicited SMS
Rural/urban					
rural	32.4	13.8	-	25.3	39.4
urban	33.6	15.5	-	18.8	35.7
Gender					
male	-	-	-	-	37.1
female	-	-	-	-	37.8
Age group					
15 - 19	32.6	15.2	42.5	20.0	40.3
20 - 24	32.0	13.7	44.5	23.6	35.4
25 - 29	31.6	13.2	43.7	22.3	36.0
30 - 39	34.5	15.0	42.7	23.8	40.2
40 - 49	34.2	14.0	42.5	24.3	39.1
50 +	32.7	15.9	39.1	19.8	34.2
Socio-economic status					
lower class	35.5	18.7	38.9	22.6	41.4
middle class	33.0	11.2	41.6	21.8	34.8
upper class	26.2	12.5	53.4	21.7	34.6

- means **not applicable**

9.3. Mobile Users

Breakdowns by principal operator of both level of awareness and accuracy of customer rights issues among mobile phone users are presented in Table 163 (Page 120) and Table 164 (Page 120) respectively. No trends of interest are evident[15].

[15] Bear in mind that the number of M-Tel subscribers is small (N=78).

Table 163 Level of awareness of Customer rights issues (% of mobile users making valid response) – by Mobile operator

	maximum waiting time (Customer Care Centre)	time to load credit (over-scratched PIN)	maximum waiting time (Call Centre)	period before losing number	opt out of unsolicited SMS
Mobile operator					
Etisalat	86.5	86.7	87.4	74.6	66.5
M-Tel	89.3	88.4	91.2	85.7	73.3
Globacom	88.8	88.8	88.9	78.4	68.6
Airtel	89.5	89.6	89.5	82.3	67.1
MTN	87.2	87.2	87.8	76.3	68.6

Table 164 Accuracy of knowledge on Customer rights issues (% of mobile users making valid response) – by Mobile operator

	maximum waiting time (Customer Care Centre)	time to load credit (overscratched PIN)	maximum waiting time (Call Centre)	period before losing number	opt out of unsolicited SMS
Mobile operator					
Etisalat	26.6	10.8	-	22.8	35.9
M-Tel	33.1	26.6	-	4.5	31.3
Globacom	31.7	14.5	-	23.2	37.4
Airtel	27.0	10.6	-	22.2	42.0
MTN	34.9	13.9	-	22.4	37.3

- means **not applicable**

Annex A Questionnaire

Telecoms Consumer Satisfaction Survey 2012 (version 3.2)

NIGERIAN COMMUNICATIONS COMMISSION

Tick only one box unless 'multiple response' indicated

Hello my name is....., I am working on behalf of the Nigerian Communications Commission (NCC). I would like to ask your views on the quality of service you receive when using mobile and fixed phones or Internet. The Information will be used by NCC to further improve quality of service in Nigeria. The Questionnaire is likely to take about 15 mins to complete.

Section 1 GENERAL SURVEY DATA

1 Serial Number				
2 Date of interview				
3 Name of Interviewer				
4 Name of Supervisor				
5 Name of Enumeration Area				
6 Name of Local Government Area				
7 Name of State				
8 Type of area (rural / urban)		rural		urban
9 Gender		male		female

Section 2 MOBILE PHONE

10 Age group	15–19	20–24	25–29	30–39	40–49	50 or over

11 Do you own a mobile handset or SIM card?		Yes		No

IF 'NO' GO TO 38

12 What is your mobile phone number?	

13 a). Please indicate which networks you personally use (making or receiving calls):
b). please indicate which **one** you use most:

	a). *(multiple)*	b).		a). *(multiple)*	b).
Etisalat			Airtel		
M-Tel			MTN		
Globacom			Other		
			Don't know		

14 Can you estimate roughly how often you use a mobile phone to make or receive calls or to send or receive SMS texts?	Less than once a week	1 or more times a week	1 or more times a day

Now, please think about the ***phone you use most*** (Q.13 b above) – the following questions ask about your experience of using this main phone only

	you	family member	friend	employer	other	not registered
15 Who is this phone registered to?						

16 How often do you usually experience loss of service (no mobile signal, no signal bars etc.)?	never	rarely	sometime	often	Almost always

1

Now, thinking about making or receiving voice calls:

17 How often do you need to dial a number before you get through (before the phone rings)?	Only once	twice	3-5 times	More than 5 times

18 How often do you get connected to the wrong number when you dial?	never	rarely	sometime	often	Almost always

19 How often do you get cut off in the middle of a call?	never	rarely	sometime	often	Almost always

20 How would you rate the voice quality of calls (e.g. clear, loud)?	Very poor	poor	no opinion	good	Very good

21 How would you rate the overall quality of calls on mobile and fixed networks?	Very poor	poor	no opinion	good	Very good	Don't know
Calls on your network (ticked in Q.13 b above)						
Calls on different mobile networks						
Calls on fixed line networks						

Now, thinking about making or receiving SMS texts:	never	rarely	sometimes	often	Almost always	Don't use SMS
22 How often are you unable to send SMS?						
23 How often do you receive unsolicited SMSs?						

Now, thinking about using your mobile to access information or Value Added services e.g. downloads, mobile banking etc.

24 Do you use your mobile phone to access information or value added services?		Yes		No

IF 'No' GO TO 26

25 How often do you have difficulties accessing information or value added services?	never	rarely	sometime	often	Almost always

Now, thinking about how the operator charges you:

26 How would you rate the following aspects of the charges made to your account:	Very poor	poor	no opinion	good	Very good	Don't know
Calls are charged correctly						
SMS are charged correctly						
Info/Value Added Services are charged correctly						
The rates agree with those advertised						

27 What type of account do you have?		Pre-paid		Post-paid

IF 'post-paid' GO TO 29

28 How would you rate the following aspects of the management of your account (prepaid):	Very poor	poor	no opinion	good	Very good	Don't know
Availability of recharge service						
The correct amount is added to your account balance						
Time taken for credit to appear on your account						
Ability to check your account balance						

2

Now, thinking about Customer Services provided by your mobile operator

	never	once	2 to 5 times	More than 5 times		
29 How often have you made a complaint in the last year (through phone or visit)?						

If 'never' GO TO 33

30 How did you usually contact Customer Services?		By phone		Visit to Customer Care centre

31 How would you rate the following aspects of the complaints handling process:	Very poor	poor	no opinion	good	Very good	Don't know
Ease of finding the right number to call						
Time taken to answer your call						
The effectiveness of the Interactive Voice Response (IVR) machine service						
Staff you talked to (e.g. polite, knowledgeable)						
Satisfactory resolution of your complaint						
Time taken to resolve your complaint						

32 The last time you made a complaint, what was it about? (*tick one box*)

Incorrect charging / billing		Inability to recharge paying a bill	
Inability to make / receive voice calls		SMS	
Request for Value Added service		Data complaint	
Time to resolve an existing complaint		Other	
Blackberry complaint			

	much lower	lower	In line	higher	Much higher	Don't know
33 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
34 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
35 Overall, how satisfied are you with your mobile service operator?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
36 How likely are you to change to an alternative operator (in next year)?						

37 Does your household have a fixed phone line?		Yes		No

IF 'YES' GO TO 39; IF 'NO' GO TO 72

Section 3 FIXED LINE PHONES

38 Does your household have a fixed phone line?		Yes		No

IF 'NO' GO TO 59

39 What is your fixed phone number?

40 a).Please indicate which company provides your phone line? *(multiple response)* b). please indicate which **one** you use most:	a).*(multiple)*	b).		a).*(multiple*	b).
Intercellular			Zoom		
Multilinks			Globacom		
NITEL			MTN-VGC		
Starcomms			Other		
Visafone			Don't know		

	Less than once a week	1 or more times a week	1 or more times a day
41 Can you estimate roughly how often you use a fixed line phone to make or receive calls?			

Now, please think about the ***phone you use most*** (Q.40.b above) – the following questions ask about your experience of using this main phone only	you	family member	friend	employer	other	not registered
42 Who is this phone registered to?						

	never	rarely	sometime	often	Almost always
43 How often do you usually experience loss of service (no dial tone, no signal bars etc.)?					

	Only once	twice	3-5 times	More than 5 times
44 How often do you need to dial a number before you get through (before the phone rings)?				

	never	rarely	sometime	often	Almost always
45 How often do you get connected to the wrong number when you dial?					
46 How often do you get cut off in the middle of a call?	never	rarely	sometime	often	Almost always

	Very poor	poor	no opinion	good	Very good
47 How would you rate the voice quality of calls (e.g. clear, loud)?					

48 How would you rate the overall quality of calls on fixed and mobile networks?	Very poor	poor	no opinion	good	Very good	Don't know
Calls on fixed line networks						
Calls on mobile networks						

Now, thinking about how the operator charges you:

49 How would you rate the following aspects of the charges made to your account:	Very poor	poor	no opinion	good	Very good	Don't know
Calls are charged correctly						
The rates agree with those advertised						

50 What type of account do you have?		Pre-paid		Post-paid

Now, thinking about Customer Services provided by your fixed line operator

	never	once	2 to 5 times	More than 5 times	
51 How often have you made a complaint in the last year (through phone or visit)?					

If 'never' GO TO 55

52 How did you usually contact Customer Services?		By phone		Visit to Customer Care centre

53 How would you rate the following aspects of the complaints handling process:	Very poor	poor	no opinion	good	Very good	Don't know
Ease of finding the right number to call						
Time taken to answer your call						
The effectiveness of the Interactive Voice Response (IVR) machine service						
Staff you talked to (e.g. polite, knowledgeable)						
Satisfactory resolution of your complaint						
Time taken to resolve your complaint						

54 The last time you made a complaint, what was it about? (*tick one box*)

Incorrect charging / billing		Inability to recharge	
Inability to make/receive voice calls		paying a bill	
Disconnection		SMS	
Time to resolve an existing complaint		Data complaint	
Other			

	much lower	lower	no opinion	higher	Much higher	Don't know
55 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
56 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
57 Overall, how satisfied are you with your fixed line operator?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
58 How likely are you to change to an alternative operator (in next year)?						

GO TO 72

Section 4 PUBLIC ACCESS

59 If you do not have a mobile or fixed line phone, please indicate the **one** way you usually access a phone: *(single response)*

Borrow from friend, neighbour or relative (not in household)		Other	
Manned public shop / kiosk		I don't use a phone	
Unmanned kiosk			

IF 'I don't use a phone' GO TO 72

	Less than once a week	1 or more times a week	1 or more times a day
60 Can you estimate roughly how often you use this phone to make or receive calls or to send or receive SMS texts??			

	never	rarely	sometime	often	Almost always
61 How often do you usually experience loss of service (no signal or dial tone)?					

Now, thinking about making or receiving voice calls:

	Only once	twice	3-5 times	More than 5 times
62 How often do you need to dial a number before you get through (the phone rings)?				

	never	rarely	sometimes	often	Almost always
63 How often do you get connected to the wrong number when you dial?					
64 How often do you get cut off in the middle of a call?					

	Very poor	poor	no opinion	good	Very good
65 How would you rate the voice quality of calls (e.g. clear, loud)?					

	never	rarely	sometimes	often	Almost always	Don't send SMS
66 How often are you unable to send SMS?						

	much lower	lower	no opinion	higher	Much higher	Don't know
67 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
68 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
69 Overall, how satisfied are you with the phone services you use?					

	Greatly decrease	decrease	no change	increase	Greatly increase	Don't know
70 How is your use of this public phone likely to change over the next year?						

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
71 How likely are you to get your own handset (mobile or fixed) or SIM (in next year)?						

Section 5 INTERNET

72 a). Which of the following do you use to access the internet/email for personal use?

b). please indicate the **one** you use most:

	a).*(multiple)*	b).
Home PC or laptop		
Blackberry		
Other mobile device (phone, iPad etc.)		
cybercafe		
I don't use internet / email		

IF 'I don't use internet / email' GO TO 88

	Less than N3,000	N3,001 to N10,000	Over N10,000	Don't know
73 Can you estimate roughly the average monthly amount you spend on the internet / email?				

Now, please think about the type of internet/email access ***that you use most*** (Q72.b above) – the following questions ask about your experience of using this internet access only

74 Which internet service provider (ISP) do you use?

Airtel		Multilinks	
Direct on pC		NITEL	
Etisalat		Starcomm	
Globacom		Swift wireless	
Hyperia		VGCom	
IPNX		Visafone	
Mobitel		Zoom mobile	
MTN		other	
MTS		Don't know	

	never	rarely	sometime	often	Almost always
75 How often do you experience loss of service (internet/email service not available)?					

	never	rarely	sometimes	often	Almost always
76 How often do you get cut off in the middle of using the internet?					

	Only one	two	3-5 times	More than 5 times
77 How many log-in attempts do you need to make before successfully getting online?				

	Very slow	slow	no opinion	fast	Very fast
78 How would you rate the speed of your internet connection?					

	Very poor	poor	no opinion	good	Very good	Not used
79 How would you rate the quality of voice calls made using the internet (e.g. Skype)?						
80 How would you rate the quality of video streaming over internet (e.g. YouTube)?						

81 How would you rate the following aspects of your internet charges:	Very poor	poor	no opinion	good	Very good
Internet/email is charged correctly					
The rates agree with those advertised					

	never	once	2 to 5 times	More than 5 times
82 How often have you made a complaint (in the last year)?				

If 'never' GO TO 84

83 How would you rate the following aspects of performance of the ISP in responding to your complaint?	Very poor	poor	no opinion	good	Very good	Don't know
Satisfactory resolution of the complaint						
Time taken to resolve the complaint						

	much lower	lower	no opinion	higher	Much higher	Don't know
84 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
85 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
86 Overall, how satisfied are you with your ISP?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
87 How likely are you to change to an alternative ISP (in next year)?						

Section 6 CUSTOMER RIGHTS

Questions for ***everybody*** (doesn't matter if they are not the account holder) – the following questions explore awareness of provisions made in the Quality of Service Regulations.

	15 mins	30 mins	1 hour	No limit	Don't know
88 What is the maximum time you **should** wait at a customer care centre to be attended to?					
89 If you tell your operator that you cannot read a recharge PIN, how long **should** they take to load your credit?					

	1 min	5 mins	15 mins	No limit	Don't know
90 If you want to speak to an agent when calling customer care, what is the maximum time you **should** wait?					

	1 month	3 months	6 months	1 year	Don't know
91 How long can you go without using a SIM before you lose the number?					

	yes	no	Don't know
92 Can you opt out of getting unsolicited SMS?			
93 Are you aware of number portability (keep your number if you change to an alternative operator)?			

	yes	no
94 Are you aware of the toll-free number you can use to contact the NCC Contact Centre?		

IF "no" tell them it is 0800 222 55 622

Thank the respondent!

95 After the interview, give your estimate of the Social Class of the respondent:	
Upper class	
Middle class	
Lower class	

Telecoms Consumer Satisfaction Survey 2012 (version 3.2)

NIGERIAN COMMUNICATIONS COMMISSION

Tick only one box unless 'multiple response' indicated

Hello my name is....., I am working on behalf of the Nigerian Communications Commission (NCC). I would like to ask your views on the quality of service you receive when using mobile and fixed phones or Internet. The Information will be used by NCC to further improve quality of service in Nigeria. The Questionnaire is likely to take about 15 mins to complete.

Section 1 GENERAL SURVEY DATA

1 Serial Number				
2 Date of interview				
3 Name of Interviewer				
4 Name of Supervisor				
5 Name of Enumeration Area				
6 Name of Local Government Area				
7 Name of State				
8 Type of area (rural / urban)		rural		urban
9 Gender		male		female

Section 2 MOBILE PHONE

10 Age group	15–19	20–24	25–29	30–39	40–49	50 or over

11 Do you own a mobile handset or SIM card?		Yes		No

IF 'NO' GO TO 38

12 What is your mobile phone number?				

13 a). Please indicate which networks you personally use (making or receiving calls):
b). please indicate which **one** you use most:

	a).*(multiple)*	b).		a).*(multiple)*	b).
Etisalat			Airtel		
M-Tel			MTN		
Globacom			Other		
			Don't know		

14 Can you estimate roughly how often you use a mobile phone to make or receive calls or to send or receive SMS texts?	Less than once a week	1 or more times a week	1 or more times a day

Now, please think about the ***phone you use most*** (Q.13 b above) – the following questions ask about your experience of using this main phone only

	you	family member	friend	employer	other	not registered
15 Who is this phone registered to?						

16 How often do you usually experience loss of service (no mobile signal, no signal bars etc.)?	never	rarely	sometime	often	Almost always

1

Now, thinking about making or receiving voice calls:

17 How often do you need to dial a number before you get through (before the phone rings)?	Only once	twice	3-5 times	More than 5 times

18 How often do you get connected to the wrong number when you dial?	never	rarely	sometime	often	Almost always

19 How often do you get cut off in the middle of a call?	never	rarely	sometime	often	Almost always

20 How would you rate the voice quality of calls (e.g. clear, loud)?	Very poor	poor	no opinion	good	Very good

21 How would you rate the overall quality of calls on mobile and fixed networks?	Very poor	poor	no opinion	good	Very good	Don't know
Calls on your network (ticked in Q.13 b above)						
Calls on different mobile networks						
Calls on fixed line networks						

Now, thinking about making or receiving SMS texts:	never	rarely	sometimes	often	Almost always	Don't use SMS
22 How often are you unable to send SMS?						
23 How often do you receive unsolicited SMSs?						

Now, thinking about using your mobile to access information or Value Added services e.g. downloads, mobile banking etc.

24 Do you use your mobile phone to access information or value added services?		Yes		No

IF 'No' GO TO 26

25 How often do you have difficulties accessing information or value added services?	never	rarely	sometime	often	Almost always

Now, thinking about how the operator charges you:

26 How would you rate the following aspects of the charges made to your account:	Very poor	poor	no opinion	good	Very good	Don't know
Calls are charged correctly						
SMS are charged correctly						
Info/Value Added Services are charged correctly						
The rates agree with those advertised						

27 What type of account do you have?		Pre-paid		Post-paid

IF 'post-paid' GO TO 29

28 How would you rate the following aspects of the management of your account (prepaid):	Very poor	poor	no opinion	good	Very good	Don't know
Availability of recharge service						
The correct amount is added to your account balance						
Time taken for credit to appear on your account						
Ability to check your account balance						

2

Now, thinking about Customer Services provided by your mobile operator

	never	once	2 to 5 times	More than 5 times		
29 How often have you made a complaint in the last year (through phone or visit)?						

If 'never' GO TO 33

30 How did you usually contact Customer Services?		By phone		Visit to Customer Care centre

31 How would you rate the following aspects of the complaints handling process:	Very poor	poor	no opinion	good	Very good	Don't know
Ease of finding the right number to call						
Time taken to answer your call						
The effectiveness of the Interactive Voice Response (IVR) machine service						
Staff you talked to (e.g. polite, knowledgeable)						
Satisfactory resolution of your complaint						
Time taken to resolve your complaint						

32 The last time you made a complaint, what was it about? (*tick one box*)

Incorrect charging / billing		Inability to recharge paying a bill	
Inability to make / receive voice calls		SMS	
Request for Value Added service		Data complaint	
Time to resolve an existing complaint		Other	
Blackberry complaint			

	much lower	lower	In line	higher	Much higher	Don't know
33 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
34 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
35 Overall, how satisfied are you with your mobile service operator?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
36 How likely are you to change to an alternative operator (in next year)?						

37 Does your household have a fixed phone line?		Yes		No

IF 'YES' GO TO 39; IF 'NO' GO TO 72

Section 3 FIXED LINE PHONES

38 Does your household have a fixed phone line?		Yes		No

IF 'NO' GO TO 59

39 What is your fixed phone number?

40 a).Please indicate which company provides your phone line? *(multiple response)* b). please indicate which **one** you use most:	a).*(multiple)*	b).		a).*(multiple*	b).
Intercellular			Zoom		
Multilinks			Globacom		
NITEL			MTN-VGC		
Starcomms			Other		
Visafone			Don't know		

	Less than once a week	1 or more times a week	1 or more times a day
41 Can you estimate roughly how often you use a fixed line phone to make or receive calls?			

Now, please think about the ***phone you use most*** (Q.40.b above) – the following questions ask about your experience of using this main phone only	you	family member	friend	employer	other	not registered
42 Who is this phone registered to?						

	never	rarely	sometime	often	Almost always
43 How often do you usually experience loss of service (no dial tone, no signal bars etc.)?					

	Only once	twice	3-5 times	More than 5 times
44 How often do you need to dial a number before you get through (before the phone rings)?				

	never	rarely	sometime	often	Almost always
45 How often do you get connected to the wrong number when you dial?					
46 How often do you get cut off in the middle of a call?	never	rarely	sometime	often	Almost always

	Very poor	poor	no opinion	good	Very good
47 How would you rate the voice quality of calls (e.g. clear, loud)?					

48 How would you rate the overall quality of calls on fixed and mobile networks?	Very poor	poor	no opinion	good	Very good	Don't know
Calls on fixed line networks						
Calls on mobile networks						

Now, thinking about how the operator charges you:

49 How would you rate the following aspects of the charges made to your account:	Very poor	poor	no opinion	good	Very good	Don't know
Calls are charged correctly						
The rates agree with those advertised						

50 What type of account do you have?		Pre-paid		Post-paid

Now, thinking about Customer Services provided by your fixed line operator

	never	once	2 to 5 times	More than 5 times
51 How often have you made a complaint in the last year (through phone or visit)?				

If 'never' GO TO 55

52 How did you usually contact Customer Services?		By phone		Visit to Customer Care centre

53 How would you rate the following aspects of the complaints handling process:	Very poor	poor	no opinion	good	Very good	Don't know
Ease of finding the right number to call						
Time taken to answer your call						
The effectiveness of the Interactive Voice Response (IVR) machine service						
Staff you talked to (e.g. polite, knowledgeable)						
Satisfactory resolution of your complaint						
Time taken to resolve your complaint						

54 The last time you made a complaint, what was it about? (*tick one box*)

Incorrect charging / billing		Inability to recharge	
Inability to make/receive voice calls		paying a bill	
Disconnection		SMS	
Time to resolve an existing complaint		Data complaint	
Other			

	much lower	lower	no opinion	higher	Much higher	Don't know
55 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
56 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
57 Overall, how satisfied are you with your fixed line operator?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
58 How likely are you to change to an alternative operator (in next year)?						

GO TO 72

Section 4 PUBLIC ACCESS

59 If you do not have a mobile or fixed line phone, please indicate the **one** way you usually access a phone: *(single response)*

Borrow from friend, neighbour or relative (not in household)		Other	
Manned public shop / kiosk		I don't use a phone	
Unmanned kiosk			

IF 'I don't use a phone' GO TO 72

	Less than once a week	1 or more times a week	1 or more times a day
60 Can you estimate roughly how often you use this phone to make or receive calls or to send or receive SMS texts??			

	never	rarely	sometime	often	Almost always
61 How often do you usually experience loss of service (no signal or dial tone)?					

Now, thinking about making or receiving voice calls:

	Only once	twice	3-5 times	More than 5 times
62 How often do you need to dial a number before you get through (the phone rings)?				

	never	rarely	sometimes	often	Almost always
63 How often do you get connected to the wrong number when you dial?					
64 How often do you get cut off in the middle of a call?					

	Very poor	poor	no opinion	good	Very good
65 How would you rate the voice quality of calls (e.g. clear, loud)?					

	never	rarely	sometimes	often	Almost always	Don't send SMS
66 How often are you unable to send SMS?						

	much lower	lower	no opinion	higher	Much higher	Don't know
67 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
68 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
69 Overall, how satisfied are you with the phone services you use?					

	Greatly decrease	decrease	no change	increase	Greatly increase	Don't know
70 How is your use of this public phone likely to change over the next year?						

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
71 How likely are you to get your own handset (mobile or fixed) or SIM (in next year)?						

Section 5 INTERNET

72 a). Which of the following do you use to access the internet/email for personal use?

b). please indicate the **one** you use most:

	a).*(multiple)*	b).
Home PC or laptop		
Blackberry		
Other mobile device (phone, iPad etc.)		
cybercafe		
I don't use internet / email		

IF 'I don't use internet / email' GO TO 88

	Less than N3,000	N3,001 to N10,000	Over N10,000	Don't know
73 Can you estimate roughly the average monthly amount you spend on the internet / email?				

Now, please think about the type of internet/email access ***that you use most*** (Q72.b above) – the following questions ask about your experience of using this internet access only

74 Which internet service provider (ISP) do you use?

Airtel		Multilinks	
Direct on pC		NITEL	
Etisalat		Starcomm	
Globacom		Swift wireless	
Hyperia		VGCom	
IPNX		Visafone	
Mobitel		Zoom mobile	
MTN		other	
MTS		Don't know	

	never	rarely	sometime	often	Almost always
75 How often do you experience loss of service (internet/email service not available)?					

	never	rarely	sometimes	often	Almost always
76 How often do you get cut off in the middle of using the internet?					

	Only one	two	3-5 times	More than 5 times
77 How many log-in attempts do you need to make before successfully getting online?				

	Very slow	slow	no opinion	fast	Very fast
78 How would you rate the speed of your internet connection?					

	Very poor	poor	no opinion	good	Very good	Not used
79 How would you rate the quality of voice calls made using the internet (e.g. Skype)?						
80 How would you rate the quality of video streaming over internet (e.g. YouTube)?						

81 How would you rate the following aspects of your internet charges:	Very poor	poor	no opinion	good	Very good
Internet/email is charged correctly					
The rates agree with those advertised					

	never	once	2 to 5 times	More than 5 times
82 How often have you made a complaint (in the last year)?				

If 'never' GO TO 84

83 How would you rate the following aspects of performance of the ISP in responding to your complaint?	Very poor	poor	no opinion	good	Very good	Don't know
Satisfactory resolution of the complaint						
Time taken to resolve the complaint						

	much lower	lower	no opinion	higher	Much higher	Don't know
84 To what extent is the quality of services in line with your expectations?						

	Very poor	poor	no opinion	good	Very good	Don't know
85 Overall, how would you rate the value for money offered by the services you pay for?						

	very dissatisfied	dissatisfied	no opinion	satisfied	very satisfied
86 Overall, how satisfied are you with your ISP?					

	very unlikely	unlikely	no opinion	likely	very likely	Don't know
87 How likely are you to change to an alternative ISP (in next year)?						

Section 6 CUSTOMER RIGHTS

Questions for ***everybody*** (doesn't matter if they are not the account holder) – the following questions explore awareness of provisions made in the Quality of Service Regulations.

	15 mins	30 mins	1 hour	No limit	Don't know
88 What is the maximum time you **should** wait at a customer care centre to be attended to?					
89 If you tell your operator that you cannot read a recharge PIN, how long **should** they take to load your credit?					

	1 min	5 mins	15 mins	No limit	Don't know
90 If you want to speak to an agent when calling customer care, what is the maximum time you **should** wait?					

	1 month	3 months	6 months	1 year	Don't know
91 How long can you go without using a SIM before you lose the number?					

	yes	no	Don't know
92 Can you opt out of getting unsolicited SMS?			
93 Are you aware of number portability (keep your number if you change to an alternative operator)?			

	yes	no
94 Are you aware of the toll-free number you can use to contact the NCC Contact Centre?		

IF "no" tell them it is 0800 222 55 622

Thank the respondent!

95 After the interview, give your estimate of the Social Class of the respondent:	
Upper class	
Middle class	
Lower class	

Annex B Local Government Areas used for sampling

Zone	States	Urban 1	Urban 2	Rural
North West	Jigawa	Dutse	Birni Kudu	Buji
	Kaduna	Kaduna	Zaria	Soba
	Kano	Kano	Nasarawa	Dawakin Kudu
	Katsina	Katsina	Dutsin-Ma	Bindawa
	Kebbi	Birnin Kebbi	Gwandu	Kalgo
	Sokoto	Sokoto	Wamako	Dange-shnsi
	Zamfara	Gusau	Talata Mafara	Maru
South South	Akwa Ibom	Uyo	Oron	Ikot Ekpene
	Bayelsa	Yenegoa	Ogbia	Ekeremor
	Cross River	Calabar South	Ikom	Odukpani
	Delta	Asaba	Sapele	Mosogar
	Edo	Benin city	Ekpoma	Ologbo
	Rivers	Port Harcourt	Obia/Akpor	Emohua
South West	Lagos	Lagos	Lagos metropolis	Ikorodu
	Ogun	Abeokuta	Sagamu	Obadaoku
	Oyo	Ibadan	Oyo	Oduona
	Osun	Osogbo	Ife	Ofatedo
	Ondo	Akure	Owo	Obaile
	Ekiti	Ado	Ikere	Ijan
South East	Abia	Umuahia	Aba	Lokpanta
	Anambra	Awka	Onitsha	Anam
	Ebonyi	Abakaliki	Afikpo	Okposi
	Enugu	Enugu Town	Nsukka	Agbogugu
	Imo	Owerri	Mbano	Urata
North Central (CTO)	Nasarawa	Lafia	Keffi	Nasarawa ntoto
	Kogi	Lokoja	Okenne	Okun
	Kwara	Ilorin	Offa	Idofian
	Niger	Minna	Suleja	Lapai
	Benue	Makurdi	Gboko	Vandeikya
	Plateau	Jos	Bukuru	Vom
	FCT	Garki	Wuse	Kuje
North East (CTO)	Adamawa	Yola	Mubi	Ganye
	Bauchi	Bauchi	Tafawa Balewa	Tildem Fulani
	Gombe	Gombe	Kaltungo	Gelengu
	Taraba	Jalingo	Mutumbiu	Takum
	Yobe	Damaturu	Potiskum	Fika
	Borno	Maiduguri	Biu	Lassa

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