

# CONSUMER PROTECTION AND QUALITY OF SERVICE/EXPERIENCE: NIGERIA PERSPECTIVES SESSION 5

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### Introduction

- Nigeria's mobile telecoms sector was liberalised in 2001
- \$68bn investment with \$35b FDI as at July 2016
- This high level of spending has helped turn the 178m-person country into the largest mobile telecoms market in Africa, boasting over 150m active subscribers as at July 2016
- The rapid rollout and uptake of successive mobile telecoms technologies –
  including 2G, 3G and 4G LTE resulted in high demand pressures on network
  infrastructure and service provision, forcing operators to navigate a
  number of complicated situations. And excessive demands from
  Consumers



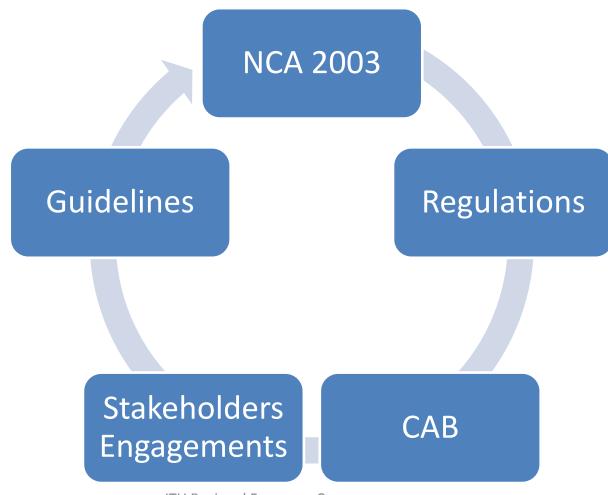
#### Some Definitions

The ITU-T Lead Study Group on QoS/QoE is Study Group 12

- QoS as "the collective effect of service performance which determines the degree of satisfaction of a user of the service".
- QoE (Quality of Experience) as "the overall acceptability of an application or service, as perceived subjectively by the end user".
- Convergence describes emerging telecommunications technologies, and network architecture used to migrate multiple communications (voice, video, and data) services into a single network.
- IoT (Internet of Things) as "a global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies".
- This is the challenge of today and the primary reason for this topic -Consumer Protection and QoS and QoE In Nigeria



## Qos Framework in Nigeria





## Qos (key) Regulations

- Universal Access and Universal Service Regulations
- Type Approval Regulations
- <u>Telecommunications Networks Interconnection</u> <u>Regulations</u>
- Quality of Service Regulations
- Mobile Number Portability Regulations
- Frequency Pricing Regulations
- Enforcement Processes Regulations
- Consumer Code of Practice Regulations
- Competition Practices Regulations



## Qos (key) Guidelines

- Guidelines for Deployment of Broadband Services on the 5.2-5.9GHz Band
- Guidelines for Deployment of 2.4GHz ISM Band (WiFi) for Commercial Telecom Services
- Guidelines for Dispute Resolution
- <u>— Appendix Arbitration Scheme</u>
- <u>— Appendix Panel of Neutrals</u>
- Guidelines for International Access and Voice over Internet Protocol (VoIP)
- Guidelines for the Installation of Telecommunications Masts and Towers
- Appendix Technical Specifications
- Guidelines for the Provision of Internet Service
- Guidelines on Advertisements & Promotions
- Guidelines on Collocation and Infrastructure Sharing
- Guidelines on Commercial Satellite Communications
- Guidelines on Consultations
- <u>Guidelines on Procedure for Granting Approval to Disconnect Telecommunications Operators</u>
- Guidelines on Shortcode Operation in Nigeria
- Guidelines on Type Approval





Periodically, the Commission engage the consumers in various ways such as:

- ADAPTI Program(ICT Training for teachers in tertiary institutions)
- Conducting and carrying out Outreach Programs around the country:
- Telecom Consumer Parliament (TCP) (79 editions) 2003
- Consumer Outreach Programme (COP) (82editions) 2002
- Consumer Townhall Meeting(CTM) (25 editions) 2010
- Industry Consumer Advisory Forum (ICAF) 2010
- Translating the educational materials into the 3 major Nigerian languages and PIDGIN English.
- Consumer Satisfaction Survey (Done yearly to ascertain consumers satisfaction based on QOS and QOE)
- 2017 Declared Year of the Telecom Consumer Flag off about now in Abuja -Nigeria



#### **Data Services KPIs and Consumer Protection Measures**

S/N	Parameters	Consumer Protection Measures				
1	Circuit Switched Data Services (CDS)	upstream data rate > 95% of the data rate agreed with consumer, at BH Downstream data rate > 95% of the data rate agreed with consumer, at BH				
2	Packet Switched Data Services (PDS)	Upstream data rate > 95% of the data rate agreed with consumer, at BH Downstream data rate > 95% of the data rate agreed with consumer, at BH				
3	GPRS Attach Success Rate	> 98%				
	PDP Context Activation Success Rate	> 98%				
	Data Service Login success or Availability	> 98%				
	Latency	GPRS < 500ms, EDGE < 100ms				
	Uplink or Downlink Throughput for Various evolution of Mobile Technology Standards	Must meet the Minimum speed specified in the 3GPP Standards				
4	Meeting Advertisement Commitments	There shall be no disparity between advertised rates and that eventually received by the Consumer				
	ITU Regional Forum on Consumer					

Information, Protection and Rights for Africa, 14 - 16 March, 2017 Cotonu, Benin Renublic



# Data Services KPIs and Consumer Protection Measures

S/N	Parameters		Consumer Protection Measures
5	Compensation for hours of data		At least 100% of loss in services not rendered supply time
6	Contention Ratio	Committed Rate	Must be specified in the contract
		Maximum Data Rate	Must be specified in the contract
7	End-to-End Throughput		Must be specified in the contract
8	Data Rate of each link from end-to-end		Must be specified in the contract, and should make provision to enable measurement.
9	Data rate of slowest link (bottleneck)		Must be specified in the contract
10	Permissible Download data size per		Must be specified in the billing period without additional charge contract on the plan
11	Response time in case of Major Faults		Must be specified in the contract
12	Customer details including address and log files		Must be available for NCC verification if required
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# Data Services KPIs and Consumer Protection Measures

**ADDITIONAL THRESHOLDS FOR 3G** 

S/N	Parameters	Consumer Protection Measures
13	RRC_CSSR	≤ 98%
14	RAB_SR	≤ 98%
15	RTWP	≤ -100dBm
16	RSCP	≥ -85dBm
17	Ec/lo	≥ -9dBm
18	lub Congestion	≤ 2%
19	CS_IRAT HHO Failure	≤ 2%
20	PS_IRAT HHO Failure	≤ 2%



#### Some Key Words

RRC_CSSR	Radio Resource Control _ Call Setup Success Rate	
RAB_SR	Radio Access Bearer _ Signal Radio	
RTWP	Received Total Wideband Power	
RSCP	Received Signal Code Power	
Ec/lo	Chip Energy per Interference Spectral Density	
CS_IRAT HHO Failure	Circuit Switch Inter Radio Access Technology Hard Handover Failure	
PS_IRAT HHO Failure	Packet Switch Inter Radio Access Technology Hard Handover Failure	



# Audit and Assessment of QoS Parameters

The Commission shall in carrying out Measurement and Data Acquisition functions use any of the following methods:

- (i) Drive test,
- (ii) Mobile Station Probes tests,
- (iii) Consumer survey,
- (iv) Data collection from Operators, the Commission's Network Operating Centers ('NOCs') or Network Management Centers ('NMCs').
- (3) The Commission's NOC or NMC may rely on real-time data acquired from feeds.
- (4) KPI Measurements may be carried out at all network segments including BTS, Cell, BSC or MSc levels.



#### **Enforcement Measures**

Where a Licensee contravenes any of the parameters, the Commission may take one or more of the following enforcement measures:

- (a) require the Licensee to submit and or publish additional information about the quality of the relevant service including but not limited to its implementation of a remedial plan within a time frame agreed with the Commission and any information submitted may be cross-checked against the performance data collected by the Commission;
- (b) issue directions pursuant to section 53 of the NCA including but not limited to directing Licensees to compensate subscribers or consumers for poor quality of service; and
- (c) Impose a fine on the contravening Licensee as may be determined.

