COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

Nigeria Consumer Satisfaction Survey
Final Report Part 1: Overview

For

Nigeria Communications Commission (NCC)

Consumer Affairs Bureau (CAB)

Submitted by

NCC Consumer Satisfaction Survey (NCC CSS) Team:
Commonwealth Telecommunications Organisation (CTO)
Decision Support Consulting Ltd
Telecom Advisory Services (TAS) Ltd
Seals Consultants Ltd

November 2012

This Report is a formal deliverable for the Nigerian Nationwide Consumer Satisfaction Survey Project. The Report is the first part of a two part final deliverable for the project, which called on the NCC CSS team to survey 50,000 Nigerian ICT users, analyse the results and provide a formal report to the NCC. The project also calls on the NCC CSS team to develop a Consumer Satisfaction Index that the NCC will use to record and assess levels of consumer satisfaction over time.

Table of Contents

Acknowledgements

The NCC Survey team is extremely appreciative of the instrumental role the Nigerian Communications Commission (NCC), most notably the Commission's Consumer Affairs Bureau (CAB), has played to ensure 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 a key part in the development of the survey instrument, the design of the sampling framework, as well as the administration and the monitoring of all fieldwork. 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 services; a 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 intervention on consumer awareness; facilitate remedial action for dissatisfied consumers; facilitate efficient consumer-operator interface for complaints management; and collaborate with consumer advocacy groups, among others.

Roles and Responsiblities of the The NCC 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 administer the survey in the South West Zone. Decision Support was founded in 1997 as an independent and 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.

As a full-service research agency with over 12 years experience Decision Support's service areas span 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 continue to lead in their field by offering professional research solutions for marketing and social accountability to clients with an interest in Africa.

Telecom Advisory Services (TAS) was contracted to administer 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, to name but a few. Made up of well seasoned professionals with 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 and Oduatel among others. www.telecomadvisory.com.ng

Seals Consultants were contracted to administer the survey in the South East Zone. Seals Consultants were created as a subsidiary of Seal Limited, which was incorporated in November 1996. Due to its mission of becoming the foremost financial and management consulting firm within and outside Nigeria, Seals is 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.

Executive Summary

In July 2012, the Nigerian Communication Commission's Consumer Affairs Bureau (CAB) conducted a nationwide survey of 50,000 Nigerian ICT users. The CAB contracted the NCC CSS Team, composed of both international and Nigeria-based consultants, to assist them coordinate and administer the survey. The NCC CSS team interviewed approximately 8000 respondents in each geopolitical zone, typically speaking to between 1200 and 1600 urban and rural ICT users in each of Nigeria's 36 States and the FCT.

By the end of July 2012, the data collection phase of the project was completed. After erroneously filled questionnaires had been filtered out, the NCC CSS team was able to analyse the responses of 47,881 Nigerian ICT users. The data collected enabled the CAB and NCC CSS team to fulfil the main objectives of the project, which were to:

- determine the quality of service provided by mobile, fixed phone, public phones and Internet service providers, and the robustness of their complaint management processes;
- ascertain consumer complaints' profile and identify frequency of consumer experience;
- make recommendations for the various services;
- determine consumer awareness of their rights, benefits and the obligations to service providers;
- make recommendations for how consumer awareness of their rights could be improved;
- suggest possible compensation/remedies to consumers; and
- develop a Consumer Satisfaction Index for the Commission.

Market Structure

Mobile Telephony

In terms of subscriber numbers, MTN was the clear market leader, followed by Airtel and Globacom (Figure 1 below – Page 8). 63% of respondents used MTN as their principle phone, 13.9% used Airtel, 13.3% used Globacom and 8.1% used Etisalat. The remaining respondents said they used 'other mobile' operators or responded with "I don't know". 98% of users were prepaid and only 0.8% said their phone were not registered, thus highlighting the effectiveness of the caller registration process in Nigeria.

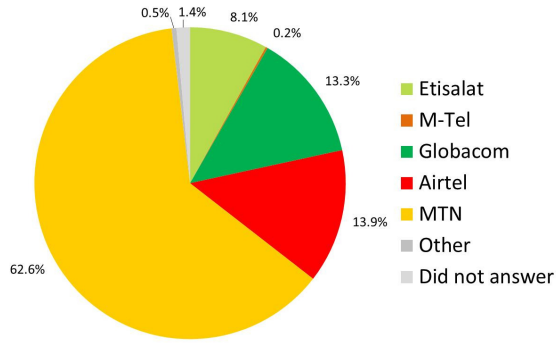

Figure 1 Principal network operators – Mobile

Fixed Telephony

In terms of fixed phones, Visafone, with just under 18% of subscribers, and MTN-VGC, with 13%, appeared to be the most popular (Figure 2 below – Page 8). 79% of accounts were pre-paid. Most fixed phone users were drawn from North West, South South and South West zones.

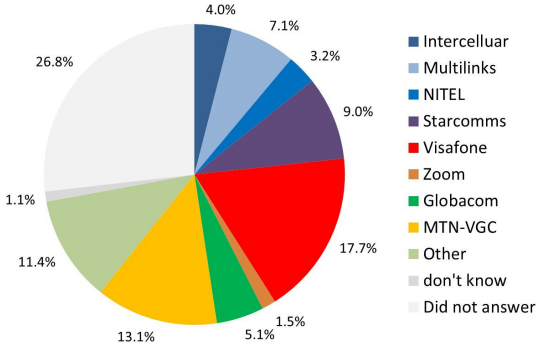

Figure 2 Principal fixed phone operator

Public Phones

Manned public phones were the most commonly used means of access for public phone users, followed by borrowing a privately owned handset. Only 11% of those who used public phones used the phone every day. Overall, respondents indicated that their future use of public phones was likely to decline, which is at least partly due to a shift towards personal handset ownership; 45% said there were likely or very likely to own a handset in the next year.

Internet

In terms of Internet subscriber numbers, MTN was the clear market leader, followed by Etisalat, Airtel, and Globacom, who between them serve 85% of respondents (Figure 3 below – Page 9).

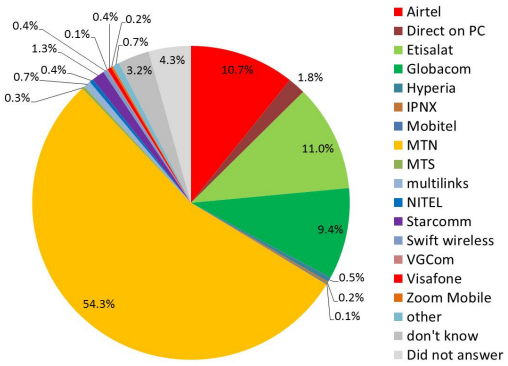

Figure 3 Internet Service Providers

Assessing Quality of Services – Network Availability and Reliability

Each respondent was asked a range of questions about their use of services, including questions about the quality of services, their experiences when accessing services and the reliability of those services they did use.

Mobile

- Mobile users were generally positive about the quality of the calls.
- The quality of off-net calls was poorer than the quality of on-net calls, and the quality of calls to fixed line networks was even poorer.
- Getting cut off during a call is regarded as the most common network reliability issue - 51% said they were sometimes cut off, while 11% said it happened often.
- 65% of respondents reported having to dial twice or more to get through
- 25% reported having to dial more than three times.
- 94% of mobile users use SMS
- Unsolicited SMS messages (spam) are a problem - Only 23% of respondents said they never or rarely received unsolicited messages.
- Problems of spam and being unable to send an SMS were felt most acutely in the South South Zone, where 46% of respondents said they often received unsolicited SMS, compared to 24% for the whole sample.
- 19% of those in the South South said they were often unable to send an SMS, compared to 11% for the whole sample.
- 28% of mobile users use their phone to access information and Value Added Services (VAS), but 88% of VAS users encountered some difficulties accessing the services.

Fixed Telephony

- The balance of fixed phones users' responses on the quality of calls was generally positive.
- Fixed phones users' perceptions on the quality of calls made to both mobile and fixed networks were similar.

- 52% of respondents reported having to dial twice or more to get through.

Public Phones

- 55% of public phone users felt the voice quality of calls was good or very good, compared with only 26% who felt the quality was poor or very poor.
- Not being able to get a signal was regarded as the most common network problem.
- 73% of public phone users reported having to dial twice or more to get through.

Internet

- The analysis of Internet users' responses indicates that views on service availability and getting cut off were similar.
- Around 10% of users said they often or almost always experience difficulties, and 50% of respondents said they 'sometimes' experienced problems.
- 73% Internet users reported having to log-in more than once before successfully getting online.
- Perceptions on Internet speeds were balanced; 41% of respondents felt the speed of their Internet connection was fast or very fast, but 44% felt it was slow or very slow.
- 60% of Internet users had made voice calls on the Internet, and 59% had streamed video over the Internet.
- Overall, the balance of views on the quality of Internet calling and streaming was positive.

Correctness of Charging – (Accuracy of Billing)

The users of each type of service were asked to rate whether they were charged correctly for the services they used. They were also asked whether what they were charged aligned with the rates advertised by service providers. Mobile users were also asked questions about the recharge services they use.

Mobile

- Two thirds of mobile users had positive views on the correctness of charges for calls.
- Only 26% agreed that rates they charged actually aligned with those advertised by service providers.
- 71% of mobile users gave a positive rating for the accuracy of charging for SMS they send.
- Mobile users were generally positive about the recharge services offered by their service provider.
- They rated four indicators for the recharge services highly: ability to check balance, time for credit to appear, correct amount added, and availability of the recharge service.

Fixed Telephony

- The balance of fixed phone users' views on both the correctness of charging of calls and the alignment of charges with operators' advertised rates was positive, but not very significantly.

- When asked to rate whether calls were charged correctly 42% of respondents provided a rating of good or very good, while 28% said they were poor or very poor.
- When asked to rate to what extent the amount they were charged for calls agreed with advertised charges, 34% of respondents gave a rating of good or very good; 21% rated this as poor or very poor.

Internet

- 59% of Internet users had positive views on the correctness of internet/email charging.
- 49% agreed that rates aligned with those advertised by Internet service providers.

Complaints Handling

Respondents were asked whether they had made a complaint in the last year, whether the complaint was made by phone or face to face, and how that complaint was handled. The proportion of users of each service that made a complaint in the last year is illustrated by Figure 4 below (see Page 11).

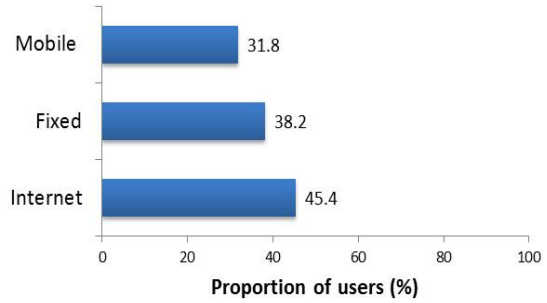

Figure 4 Proportion of Service users that made a complaint (in the last year)

Mobile Telephony

- 32% of mobiles users had made a complaint in the last year.
- Most complaints concerned charging, billing and the recharging of pre-paid accounts.
- 90% of these usually lodged complaints by phone.
- 8% said they visited a customer care centre.
- The time taken to answer a call and the time taken to resolve complaints were the most criticised aspects of complaints handling processes, closely followed by how long call centre staff took to answer calls.
- Respondents were most positive about the staff they spoke to.

Fixed Telephony

- 38% of respondents made a complaint in the last year.
- 69% of those that complained in the last year usually lodged complaints by phone.
- Most complaints concerned charging and billing, problems with voice calls and with SMS.
- Time to answer a call and finding the right number to call were the most criticised aspects of the complaints handling processes of fixed telephony service providers.

- Respondents were most positive about the staff that handled the complaint.

Internet

- 45% of Internet users made a complaint in the last year.
- Most complaints concerned both VOIP and the quality of video streaming, but not the perceived speed of Internet connection.
- Many users also complained about the number of log-in attempts needed, indicating that this is an issue of importance to customers.
- Overall, the balance of views on aspects of the complaints handling processes was positive, but not considerably.

Differences between Service Providers and Between Geo-Political Zones

Mobile Telephony

The differences between Nigeria's four major mobile operators were modest across all indicators for mobile telephony. MTN registered lower scores on quality of calls to other mobile and fixed networks; it scored 58.5, compared to Etisalat's score of 63.1, which was the highest for that indicator. Etisalat also scored highest on issues concerning network reliability, but differences were modest again. For example, Etisalat scored 62.8 on the loss of service indicator, the lowest score of 60.9 was registered by MTN, closely followed by Airtel's score of 61.

On the issue of charging, Globacom and Etisalat registered higher scores; Etisalat had the highest scores for the correct charging of calls 65.5, closely followed by Globacom with 65.2. On the issue of whether rates aligned with service providers' advertised rates, Etisalat scored highest with 60.9, closely followed by Globacom on 59.1. MTN was the lowest on both issues of charging; it scored 60.4 for the correctness of charging and 55.3 for the whether the rates it charged agreed with advertised.

Although the differences were modest, Etisalat subscribers rated VAS services highly (57.2), and MTN subscribers rated those relatively poorly (55.5). Etisalat subscribers rated all aspects of complaints handling highly. It received the highest scores for all complaints handling indicators, apart from the effectiveness of the IVR service; its score of 63.2 was just beaten by Airtel's score of 63.3.

When looking at differences between zones, mobile services appeared to be better in the North Central & FCT and South West zones. Views on the charging for SMS and VAS services were poorer in North West zone, and respondents in South South zone appeared to have greater technical difficulty in using these services. Respondents in these two zones also rated mobile recharge services poorly. Note that views on complaints handling procedures appeared to mirror views on service provision, so respondents from the North West and South South zones rated complaints handling process highly.

Fixed Telephony

Visafone consistently scored highly in respect of voice quality and charging. It scored the highest for voice quality, 72.9, followed by MTN-VGC on 70.4 and Starcoms on 64.9; NITEL registered the lowest score for voice quality with 38.2. Among those operators with relatively large numbers of subscribers, MTN-VGC subscribers registered lower scores for network reliability issues. MTN-VGC, however, scored relatively highly on complaints handling, as did Visafone.

Public Phones

Users of unmanned kiosks experienced particularly poor service; it received the lowest scores.

Internet

Scores for internet speed were highest among Etisalat subscribers (57.4), and lowest among MTN subscribers (46.9). The spread of scores for quality of voice calls and video streaming was much smaller, but scores registered by Etisalat subscribers were still highest 58.5 and 58.6 respectively. The lowest scores for voice and video streaming were registered by MTN 54.7 and 56.2 respectively.

The spread of network reliability scores across ISPs was small. Etisalat registered the highest score in respect of the lost of service and getting cut off at 61.2 and 60.6 respectively. MTN scored the lowest when it came to getting cut off and loss of services, scoring 58.1 and 57.9 respectively. Although the spread of scores across ISPs for complaints handling was small, they were highest among Globacom subscribers.

Perceived internet speed appeared to be relatively high in the South West zone, and slow in North West zone. However, at the same time, perceived quality of voice calling through the Internet was highest in North West zone. Perceived frequency of getting cut off was also highest in North West zone, as were network availability problems.

Customer Satisfaction and Customer Care Indices

Separate customer Satisfaction and Customer Care Indices were created for each service. The NCC Customer Satisfaction and NCC Customer Care Indices present the scores for each service and each operator's customer care. The higher the score, the more satisfied consumers are with services, service providers and customer care.

Figure 5 below (Page 14) presents the NCC CSI and NCC CCI for services. It indicates that users of services are generally positive about the services they use and customer care they receive, although there is clearly room for improvement. Users of fixed phones and Internet appear to be most satisfied. When it comes to issues of customer care, users of fixed phones and mobiles are the most satisfied again.

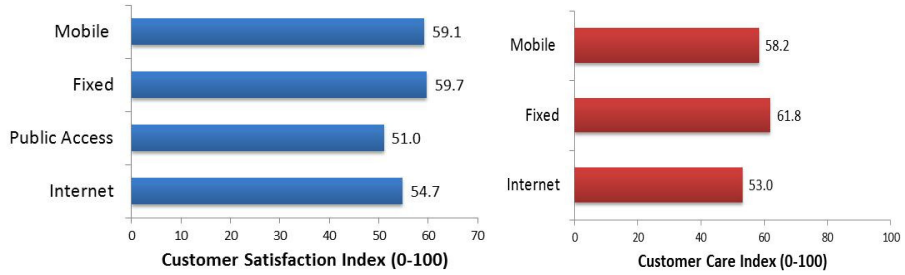

Figure 5 Composite indices for telecommunications products

The spread of NCC CSI scores for mobile operators was only 3.1 points, from 58.2 (MTN) to 61.3 (Etisalat). For customer care the spread was wider, 4.6 points, from 57.4 for MTN to 62 for Etisalat (Figure 6– page 14).

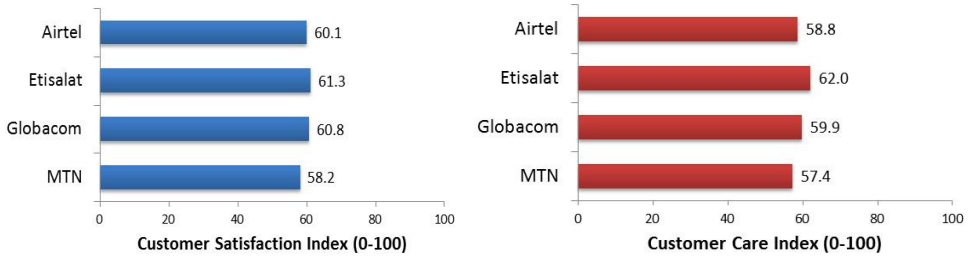

Figure 6 Composite indices for principal mobile operators

The spread of NCC CSI scores across fixed line operators was 24.4 points, from 45.6 for Multilinks to 70 for MTN- VGN. For the NCC Customer Care Index the spread for fixed line operators was wider, 34.4, from 41.9 for Multilinks to 70 for MTN-VGC (Figure 7 below – Page 14).

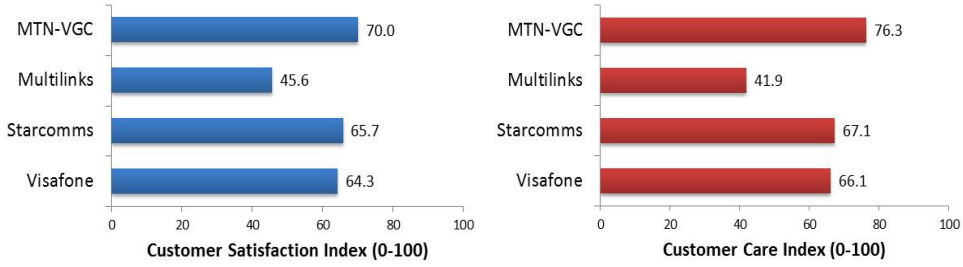

Figure 7 Composite indices for principal fixed phone operators

The spread of NCC CSI scores across Internet service providers (ISP) was only 7.2 points, from 53.5 MTN to 60.7 for Etisalat. For the NCC CCI the spread for ISPs was wider, 31 points, from 52.5 for MTN to 54.8 for Airtel (Figure 8 below – Page 15).

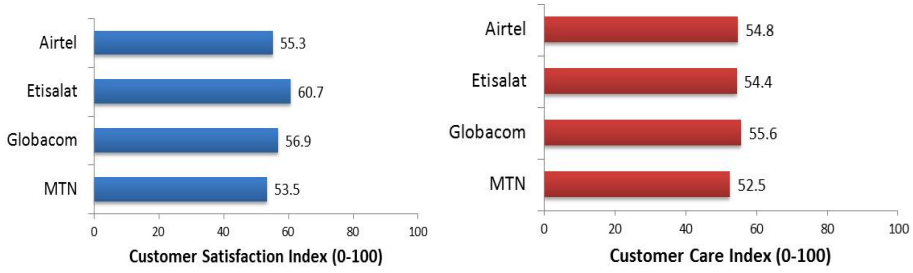

Figure 8 Composite indices for principal internet service providers

Awareness of Consumer Rights

Table 1 below (Page 15) presents the proportion of the sample that knew the correct answer and those that said I don't know to five questions intended to assess respondents' awareness of their rights. The proportion of respondents who either said they 'didn't know' or declined to answer the question gives an indication of the level of awareness of an issue. The ability to opt out of unsolicited SMSs stands out from Table 1 as an issue for which lack of awareness is acute.

Table 1 Categories of responses to consumer rights questions (proportion of whole sample)

	don't know/did not answer (%)	'Correct' response (%)
maximum waiting time (Customer Care Centre)	10.6	28.8
time to load credit (spoiled PIN)	10.4	11.0
maximum waiting time (Call Centre)	10.1	37.4
period before losing number	22.6	19.5
opt out of unsolicited SMS	31.6	25.8

Two additional questions were used to test levels of awareness of number portability and the NCC contact number. 18% of respondents said they were aware of number portability, though it is not yet available in Nigeria. Concerning levels of awareness of the NCC contact number, the figure of 11% for the sample as a whole reflected a low level of awareness across the country. This suggests that the NCC will need to put resources into raising awareness of number portability and the NCC customer care number.

Suggestion on Service Improvements, Remedies and Compensation

The data analysis exercise indicated some the aspects of services that might deserve most attention from the NCC in the first instance[1]. This is not to say that other aspects are not important; it is simply to establish priorities and support the NCC in deciding where to apply its resources[2]. They are:

[1] Besides being the aspects in which the proportion of ratings of "poor or very poor" exceeds 30 percentage points, these are also the aspects in which the ratio of ratings of "poor or very poor" to ratings of "good or very good" exceeds 68%. In other words, at least two third as many ratings of these aspects were "poor or very poor" as were "good or very good".

[2] In particular, the NCC might have additional evidence (for example, in records of complaints about operators) pointing to other aspects of services deserving attention.

- Internet data rate;
- Ability to connect first time;
- No need to make complaints in the past year;
- Time to answer complaint calls;
- Time to resolve complaints;
- Absence of spam;
- Alignment of charging with advertising[3];
- Correctness of charging; and
- Ability to recharge.

Encouragement to Enforcement

The NCC should focus on encouraging service providers, while retaining its option to use enforcement. The main reasons for this are that encouragement can:

- Avoid the delay, expense and diversion of management attention inherent in litigation;
- Foster a co-operative attitude on the part of the operators and thereby make other policy objectives, such as universal service, easier to achieve;
- Allow standards to be set by the best in class practices of operators, rather than targets that are necessarily arbitrary and potentially irrelevant to customer satisfaction[4];
- Harness the forceful style of public debate and press comment in Nigeria to publicise differences in quality of service between operators and thereby use competition as a spur to improvement[5]; and
- Permit improvements to be requested because of findings about subjective indicators, such as customer attitudes, that are not subject to the Regulations.

Even with an emphasis on encouragement, powers of enforcement would still be needed in a graduated series of obligations, such as the one in Figure 9 (below – Page 16) that the NCC could threaten to impose.

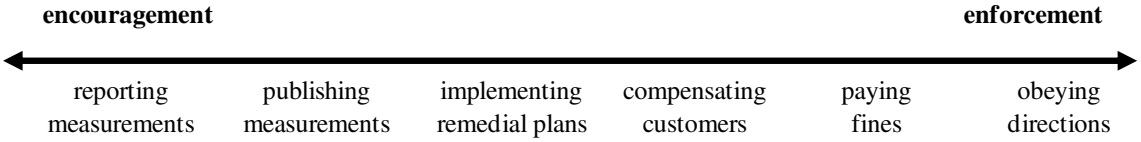

Figure 9: Requirement of operators intended to improve quality of service

[3] Though this has a lower proportion of "poor or very poor" ratings than other indicators, it deserves investigation, because there should be no mismatch between advertised and actual prices.

[4] For instance, a customer is unlikely to be able to tell the difference between call setup success rates of 97% and 98% but one contravenes the Regulations and the other does not.

[5] The beneficial effect of "naming and shaming" operators can be seen in a recent report from the UK regulator, Ofcom(http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/complaints/q2_2012.pdf). This shows how the numbers of complaints to Ofcom have been falling for all services since Ofcom started to publish the numbers separately for each operator in 2010. The figures for TalkTalk are especially enlightening: TalkTalk attracted very considerable press comment in 2010 because of its poor customer service, and in eighteen months it has halved the number of complaints.

The NCC is likely to find operators most co-operative if it discusses its programmes of work and plans for publication with them. Included in the discussions would be how the NCC intended to apply such a graduated series of obligations.

Potential Ways of Improving the Services

Using the Survey Findings

1. The NCC could publish the aggregate figures from the survey findings, by briefing journalists, in advertising, on its web site, and to the Consumer Parliament. For courtesy the NCC would brief the operators and invite comments some days before.

2. The NCC could discuss with each operator the figures for its own services, to obtain explanations of any major shortfalls in different zones (relative to the aggregate figures) and details of any plans for improvement under Regulation 14 of the Regulations[6]. If the NCC was not satisfied with the outcome of the discussion, it could publicise the fact.

3. The NCC could let each operator use the figures for its own services in its own publicity, subject to guidelines on statistical reliability and approval by the NCC of the wording and context.

4. The NCC could publish the figures for the services of individual operators by briefing journalists, in advertising, on its web site, and to the Consumer Parliament. Publication would use simple tables or bar charts and focus on very few, important, indicators, as a prototype for publication of information to the general public under Regulation 10 of the Regulations.

5. The NCC could convene a joint meeting of the industry and consumer groups to identify actions to improve unmanned public payphones and people who would take responsibility for implementation.

Extending the Survey Findings

1. The NCC could ask for the operator records of customer complaints to check whether these and the NCC complaint records match the survey findings and compliance with the standards in Schedule 1 Table 2 (Account Complaints KPIs) of the Regulations. If the NCC found significant mismatches or suspected that the records were partial, it could investigate further under Regulation 12 of the Regulations.

[6] Of course the zones are large, and the figures for them do not show the differences within individual zones. However, operators will already know in which areas of the zones they are deficient. Discussing the survey with them should help to focus their attention on those areas.

2. The NCC could check the consistency of the survey findings with information gathered from other sources (such as NCC drive tests and measurements submitted by the operators themselves) and aim to understand any inconsistencies.

3. The NCC could compare the survey findings with the findings of the earlier survey, to determine what had changed in customer perceptions.

4. The NCC could do its own tests of call handling, including enough tests to be statistically significant, to check compliance with Schedule 1 Table 3 (Customer Care Services KPIs) of the Regulations, bearing in mind the survey findings on customer care. These tests of call handling would involve mystery shopping by or on behalf of the NCC, in which callers would make calls to the operator call centres to make complaints or just to make enquiries.

5. The NCC could conduct a special investigation of charging for on-net and off-net calls, to understand and rectify problems taking into account the survey findings on alignment of charging with advertising.

6. For internet:
    - The NCC could do mystery shopping by speaking to sales staff to examine contracts for compliance with Regulations, particularly as, according to the survey, the internet data rate is a cause for concern.
    - The NCC could do its own tests of login success, data rate, delay and packet loss, including enough tests to be statistically significant, to check compliance with Schedule 1 Table 5 (Data Services KPIs) of the Regulations and contracts[7].

7. The NCC could use its own test and mystery shopping results in essentially the same the same ways (1-4 above) as the survey findings.

Improve Quality in the Future

1. To help raise consumers' awareness of their rights, benefits and obligations in relation to service providers, the NCC could raise the apparent difficulty of finding customer contracts and customer codes of practice with the operators and request that they make them more readily available. Airtel was the only operator to make its customer code of practice available on its website.

2. The NCC could announce what it does, and does not, intend to enforce. Having an enormous collection of targets that are not enforced but that might be enforced

[7] However, as the internet data rate can vary for many reasons, including several outside the control of the operator, compliance is unlikely.

some time does not serve subscribers or encourage network development; it encourages operators to disregard the Regulations completely[8].

3. The NCC could raise consumer awareness of rights and what to do when things go wrong, through various publicity avenues and campaigns. The survey points to some interesting differences between zones in knowledge of customer rights[9]. These differences might point to differences in the effectiveness of earlier campaigns in different zones, if they are not just cultural or linguistic.

4. The NCC could discuss with the industry and consumer groups which of the following approaches to enforcement would be simplest to implement and most effective:
    - Providing compensation to all relevant subscribers, with messages written by the NCC in bills or in SMS explaining why the compensation is being given[10]; and
    - Paying fines that are earmarked for an audited fund serving purposes that are beneficial to all consumers, such as publicising consumer information written by the NCC (that might on occasions name and shame particular operators).

5. In the future, the NCC could undertake both general surveys, covering the whole country and all services, and smaller surveys, focusing on specific geographic areas, service aspects or consumer groups. These smaller surveys would let the NCC gain a better understanding of the issues causing most dissatisfaction.

6. The NCC could remove most of the indicators and targets from the Regulations by gazetting a new version. Setting very demanding targets for aspects of services that consumers are already satisfied with is likely to be counterproductive: management attention and resources, in the operators and the NCC, might better be directed to areas of lower satisfaction.

Reducing Spam

The current consumer codes of practices and QoS Regulations 2012 contain provisions that oblige licensees and the partners to make reasonable effort to block or filter spam, as well as enable consumers to opt out of receiving it. However, there does not yet appear to be legislation of broader scope with which to address unsolicited messages from other sources, although it has been discussed in the context of successive drafts of the Cybersecurity Bill.

In the circumstances, the best course of action to reduce the nuisance to consumers of spam texts may be for the NCC to ask each operator to report on:

[8] Some of these targets (such as the requirements for no more than 10 complaints per 1 million accounts and 20 faults per 1 million fixed lines) could never be enforced, as they are unrealistic.

[9] For instance, in several respects the most and least accurate beliefs about rights are held in South South and North West (respectively).

[10] For instance, compensation could be credited automatically to the accounts of all postpaid and prepaid subscribers who have used their phones for revenue-generating events in the past six months.

- Its opt-out provisions, including how these are publicised and how far the opt-out option has been taken up; and
- The efforts it has been putting in to "identify and block or filter bulk, unsolicited and offensive messages from other sources".

The next step might be for the NCC to encourage the operators to co-operate in reducing this nuisance to their customers, by:

- Sharing best practice among themselves[11];
- Re-publicising the opt-out option, which in the future should signify a preference for not receiving unsolicited marketing messages from any source. At the same time, the public should be made aware that responding to such messages is the surest way to ensure that they continue – and conversely;
- Providing a central reporting point to which consumers are invited to forward unwanted text messages; and
- Analysing the unwanted messages received, and using their best efforts to identify the senders and take appropriate action[12].

The nuisance is unlikely to be stopped, but it may be reduced thus public expectations should be managed accordingly.

[11] This might include, for example, having a short code ("7726", which transliterates as "spam") to which spam would be forwarded (where a human would arrange for the messages from the spam sender to be blocked) or installing spam identification and treatment systems such as http://www.cloudmark.com/.

[12] Genuine marketers should be relatively open to persuasion to reduce the volume of their messages; fraudsters can be pursued and dealt with under the law.

Introduction

This report is the first part of a two part final deliverable for the Nigerian Consumer Satisfaction Survey (CSS) Project. It has been prepared by the NCC CSS team for the Nigerian Communications Commission (NCC). The Nigerian NCC CSS team comprises the Commonwealth Telecommunications Organisation (CTO), Decision Support Consulting Limited, Telecom Advisory Services (TAS), and Seals Consultants.

The project called on 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 team to develop a Consumer Satisfaction Index for the Commission and provide recommendations regarding how the NCC may improve services and compensation/remedies.

This report is an overview report, which provides a summary of the methodology employed during the project, the data analysis and key findings. It also presents the NCC CSS team's suggestions for compensation and remedies, as well as actions the NCC might take to improve services. Part 2 of this report, the Nigeria Customer Satisfaction Data Analysis report, presents the result of the data analysis in its entirety. It includes a disaggregation by demographic descriptors that have not been brought forward into the Overview report.

This report is structured as follows:

Part 1: details the background to the project and the project objectives. It explains why quality of service and consumer satisfaction have become such important issues in Nigeria and, therefore, why the NCC felt it necessary to undertake the nationwide survey. It also summarises the project objectives that the NCC CSS team's had to meet.

Part 2: provides an overview of the methodology used for the project. It details the activities and tasks that were undertaken to fulfil the project objectives. It also summarises the methodology used to develop the questionnaire, the Customer Satisfaction Index and Customer Care Index. It concludes with a description of the sampling framework used for the survey and the weighting exercise used during data analysis.

Part 3: presents the main results of the survey. In addition to the main findings for each of the five sections of questionnaire, this section also presents the scores for the customer satisfaction and customer care indices.

Part 4: summaries the survey's key findings. It details the NCC CSS team's comments on some of the key findings, highlighting those which the NCC may find particularly interesting as it seeks to improve quality of services and facilitate universal access to ICT services. It also suggests some possible areas of further investigation for the NCC.

Part 5: presents the NCC CSS team's suggestions for ways to improve services, compensation/remedies for consumers, and ways to improve consumers' awareness of their rights, benefits and obligations in relation to service providers.

1. Background and Project Objectives

This section of the report provides details about the background to the project and explains why quality of service has become such an important issue in Nigeria and, therefore, why the NCC felt it necessary to undertake the nationwide survey. It also summarises the project objectives that the NCC CSS team's had to meet.

1.1 Snapshot of the Nigeria ICT sector

Since August 2001 when the first licensed mobile operators began providing services to the Nigerian consumer, the ICT sector has rapidly grown. As of June 2012, there were more than 102 million mobile subscriptions, giving Nigeria a penetration rate of 73.52%. Although fixed line penetration has declined during the same period to leave the penetration rate lower than it was in 2000, the growth of Nigeria's ICT sector, driven by the explosion of mobile telephony, means that the majority of Nigerians now have access to voice services (
Figure 10 – Page 23).

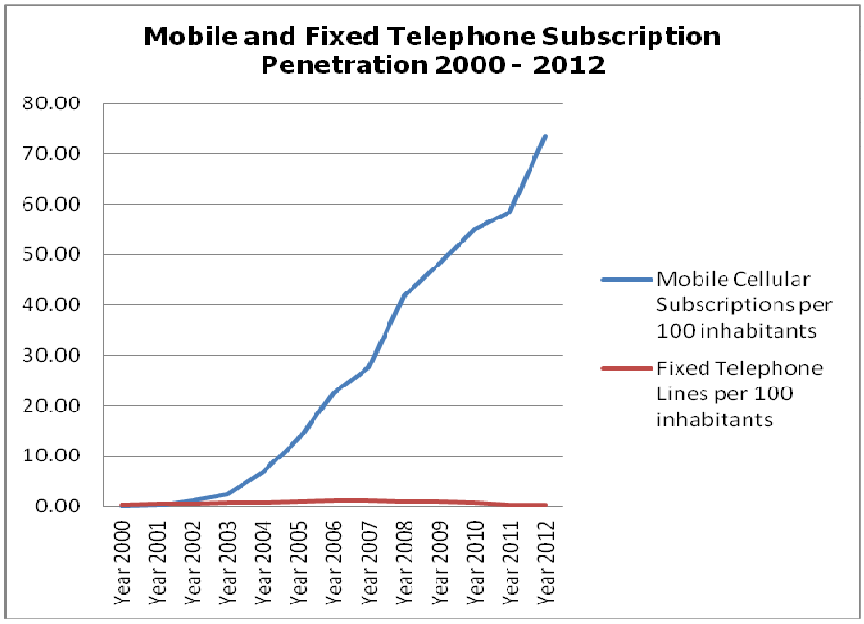

Figure 10 Mobile and Fixed Telephone Subscriptions 2000 – 2012
Source: ITU ICT Indicators Database and Nigerian Communication Commission Website, accessed September 2012

While voice services have become widespread in Nigeria due to the spread of mobile telephony, the use of Internet and broadband services have grown less quickly. Like most countries in sub-Saharan Africa, Internet and broadband subscription in Nigeria remain relatively low when compared with other parts of the world.

Although fixed broadband subscription levels have remained low, Nigeria has witnessed strong growth in Internet usage since 2004, which accelerated in 2007 – see Figure 11

below (Page 24). In part this can be attributed to the growth of mobile broadband subscriptions since 2007.

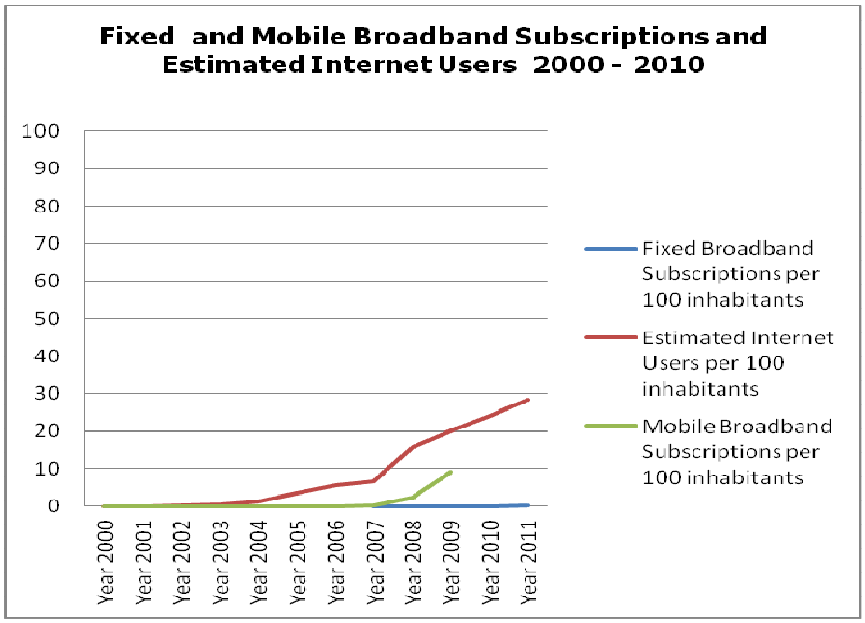

Figure 11 Fixed and Mobile Broadband Subscriptions and Estimated Internet Users 2000 - 2010
Source: International Telecommunications Union (ITU) ICT Indicators Database

The growth of services has largely been driven by the rollout of GSM network. Figure 12 below (Page 24) provides a vivid illustration of the overwhelming importance of GSM infrastructure, although Nigerian operators invariably use a mix of infrastructure solutions to deliver services, including fibre, satellite and microwave etc.

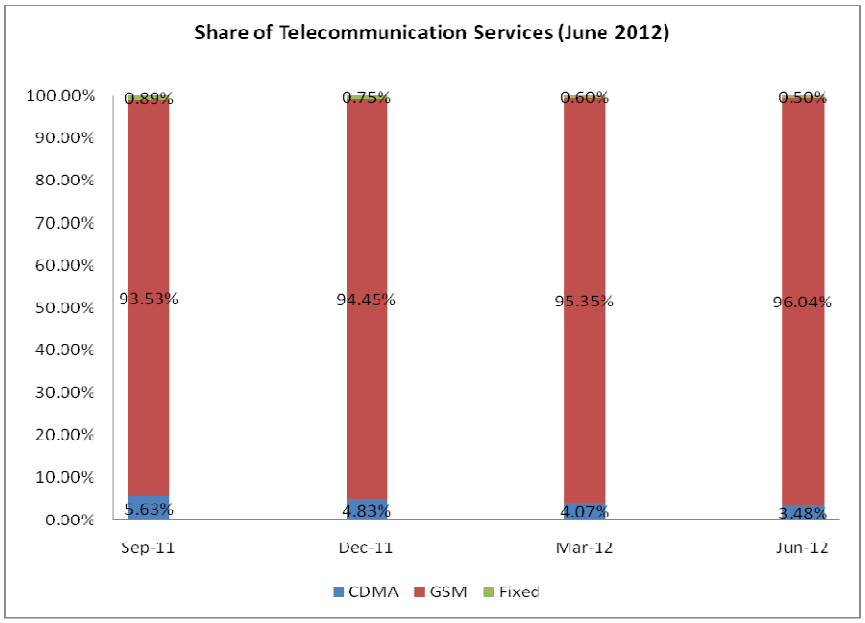

Figure 12 Share of Telecommunications Services September 2011 – June 2012

Source: NCC Website Accessed September 2012

MTN and Econet were the first licensed operators to provide services in Nigeria in August 2001[13]. Today, MTN is the apparent market leader in Nigeria, with more than twice the number of subscriptions as its nearest rivals, Globacom and Airtel – see Figure 13 below (Page 25)

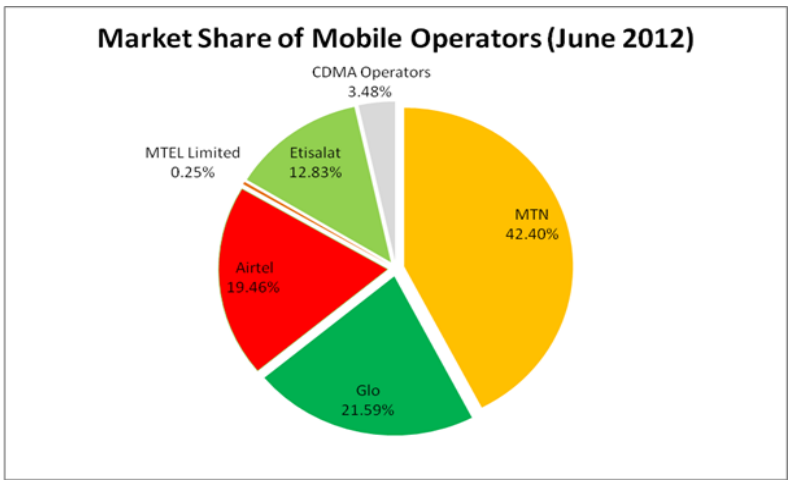

Figure 13 - Market Share Nigerian Mobile Operators June 2012
Source: Nigerian Communications Commission website, accessed August 2012

1.2 Quality of Service issues in Nigeria: Past and Present

As an increasing number of Nigerians use ICT services, Quality of Service (QoS) issues have arisen. In part, these stem from the rapid growth in demand for services and the strain this demand places upon network infrastructure. Indeed, operators in Nigeria have cited the rapid growth in demand as one reason why QoS issues have arisen. Other reasons cited include the vandalism of network equipment, the lack of roads, the difficulties posed by inadequate power supply and breaches of security in some parts of the country.

Despite the fact that the reasons given by operators for poor quality of service have some validity, there is an expectation among users that the technological innovations which have occurred in the ICT sector will result in good speech quality and uninterrupted services. Indeed, this expectation, coupled with other drivers such as the falling prices of services and devices, have fuelled the growth in the use of services.

It has become increasingly evident, however, that quality of service issues, including a complete loss of service, have become more pronounced. Indeed, a number of observers have suggested that the Nigerian telecom sector has been plagued by problems in the past few years, causing much frustration amongst consumers. An article in Nigerian

[13] http://news.bbc.co.uk/1/hi/business/1905744.stm

Communications Weekly provides some indication of the past and present situation in Nigeria vis-à-vis quality of service:

"Since the advent of the mobile revolution [in Nigeria], availability has grown but has not been matched by quality of service owing largely to some issues including: the notoriously unreliable public power supply; security; limited transmission infrastructure; network congestion; and lack of information to consumers on downtime".[14]

The growing frustration of consumers with the quality of service they receive has not gone unnoticed by the Nigerian authorities who have made efforts to encourage and, where necessary, compel operators to improve services. In 2007, the House of Representatives mandated an impromptu committee to investigate QoS issues, while the Upper Legislative House set up a committee to investigate the poor service offered by operators in 2007.

In keeping with its mandate, the NCC has played the most important role in the fight to protect ICT consumer interests. The Commission has closely monitored the performance of operators to ensure they satisfy the minimum performance standards in Quality of Service Regulations 2006, 2009 and 2012. It has gathered robust evidence of issues concerning consumer satisfaction and taken action. In March 2011, for example, an NCC assessment of 100 base stations found that 30% were congested. This compelled the Commission to issue a two-week ultimatum to operators to decongest their networks.

Much of the evidence of poor quality of service used by the Commission is derived from operators who are required to submit quarterly reports. The NCC has also made a commitment to undertake continuous drive tests that will enable it to determine quality of service.[15]

More recently, the Commission has exercised its right to fine operators for failing to fulfil a commitment to improve quality of service by March 2012. On 10th May 2012, it issued fines totalling N1.17bn to operators who had failed to meet Key Performance Indicators detailed in the 2012 Quality of Service Regulations. MTN and Etisalat were fined N360M, Airtel N270M and Globacom N180M.

1.3 Project Objectives

Despite the evidence it has collected, and continues to collect from exercises, including drive tests and operators submissions, the NCC appreciates the problem of quality of service is multifaceted. Indeed, the Commission understands how important it is to capture the views of the market's most important stakeholders – the consumer.

The NCC decided to undertake a nationwide survey to understand consumers' perceptions of quality of service. The Commission also sought to build an effective consumer satisfaction

[14] Nigeria Communications Weekly, March, 2011.

[15] http://www.punchng.com/business/close-up-on-ict/ncc-insists-on-n1-17bn-fine-for-kips-violators/

index that will aid the continuous monitoring of customer satisfaction and Quality of Service and improve Nigerian service providers' efforts to meet consumers' expectations in the future.

Clearly, the need to understand consumers' perceptions of quality of service and build an effective consumer satisfaction index, that will help the NCC to continually monitor QoS and ensure operators meet customers' expectations is timely.

The primary objectives of this project were to:

- conduct a nationwide survey of 50,000 Nigerian ICT consumers to ascertain the level of satisfaction by consumers with telecommunications service delivery in the six geo-ppolitical zones and FCT in Nigeria, including rural areas;

- determine the quality of service provided by service providers for voice, data and the robustness of the complaints management services;

- ascertain consumer complaints' profile and identify frequency of consumer experience;

- make recommendations for the various services;

- determine consumer awareness of their rights, benefits and the obligations to Service Providers;

- make recommendations for how consumer awareness of their rights could be improved;

- suggest possible compensation/remedies to consumers; and

- develop a Consumer Satisfaction Index for the Commission.

2. Methodology

To meet the project objectives, the NCC CSS team employed a comprehensive methodology. This section of the report provides an overview of the methodology used for the project. It details the activities and tasks that were undertaken to fulfil the project objectives; these are presented in the form of a timeline for the implementation of the project. It also summarises the methodology used to develop the Questionnaire, the Customer Satisfaction Index and Customer Care Index. It concludes with a description of the sampling framework used for the survey and weighting exercise employed during data analysis.

2.1 Project Design and Execution

The project comprised two major components. The first involved the survey of 50,000 ICT consumers in Nigeria, as well the associated data cleaning and data entry. The second called for comprehensive analysis of the collected data, the development of a Consumer Satisfaction Index and reporting.

The two main components were undertaken sequentially and were completed during three phases of work:

1. Phase 1 - Inception Phase
2. Phase 2 - Data Collection and Data Entry
3. Phase 3 - Data Analysis, Mining and Reporting

The completion of all three phases of work resulted in the execution of the Nigeria Consumer Satisfaction Survey project.[16]

[16] A more granular outline of activities undertaken during the project can be reviewed in the CTO Interim progress report, submitted September 2012.

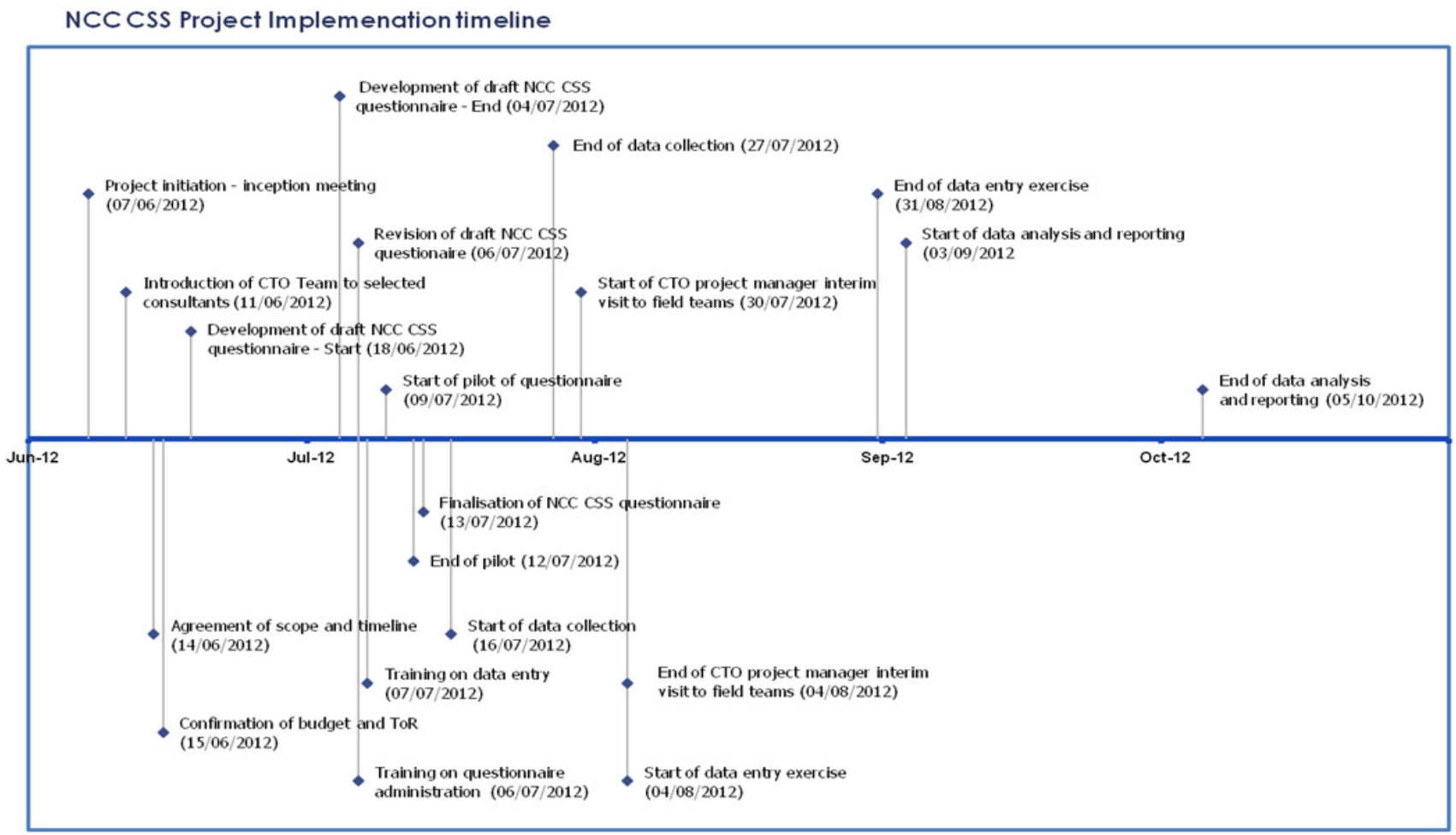

Figure 14 NCC CSS Project Implementation Timeline

2.2 Survey Design

The survey 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 methodology also considers customer service, as this is a key feature of the NCC Guidelines (Figure 15 below – Page 30).[17]

Figure 15 Construct for survey methodology

A single questionnaire, comprising five sections, was used to gather data on all telecommunications services:

- 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

An additional short section explored awareness of provisions made within the Quality of Service Regulations (Customer rights).

After exploration of the data, Customer Satisfaction Index and Customer Care Index figures were calculated separately. Among mobile phone users, for example, only one third of respondents had made a complaint in the last year and were, therefore, in a position to answer the questions on complaints handling procedures. The Customer Satisfaction Index has been based on the responses of all mobile phone users, and the Customer Care Index has been based on the responses of those who had made a complaint. A separate set of indices has been calculated for each service.

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

The analysis has explored ways in which groups of questions relate to each other in order to provide measures of underlying constructs (latent variables). Scores for latent variables have been calculated as the arithmetic mean of component indicators. A second factor analysis has then been conducted to identify those indicators and latent variables that comprise a construct for customer satisfaction. The composite Customer Satisfaction Index was then calculated as the arithmetic mean of these indicators and latent variables. For all four telecommunications services, the complaints handling indicators constitute a group with high internal consistency, so the Customer Care Index has been calculated as the arithmetic mean of these.

Attitudinal questions used likert scales, which have been converted to unipolar scales (0 – 100). Both unipolar scores and calculated indices adhere to the convention that higher score reflect better service.

2.3 Sampling Design and Weights

The sample was drawn 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".

The use of a randomised cluster sampling design was originally proposed, 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.

The sampling design was based on a population frame, taking account of gender, age, and rural/urban context[18]. The samples returned did not fully 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. Note that all figures given in the analysis are based on weighted data, except where stated otherwise.[19]

Data sets comprising 50,139 records were submitted by the four Consultants who had conducted the field work. Data sets were cleaned to eliminate respondents who had not used any telecommunications services, obvious duplicates, and records containing erroneous data. 2,258 records were deleted altogether (4.5%), leaving a combined data set of 47,881 valid records.

[18] Age and gender distributions were taken from: 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.

[19] See Annex B for full description of sampling framework employed by consultants

Almost all respondents answered questions on mobile phone use (96%), 27% were internet users, and 4% were exclusively public phone users (i.e. they did not also have access to a private phone).

3. Survey Results – the Data

This part of the report presents the main results of the survey. In addition to the main findings for each of the five sections of questionnaire - Mobile Telephony, Fixed Line Telephony, Internet, Public Phones and Customer Rights. This section also presents the scores for the Customer Satisfaction and Customer Care indices.[20] The indices should aid the Commission's continuous monitoring of customer satisfaction and Quality of Service (QoS), and improve Nigerian service providers' efforts to meet consumers' expectations in the future.

3.1 Mobile Telephony

In terms of subscriber numbers, MTN was the clear market leader, followed by Globacom and Airtel (Figure 16 below – Page 33). Overall, almost 63% of respondents used MTN as their principle phone, 13.9% used Airtel, 13.3% used Globacom and 8.1% used Etisalat. The remaining respondents told survey administrators that they used 'other mobile' operators or responded with "I don't know".

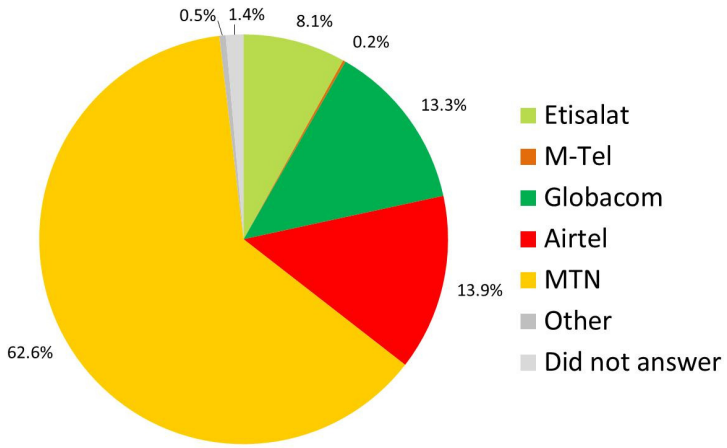

Figure 16 Principal network operators

79% of all respondents used the phone one or more times a day, highlighting the unequivocal importance of mobile telephony in the livelihoods of Nigerians. Only 0.8% of respondents said the phone they used was not registered, which highlights the effectiveness of the caller registration programme instigated by the NCC (0.5% did not answer the question). 98% of accounts were prepaid.[21]

[20] The five sections of the questionnaire are Mobile Telephony, Fixed Line Telephony, Internet, Public Telephones and Customer Rights.

[21] Proportion of valid responses.

The balance of responses on the quality of calls was generally postive (Figure 17 below – Page 34). However, the quality of off-net calls was poorer than the quality of on-net calls, and the quality of calls to fixed line networks was poorer still.

Getting cut off during a call is regarded as the most common network reliability issue (Figure 17 below – Page 34). 65% of respondents reported having to dial twice or more to get through, while 25% reported have to dial more than three times.

Unsolicited SMS messages (spam) appeared to be quite commonplace in Nigeria, as only 23% of the whole sample said they never or rarely received unsolicited messages (Figure 17 below – Page 34). Although it has been assumed that receiving unsolicited SMS messages impairs perceptions of quality of service, there may be exceptions e.g. disaster warning messages.

28% of respondents used their mobile phone to access value added services (VAS).[22] Among those that used these services, just over 88% felt they encountered some level of difficulty in accessing the services and information. (Figure 17 below – Page 34).

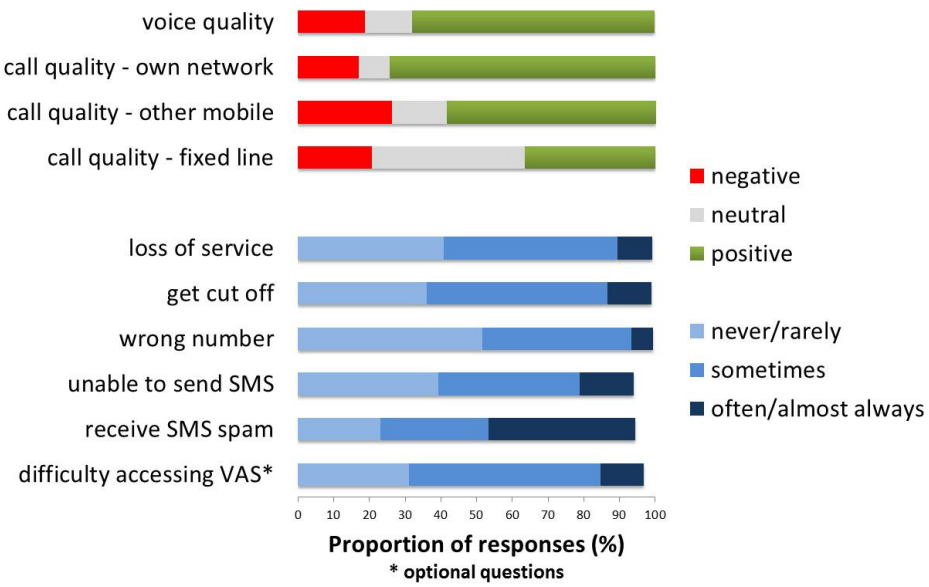

Figure 17 Responses to questions on network performance issues – mobile[23]

Overall, two thirds of respondents had positive views on the correctness of charging of calls. However fewer respondents – just over 26% - agreed that rates aligned with those advertised by service providers (
Figure 18 below – Page 35). 71% of respondents gave a positive rating for the accuracy of charging for SMS they send.

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

[23] Responses to attitudinal questions have been reduced to a bipolar scale (negative = 'poor' or 'very poor'; positive = 'good' or 'very good'; neutral = 'don't know', 'no opinion', or did not answer). Responses to frequency questions have been reduced from a 5 point to a 3 point scale; 'don't know' responses and those that did not answer are not categorised, so some bars total to less than 100%

Users were generally positive about the recharge services offered by their service provider. Among pre-paid account holders, who accounted for 98% of respondents, all four indicators for the recharge service were rated highly – **(see**
Figure 18 below – Page 35).

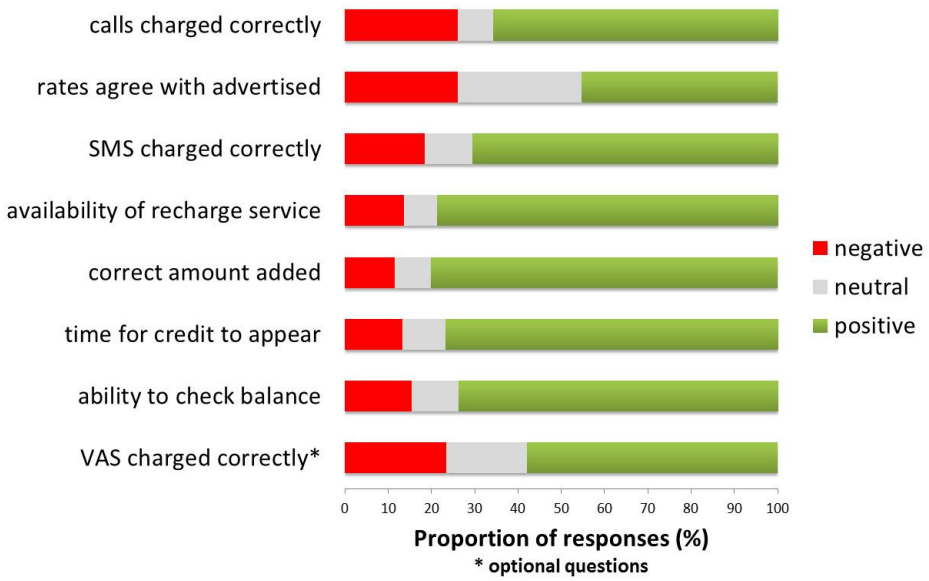

Figure 18 Responses to questions on billing and charging issues - mobile[23]

32% of respondents had made a complaint in the last year. 90% of these usually lodged complaints by phone, while only 8% said they visited a customer care centre. Figure 19 below (Page 35) shows that most complaints concerned charging, billing, and the recharging of pre-paid accounts.

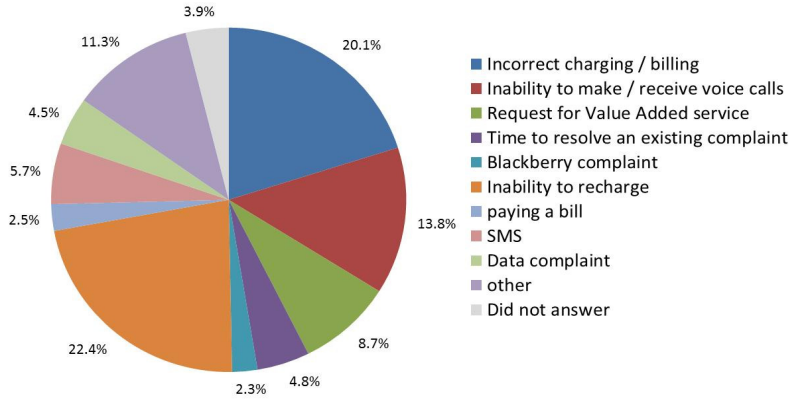

Figure 19 Breakdown of complaints – mobile phones

Time to answer a call and the time taken to resolve complaints were the most criticised aspects of complaints handling processes (Figure 20 below – Page 36).

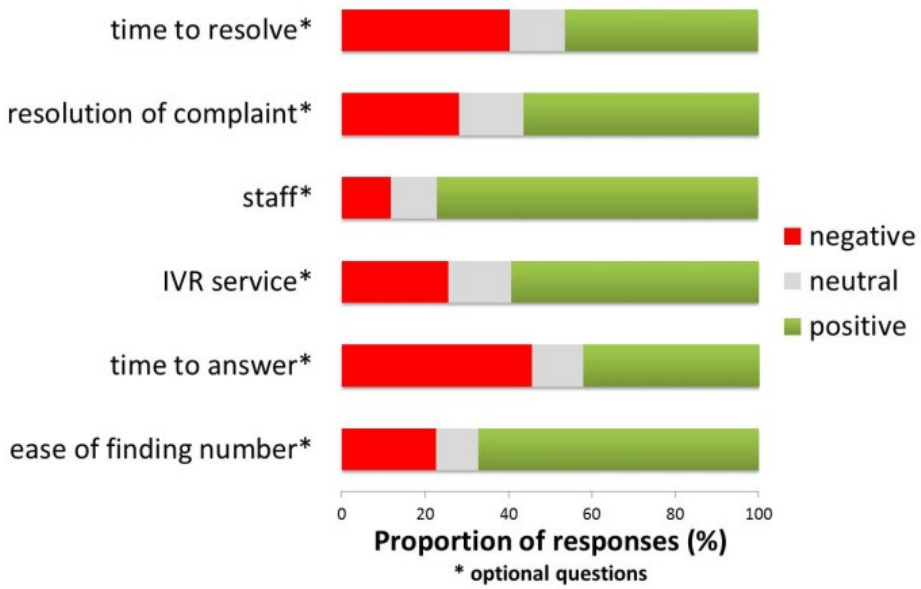

Figure 20 Responses to questions on complaints handling - mobile[23]

Table 2 below (Page 37) highlights those zones where the scores for particular indicators may be 5 points higher or lower than the mean score for whole sample. Overall, services appeared to be better in the North Central & FCT and South West zones (Table 2 below - Page 37). Views on the charging for SMS and VAS services were poorer in North West zone, and respondents in South South zone appeared to have greater technical difficulty in using these services. Respondents in these two zones also rated recharge services poorly. Note that views on complaints handling procedures appeared to mirror views on service provision, so respondents from the North West and South South zones rated complaints handling process highly.

Table 2 High and low scores - by zone

	North West	South South	South West	South East	North Central & FCT	North East
Customer Satisfaction Index	-	-	-	-	-	-
Customer Care Index	-	-	-	-	-	-
Expectations (stated)	-	-	-	-	-	□
Perceived value (stated)	-	-	-	-	-	-
Satisfaction (stated)	-	-	-	-	-	-
Intention to change (stated)	●	-	□	●	-	-
voice quality	-	-	-	-	-	-
call quality - own network	-	-	-	-	●	-
call quality - other mobile	-	-	-	-	-	-
call quality - fixed line	-	-	-	-	-	●
calls charged correctly	-	-	-	-	●	-
rates agree with advertised	-	-	●	-	-	-
loss of service	-	-	-	-	-	-
wrong number	-	-	●	-	-	□
get cut off	-	-	●	-	-	-
unable to send SMS	-	□	-	-	-	-
receive SMS spam	-	□	-	-	-	-
SMS charged correctly	□	-	-	-	●	-
availability of recharge service	□	-	-	-	●	-
correct amount added	□	□	-	●	●	-
time for credit to appear	□	-	-	-	-	-
ability to check balance	-	□	-	●	-	-
difficulty accessing VAS	-	□	●	-	-	-
VAS charged correctly	□	-	-	-	●	-
ease of finding number	-	-	-	-	-	-
time to answer	●	●	□	□	-	●
IVR service	-	●	-	-	-	-
staff	-	-	-	-	●	-
resolution of complaint	-	-	-	-	-	-
time to resolve	●	-	-	-	□	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)

□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
- means **not applicable.**

Table 3 below (Page 38) indicates that differences between Nigeria's four major mobile operators were modest, so very few indicators have been highlighted. MTN registered lower scores on quality of calls to other mobile and fixed networks, and on charging issues. Globacom and Etisalat registered higher scores for charging issues. Although the differences were modest, Etisalat subscribers rated VAS services highly, and MTN subscribers rated them poorly. Etisalat subscribers rated all aspects of complaints handling highly.

Table 3 High and low scores - by operator

	Etisalat	Globacom	Airtel	MTN
Customer Satisfaction Index	-	-	-	-
Customer Care Index	-	-	-	-
Expectations (stated)	-	-	-	-
Perceived value (stated)	-	-	-	-
Satisfaction (stated)	-	-	-	-
Intention to change (stated)	-	-	-	-
voice quality	-	-	-	-
call quality - own network	-	-	-	-
call quality - other mobile	-	-	-	-
call quality - fixed line	●	-	-	-
calls charged correctly	-	-	-	-
rates agree with advertised	-	-	-	-
loss of service	-	-	-	-
wrong number	-	-	-	-
get cut off	-	-	-	-
unable to send SMS	-	-	-	-
receive SMS spam	-	-	-	-
SMS charged correctly	-	-	-	-
availability of recharge service	-	-	-	-
correct amount added	-	-	-	-
time for credit to appear	-	-	-	-
ability to check balance	-	-	-	-
difficulty accessing VAS	-	-	-	-
VAS charged correctly	-	-	-	-
ease of finding number	-	-	-	-
time to answer	-	-	-	-
IVR service	-	-	-	-
staff	-	-	-	-
resolution of complaint	●	-	-	-
time to resolve	●	-	-	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
- means **not applicable.**

For the sample as a whole, the mean NCC Customer Satisfaction Index score was 59.1 ± 0.2 (95% confidence interval). Of the key satisfaction indicators investigated, the extent to which services meet expectations was rated most poorly (see
Figure 21 – Page 39).

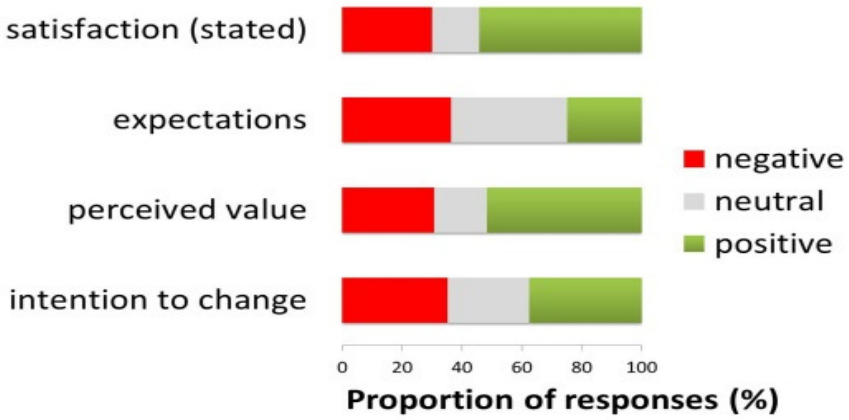

Figure 21 Responses to key satisfaction indicators - mobile[23]

Scores for the NCC Customer Satisfaction Index were lowest in the North West and North East zones (
Table 4 below – Page 39). The spread of scores across operators was only 3.1 points - from 58.2 (MTN) to 61.3 (Etisalat) – see Table 5 below (Page 39).

The overall mean NCC Customer Care Index score was 58.2. In terms of geography, scores mirrored the trend of Customer Satisfaction Index scores. NCC Customer Care Index scores were high in North West and North East zones, and lowest in South West zone, which enjoyed the highest NCC Customer Satisfaction Index score. This suggests that in zones where service was poor, customers expressed greater appreciation for the support they were given.

Table 4 Customer Satisfaction Index and Customer Care Index - by zone

	Whole sample	North West	South South	South West	South East	North Central & FCT	North East
Customer Satisfaction Index	59.1	55.9	58.0	61.1	61.1	60.7	57.1
Customer Care Index	58.2	60.2	60.4	56.7	58.0	56.6	59.5

When comparing mobile operators (Table 5 below – Page 39), scores corresponding with the CC Customer Satisfaction Index – Etisalat subscribers again registered the highest scores while scores were low among MTN subscribers.

Table 5 Customer Satisfaction Index and Customer Care Index - by operator

	Whole sample	Etisalat	Globacom	Airtel	MTN
Customer Satisfaction Index	59.1	61.3	60.8	60.1	58.2

Customer Care Index	58.2	62.0	59.9	58.8	57.4

3.2 Fixed Telephony

Fixed phone users were predominantly from urban areas (39.9:60.1 rural:urban) where the mix of infrastructure used to provide fixed telephony – copper, fibre optic, GSM, CDMA- is relatively prevalent. The gender balance was close to that of the national population (46.9:53.1 male:female). Yet the age profile of fixed phone users was skewed towards younger age groups. Most fixed phone users were drawn from three zones (North West, South South and South West), so no comparison between zones has been made.

In terms of subscriber numbers, Visafone, with slightly less than 18%, and MTN-VGC, with 13% appeared to be the most popular amongst fixed phone respondents to the survey (Figure 22). 34% used the phone one or more times a day. 2.7% of respondents said the phone was not registered (and 19% did not answer the question). 79% of accounts were pre-paid[21].

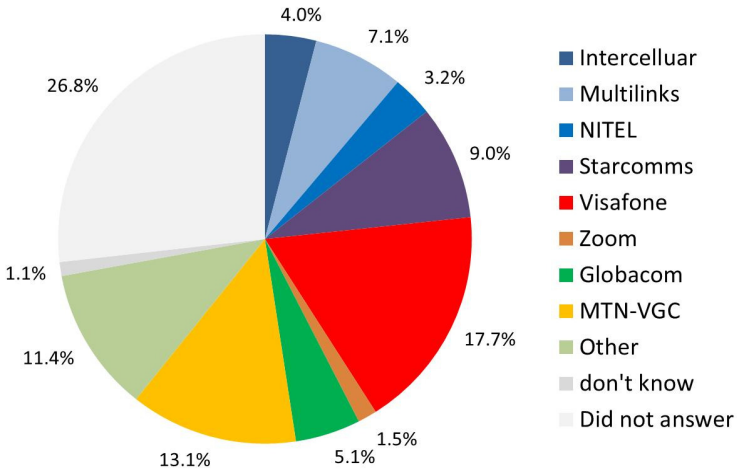

Figure 22 Principal fixed phone operator

The balance of responses on the quality of calls made from fixed phones was generally positive (Figure 23 - Page 41). Fixed phones users' perceptions on the quality of calls made to both mobile and fixed networks were similar. 52% of respondents reported having to dial twice or more to get through.

Figure 23 below (Page 41) also shows that views on a range network reliability issues were similar.

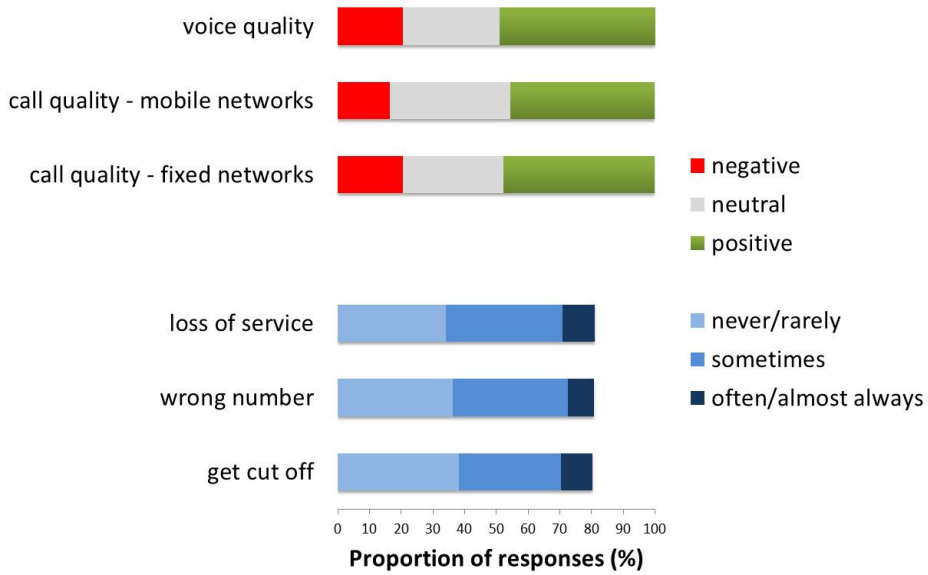

Figure 23 Responses to questions on call quality and network performance issues - fixed[23]

The balance of views on both the correctness of charging of calls and the alignment of charges with operators' advertised rates was positive, but not substantially (Figure 24 – Page 42).

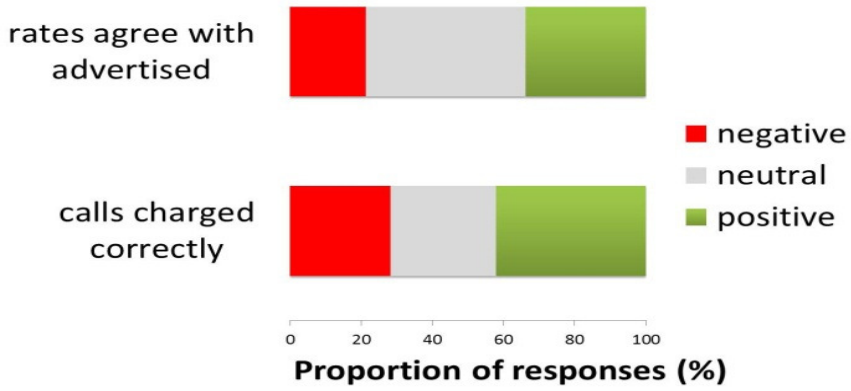

Figure 24 Responses to questions on charging issues - fixed[23]

48% of respondents had made a complaint in the last year (Figure 25 below – Page 42). Figure 25 also shows that most complaints concerned charging and billing, problems with voice calls and with SMS.

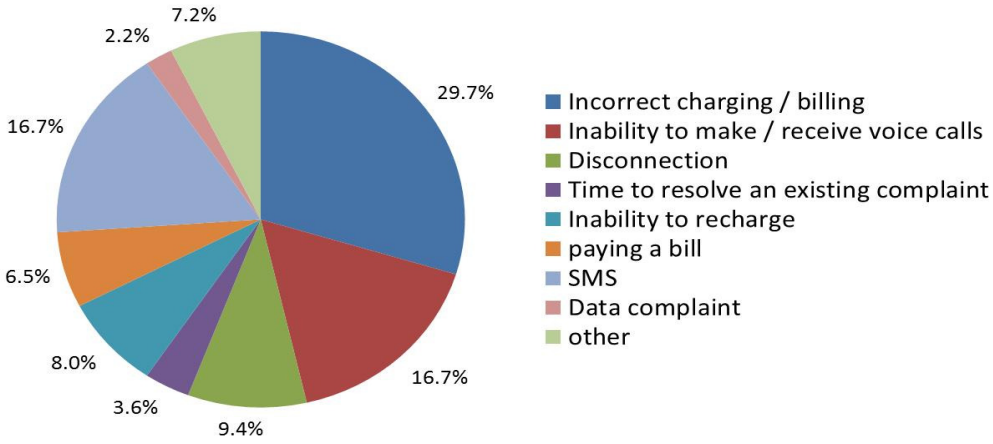

Figure 25 Breakdown of complaints - fixed phones

69% of those that complained in the last year usually lodged complaints by phone, while 24.6% visited a customer care centre. Time to answer a call and finding the right number to call were the most criticised aspects of the complaints handling processes provided by fixed telephony service providers. (
Figure 26 – Page 42).

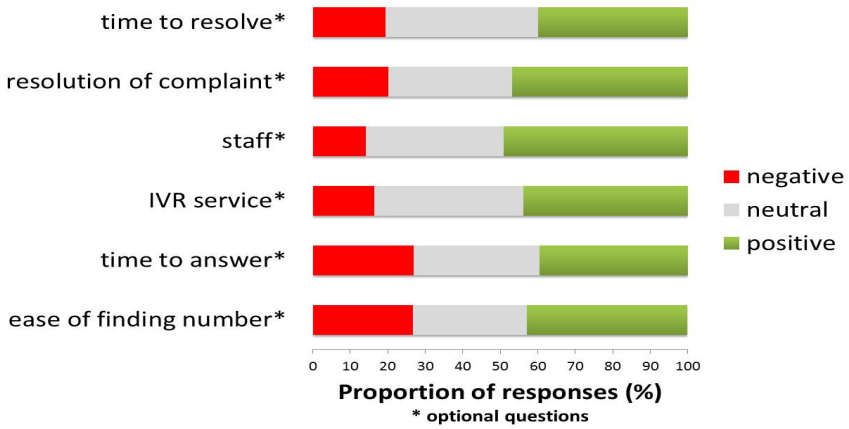

Figure 26 Responses to questions on complaints handling - fixed[23]

Visafone consistently scored highly across primary service indicators covering voice quality and charging (Table 6 below – Page 43). Among those operators with a relatively large numbers of subscribers, MTN-VGC received lower scores for network reliability issues. MTN-VGC, however, scored relatively highly on complaints handling, as did Visafone.

Table 6 High and low scores - by operator [a]

	Intercelluar	Multilinks	NITEL	Starcomms	Visafone	Zoom	Globacom	MTN-VGC
Customer Satisfaction Index	□	□	-	●	-	-	-	●
Customer Care Index	-	□	-	●	-	-	-	●
Expectations (stated)	□	□	-	●	●	-	□	●
Perceived value (stated)	□	□	-	-	-	-	□	●
Satisfaction (stated)	□	□	-	-	-	-	□	●
Intention to change (stated)	●	●	-	□	□	-	●	-
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	□	-	●	-	-	-	-	□
ease of finding number	□	□	-	-	□	-	●	●
time to answer	-	-	-	-	-	-	-	●
IVR service	-	□	-	□	●	-	-	●
Staff	-	□	-	-	●	-	●	●
resolution of complaint	-	□	-	-	●	-	-	●
time to resolve	-	□	-	●	●	-	□	●

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
a mean values not calculated for at least one group because of small sample size (less than 10)
- means **not applicable**

For the sample as a whole, the mean NCC Customer Satisfaction Index score was 59.7 ± 3.1 (95% confidence interval). The spread of scores across fixed phone operators was 30 points - from 40.5 (Intercellular) to 70.1 (MTN-VGC) – see Table 7 below (Page 44). The overall mean Customer Care Index score was 61.8 – see Table 7 below (Page 44). Again, there was a large spread of scores (34 points) and scores were highest for MTN-VGC. Of the key satisfaction indicators investigated, intention to change stands out as most strongly negative i.e. although the balance of views on the other indicators was positive, respondents expressed an intention to change fixed their fixed line operator (see Figure 27 – Page 44)

Table 7 Customer Satisfaction Index and Customer Care Index - by operator

	Whole sample	Intercelluar	Multilinks	NITEL	Starcomms	Visafone	Zoom	Globacom	MTN-VGC
Customer Satisfaction Index	59.7	40.5	45.6	-	65.7	64.3	-	-	70.0
Customer Care Index	61.8	-	41.9	-	67.1	66.1	-	63.3	76.3

- means **not applicable**

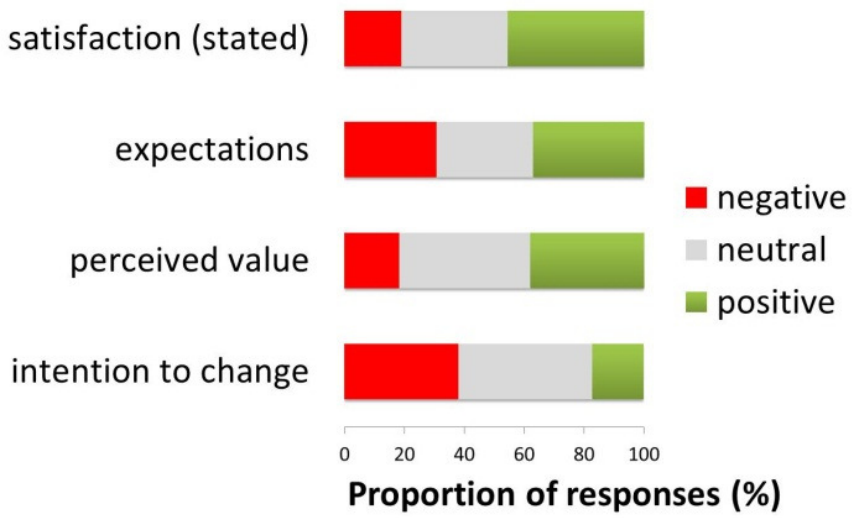

Figure 27 Responses to key satisfaction indicators - fixed[23]

3.3 Public Access Phones

Public phone users were predominantly from rural areas (58.4:41.6 rural:urban), and it was clearly women who made greater use of public phones (36.1:63.9 male:female). Moreover, it was the young and the elderly who made most use of public phones. The socio-economic status of public phone users was considerably lower than that of the sample as a whole. Few public phone users were drawn from North East and South West zones, so no comparison between zones has been made.

Manned public phones were the most commonly used means of access, followed by borrowing a privately owned handset. Only 11% of those who used public phones used the phone every day.

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 (see

Figure 28 below). Not being able to get a signal (network availability) was regarded as the most common network problem (see
Figure 28 below – Page 45). This highlights the importance of successfully being able to make a call to people who have to travel or make special arrangements to access a phone. 73% of respondents reported having to dial twice or more to get through.

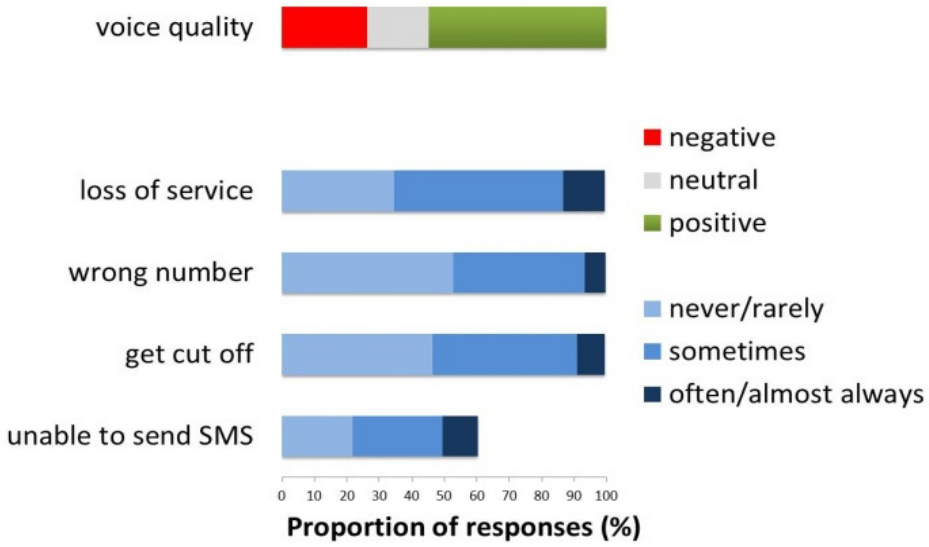

Figure 28 Responses to questions on network performance issues – public access[23]

Overall, respondents indicated that their future use of public phones was likely to decline (
Figure 29 below – Page 46), which is at least partly due to a shift towards personal handset ownership; 45% said there were likely or very likely to own a handset in the next year. As might be expected, the desire to obtain their own handset was strongest among most intensive public phone users and these respondents from higher socio-economic status groups.

The overall mean NCC Customer Satisfaction Index score was 51.0± 0.8 (95% confidence interval) for public phones. The balance of views held by users of public phones tended to be negative concerning satisfaction with the phone services they receive, the value for money provided by their services and whether the quality of services was in line with their expectations.

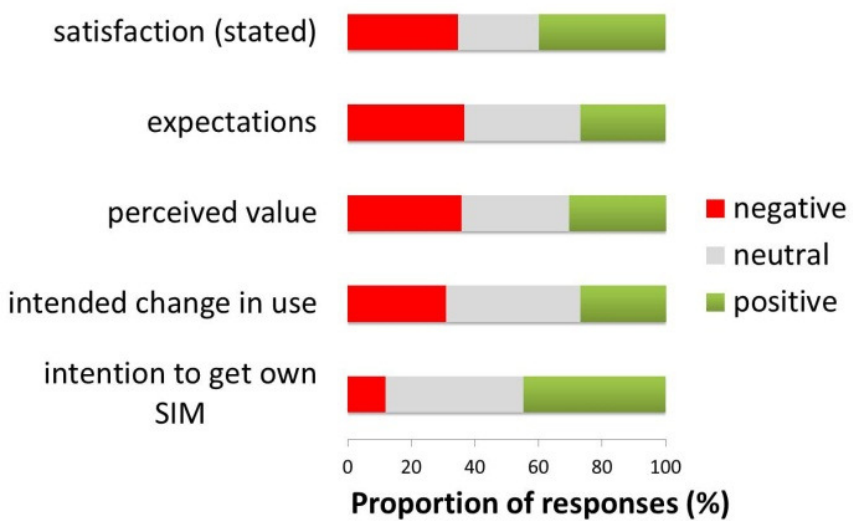

Figure 29 Responses to key satisfaction indicators – public access[23]

Table 8 below (Page 46) indicates that users of unmanned kiosks experience particularly poor service.

Table 8 High and low scores - by means of access

	borrow from friend, neighbour, relative	manned public shop/ kiosk	unmanned kiosk
Customer Satisfaction Index	-	-	□
Expectations (stated) [b]	-	-	-
Perceived value (stated)	-	-	-
Satisfaction (stated)	-	-	-
intended change in use	●	-	-
Intention to get handset (stated)	●	-	□
voice quality	-	-	□
loss of service	-	-	□
wrong number	-	-	□
get cut off	-	-	□
unable to send SMS	-	-	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
b difference between groups not significant (i.e. p>0.05)
- means **not applicable**

Respondents' poor experience with unmanned pay phones is also reflected in the Customer Satisfaction Index values given in

Table 9 below (Page 47).

Table 9 Customer Satisfaction Index - by means of access to public phones

	Whole sample	borrow from friend, neighbour, relative	manned public shop/ kiosk	unmanned kiosk
Customer Satisfaction Index	51.0	52.5	52.6	44.3

3.4 Internet

Internet users were predominantly from urban areas (37:63 rural:urban). The gender profile was well balanced (51.6:48.8 male:female). The age profile was skewed towards younger age groups. The socio-economic status of internet users was relatively high.

In terms of subscriber numbers, MTN was the clear market leader, followed by Etisalat, Airtel, and Globacom, who between them serve 85% of respondents (Figure 30 below – Page 47). 84% of users spend less than N3,000 per month (based on valid responses).

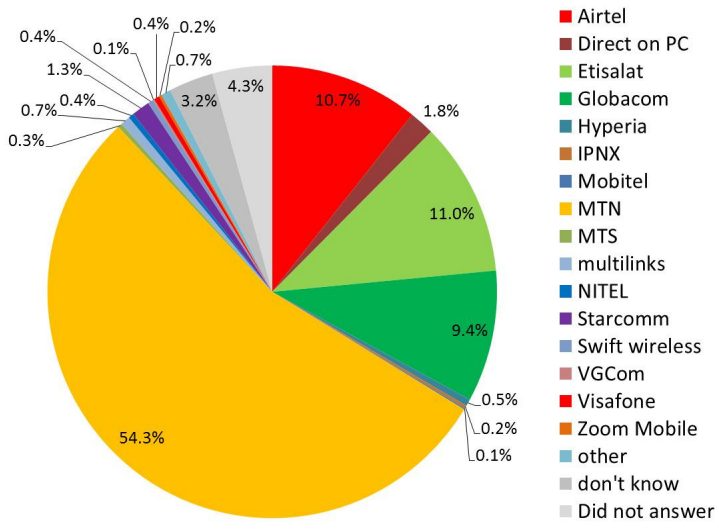

Figure 30 Internet Service Providers

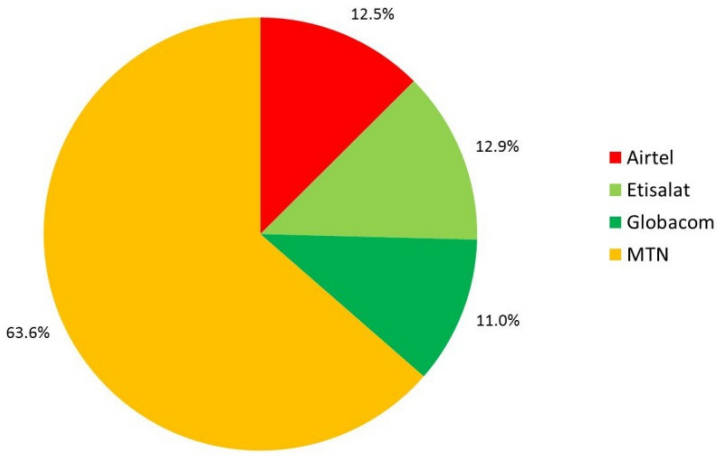

Figure 31 Four main Internet service providers

Views on service availability and getting cut off were similar, with around 10% of users saying that they often or almost always experience difficulties, and 50% of respondents saying they 'sometimes' experienced problems. 73% Internet users reported having to log-in more than once before successfully getting online.

Mobile devices were clearly the most popular means of accessing the Internet; 77% of internet users used a mobile device as their principal means of accessing the Internet (16% used a Blackberry, and 61% used some other mobile device).

Overall, perceptions on Internet speeds were balanced; 41% of respondents felt the speed of their Internet connection was fast or very fast, and 44% felt it was slow or very slow (Figure 32 below – Page 49). 60% had made voice calls on the Internet, and 59% had streamed video over the Internet. Overall, the balance of views on the quality of calling and streaming was positive or neutral (Figure 32 below - Page 49).

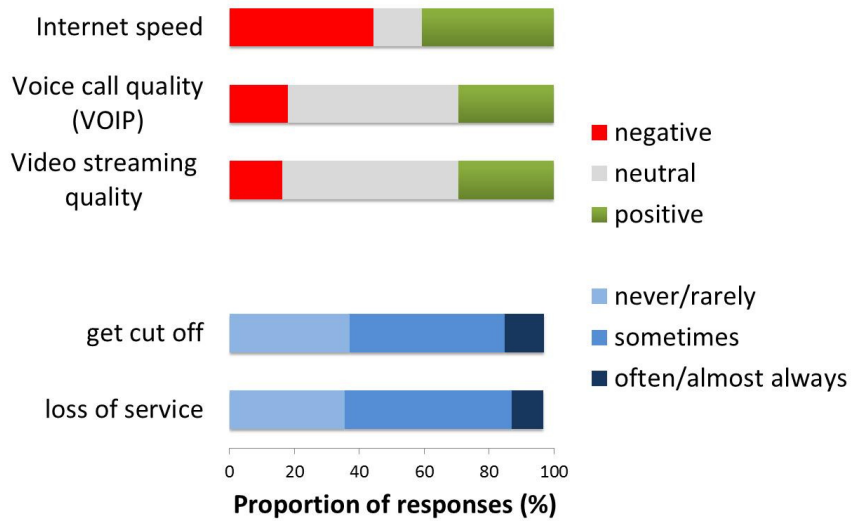

Figure 32 Responses to questions on network performance issues – internet[23]

49% had positive views on the correctness of internet/email charging, but fewer agreed that rates aligned with those advertised by Internet service providers (see Figure 33 below – Page 49).

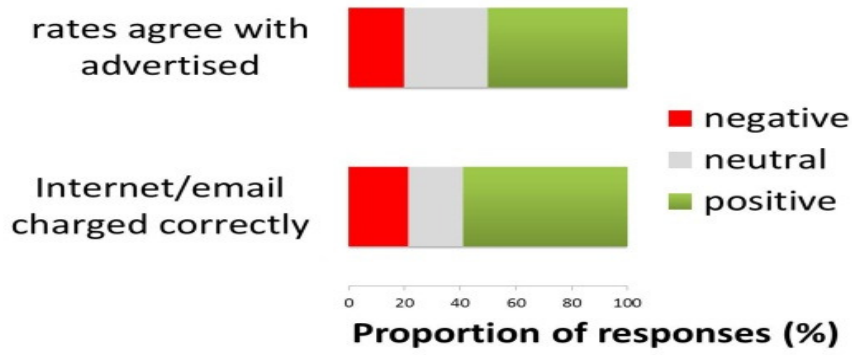

Figure 33 Responses to questions on charging issues - internet[23]

45% of respondents had made a complaint in the last year. The frequency of complaints was linked to both VOIP and streaming bandwidth indicators, but not to perceived speed of internet connection. It was also linked to the number of log-in attempts needed, indicating that this is an issue of importance to customers. Overall, the balance of views on aspects of complaints handling processes was positive, but not considerably (Figure 34 below – Page 50).

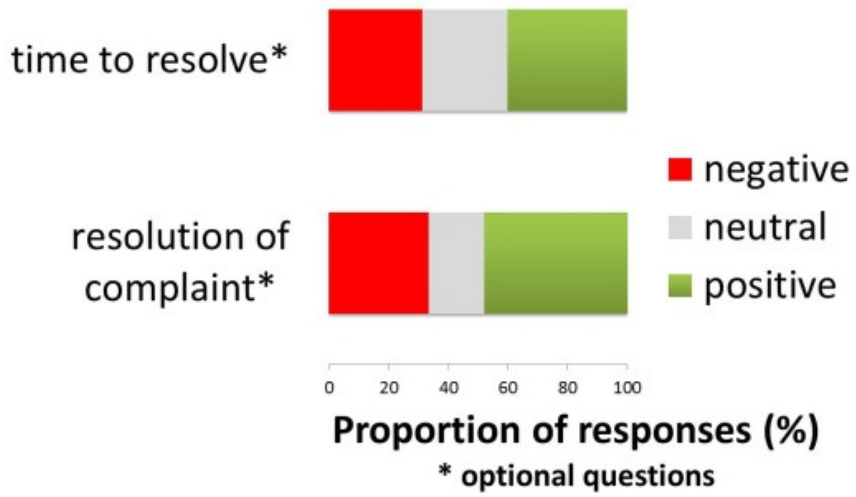

Figure 34 Responses to questions on complaints handling - Internet[23]

Table 10 below (Page 51) indicates the zones whose scores were 5 points higher or 5 points lower than the mean for the whole NCC CSS sample. Perceived Internet speed appeared to be relatively high in South West zone, and slow in North West zone (Table 10 below - Page 51). However, at the same time, perceived quality of voice calling was highest in North West zone. Perceived frequency of getting cut off was also highest in North West zone, as were network availability problems. A remarkably large proportion of users from North West zone did not answer the question on how well internet / email charges corresponded with advertised rates, which suggests that they may not have been aware of advertised rates. Despite this pattern of slow and unreliable Internet service, users from North West registered the lowest frequency of complaints. However, among those who did complain, users from the North West were most critical of the complaints handling process (Table 10 below - Page 51).

Table 10 High and low scores - by zone

	North West	South South	South West	South East	North Central & FCT	North East
Customer Satisfaction Index	-	-	-	-	-	-
Customer Care Index	□	-	-	-	●	-
Expectations (stated)	●	-	-	-	□	-
Perceived value (stated)	●	-	-	-	□	-
Satisfaction (stated)	●	-	-	-	-	-
Intention to change (stated)	●	-	□	●	-	-
speed of internet	□	-	●	-	-	-
quality of voice calls	-	-	-	-	-	-
quality of video streaming	-	-	-	-	-	-
internet/email charged correctly	-	-	-	-	-	-
rates agree with advertised	●	-	-	-	-	-
loss of service	-	-	-	-	-	-
get cut off	□	●	-	-	-	-
resolution of complaint	□	-	-	-	●	-
time to resolve	□	-	-	-	-	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
- means **not applicable**

The information given in Table 11 below (Page 52) highlights the operators whose scores were 5 points higher or 5 points lower than the mean for the whole NCC CSS sample. Scores for Internet speed were highest among Etisalat subscribers, and lowest among MTN subscribers. The spread of scores for quality of voice calls and video streaming was much smaller, but scores registered by Etisalat subscribers were still highest. Scores for network reliability indicators were highest among Blackberry users, and lowest among cybercafé users. Again, the spread of network reliability scores across ISPs was small. Although the spread of scores across ISPs for complaints handling was small, they were highest among Globacom subscribers.

Table 11 High and low scores - by principal ISP

	Airtel	Etisalat	Globacom	MTN
Customer Satisfaction Index	-	●	-	-
Customer Care Index	-	-	-	-
Expectations (stated)	-	-	-	-
Perceived value (stated)	-	●	-	-
Satisfaction (stated)	-	●	-	-
Intention to change (stated)	-	-	-	-
speed of internet	-	●	-	-
quality of voice calls	-	-	-	-
quality of video streaming	-	-	-	-
internet/email charged correctly	-	●	-	-
rates agree with advertised	-	●	-	-
loss of service	-	-	-	-
get cut off	-	-	-	-
resolution of complaint	-	-	-	-
time to resolve	-	-	-	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
- means **not applicable**

Table 12 below (Page 53), emphasizes which means of access used by respondents had scores that were 5 points higher or 5 points lower than the mean for the whole NCC CSS sample

Scores for Internet speed were highest among users of mobile devices (other than Blackberry), but quality of voice calls and video streaming were rated most highly by Blackberry users.

Table 12 High and low scores - by means of access

	home PC or laptop	Blackberry	other mobile device (phone, iPad etc.)	cybercafe
Customer Satisfaction Index	-	-	-	-
Customer Care Index	-	-	-	-
Expectations (stated)	-	-	-	□
Perceived value (stated)	-	-	-	-
Satisfaction (stated)	-	-	-	-
Intention to change (stated)	-	-	-	-
speed of internet	-	-	-	□
quality of voice calls	-	-	-	-
quality of video streaming	-	-	-	-
internet/email charged correctly	-	-	-	□
rates agree with advertised	-	-	-	-
loss of service	-	-	-	-
get cut off	-	-	-	-
resolution of complaint	-	-	-	-
time to resolve	-	-	-	-

● mean for the group was **higher** than the whole sample mean (by 5 points or more)
□ mean for the group was **lower** than the whole sample mean (by 5 points or more).
- means **not applicable**

Examining the satisfaction indicators, Internet users were most positive about their satisfaction with their ISP and how they rated the value of the services they paid for (see - Figure 35 below -Page 54).

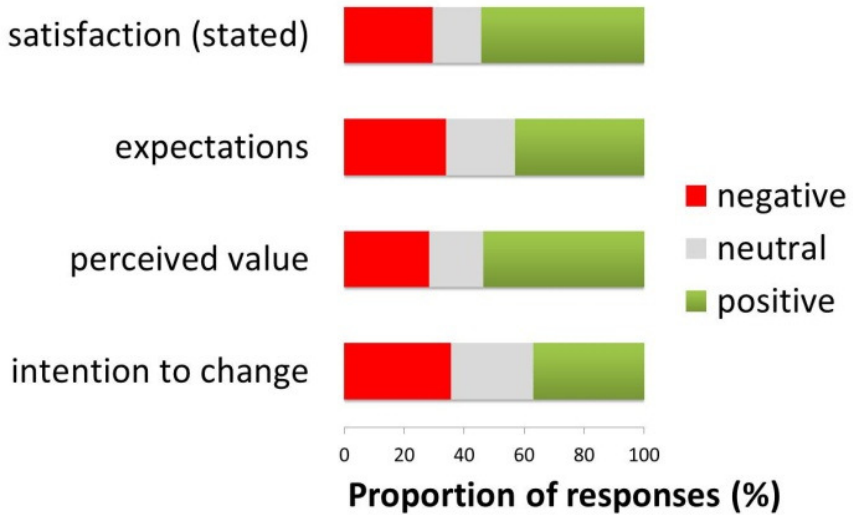

Figure 35 Responses to key satisfaction indicators – Internet

The overall mean NCC Customer Care Index score was 53.0 ± 0.6 (95% confidence interval). For the sample as a whole, the mean Customer Satisfaction Index score was 54.7 ± 0.4 (95% confidence interval). Lowest scores were registered in North Central & FCT zone and highest in North West zone despite poor levels of service - see Table 13 below (Page 54). At the same time, the NCC Customer Care Index was lowest in North West zone (and highest in North Central & FCT zone). This suggests that in zones where service was poor, customers expressed greater appreciation for the support they were given.

Table 13 Customer Satisfaction Index and Customer Care Index - by zone

	Whole sample	North West	South South	South West	South East	North Central & FCT	North East
Customer Satisfaction Index	54.7	58.7	57.0	57.2	53.3	50.9	52.1
Customer Care Index	53.0	47.1	49.7	53.7	51.0	59.4	53.1

The NCC Customer Satisfaction Index for Internet was highest among Etisalat subscribers, and lowest among MTN subscribers, – see Table 14 below (Page 54). The spread of NCC Customer Care Index scores across ISPs was small, but again, scores were lowest among MTN subscribers. Both indices were lowest among cybercafé users

Table 14 Customer Satisfaction Index and Customer Care Index - by ISP

	Whole sample	Airtel	Etisalat	Globacom	MTN
Customer Satisfaction Index	54.7	55.3	60.7	56.9	53.5
Customer Care Index	53.0	54.8	54.4	55.6	52.5

3.5 Awareness of Consumer Rights

Respondents were asked five questions concerning levels of service specified in the Quality of Service regulations. It is unlikely that respondents will have any direct knowledge of the quality of service regulations so it is likely that responses have, therefore, been based on a combination of beliefs and expectations. These in turn may be based on experience (e.g. how long they usually have to wait), hearsay (from discussion with peers), or information disseminated by operators.

The proportion of respondents who either said they 'didn't know' or declined to answer the question gives an indication of the level of awareness of an issue. The ability to opt out of unsolicited SMSs stands out from Table 15 below (Page 55) as an issue for which lack of awareness is acute. There were large differences between zones; respondents from North West zone appeared to be least aware, and respondents in South South and South West zones were most aware.

Table 15 Categories of responses to consumer rights questions (proportion of whole sample)

	don't know/did not answer (%)	'Correct' response (%)
maximum waiting time (Customer Care Centre)	10.6	28.8
time to load credit (spoiled PIN)	10.4	11.0
maximum waiting time (Call Centre)	10.1	37.4
period before losing number	22.6	19.5
opt out of unsolicited SMS	31.6	25.8

Among respondents that gave a valid response, 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 15 above (Page 30) indicate that views on time to wait to speak to an agent at a call centre corresponded most closely with the regulations (5 minutes), and the discrepancy was greatest concerning the time taken to load credit with the PIN is over scratched.

Two additional questions were used to test levels of awareness of number portability and the NCC contact number. 18% of respondents said they were aware of number portability, but must have either been answering in abstract terms or been misinformed because number portability was not available at the time of the survey. Awareness of both number portability and the NCC contact number was remarkably high in the South South zone. Concerning levels of awareness of the NCC contact number, the figure of 11% for the sample as a whole masked a low level of awareness in most of the country.

4. Summary of Key findings

This section of the report summarises the key findings of the survey. It details the NCC CSS team's comments on some of the key findings, highlighting those which the NCC may find particularly interesting as it seeks to improve quality of service and facilitate universal access to ICT services. It also suggests some possible areas of further investigation for the NCC.

4.1 Key Findings

A composite Customer Satisfaction Index has been calculated for each of the four telecommunications services (mobile, fixed, public access, and internet). The indices have been based on arithmetic means of scores from certain questions. The survey analysis has identified constructs that were closely interrelated, and which together made up a holistic measure of customer satisfaction. A separate Customer Care Index has also been calculated for three of the services (mobile, fixed, and internet).

When exploring interrelationships between indicators, it was interesting to find that indicators relating to the reliability of services (e.g. getting cut off, unable to send SMS) did not relate to primary indicators of service quality (e.g. voice quality), but tended to group together forming a cluster of 'convenience' issues. A key finding is that this convenience construct did not then relate strongly to the other constructs representing customer satisfaction i.e. level of satisfaction did not appear to be influenced by factors making the service inconvenient to use. Further investigation is needed to explore the reasons for this counterintuitive finding, but possible explanations include a lack of expectation that services can (or should) improve, either because they are conditioned to the current level of service, or they feel that there is no prospect of services improving.

The model used proposed that intention to change operator provides a cross-check on customer satisfaction, on the basis that satisfied customer are less likely to change. This was indeed the case for mobile phone and Internet users (as a whole), but not for fixed line phone users. Neither was it true for certain groups, such as mobile and Internet users from South West zone. The finding that customers with higher levels of satisfaction expressed a greater likelihood of changing operator suggests that, among certain groups, intention to change is driven by factors other than satisfaction with the existing level of service. Further investigation is required to determine what these factors might be, but given that respondents from South West zone had the highest socio-economic status and includes the commercial centre of Lagos, this may reflect high levels of awareness of consumer rights (e.g. number portability), and a greater familiarity with telecommunications companies and an understanding of what is involved with changing provider.

High status users were more willing to complain, reflecting a stronger sense of empowerment. For example, the frequency of complaints made by mobile phone users was higher among those who used their phone to access VAS, which represents a more sophisticated group of mobile phone users. Overall, 32% of mobile phone users made a

complaint in the previous year, but among Internet users, who tended to be young, urban and of high socio-economic status, the proportion was much higher at 45%.

The survey was based mainly on attitudinal questions, so results reflect perceptions rather than objective measures of service. Results illustrate how perceptions reflect the circumstances of service users. For example, respondents from North West zone, who had the lowest socio-economic status, registered the highest scores for satisfaction (stated), NCC Customer Satisfaction Index, and perceived value for money offered by mobile phones services, yet intensity of phone use was lowest in this zone. Although public access scores for quality of service issues were generally higher among urban respondents and stated satisfaction was higher among urban respondents, it was rural respondents that registered higher scores for perceived value for money. This reflects the premium value of communications to citizens that are isolated, which means they tend to be satisfied with lower levels of service, perceive greater financial benefit from the ability to communicate, yet make only modest use of services.

The analysis highlighted an interesting relationship based on geography between figures for the NCC Customer Satisfaction Index and NCC Customer Care Index. For both mobile phone and internet users, they exhibited an inverse relationship i.e. in zones where the NCC Customer Satisfaction Index score was high, the NCC Customer Care Index was low, and vice versa. This may suggest that in zones where service was poor, customers expressed greater appreciation for the support they were given.

The analysis identified vulnerable groups of users. Respondents who used public phones exclusively (i.e. did not also have access to a private phone) tended to be rural women of low socio-economic status, and 21% mainly used unmanned kiosks. Results show that unmanned kiosk users experience poor levels of service and express low levels of satisfaction and perceived value for money. This is a dissatisfied group that feels they are overcharged, yet are unable or unwilling to invest in a handset.

Finally, some interesting characteristics concerning the use of technology were highlighted. Mobile devices were clearly the most popular means of accessing the Internet. Around 60% of Internet users made voice calls (VOIP), and 60% streamed video over the Internet. VOIP use was highest in North East and North West zones, which also registered the lowest NCC Customer Satisfaction Index scores for mobile service. Conversely, VOIP use was lowest in South West zone, where the mobile NCC Customer Satisfaction Index was highest. Despite often being less convenient to use, less satisfied users may view VoIP as a free or cheaper alternative technology for making calls, especially because users are charged for internet access rather than on a per minute or per second basis for VoIP calls.

5. Suggestion on Service Improvements, Remedies and Compensation

The terms of reference for the project call for the NCC CSS team to make suggestions for ways to improve services, compensation/remedies for consumers, and ways to improve consumers' awareness of their rights, benefits and obligations in relation to service providers. This section of the report comprises the NCC CSS team's suggestions.

5.1 Establishing Priorities

Table 16 below (Page 59) and Table 17 (Figure 36 below (Page 60) summarise the survey findings related to specific aspects of services. They state for each relevant indicator for each service the proportions of respondents that regarded that aspect of the service as "poor or very poor"[24]. For instance, the Internet data rate was rated as "poor or very poor" by over 40% (in fact, by 42%) of respondents to questions about internet services, and the video quality was rated as "poor or very poor" by over 10% (in fact, by 16%).

The relevant indicators in Table 16 below (Page 59) and Figure 36 below (Page 60) are not all those used in the survey; they are only those that can, in principle, be related to objective measurements such as call setup success rate and that can therefore be compared with figures from other sources.[25] The indicators excluded are those relating to knowledge of consumer rights and to satisfaction. The latter are:

- To what extent is the quality of service in line with your expectations?
- Overall, how would you rate the value for money offered by the services you pay for?
- Overall, how satisfied are you with the services you use?
- How likely are you to change to an alternative way of obtaining services (in next year)?

[24] In cases where the respondents were asked to choose a frequency ("never", "rarely", "sometimes", "often" or "almost always") responses of "sometimes" were not regarded as "good or very good" or as "poor or very poor", just as in other case responses of "no opinion" were not regarded as "good or very good" or as "poor or very poor". For mobile, fixed line, public access and internet services Part of this report, which present the full data analysis, provides separate versions of Figure 1 that include the positive ("good or very good") ratings and the neutral ("don't know, no opinion, or did not answer") ratings as well as the negative ("poor or very poor") ones.

[25] The operators may well be conducting customer satisfaction surveys of their own, but they are unlikely to frame the questions in the same way as the NCC or to let the NCC use any of their results that could benefit competitors.

With few exceptions, the indicators fall into three classes: nine (mainly in the initial third of the list in Figure 36 below - Page 60) are concerned with billing and charging, seven (in the middle third of the list) are concerned with complaint handling and eight (in the final third of the list) are concerned with network performance.

Table 16 Percentages of respondents stating that specific indicators were "poor or very poor"

	Mobile	Fixed line	Public access	Internet
Ability to check account balances	15	-	-	-
Timeliness of the recharge service	13	-	-	-
Correctness of the recharge service	12	-	-	-
Availability of the recharge service	14	-	-	-
Correctness of charging for VAS	23	-	-	-
Ease of access to VAS	12	-	-	-
Absence of spam	41	-	-	-
Correctness of charging for SMS	18	-	-	-
Ability to send SMS	15	-	11	-
Time to resolve complaints	40	19	-	31
Adequacy of resolution of complaints	29	20	-	33
Effectiveness of IVR	26	16	-	-
Politeness and knowledge of complaint handlers	12	14	-	-
Time to answer complaint calls	46	17	-	-
No difficulty in finding complaint call numbers	23	27	-	-
No need to make complaints in the past year	32	38	-	45
Little loss of connection	12	10	8	12
Ability to get the right number first time	6	8	6	-
Ability to connect first time	65	51	73	73
Little loss of service	10	10	14	10
Alignment of charging with advertising	26	21	-	20
Correctness of charging	26	28	-	21
Voice quality fixed off-net	21	21	-	-
Voice quality mobile off-net	26	16	-	-
Voice quality on-net	17	-	-	-
Voice quality	19	21	26	18
Video quality	-	-	-	16
Internet data rate	-	-	-	42

- means **not applicable**

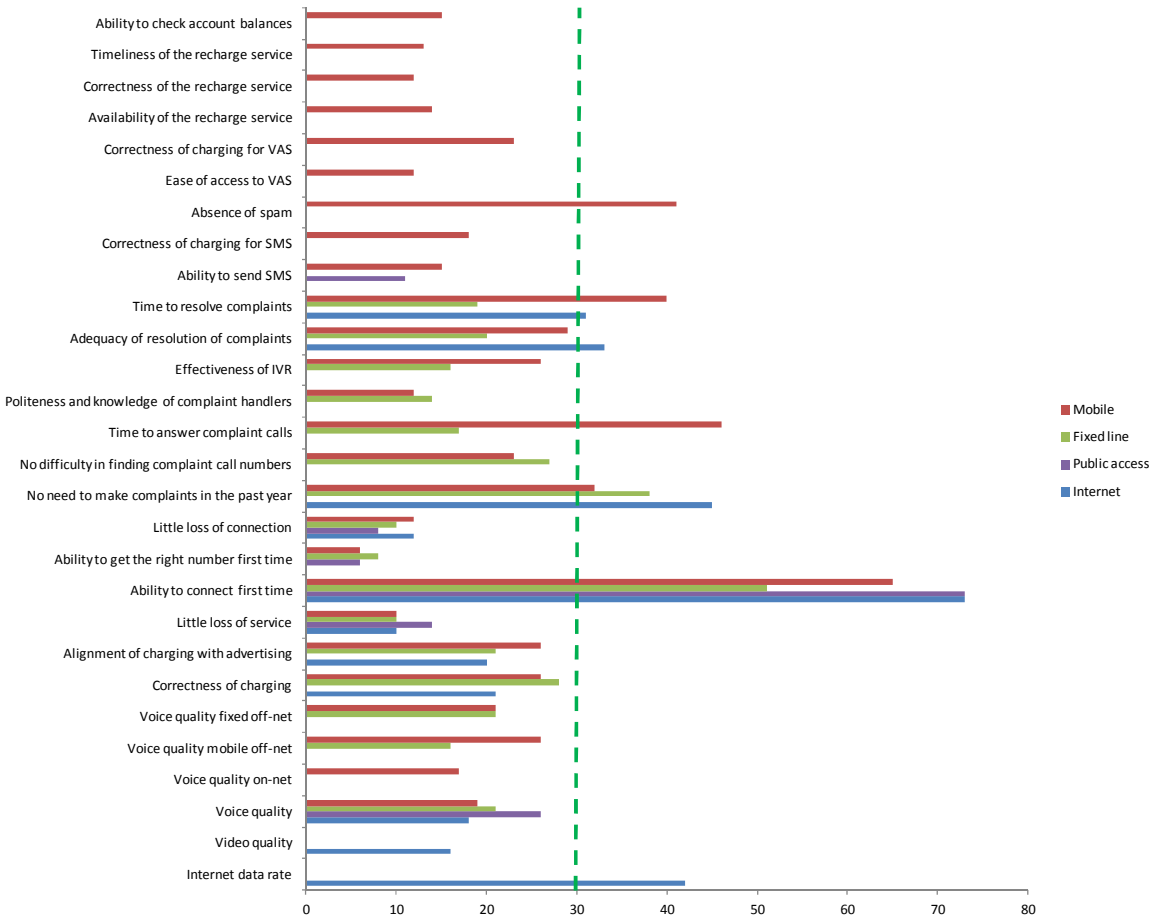

Figure 36 Survey findings of "poor or very poor"

We take the survey findings singled out by crossing the dashed lines in Figure 36 above (Page 60) and Table 16 above (Page 59) to represent the aspects of services that might deserve most attention from the NCC in the first instance.[26] This is not to say that other aspects are not important; it is simply to establish priorities and support the NCC in deciding where to apply its resources. They are:

- Internet data rate.
- Ability to connect first time.
- No need to make complaints in the past year.
- Time to answer complaint calls.
- Time to resolve complaints.
- Absence of spam.
- Alignment of charging with advertising.
- Correctness of charging.
- Ability to recharge.

[26] Besides being the aspects in which the proportion of ratings of "poor or very poor" exceeds 30 percentage points, the aspects of services singled out in **Error! Reference source not found.** above (Page 58) are also the aspects in which the ratio of ratings of "poor or very poor" to ratings of "good or very good" exceeds 68%. In other words, at least two third as many ratings of these aspects were "poor or very poor" as were "good or very good".

Even among these there might be some that do not deserve as much attention as others: respondents might be much more concerned about one than another. To some extent the complaint subjects let this bias be taken into account.

Table 2 (in Section 3.1 –Page 37) identifies zones and aspects of services for which ratings were at least 5 percentage points worse than the relevant means. The customer difficulties with SMS, VAS and recharge in North West and South South stand out as warranting investigation.

Table 3 (in Section 3.1 – Page 38) identifies operators and aspects of services for which ratings were at least 5 percentage points worse than the relevant means. M-Tel is the worst operator on many counts.

5.2 Tools Available for Improving the Services

The NCC already has several relevant legal instruments at its disposal. They include:

- The Quality of Service Regulations 2012.
- The Consumer Code of Practice Regulations 2007.
- The Nigerian Communications (Enforcement Processes, Etc.) Regulations 2005.
- The Complaint Adjudication Guidelines.
- The Dispute Resolution Guidelines.

We do not advocate the introduction of extra legal instruments to handle quality of service problems, though, as we discuss briefly later, we recommend revising the Quality of Service Regulations in due course. We concentrate instead on ways of making use of the instruments that already exist, so that action is not delayed unnecessarily by legal and parliamentary processes.

The NCC already makes use of some of its powers. In particular, from time to time it publishes tables giving the values of certain indicators for GSM operators (most recently in April 2012) and CDMA operators (most recently in February 2012).[27] However, its powers go beyond this and the Quality of Service Regulations 2012 (hereafter "the Regulations") state that it has powers to:

- Publish any information relevant to reported data (Regulation 10).
- Audit reported data (Regulation 11).
- Investigate data collection procedures (Regulation 12).
- Demand the implementation of remedial plans (Regulation 14(a)).
- Require compensation for customers (Regulation 14(b)).
- Impose fines (Regulation 14(c)).

Moreover Articles 61-63, 64-68, 89 and 141 of the Nigerian Communications Act 2003 give the NCC broad powers of investigation and information gathering.

[27] These tables are sometimes called "quality of service audit reports". In fact, they comprise measurements (apparently by the operators), along with comments by the NCC on the measurements.

Figure 37 below (Page 62) shows a range of ways in which the NCC could exercise these powers, from encouragement (aiming to improve quality of service through competition) to enforcement. We propose, as far as possible, the use of encouragement rather than enforcement. The main reasons for this are that encouragement can:

- Avoid the delay, expense and diversion of management attention inherent in litigation;
- Foster a co-operative attitude on the part of the operators and thereby make other policy objectives, such as universal service, easier to achieve;
- Allow standards to be set by the best in class practices of operators, rather than targets that are necessarily arbitrary and potentially irrelevant to customer satisfaction;[28]
- Harness the forceful style of public debate and press comment in Nigeria to publicise differences in quality of service between operators and thereby use competition as a spur to improvement[29]; and
- Permit improvements to be requested because of findings about subjective indicators, such as customer attitudes, that are not subject to the Regulations.

Even with an emphasis on encouragement, powers of enforcement would still be needed in a graduated series of obligations, such as the one in Figure 37 (Page 62) that the NCC could threaten to impose. Nonetheless, the intensity of competition in Nigeria (as shown in sales promotions, for example) suggests that, despite the predominance of one operator, the NCC could improve quality of service by making it attract competitive attention.[30]

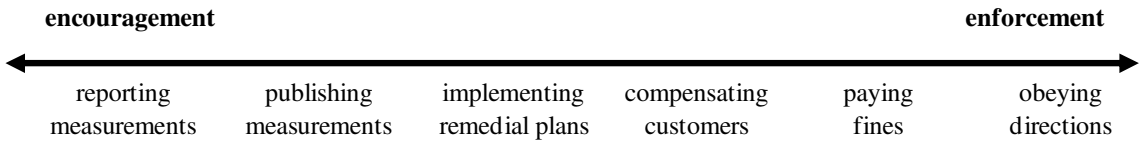

Figure 37 Requirements on operators intended to improve quality of service

The NCC is likely to find operators most co-operative if it discusses its programmes of work and plans for publication with them. Included in the discussions would be how the NCC intended to apply such a graduated series of obligations.

[28] For instance, a customer is unlikely to be able to tell the difference between call setup success rates of 97% and 98% but one contravenes the Regulations and the other does not.

[29] The beneficial effect of "naming and shaming" operators can be seen in a recent report from the UK regulator, Ofcom(http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/complaints/q2_2012.pdf). This shows how the numbers of complaints to Ofcom have been falling for all services since Ofcom started to publish the numbers separately for each operator in 2010. The figures for TalkTalk are especially enlightening: TalkTalk attracted very considerable press comment in 2010 because of its poor customer service, and in eighteen months it has halved the number of complaints.

[30] The programme by MTN to improve customer service through the "partner shop" retail outlets, and recent comments by Airtel Nigeria on its investment in customer care, could already be illustrating this.

5.3 Potential Ways of Improving the Services

5.3.1 Using the Survey Findings

1. The NCC could publish the aggregate figures from the survey findings, by briefing journalists, in advertising, on its web site, and to the Consumer Parliament. For courtesy the NCC would brief the operators and invite comments some days before.

2. The NCC could discuss with each operator the figures for its own services, to obtain explanations of any major shortfalls in different zones (relative to the aggregate figures) and details of any plans for improvement under Regulation 14 of the Regulations.[31] If the NCC was not satisfied with the outcome of the discussion, it could publicise the fact.

3. The NCC could let each operator use the figures for its own services in its own publicity, subject to guidelines on statistical reliability and approval by the NCC of the wording and context.

4. The NCC could publish the figures for the services of individual operators by briefing journalists, in advertising, on its web site, and to the Consumer Parliament. Publication would use simple tables or bar charts and focus on very few, important, indicators, as a prototype for publication of information to the general public under Regulation 10 of the Regulations.

5. The NCC could convene a joint meeting of the industry and consumer groups to identify actions to improve unmanned public payphones and people who would take responsibility for implementation. Though the number of users of unmanned payphones in the survey is relatively small, the findings suggest that these payphones provide particularly poor service quality, to some of the least privileged members of society.

5.3.2 Extending the Survey Findings

1. The NCC could ask for the operator records of customer complaints to check whether these and the NCC complaint records match the survey findings and comply with the standards in Schedule 1 Table 2 (Account Complaints KPIs) of the Regulations. If the NCC found significant mismatches or suspected that the records were partial, it could investigate further under Regulation 12 of the Regulations.

2. The NCC could check the consistency of the survey findings with information gathered from other sources (such as NCC drive tests and measurements submitted

[31] Of course the zones are large, and the figures for them do not show the differences within individual zones. However, operators will already know in which areas of the zones they are deficient. Discussing the survey with them should help to focus their attention on those areas.

by the operators themselves) and aim to understand any inconsistencies. Inconsistencies could, for example, point to fluctuations in service quality (due to faulty equipment or changeable weather), reporting errors by operators, or simply to varying sensitivities of consumers (perhaps in different zones) to different aspects of services.[32]

3. The NCC could compare the survey findings with the findings of the earlier survey, to determine what had changed in customer perceptions.

4. The NCC could do its own tests of call handling, including enough tests to be statistically significant, to check compliance with Schedule 1 Table 3 (Customer Care Services KPIs) of the Regulations, bearing in mind the survey findings on customer care. These tests of call handling would involve mystery shopping by or on behalf of the NCC, in which callers would make calls to the operator call centres to make complaints or just to make enquiries.

5. The NCC could conduct a special investigation of charging for on-net and off-net calls, to understand and rectify problems taking into account the survey findings on alignment of charging with advertising, asking questions such as these examples:
    - Are advertised charges in error, misleadingly presented or out of date? (Rectification could entail ensuring the strengthening and enforcement of advertising codes of practice.)
    - Are charging or recharge mechanisms faulty? (Rectification could entail testing metering and billing systems or examining transformations of call detail records.)
    - Are consumers misunderstanding their charges? (Rectification could entail requiring clearer and better publicity.)

6. For internet:
    - The NCC could do mystery shopping by speaking to sales staff to examine contracts for compliance with Schedule 1 Table 5 (Data Services KPIs) of the Regulations, particularly as, according to the survey, the internet data rate is a cause for concern.
    - The NCC could do its own tests of login success, data rate, delay and packet loss, including enough tests to be statistically significant, to check compliance with Schedule 1 Table 5 (Data Services KPIs) of the Regulations and contracts.[33] Other things in Schedule 1 Table 5 (Data Services KPIs) of the Regulations should not be tested, for simplicity and economy.

7. The NCC could use its own test and mystery shopping results in essentially the same ways (1-4 above) as the survey findings.

[32] For instance, a business customer might be more annoyed by repeated dropped calls than a residential customer.

[33] However, as the internet data rate can vary for many reasons, including several outside the control of the operator, compliance is unlikely.

5.3.3 Improving Quality in the Future

1. The NCC could raise the apparent difficulty of finding customer contracts and customer codes of practice with the operators. Despite the Consumer Code of Practice Regulations 2007, our inspection of the GSM operators' web sites located no customer contracts and only one customer code of practice.[34] Making customer contracts and customer codes of practice readily available would, of course, help raise consumers' awareness of their rights, benefits and obligations in relation to service providers.

2. The NCC could announce what it does, and does not, intend to enforce. Having an enormous collection of targets that are not enforced but that might be enforced some time does not serve subscribers or encourage network development; it encourages operators to disregard the Regulations completely.[35]

3. The NCC could raise consumer awareness of rights and what to do when things go wrong, through various publicity avenues and campaigns. The survey points to some interesting differences between zones in knowledge of customer rights.[36] These differences might point to differences in the effectiveness of earlier campaigns in different zones, if they are not just cultural or linguistic.

4. The NCC could discuss with the industry and consumer groups which of the following approaches to enforcement would be simplest to implement and most effective:
    - Providing compensation to all relevant subscribers, with messages written by the NCC in bills or in SMS explaining why the compensation is being given;[37] and
    - Paying fines that are earmarked for an audited fund serving purposes that are beneficial to all consumers, such as publicising consumer information written by the NCC (that might, on occasions, name and shame particular operators).

5. In the future, the NCC could undertake both general surveys, covering the whole country and all services, and smaller surveys, focusing on specific geographic areas, service aspects or consumer groups. These smaller surveys would let the NCC gain a better understanding of the issues causing most dissatisfaction. The findings of the survey reported in this project could be compared usefully with the findings of these smaller surveys as well as with the findings of the general surveys, to track the

[34] Airtel Nigeria is the only major mobile operator in Nigeria to make its customer code of practice available on its website.

[35] Some of these targets (such as the requirements for no more than 10 complaints per 1 million accounts and 20 faults per 1 million fixed lines) could never be enforced, as they are unrealistic.

[36] For instance, in several respects the most and least accurate beliefs about rights are held in South South and North West (respectively).

[37] For instance, compensation could be credited automatically to the accounts of all postpaid and prepaid subscribers who have used their phones for revenue-generating events in the past six months.

evolution of service quality and customer attitudes over time.[38] For instance, the NCC could institute an intensive survey programme that aimed to cover each Local Government Area (LGA) in three years by:

- Surveying four or five LGAs per state every six months, with some overlap between the LGAs considered in one survey and the LGAs considered in the next; and
- Imposing a series of graduated obligations on each operator, following Figure 37 (Page 62) in Section 5.2, according to the number of consecutive surveys in which the operator has been significantly worse than other operators for particular aspects of services in particular areas.

6. The NCC could remove most of the indicators and targets from the Regulations by gazetting a new version. Setting very demanding targets for aspects of services that consumers are already satisfied with is likely to be counterproductive: management attention and resources, in the operators and the NCC, might better be directed to areas of lower satisfaction. Unrealistic targets, targets that are realistic but of no current interest to consumers, and targets that do not relate to aspects of services that are directly perceived by users could all be removed. In addition, ambiguities could be removed. For instance, regarding the internet:
    - The required measurements assume customer knowledge (of data rates, for example) and do not defined the tests to be made (for instance, they say nothing about to where delay is measured);
    - There are many things that "must be specified in the contract", including several that the residential customer is unlikely to understand; and
    - There are several measurements for 3G services, the purpose and relevance of which is unclear.

5.3.4 Reducing Spam

The Consumer Code of Practice Regulations 2007 includes a section requiring licensees and their business partners to follow good practice in their own telemarketing, and to respect consumers' expressed preferences (opt-out). The Quality of Service Regulations 2012 includes two "targets" in Schedule 1 Table 2 (Account Complaint KPIs) related to unsolicited messages:

- The service provider must provide an option for the subscriber to "opt out" of receiving such messages where the messages originate from the service provider or its third party business partners; and
- The service provider should make reasonable effort to identify and block or filter bulk, unsolicited and offensive messages from other sources.

There does not yet appear to be legislation of broader scope with which to address unsolicited messages from other sources, although it has been discussed in the context of successive drafts of the Cybersecurity Bill.

[38] It could well be that customer expectations will rise in step with service quality, so customer satisfaction will not rise

In the circumstances, the best course of action to reduce nuisance to consumers caused by spam texts may be for the NCC to ask each operator to report on:

- Its opt-out provisions, including how these are publicised and how far the opt-out option has been taken up; and
- The efforts it has been putting in to "identify and block or filter bulk, unsolicited and offensive messages from other sources".

The next step might be for the NCC to encourage the operators to co-operate in reducing this nuisance to their customers, by:

- Sharing best practice among themselves;[39]
- Republicising the opt-out option, which in the future should signify a preference for not receiving unsolicited marketing messages from any source. At the same time, the public should be made aware that responding to such messages is the surest way to ensure that they continue – and conversely;
- Providing a central reporting point to which consumers are invited to forward unwanted text messages; and
- Analysing the unwanted messages received, and using their best efforts to identify the senders and take appropriate action.[40]

The nuisance is unlikely to be stopped, but it may be reduced thus public expectations should be managed accordingly.

[39] This might include, for example, having a short code ("7726", which transliterates as "spam") to which spam would be forwarded (where a human would arrange for the messages from the spam sender to be blocked) or installing spam identification and treatment systems such as http://www.cloudmark.com/.

[40] Genuine marketers should be relatively open to persuasion to reduce the volume of their messages; fraudsters can be pursued and dealt with under the law.

Annex A - Final NCC CSS Questionnaire

Telecoms Consumer Satisfaction Survey 2012 (version 3.2)

x

NIGERIAN COMMUNICATIONS COMMISSION

Tick only <u>one</u> 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?								
	never	rarely	sometimes	often	Almost always			
16 How often do you usually experience loss of service (no mobile signal, no signal bars etc.)?								
Now, thinking about making or receiving voice calls:								
	Only once	twice	3-5 times	More than 5 times				
17 How often do you need to dial a number before you get through (before the phone rings)?								
	never	rarely	sometimes	often	Almost always			
18 How often do you get connected to the wrong number when you dial?								

	never	rarely	sometimes	often	Almost always	
19 How often do you get cut off in the middle of a call?						
	Very poor	poor	no opinion	good	Very good	
20 How would you rate the voice quality of calls (e.g. clear, loud)?						
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	sometimes	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						
Now, thinking about Customer Services provided by your mobile operator						
29 How often have you made a complaint in the last year (through phone or visit)?	never	once	2 to 5 times	More than 5 times		
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	
Inability to make / receive voice calls		paying a bill	
Request for Value Added service		SMS	
Time to resolve an existing complaint		Data complaint	
Blackberry complaint		Other	

	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?						
43 How often do you usually experience loss of service (no dial tone, no signal bars etc.)?	never	rarely	sometimes	often	Almost always	
44 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		
45 How often do you get connected to the wrong number	never	rarely	sometimes	often	Almost always	

when you dial?						
	never	rarely	sometimes	often	Almost always	
46 How often do you get cut off in the middle of a call?						
	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						
51 How often have you made a complaint in the last year (through phone or visit)?	never	once	2 to 5 times	More than 5 times		
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) member		Other	
Manned public shop / kiosk		I don't use a phone	
Unmanned kiosk			

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

60 Can you estimate roughly how often you use this 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

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

Now, thinking about making or receiving voice calls:

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

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

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

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

					Almost	Don't send

	never	rarely	sometimes	often	always	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					
73 Can you estimate roughly the average monthly amount you spend on the internet / email?		Less than N3,000	N3,001 to N10,000	Over N10,000	Don't know
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			Starcomms		
Globacom			Swift wireless		
Hyperia			VGCom		
IPNX			Visafone		
Mobitel			Zoom mobile		
MTN			other		
MTS			Don't know		
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?	never	rarely	sometimes	often	Almost always
77 How many log-in attempts do you need to make before	Only one	two	3-5 times	More than 5 times	

successfully getting online?						
78 How would you rate the speed of your internet connection?	Very slow	slow	no opinion	fast	Very fast	
79 How would you rate the quality of voice calls made using the internet (e.g. Skype)?	Very poor	poor	no opinion	good	Very good	Not used
80 How would you rate the quality of video streaming over internet (e.g. YouTube)?	Very poor	poor	no opinion	good	Very good	Not used
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						
82 How often have you made a complaint (in the last year)?	never	once	2 to 5 times	More than 5 times		
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						
84 To what extent is the quality of services in line with your expectations?	much lower	lower	no opinion	higher	Much higher	Don't know
85 Overall, how would you rate the value for money	Very poor	poor	no opinion	good	Very good	Don't know

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?					
	15 mins	30 mins	1 hour	No limit	Don't know
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?			
	yes	no	Don't know
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		

Annex B - Sampling Framework

Adults from across all 6 Geo Political zones of the country will be sampled, and from all states within each zone. In order to eliminate "null" responses, the sample should be drawn from the population of telecommunications service users, to be defined as "those who have made some use of voice or data communications within the previous 3 months".

The quota sampling design will reflect the key demographics of the population:

- Rural / urban location
- Gender
- Age

The sample is to be drawn from the population of Nigerian adults (15 years and over). Although penetration rates are relatively high, it is likely that a sizable minority of the population will make sole use of public access to telecommunications. In order to generate data pertinent to universal access provision, the methodology is designed to canvas not only phone subscribers (both mobile and fixed), but also public access users. It is safe to assume that Internet users will be a subset of phone subscribers.

The large sample size (50,000), coupled with the fact that it is to be drawn from across the country, means that results are likely to be reasonably representative of the overall population. However, because the sampling method is a non-probability sampling method (unlike a household survey), no margin of error can be computed. This means that the results cannot be generalized to the national population with an exact degree of precision. Whilst this approach offers a practical approach that can be achieved within time and budgetary constraints, and is an accepted approach to such surveys, it is important to recognize the theoretical weakness of the method.

Quota sampling is similar to stratified sampling, in that the sample can be drawn from different subgroups of the population. As with stratification, the categories of the groupings to be used should be mutually exclusive i.e. any single respondent fits into only one category e.g. male / female. The ICT used (mobile, fixed, VAS and internet) is not mutually exclusive; VAS is by definition a subset of mobile users, and it is likely that both fixed and mobile will be a subset of Internet.

Random selection

Although quota sampling this is a non-probability sampling method, a degree of randomness can be introduced in the selection of geographical areas from which the sample is to be drawn. This is recommended, as it will ensure the selection of areas was not biased. Each

of the field teams will be asked to randomly select those areas from which they select respondents and they will be asked to provide a brief summary of how those areas were selected.

Each zone is to be regarded as an individual domain, so equal sample sizes are to be drawn from each zone. It is beyond the scope of the budget and time provided to sample from clusters throughout each zone, so a multi-stage sampling process is required. It is proposed to use Local Government Areas (LGAs) as the first level of sampling. Within each zone, a manageable number of LGAs can be selected randomly. It is proposed to use Enumeration Areas (EAs) as the second level of sampling. Within each LGA, a manageable number of EAs can be selected randomly.

Example quota design

The population pyramid for adults in Nigeria is presented in Figure 38. Overall, the male:female distribution of the adult population is 49:51. This age and gender distribution will be used to calculate the quotas to be used at a Geo-Political Zone level – see Table 17 (Page 84) . It is proposed to split the sample equally between rural and urban locations on the basis that the population is roughly 50% urban.

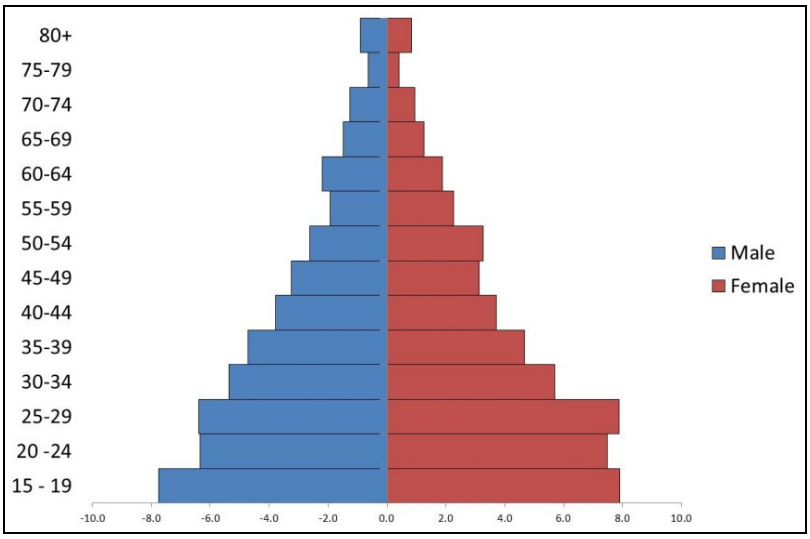

Figure 38 Population pyramid (aged 15 years and over)

Table 17 Example quota numbers per Geo-Zone

	Male	Female
15 - 19	645	659
20 -24	529	624
25-29	532	656
30-39	840	866
40-49	586	571
50 +	918	907
	4050	**4283**

Annex C. Completion of Data Collection

The urban and rural locations where the questionnaire would be administered were agreed with the NCC and communicated to the field teams on the 13th of July. All the field teams had confirmed receipt of their designated areas by the morning of the 14th July 2012. Survey Administration teams printed their respective questionnaires on the 13th, 14th and 15th of July and subsequently couriered them to field teams in each State and the FCT.

Data collection began on the morning of Monday 16th July 2012 and was completed on the morning of the 27th July 2012, rather than the evening of the 26th July 2012 as scheduled. It was conducted in the survey administration areas agreed with the NCC. However, survey administration teams from Telecom Advisory Services (TAS) had to change three of their enumeration areas due to security issues in the areas that were originally designated to them. The table below (Table 18 – Page 86) details the locations in which data was collected and the number of respondents that were interviewed in each location. The cells highlighted in yellow indicate survey administration areas that were changed.

The field teams administered a total of 50,345 questionnaires. However, the number of questionnaires that were analysed was slightly less than this following the data cleaning exercise, which should ensure that the team extract any questionnaires that may be deemed unreliable.

Table 18 Urban and Rural Areas for Survey Administration

Zone	States	Urban 1	Proposed Sample Size	Urban 2	Proposed Sample Size	Rural	Proposed Sample Size
North West (TAS)	**Jigawa**	Dutse	300	**Hadejia - B/Kudu**	300	Buji	600
	Kaduna	Kaduna	300	Zaria	300	Soba	600
	Kano	Kano	300	Nasarawa	300	**Dawakin Kudu changed to Kumbotso**	600
	Katsina	Katsina	300	Dutsin-Ma	300	Bindawa	600
	Kebbi	Birnin Kebbi	300	Gwandu	300	Kalgo	600
	Sokoto	Sokoto	300	Wamako	300	**Dange-shnsi changed to Kware**	600
	Zamfara	Gusau	300	Talata Mafara	300	Maru	600
	Total		**2100**		**2100**		**4200**
South South (TAS)	**Akwa Ibom**	Uyo	350	Oron	350	Ikot Ekpene	700
	Bayelsa	Yenegoa	350	Ogbia	350	Ekeremor	700
	Cross River	Calabar South	350	Ikom	350	Odukpani	700
	Delta	Asaba	350	Sapele	350	Mosogar	700
	Edo	Benin city	350	Ekpoma	350	Ologbo	700
	Rivers	Port Harcourt	350	Obia/Akpor	350	Emohua	700
	Total		**2100**		**2100**		**4200**
South West (ICT DECISION SUPPORT)	**Lagos**	Lagos	348	Lagos metropolis	348	Ikorodu	695
	Ogun	Abeokuta	348	Sagamu	348	Obadaoku	695
	Oyo	Ibadan	348	Oyo	348	Oduona	695
	Osun	Osogbo	348	Ife	348	Ofatedo	695

	Ondo	Akure	348	Owo	348	Obaile	695
	Ekiti	Ado	348	Ikere	348	Ijan	695
	Total		**2088**		**2088**		**4170**
Zone	**States**	**Urban 1**	**Proposed Sample Size**	**Urban 2**	**Proposed Sample Size**	**Rural**	**Proposed Sample Size**
South East (SEALS)	**Abia**	Umuahia	418	Aba	418	Lokpanta	836
	Anambra	Awka	418	Onitsha	418	Anam	836
	Ebonyi	Abakaliki	418	Afikpo	418	Okposi	836
	Enugu	Enugu Town	418	Nsukka	418	Agbogugu	836
	Imo	Owerri	418	Mbano	418	Urata	836
	Totals		**2090**		**2090**		**4180**
North Central (CTO)	**Nasarawa**	Lafia	301	Keffi	301	Nasarawa ntoto	601
	Kogi	Lokoja	301	Okenne	301	Okun	601
	Kwara	Ilorin	301	Offa	301	Idofian	601
	Niger	Minna	301	Suleja	301	Lapai	601
	Benue	Makurdi	301	Gboko	301	Vandeikya	601
	Plateau	Jos	301	Bukuru	301	Vom	601
	FCT	Wuse	301	Gwagwalada	301	Buwari	601
	Totals		**2107**		**2107**		**4207**
North East (CTO)	**Adamawa**	Yola	**351**	Mubi	351	Ganye	701
	Bauchi	Bauchi	**351**	Tafawa Balewa	351	Tildem Fulani	701
	Gombe	Gombe	**351**	Kaltungo	351	Gelengu	701
	Taraba	Jalingo	**351**	Mutumbiu	351	Takum	701
	Yobe	Damagun	**351**	Damaturu	351	Fika	701
	Borno	Maiduguri	**351**	Biu	351	Lassa	701
	Totals		**2106**		**2106**		**4206**

For more information, please contact:
Kojo Boakye
Programme Manager
T. +44 208 600 3815
M. +44 7961 354 705
E. k.boakye@cto.int

COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

64 - 66 Glenthorne Road
London W6 0LR
United Kingdom

Tel: +44 (0) 208 600 3800
Fax: +44 (0) 208 600 3819
E-mail: info@cto.int
Website: www.cto.int