



ANNUAL REPORT

2014-15

WHO WE ARE

VISION

Access to and use of Information and Communication services by all in Kenya by 2018

PURPOSE

Facilitate the transformation
of lives through progressive
regulation of the Information and
Communication Technology sector

BRAND PROMISE

Opening your world

VALUES

- Integrity
- Transparency
- Diligence
- Results-focus
- Accountability
- Teamwork

ACRONYMS AND ABBREVIATIONS	
ACRONYMS AND ABBREVIATIONS	2
ACKNOWLEDGEMENT	3
BOARD OF DIRECTORS	
DIRECTORS' BIOGRAPHIES	
CHAIRMAN'S OVERVIEW	10
DIRECTOR GENERAL'S FOREWORD	12
PREAMBLE	13
ESTABLISHMENT AND MANDATE OF THE AUTHORITY	13
FUNCTIONS OF THE BOARD OF DIRECTORS	14
ORGANIZATION STRUCTURE	16

Annual Report 2014 - 2015

CHA	PTER 1:		5.2.	Capacity building	6
MACI	ROECONOMIC ENVIRONMENT	17	5.3.	Supporting Capacity Building in ICTs	6
1.1.	Global Economy	19	5.4.	E-Resource Centres	6
1.2.	Global Information and Communications Technology Industry	19	5.5.	USF levies	6
1.3.	Local Environment	19	CH/	APTER 6:	
CHA	PTER 2:			PACITY BUILDING, IMPROVEMENT OF SYSTEMS AND	
MAN	AGEMENT OF SCARCE RESOURCES	23			
2.1.	Frequency Management	25		RKING ENVIRONMENT	6
	2.1.1: Mobile Cellular Services	25	6.1.	Human Capital	6
	2.1.2: Fixed Links	25	6.2.	Capacity Building	6
	2.1.3: Fixed Wireless Access Services	26		6.2.1: Organisation Learning	(
	2.1.4: Satellite Systems	27		6.2.2: Promoting Capacity Building in the Industry	(
	2.1.5: Private Land Mobile Services	27	0.7	6.2.3: Knowledge Transfer between Industry and Academia	(
	2.1.6: Radio Alarm Networks	27	6.3.	Improvement of the Working Environment	6
	2.1.7: Radio Alarm Units2.1.8: Digital TV Broadcasting Frequencies	27 28		6.3.1: Occupational Health and Safety	(
	2.1.9. Maritime Mobile Service Identity	28		6.3.2: Employee Wellness and Youth Empowerment	
	2.1.0: Management of the Digital Dividend	28		6.3.3: Corruption Eradication Strategies	
2.2.	Management of Numbering Resources	28		6.3.4: Prevention of Drugs and Substance Abuse	
2.2.	2.2.1: Assignment of Numbering Resources	28		6.3.5: Gender and Disability Mainstreaming	
	2.2.2: Mobile Number Portability	29		6.3.6: Employee Satisfaction Surveys 6.3.7: Culture Change	
	2.2.3: Management of the dot KE Domain Name Registry	30	6.4.		
			6.5.		
	APTER 3:		6.5.	Automation of the Authority's Processes	
PRO	MOTING COMPETITION AND INNOVATION	31		6.5.2: Implementation of a Network Management System (NMS) 6.5.3: Deployment of a Dual Stack System (IPv4 and IPv6)	
3.1.	Licensing of Communication Services	33		6.5.4: Upgrade of the Authority's Internet Connectivity	
	3.1.1: Telecoms Licensing	33	6.6.	Procurement and Disposal	
	3.1.2: Postal Licensing	35		ISO Certifications	
	3.1.3: Licensing of Broadcasting Services	36	6.7.		
	3.1.4: Electronic Transactions Services	36		6.7.2: ISO 9001:2008	
3.2.	Information and Communications Technology Services	36	6.0	6.7.3: ISO 27001:2013	
	3.2.1: Telecommunication Services	36	6.8.	Risk Management	
	3.2.2: Postal and Courier Services	43	CHA	APTER 7:	
	3.2.3: Broadcasting Services	43	COR	PORATE COMMUNICATION AND INTERNATIONAL LIAISON	
3.3.	Tariffs and Competition	43	7.1.	Engaging with Stakeholders and Local Community	
	3.3.1: Telecommunications	43		7.1.1: Corporate Social Responsibility	
	3.3.2: Postal and Courier Services	45		7.1.2: Public and Stakeholder Consultations	
	3.3.3: Broadcasting Services	45		7.1.3: Exhibitions and Promotional Activities	
CHA	APTER 4:			7.1.4: Public Awareness Campaigns	8
ENSU	JRING COMPLIANCE AND EMPOWERING CONSUMERS	47	7.2.	International Relations and Liaison	8
4.1.	Monitoring and Enforcing Compliance	49		7.2.2: Regional and International Meetings and Conferences	8
	4.1.1: Inspections	49		7.2.3: Benchmarking	8
	4.1.2: Interference Resolution and Radio Monitoring	52		7.2.4: Subscriptions to Regional and International Organizations	8
	4.1.3: Returns from Operators	54	CIL	ARTER O	
	4.1.4: Type Approval	55		APTER 8:	
	4.1.5: Cyber Security Management	56		NCIAL INFORMATION	
	4.1.6: De-activation of Counterfeit Telephone Handsets	59	8.1.	Corporate Governance	8
4.2.	Empowering and Protecting the Consumer	59	8.2.	Statement of Directors` Responsibilities	8
	4.2.1: Consumer Education and Information	59	8.3.	Revenue	8
	4.2.2: Understanding Consumers	59	8.4.	Expenditure	8
	4.2.3: Service Delivery	59	8.5.	Audit of Financial Statements	8
	4.2.4: Consumer Protection	60	8.6.	Annual Budget Estimates and Revised Budget	8
	4.2.5: Resolution of Consumer Complaints and Enquiries	60			
CHA	PTER 5:				
	DMAP TO UNIVERSAL ACCESS	63	ANI	NEX: SELECTED KEY COMMUNICATIONS STATISTICS	
5.1.	Implementation of the Universal Service Fund	65	AND	D ECONOMIC INDICATORS	8

Acronyms and Abbreviations

2G	Second Generation							
3G	Third Generation							
4G	Fourth Generation							
AFRALTI	African Advanced Level Telecommunications Institute							
AIDS	Acquired Immune Deficiency Syndrome							
ARICEA	Association of Regulators of Information and Communications for Eastern and Southern Africa							
ASK	Agricultural Society of Kenya							
ASP	Application Service Provider							
ATU	African Telecommunications Union							
ВРО	Business Process Outsourcing							
BUC	Block Up Converter							
BTS	Base Transmitter Stations							
CA	Communications Authority of Kenya							
CAP	Chapter							
СВ	Citizen Band							
CCK	Communications Commission of Kenya							
CIIP	Critical Information Infrastructure Protection							
CIRT	Computer Incident Response Team							
CPI	Consumer Price Index							
СРА	Consumer and Public Affairs							
CS	Commission Secretary							
CSP	Content Service Providers							
CSR	Corporate Social Responsibility							
CTMA	Competition, Tariffs and Market Analysis							
СТО	Commonwealth Telecommunications Organization							
dBm	Decibels (dB) measurement (m)							
DCNO	Data Carrier Network Operator							
DG	Director General							
DMP	Dominant Market Power							
DR	Disaster Recovery							
DSL	Digital Subscriber Line							
DTC	Digital Television Committee							
DVB-T2	Digital Video Broadcast - Terrestrial 2 nd Generation							
EAC	East African Community							
EACO	East African Communications Organization							
EASSy	East African Sub-marine Cable System							

EDGE	Enhanced Data Rates for GSM Evolution
F&A	Finance and Accounts
FSM	Frequency Management Spectrum
FTR	Fixed Termination Rate
FWA	Fixed Wireless Access
GAAP	Generally Accepted Accounting Practice
Gbps	Giga Bits Per Second
GDP	Gross Domestic Product
GE06	Geneva 06 Agreement
GHz	Giga Hertz
GIXP	Government Internet Exchange Point
GMPCS	Global Mobile Personal Communications by Satellite Service Providers
GPRS	General Packet Radio Service
GSM	Global System For Mobile Communication
GSR	Global Symposium for Regulators
HF	High Frequency
HIV	Human Immuno-deficiency Virus
HPA	High Power Amplifier
НСА	Human Capital and Administration
HSPA	High Speed Packet Access
RMIA	Risk Management and Internal Audit
IASs	International Accounting Standards
IBGO	Internet Backbone and Gateway Operator
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information and Communications Technology
IGF	Internet Governance Forum
IGS	International Gateway Systems and Services
IMIS	Integrated Management Information System
IP	Internal Protocol
ISO	International Organization for Standardization
IT	Information Technology
ITU	International Telecommunications Union
ITU-D	ITU Telecommunication Development sector
ITU-R	ITU Radio communication sector
ITU-T	ITU Standardisation sector
EACC	Ethics and Anti-Corruption Commission

Acronyms and Abbreviations

KE-CIRT/ CC	Kenya Computer Incident Response Team/Coordination Centre
KECOSO	Kenya Communications Sports Organization
KENIC	Kenya Network Information Centre
KES	Kenya Shilling
KICA	Kenya Information and Communications Act
KNLS	Kenya National Library Services
KPIs	Key Performance Indicators
LA	Legal Affairs
LAN	Local Area Network
LCS	Licensing, Compliance and Standards
LLOs	Local Loop Operators
LTE	Long Term Evolution
Mbps	Mega Bits Per Second
MHz	Mega Hertz
MNDC	Mobile National Destination Codes
MOS	Mean Opinion Score
MOU	Minutes of Use
MoU	Memorandum of Understanding
MTR	Mobile Termination Rate
NACADAA	National Campaign Against Drug Abuse Authority
NACC	National Aids Control Council
NCPWDs	National Council for Persons with Disabilities
NFP	Network Facility Provider
NFP T1	Network Facility Provider Tier 1
NFP T2	Network Facility Provider Tier 2
NFP T3	Network Facility Provider Tier 3
NGN	Next Generation Networks
NPC	National Preparatory Committee
PAPU	Pan African Postal Union
PBXs	Private Branch Exchanges
PCK	Postal Corporation of Kenya
PDNO	Public Data Network Operator
PKI	Public Key Infrastructure
POC	Postal Operations Council
PROC	Procurement

PRS	Premium Rate Services
PSTN	Public Switched Telephone Network
PwDs	Persons with Disabilities
QMS	Quality Management System
QoS	Quality of Service
RxLev	Received Signal Level
SCR	Submarine Cable Landing Rights
SEACOM	Sea Submarine Communications
SHF	Super High Frequency
SMS	Short Message Service
MMS	Multimedia Services
SSA	Sub-Saharan Africa
Tbps	Tera Bits Per Second
TEAMS	The East African Marine System
TEC	Telecommunications Contractors
TEV	Telecommunications Vendors
TKL	Telkom Kenya Limited
TNA	Training Needs Assessment
TP	Technical Personnel
TV	Television
UCC	Uganda Communications Commission
UDPK	United Disabled Persons of Kenya
UHF	Ultra High Frequency
UK	United Kingdom
ULF	Unified Licensing Framework
UPU	Universal Postal Union
USD	United States Dollar
USF	Universal Service Fund
VAS	Value Added Services
VHF	Very High Frequency
VoIP	Voice over Internet Protocol
VSAT	Very Small Aperture Terminal
WIMAX	Worldwide Interoperability for Microwave Access
WRC-12	World Radio Conference 2012
WSIS	World Summit on the Information Society
WTDC	World Telecommunications Development Conference

Acknowledgement The Authority acknowledges and appreciates the hard work that went into developing this Annual Report. The Authority thanks the following individuals for their dedication, commitment and professionalism in developing this Annual Report. Dr. James Njeru • Mr. Bernard Maina • Mr. Edwin Ombega • Mr. Paxton Musomba Ms. Hazel King'ori Ms. Stellah Abongo Ms. Isabelle Kandagor Ms. Winnie Eguchi Mr. Michael Kibukosya Mr. Lukas Musembi • Mrs. Patricia Kemei AIR MAIL



X

Directors' Biographies

Mr. Ngene B. Gituku Chairman of the Board

Mr. Ngene B. Gituku is the Chairman of the Board of Directors of the Communications Authority of Kenya. Prior to his appointment, he served as the immediate Chairman of the Board of the then Communications Commission of Kenya (CCK). He holds a BSc. Degree in Mathematics and Meteorology from the University of Nairobi and a Diploma in Marketing. He was appointed to the position on 23rd May, 2014 for a three-year term.

Mr. Joseph Tiampati Ole Musuni

PS, Ministry of Information, Communications and Technology

Mr. Joseph Tiampati Ole Musuni is the Principal Secretary, Ministry of Information, Communications and Technology (MoICT). He serves in the Communications Authority of Kenya Board as Principal Secretary in the Ministry of ICT, a position he has held since 27th June, 2013.

Amb. Dr. Monica Juma

PS, Ministry of Interior and Coordination of National Government

Amb. Monica Juma is the Principal Secretary in the Ministry of Interior and Coordination of National Government. She served in the Communications Authority of Kenya Board in this position as Principal Secretary in the Ministry of Interior and Coordination of National Government.

Amb. Dr. Juma holds a Doctorate of Philosophy (PhD) from the University of Oxford, Master of Arts (MA) and Bachelor of Arts (BA) from the University of Nairobi and Certificate in Refugees Studies from Oxford University.

She was appointed to this position on 14th August 2014 replacing Mr. Muteo Iringo.

Dr. Kamau Thugge, E.B.S., M.B.S.

PS, National Treasury

Dr. Kamau Thugge is the Principal Secretary at the National Treasury. He was appointed to this position on 27th June, 2013. He serves in the Communications Authority of Kenya Board in his position as Principal Secretary at the National Treasury.

Dr. Thugge holds a Doctorate of Philosophy (PhD) in Economics from Johns Hopkins University, Master's in Economics from Johns Hopkins University, USA and Bachelor's of Arts (Economics) from Colorado College, USA.

Mr. Francis W. Wangusi, MBS

Director General

Mr. Francis W. Wangusi is the Director General of the Communications Authority of Kenya. He was appointed to the position on 21st August 2012 for a period of three years.

Mr. Wangusi holds a Master's degree in Space Sciences with specialization in Satellite Communications from the International Space University, France; a BSc in Telecommunications Engineering from the University of Rome, Italy and a Charted Engineer Part II Certificate from the Institute of Electronics Engineering, UK. He is also a holder of Global Executive Master's Degree in Business Administration (GEMBA) from the United States International University (USIU).

Eng. Wilbert Kipsang Choge

Director

Eng. Wilbert Kipsang Choge was appointed to the CA board on 20th May, 2014 for a three-year term. He has vast experience in the telecommunications and ICT sector having worked for the defunct Kenya Posts and Telecommunications Corporation (KP&TC).

He holds a MSc in Telecommunications and a BSc (Hons.) in Electronics from Manchester University (UK).

Prof. Levi Obonyo

Directo

Prof. Levi Obonyo is an Associate Professor of Communication and Media Studies, and also the Dean of the School of Communication, Language and Performing Arts at Daystar University.

Prof. Obonyo holds a PhD in Mass Media and Communications from Temple University Philadelphia, USA. He also holds a Post Graduate Diploma in Tertiary Education from Potchefstroom University for Christian Higher Education, South Africa.

He was, until recently, the Chairman of the Media Council of Kenya. He currently serves as a member of the Advisory Council to Kenya National Commission to UNESCO specializing on communications.

He was appointed to the CA Board on 20th May, 2014 for a three-year term.

Ms. Grace M. Munjuri, MPRSK

Director

Ms. Grace Munjuri has wide experience in Corporate Communications for Brand Positioning, Public Relations, Media Relations, Government and Stakeholder Relations, Marketing and Communication for Advocacy. She has served in the Media Council of Kenya as a council member. She is the current Vice Chair of the Public Relations Society of Kenya (PRSK).

She holds a Master of Arts degree in Corporate Communications from Daystar University, and Bachelor of Commerce (Marketing) degree from Kenyatta University.

She was appointed to the CA Board on 20^{th} May, 2014 for a three-year term.

Directors' Biographies

Mr. Peter Mutie, MIPRA, MPRSK

Director

Mr. Peter Mutie is a communications specialist with experience spanning over two decades. He has served as the Chief Executive Officer of the Kenya Film Commission and is also a founder member of Brand Kenya and Media Council of Kenya.

He holds a Master in Business Administration (MBA), BA (Economics) and a Post Graduate Diploma in Mass Communication. He was appointed to the CA Board on 20^{th} May, 2014 for a three-year term.

Dr. Ken M. Nyaundi

Director

Dr. Ken Nyaundi is a legal practitioner with experience spanning over two decades. He has over the years distinguished himself in civil litigation, commercial transactions, property and conveyance and public law, particularly international human rights and constitutional issues. He is also a chartered arbitrator.

He holds a Doctorate of Philosophy (PhD) in International Law and a Master of Laws Degree in Public International Law both from the University of Cape Town, South Africa.

He was appointed to the CA Board on 20th May, 2014 for a three-year term.

Eng. Helen Kinoti

Director

Eng. Kinoti is a telecommunications expert and has been part of the transformation in the ICT sector in Kenya for close to three decades. She worked for the defunct Kenya Posts and Telecommunications Corporation (KP&TC) and Telkom Kenya Limited.

Eng. Kinoti holds a Master's degree in Business Administration (MBA) from the University of Free State (UOFS) – South Africa and a Bachelor's degree in Electrical Engineering from University of Nairobi. She is a member of Institution of Engineers of Kenya (IEK), Engineers Registration Board (ERB) and the Kenya Society of Electrical and Electronic Engineers (KSEEE).

She was appointed to the CA Board on 20th May 2014 for a period of three years.

Ms. Beatrice Opee

Director

Ms. Beatrice A. Opee is a Telecommunications Specialist with extensive ICT regulatory experience. She holds a Master of Science degree in Telecommunications from the State University of New York Institute of Technology (SUNYIT) and a Bachelor of Science degree in Computer Science from Middle Tennessee State University (MTSU). She has worked

closely with Federal Communications Commission (FCC) on behalf of various New York state public safety agencies.

Ms. Opee served as a Board Member of the former Communications Commission of Kenya between February 2012 and April 2014. She was appointed as a member of theCA Board on 20th May 2014 for a period of three years.

Ms. Beatrice Gathirwa

Alternate Director

Ms. Beatrice Gathirwa is the Directional/National Assets and Liabitilities Management in the Department of Government Investment and Public Enterprises at the National Treasury.

She is a Certified Public Accountant and holds an MBA from Moi University. She is a member of the Institute of the Certified Accountants of Kenya and is also a member of the secretariat of the Public Accounting Standards Board.

She serves on the CA Board as the Alternate Director to the Principal Secretary, National Treasury.

Mr. John Njoroge

Alternate Director

Mr. John Njoroge is a Chief Economist at the Ministry of Interior and Coordination of National Government.

He holds a Master's and Bachelor's degree in Economics from the University of Nairobi. He has over 24 year experience in Security, Education, Economic Development, Gender Mainstreaming, Budget Formulation and Execution, Monitoring and Evaluation issues.

He serves on the CA Board as an Alternate Director to the Principal Secretary, Ministry of Interior and Coordination of National Government.

Mr. Brown Otuya

Alternate Director

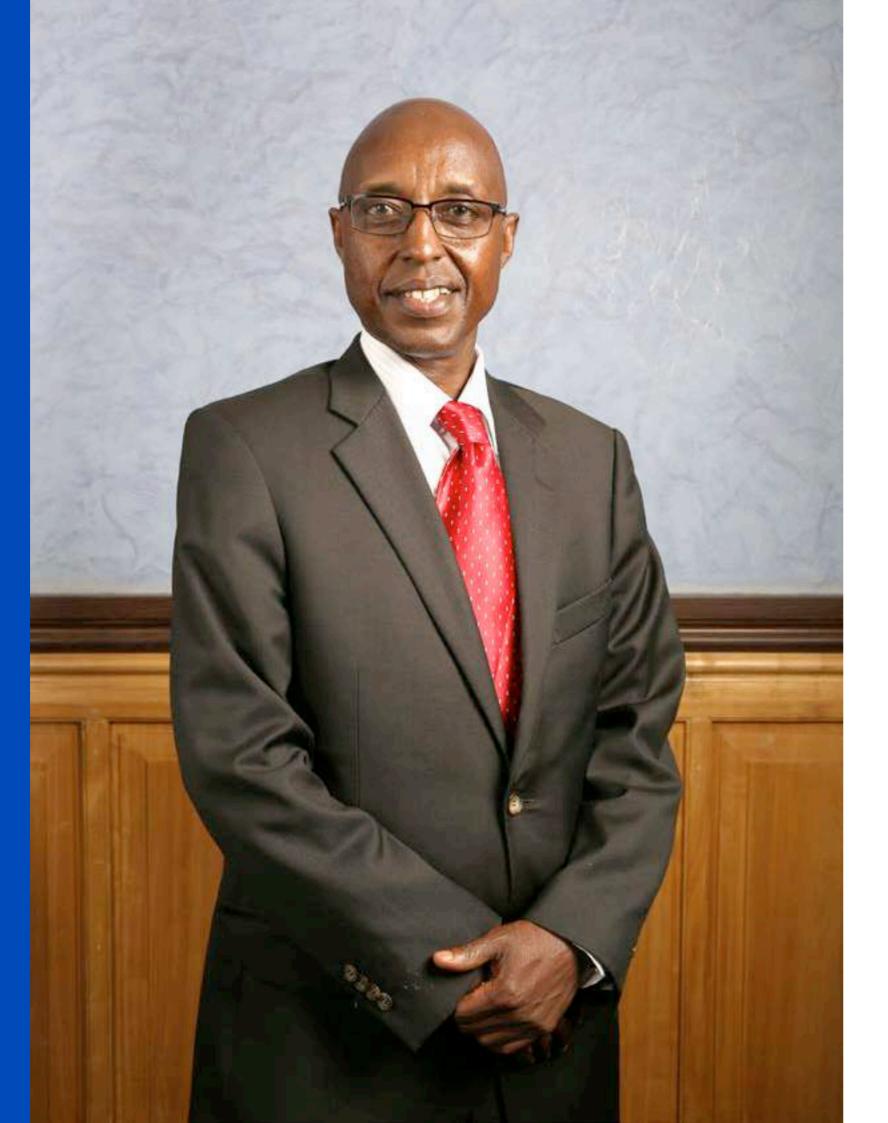
Mr. Brown Otuya is the Secretary of Administration at the Ministry of Information, Communications and Technology.

He holds a Master's degree in International Studies and a Bachelor's degree in Political Science and Economics both from University of Nairobi.

He serves on the CA Board as an Alternate Director to the Principal Secretary, Ministry of Information, Communications and Technology.







Chairman's Overview

On behalf of the Board of Directors, Management and staff of the Communications Authority of Kenya (CA), I am pleased to present to you the Authority's Annual Report for the year ended 30th June, 2015 as required by Section 22 (1) of the Kenya Information and Communications Act, 1998.

The Communications Authority of Kenya continued operating within its independence and the wider mandate as enshrined in the Constitution of Kenya 2010. During the year under review, the Authority set up mechanisms to achieve and deliver on its statutory mandate to the people of Kenya. Key among them was the review of the sector regulations to encompass the various sub-sectors in the industry. A total of 10 regulations underwent review in consultation with stakeholders and the public at large, which ensured that both the players and consumers took part in the development of policies that regulate the industry. These regulations are set to be promulgated during the next financial year.

The Authority, amid numerous challenges, spearheaded the completion of the digital migration on 30th March 2015, three months before the global deadline of 17 June 2015. The experience presented us with important lessons in stakeholder engagement, which we shall employ in future on matters that require extensive engagement. Going forward, the Authority is planning on how best to make optimum use of the digital dividends.

The ICT sector continues to expand, including its contribution to national development. According to the 2015 Economic Survey, the information and communications sector contributed 13.4 per cent of the growth of GDP. Despite this expansion, there are areas that still do not have access to basic ICT services. In line with our corporate Vision of ensuring access and use of information and communications services by all in Kenya by 2018, the Authority has established a framework for the Universal Service Fund (USF). The Fund shall finance roll out of ICT services and projects in un-served and underserved areas. By 30th

June 2015, a total of KES2.67billion had been collected from licensees as USF levies.

Given the critical role that ICTs play in the economy today, the Authority is cognizant of its need to keep abreast with changing needs of the market and at the same time create an environment that encourages investments in the sector. In this regard, the Authority, during the year, involved industry players and other stakeholders in the review of the regulatory frameworks, including the Unified Licensing Framework (ULF) and the postal/courier market structure. Further, the Authority also consulted stakeholders on postal/courier security management framework and Quality of Service parameters. In the broadcasting sector, the Authority engaged stakeholders on the Programming and Broadcasting Code and Complaints Handling Procedure for Free To Air TV and radio services.

On the international platform, Kenya was re-elected to the ITU Council during the 2014 ITU Plenipotentiary Conference. In addition, Kenya's Mr. Stanley Kibe was re-elected to the ITU Radio Regulations Board. These positions not only raise the country's profile as an ICT leader, but also put us in a position where we can drive the Kenyan and East African ICT agenda on a global level.

In summary, the year 2014-15 has been marked with key milestones in growing the ICT sector. I wish to express my appreciation to the Director General and the Staff at the Authority for the hard work that was undertaken during the year. I look forward to an even more exciting 2015-16 in the ICT sector.

MIR

Ngene B. Gituku Chairman of the Board





Director General's Foreword

The year 2014/15 witnessed continued growth in the ICT sector with regard to increased access to services, deployment of innovative services and review of the sector's legal framework.

In collaboration with the Government and other stakeholders, the Authority successfully migrated the country to digital TV broadcasting ahead of the global deadline of 17 June 2015. The switch off of the analogue signal was carried out in three phases starting in Nairobi and its environs on 30th December 2013, major towns across the country on 2nd February 2015 and in the remaining sites on 30th March 2015.

The migration process was bedeviled with major challenges, including lengthy and numerous lawsuits as well as public misinformation by industry players. To address these challenges, the Authority successfully presented its case in court and eventually got the green light to fully migrate the country. To raise public awareness, the Authority aggressively used social media, roadshows and radio to engage with the public and create awareness on the migration process.

During the year under review, the Authority initiated the revision of the ICT sector regulations with a view to aligning them with revised ICT sector law enacted in December 2013. The regulations were also reviewed with the aim of addressing emerging challenges in the industry. In particular, the "Fair Competition and Equality of Treatment Regulations" were revised to provide an enabling framework to adequately address the issue of effective competition in the ICT market, including abuse of dominance.

During the year under review, one of the four Mobile Virtual Network Operators (MVNOs) licensed in the previous year commenced operations with the introduction of thin-SIM technology. This alternative technology was met with resistance from other players in the market ostensibly on the grounds that the technology could introduce vulnerabilities in their networks and at the same time interrupt and

intercept communication. The matter was taken to court for resolution and is still in abeyance.

Overall, the ICT sector recorded a positive growth of 13.4 percent during the year under review compared to 12.3 percent in 2013. Mobile and Internet penetration were recorded at 83.98 percent and 69 percent respectively.

With the increased access to the Internet, the number of cyber crime incidents in the country has been on the upswing. To build on its networks of dealing with cybercrime, the Authority, during the year, joined the Forum for Incident Response and Security Teams (FIRST)-an international confederation of trusted CIRTs who cooperatively handle computer security incidents and promote incident prevention programmes.

To enhance provision of services across the country, the Authority opened offices in Eldoret (to cover the Western Region) and in Mombasa (to cover the Coast Region). The offices provide a wide range of services including processing licence applications, and handling of consumer-related issues.

These and other milestones captured in this Annual Report could not have been realized without the support of a dedicated staff and management. I wish to also appreciate the Board of Directors and the Ministry of Information, Communications and Technology for their continued support.

many oss

Francis W. Wangusi, MBS Director General

Preamble

Authority of Kenya (CA) for the financial year 2014/2015 (1st July, Kenya Information and Communication Act, 1998

 \top his report provides the performance of the Communications 2014 to 30th June, 2015) in compliance with the requirements of the

Establishment and Mandate of the Authority

The Communications Authority of Kenya is the ICT regulator whose The Authority is mandated by the Constitution and KICA, 1998 to: existence and mandate is founded in the Kenya Information and Communications Act, 1998.

Established in 1999, the Authority's initial mandate was licensing and regulation of the telecommunications and postal/courier sub-sectors as well as management of the country's radio-frequency spectrum. The Act has since been amended twice: in 2009 and 2013. The 2009 amendments enhanced the scope of the Authority to include regulation of broadcasting content. CA's roles include:

- 1. Licensing all systems and services in the communications industry, including telecommunications, broadcasting and postal/courier;
- 2. Managing the country's frequency spectrum and numbering resources.
- 3. Facilitating the development of e-commerce;
- 4. Type approving/accepting communications equipment meant for use in the country;
- 5. Protecting consumer rights within the communications environment:
- 6. Managing competition in the sector to ensure a level playing ground for all players;
- 7. Regulating retail and wholesale tariffs for communications services;
- 8. Managing and administering the Universal Service Fund (USF);
- 9. Monitoring the activities of licensees to enforce compliance with the licence terms and conditions as well as the law.

Following the promulgation of the Constitution of Kenya, 2010, the Act was further amended in 2013 to align it with the Supreme law of the land which required the enactment of a legislation to provide for the establishment of an independent body to regulate the ICT sector. The body was to be independent of control by government, political or commercial interests and its composition reflective of the interests of all sections of the society.

- Make some of the new Regulations:
- 2. Establish a Broadcasting Standards Committee, in place of the Broadcasting Content Advisory Council, to set media standards, regulate and monitor compliance with those standards;
- 3. Undertake prosecution of any offence under the Act; and
- 4. Develop a framework for facilitating the investigation and prosecution of cybercrime offences.

Review of Sector Regulations

During the year under review, the Authority commenced the process of reviewing the following sets of Regulations:

- 1. The Kenya Information and Communications (Radio Communications and Frequency Spectrum) Regulations, 2015
- 2. The Kenya Information and Communications (Postal and Courier Services) Regulations, 2015
- 3. The Kenya Information and Communications (Compliance Monitoring, Inspection and Enforcement) Regulations, 2015
- 4. The Kenya Information and Communications (Numbering, Naming and Addressing) Regulations, 2015
- 5. The Kenya Information and Communications (Fair Competition and Equality of treatment) Regulations, 2015
- 6. The Kenya Information and Communications (Interconnection and Provision of Fixed Links, Access and Facilities) Regulations, 2015
- 7. The Kenya Information and Communications (Tariffs) Regulations, 2015
- 8. The Kenya Information and Communications (Consumer Protection) Regulations, 2015
- 9. The Kenya Information and Communications (Licensing and Equality of Service) Regulations, 2015
- 10. The Kenya Information and Communications (Type Approval, Importation and Distribution of Communications Equipment) Regulations, 2015

Functions of the Board of Directors

The governance of the Authority is vested in the Board of Directors whose primary duty is to manage the Authority's affairs in the interests of the all stakeholders within the framework of the laws, regulations and policies under which the Authority operates.

The Board Charter establishes guidelines for the conduct of the affairs of the Board and sets out the specific responsibilities to be discharged by the Board members individually and collectively.

The functions of the Board of Directors as outlined in the Charter include:

- (i) Exercising leadership, integrity and judgement in directing the
- (ii) Setting the vision, mission and values of the Authority;
- (iii) Developing strategies to achieve the Authority's mandate;
- (iv) Determining key performance indicators for the Authority, setting targets and monitoring performance;
- (v) Ensuring that internal structures and policies are in place;
- (vi) Identifying and managing key risk areas; and
- (vii) Ensuring preparation of annual financial statements and reports and disclosure of information to stakeholders.

Composition of the Board

The Board comprises 12 members consisting of the Chairperson, the Director General, the Principal Secretaries to the Ministry of Information, Communications and Technology, National Treasury and Ministry of Interior and Co-ordination of National Government, and seven other directors, all of whom are non-executive.

The Chairperson is appointed by the President, while the other seven directors are competitively appointed by the Cabinet Secretary in the MoICT. Persons eligible to be appointed to the Board must be Kenyan citizens who are knowledgeable or experienced in matters relating to postal services, broadcasting, radio communications, telecommunications, information technology, computer science, consumer protection and law.

The Director General is the Chief Executive Officer of the Authority and an ex-officio member of the Board. The Director General is responsible for the day-to-day affairs of the Authority on behalf of the Board.

Board Meetings

Section 8 (1) (a) of the State Corporations Act, Cap 446 requires the Board of every State Corporation to meet at least four times in every financial year. During the period under review, the Board held 25 full board meetings and 24 committee meetings.

Board Committees

While the whole Board remains accountable for the performance and affairs of the Authority, the Act empowers the Board to delegate the exercise of any of its powers and performance of its functions or duties to Committees, which operate within defined terms of reference.

During the period under review, the Board established three standing Ad-Hoc Committees on Court Cases, Restructuring and Communications in addition to committees on Finance, Staff and Administration, Technical, Audit and Broadcasting standards.

(i) The Finance Committee

This Committee consists of six members. It has oversight on all financial issues including procurement. The Committee met three times during this period.

(ii) The Technical Committee

This Committee consists of six members. It handles regulatory issues including granting of licenses, review of the market structure and other regulatory interventions. The Committee held five meetings during the period.

(iii) The Staff Committee

This Committee consists of six members. It is responsible for human resources and administrative matters. The Committee held four meetings during the period.

(iv) The Audit Committee

This Committee consists of four members. It oversees financial reporting, development of internal control and risk management systems and review of audit reports. The Committee held four meetings during the period.

(v) The Broadcasting Standards Committee

The committee consists of six members. It sets media standards, regulates and monitors compliance with those standards. The committee held three meetings during that period.



(vi) Ad Hoc committees

During the year, the Board created three Ad Hoc committees to handle various issues in the Authority. These are the Ad Hoc Committee on Court Cases, the Committee on Communications and Ad Hoc Committee on Restructuring.

Universal Service Advisory Council (USAC)

The Act establishes the Universal Service Advisory Council, appointed by the Cabinet Secretary from amongst persons selected by the Public Service Commission. The role of the Council is to provide strategic policy guidance for the administration and implementation of the Universal Service Fund.

The Council members are Catherine Ngahu (Chairperson), Josephine Chepkurui Towett, James Long'ole Wangiros, Rodah Awinja Masaviru,

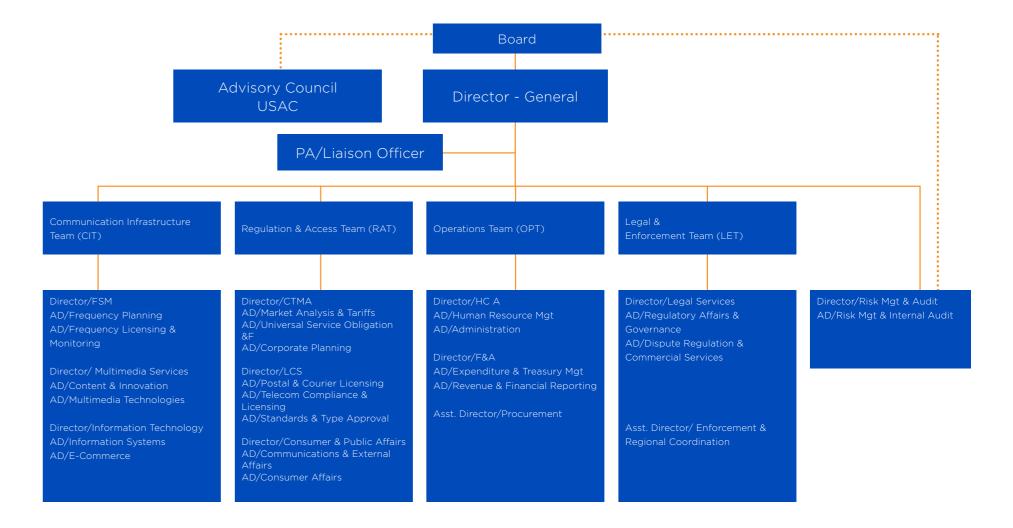
Kennedy Odiwuor Okong'o, Nixon Mageka Gecheo, Wellington Pakia Godo, Samuel Gitonga Mutungi, and Michael Maina Itote.

Capacity Building

The Directors of the Board attended various training programmes aimed at enhancing their understanding of the Authority's mandate and the ICT business environment.

To gain better insights into global best practices in ICT regulation, Directors of the Board attended local, regional and international conferences and workshops. These included conferences and workshops on strategic leadership and organisation transformation; and telecommunication regulatory corporate governance workshop for board members facilitated by the Commonwealth Telecommunications Organization (CTO).

Organization Structure



KEY:	
AD	Assistant Director
USAC	Universal Service Advisory Council
FSM	Frequency Spectrum Management
CTMA	Competition, Tariff and Market Analysis
LCS	Licensing, Compliance and Standards
НСА	Human Capital and Administration
F&A	Finance and Accounts
MGT	Management
PA	Personal Assistant



※

1.1. Global Economy

The global real Gross Domestic Product (GDP) in 2014 expanded by 3.7 per cent in comparison to 3 per cent in 2013, a rate that was marginally lower than projected. According to the 2013-2014 Global Competitive Report, the global economy has continued to recover from the worst and longest financial and economic crisis of the past 80 years. However, this recovery is at a slower pace compared to previous downturns within the period. This recovery has largely been attributed to the extraordinary and bold expansionary monetary policies carried out by the Federal Reserve and Central Banks in countries such as Japan, to increase the amount of money available in the economy.

The World Economic Outlook (WEO) Report 2014 by the International Monetary Fund (IMF) projected that advanced economies shall continue recovering slowly with growth rising to 1.8 per cent. The legacies of the pre-crisis boom and the subsequent crisis, including high private and public debt, still cast a shadow on the recovery of advanced economies. Emerging markets are adjusting to rates of economic growth lower than those reached in the pre-crisis boom and the post-crisis recovery. Emerging economies experienced growth in trade and investments, while expansion in infrastructure was estimated at 5.0 per cent in 2014, which was slightly lower than 2013. All in all, the pace of recovery is becoming more country specific.

Economic activity in Sub-Saharan Africa continued to grow robustly on the back of supportive external demand conditions and strong growth in public and private investment, according to the WEO 2014. However, the growth was uneven amongst countries within the region owing to the outbreak of the Ebola virus in West Africa, reduction in petroleum prices, and, rapid build-up of fiscal vulnerabilities and intensified security threats, which impacted the affected countries negatively.

According to the Economic Survey 2015, the East African Community's GDP growth increased to 5.8 per cent in 2014 compared to 5.3 per cent growth in 2013. Inflation in the region dropped to 5.6 per cent in 2014 down from 6.4 per cent in 2013 mainly on account of reduced food and fuel prices.

Globally, most developed and developing economies are projected to record improved growth in 2015. Oil prices are expected to remain low due to possibility of sustained oversupply as Iran and Libya add to the current output following improved political environments. The global economic prospects for 2015 is positive and the world real GDP is projected to grow at 3.5 per cent in 2015 subject to continued recovery from the global financial crisis.

1.2. Global Information and Communication Technology Industry

ICT revolution has driven global development in unprecedented ways. Technological progress, infrastructure deployment, and falling prices have brought unexpected growth in access to ICTs and connectivity to billions of people around the world.

By the end of 2014, there were more than 7 billion mobile cellular subscriptions, corresponding to a penetration rate of 97 per cent, up from 6.7 billion in 2013. Notably, mobile broadband was the most dynamic market segment as global mobile broadband penetration reached 47 per cent in 2015, a value that has increased 12 times since 2007.

Globally, 3.2 billion people were using the Internet by the end of 2014, of which 2 billion were from developing countries. Of the 940 million people living in the least developed countries (LDCs), only 89 million use the Internet, representing a 9.5 per cent penetration rate. By the end of 2014, 34 per cent of households in developing countries had Internet access, compared to more than 80 per cent in developed countries. In least developed countries (LDCs), only 7 per cent of households had Internet access, compared to the world average of 46 per cent. Internet penetration in developing countries stood at 35 per cent; while LDCs lagged behind at 10 per cent. In Africa, one in 5 people was using the Internet in 2014, compared to almost 2 in 5 people in Asia and Pacific, and 3 in 5 people in the Commonwealth of Independent States (CIS).

Europe and the Americas continued to record the highest mobile-broadband penetration levels at approximately 78 per cent compared to 17 per cent in Africa. On the other hand, fixed-broadband penetration remained at less than one per cent in Africa.

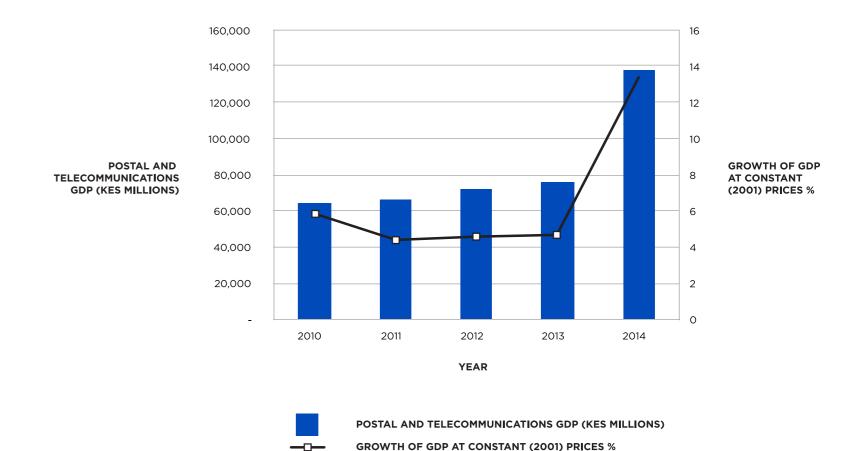
In Sub Saharan Africa, mobile telephony continues to revolutionize the uptake of ICT services such as mobile broadband and mobile money transfer services. According to GSMA, in 2014, the mobile industry's unique subscriber (i.e. Refers to the number of people who subscribe to mobile services and can actively use multiple connections) was estimated at 39.0 per cent and is expected to reach 48.7 per cent by 2020. With regard to mobile money uptake, Sub-Saharan Africa has the highest number of mobile money accounts. In East Africa, 50 per cent of the mobile phone subscribers have mobile money accounts.

1.3. Local Environment

Kenya's Gross Domestic Product (GDP) expanded by 5.3 per cent in 2014 compared to 5.7 per cent in 2013, according to the estimates contained in the 2015 Economic Survey. Despite the depreciation of the Kenyan shilling against the US dollar and other hard currencies, the macroeconomic environment remained fairly stable for the better part of the year. The most significant growths were notably in mining and quarrying (14.2 per cent), information and communications (13.4 per cent), construction (13.1 per cent) and financial and insurance services (8.3 per cent). Publishing, broadcasting and IT activities and air transport sub-sectors recorded declines and therefore negatively affected the contribution of Information and communications and transport and storage sectors to the GDP.

Figure 1.1 Contribution of Information and Communications to GDP vis-à-vis growth in GDP

CONTRIBUTION OF ICT TO GDP VIS-A-VIS GROWTH IN GDP



Source: Communications Authority of Kenya

The growth in Information and communications sub-sector at constant prices for the year 2014 was recorded at 13.4 per cent compared to 12.3 per cent recorded in the year 2013. Table 1.1 shows a summary of a selection of economic indicators for the past 5 years.



Indicator	2010	2011	2012	2013	2014*
Population (Millions)	38.5	39.5	40.7	41.8	43.0
GDP at market prices (in KES. Billions.)	3,169.3	3,725.9	4,261.1	4,730.8	5,357.7
Growth of GDP at Constant Prices (%)	8.4	6.1	4.6	5.7	5.3
GDP Per Capita at Constant Prices (KES.)	80,688.5	83,297.9	84,721.2	87,105.4	89,240.5
Transport and Storage GDP at Current Prices (KES. Millions)	217,008	265,995	339,524	371,102	444,332
Information and Communication GDP (KES. Millions)	68,384	61,381	68,437	68,598	66,056
Information and communication as % of GDP	2.2	1.6	1.6	1.5	1.2
Growth of Information and communications at Constant (2009) Prices (%)	17.4	22.1	2.4	12.3	13.4
Private sector wage employment in Information and communication ('000s)	1,396.4	1,440.8	1,493.6	1,599.8	1,669.4
Public sector wage employment in Information and communication ('000s)	619.8	643.3	662.1	683.3	700.8
Consumer Prices, Annual Average [Index numbers February 2009=100]	106.27	121.17	132.53	140.11	149.74
CPI Annual Inflation Rate (Overall) %	4.1	14.0	9.4	5.7	6.9

+Revised figures *Estimated figures

Source: Economic survey 2015

During the year under review, the information and communications market structure to introduce Self Provisioning Signal Distribution and sub-sectors continued to advance in the mobile telephony, Internet and mobile money transfer services. Mobile money transfer service signal distributors to charge broadcasters. subscribers stood at 27.74 million. On the other hand, mobile telephony market subscribers stood at 36.11 million, representing a mobile penetration rate of 83.98 per cent.

The number of Internet users increased by 33 per cent to stand at 29.67 million up from 22.31 million recorded in the previous financial year. The growth in Internet users can be attributed to: the increased use of the internet in accessing basic services such as mobile banking; health services and education; the availability of affordable data enabled devices; as well as the increased affordability of data services. Internet penetration as at June 2015 stood at 69 per cent, showing that despite the increase, there is room for growth in the sub-market.

aggressive consumer awareness activities, review of the broadcasting supply and critical infrastructure.

enforcement of tariffs approved by the Authority for digital terrestrial

According to the 2014 World Economic Outlook, the IMF forecasts that the global economy will expand by 3.3 per cent, largely on account of the recovery in the advanced economies. World trade is also expected to expand by 5.0 in 2015; this may therefore see Kenya's volume of exports increase significantly, backed by heightened global demand for goods. Growth is expected to increase to 1.4 per cent in 2015, as the Euro area emerges from recession. Exports are also expected to heavily contribute to this growth. In emerging markets and developing countries, growth is expected to increase to 5.0 per cent in 2015.

However, despite the forcasted growth, the IMF advocates for various measures to be put in place to ensure that growth continues. Kenya met the global analogue switch-off deadline of 17th June 2015 These measures include improving the efficiency of public expenditure, despite the challenges of litigation and misleading media campaigns implementing structural reforms aimed at promoting economic faced during the digital migration period. This was as a result of diversification and investing in strategic projects to develop energy



The Digital migration caravan makes it way through the Nairobi City. The caravan was used to create consumer awareness on digital migration in major towns across the country.

| 22 | 21



This chapter presents the status of the use of scarce resources spectrum is important to help secure benefits from this resource. namely spectrum, numbering and domain names.

Radio frequency spectrum is a scarce national resource managed by the Authority on behalf of the people of Kenya. This resource is essential to the provision of wireless communication such as broadcasting, cellular, radar, and space communication, among others.

Numbering resources refer to numbers, names and addresses structured in a standard format to provide unique communications identifiers to a user network interface, services or end users.

A domain name is a unique name used as an Internet address to identify the location of a particular website in the wold wide web.

2.1. Frequency Management

The radio frequency spectrum is a national and natural resource that is held in trust and managed by the Authority on behalf of the Government and people of Kenya. Effective and efficient utilisation of

In exercising its spectrum management mandate, the Authority has to plan, allocate, assign, issue frequency licences, monitor, carry out surveillance and coordinate the usage of the radio frequency spectrum resource to ensure optimal and efficient utilization.

This report presents the status of the use of the spectrum resource for mobile, fixed, and broadcasting services in various bands countrywide. The changes in frequency utilization for the FY 2014/2015 are summarized below.

2.1.1: Mobile Cellular Services

The total number of transceivers deployed for the provision of 2G services increased by 6.25 per cent from 84,631 in the FY 2013/14 to 89,994 in the FY 2014/15, while those used for 3G services rose by 25.5 per cent from 15,381 in the FY 2013/14 to 19,300 in the FY 2014/15 as detailed in Table 2.1 below.

Operator	Technology	2011/12	2012/13	2013/14	2014/15
Essar Telecom Kenya Ltd	2G	5,500	5,500	5,500	-
ssar relecon Kenya Ltu	3G	-	-	-	-
Telkom Kenya Ltd	2G	6,230	6,391	6,903	7,631
	3G	2,269	2,375	3,056	3,192
A intel Nicher and a 17 and a 18 d	2G	13,452	14,788	15,981	16,811
Airtel Networks Kenya Ltd	3G	973	1,096	1,686	1,892
Safaricom Limited	2G	46,702	54,215	56,247	65,552
Salaricom Limited	3G	7,811	9,304	10,639	14,216
Tatal No. of Typpogoiyova	2G	71,884	80,894	84,631	89,994
Total No. of Transceivers	3G	11,053	12,775	15,381	19,300

Source: Communications Authority of Kenya

During the year under review, operators enhanced their capacity for data services in urban centers as competition in data services continued to define mobile cellular business in the country.

2.1.2: Fixed Links

To facilitate provision of communications services, the Authority review was 1089, up from 445 decommissioned during the FY 2013/14. the increased number of non-protected links currently being deployed.

The total number of fixed links decommissioned in the year under

assigned frequencies for 667 new microwave links to various operators Overall, the number of fixed microwave links decreased from 6825 to for deployment. This was a marginal increase from the frequencies for 6403. The decrease can be attributed to the exit of Essar Telecom 630 links assigned in the previous financial year. This is attributed to as well as the increased adoption of optical fiber technology for backhauling by network operators.

Table 2.2 below shows status of fixed links in the country.

Table 2.2: Fixed Links	able 2.2: Fixed Links									
Frequency Band	Numbe	Number of New Links			No. of Decommissioned Links			Cumulative No. of Fixed Links		
	2012/	2013/	2014/	2012/	2013/	2014/	2012/	2013/	2014/	
	13	14	15	13	14*	15	13	14	15	
5GHz	170	224	357				830	1144	1501	
6GHz	-	6	0	-	-		113	66	66	
7/8GHz	80	97	56	35	63	254	1,273	1,307	1,108	
11 GHz	-	-	1		-	0	0	4	5	
13GHz	13	21	3	30	-	452	807	798	349	
15GHz	198	192	193	151	356	77	2,973	2,809	2,679	
18GHz	-	4	3	-	2	4	8	76	75	
23GHz	44	64	54	-	24	54	533	513	513	
38GHz	16	22	0	-	-	1	118	108	107	
Total	521	630	667	216	445	842	5,464	6,825	6,403	

Source: Communications Authority of Kenya

* Revised figures

2.1.3: Fixed Wireless Access Services

The number of sites with Fixed Wireless Access (FWA) systems cheaper and attracts much lower frequency fees than protected and deployed in the 1.7 GHz, 3.3 GHz and 3.5 GHz frequency bands decreased from 616 to 508. Consistent with this decline, the number of transceivers decreased from 2423 in 2013/14 to 2169 in 2014/15. This decrease is attributed to increased deployment of wireless access technologies in unprotected frequency bands whose equipment is

exclusive frequency bands.

The shift in the roll out and deployment of fixed wireless using unprotected frequency bands has resulted in increased data service penetration in both the rural and urban areas. Table 2.3 shows the status of Fixed Wireless Access Systems.

Table 2.3: Fixed Wireless Access Systems							
Number of Sites Number of Transce							
Frequency Band	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15	
1.7 GHz	23	23	23	276	276	276	
3.3 GHz	103	107	73	270	232	201	
3.5 GHz	511	486	412	1,958	1,915	1,692	
Total	637	616	508	2,504	2,423	2,169	

Source: Communications Authority of Kenya

2.1.4: Satellite Systems

Terminals (VSAT) in the Financial Year 2014/15 compared to 6 in the the 6 GHz and 14 GHz bands.

The Authority authorized frequencies for 12 Private Very Small Aperture previous year. The VSAT earth stations were assigned frequencies in

TII O	/ A I	12.1.2	D	T L K	A 1 11	C
Tanie /	Δ . Δ	difional	Private	Iandi	VIONIIA I	Stations
		artion iai	1 IIVate			

Frequency Band	Station Type	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/2015
VHF	Fixed	85	61	65	74	94	112	113
	Mobile /Portable	440	376	632	697	822	565	1,166
	Total	525	437	697	771	916	677	1,323
	Fixed	14	15	1	11	3	-	10
HF	Mobile / Portable	16	13	13	31	7	-	34
	Total	30	28	14	42	10	-	44

Source: Communications Authority of Kenya

2.1.5: Private Land Mobile Services

1,200 Mobiles/Portable stations in both VHF and HF frequency bands.

During the year, there was an increase in the uptake of VHF and HF communication services, which is attributed to heightened security

As shown in Table 2.4, the Authority licensed 123 fixed stations and and county governments setting up networks to aid their operations.

Table 2.5 depicts a slight increase in the cumulative number of authorized private communication networks, which stood at 4,426 fixed stations and 23,647 mobile stations, respectively.

Table 25: Number of Private Radio-communication Stations

Table 2.5. Number of Finale Naglo Communication Stations										
Frequency Band		No. of Fixed Stations			N	No. of Mobile/Portable Stations				
	2011/12	2012/13	2013/14	2014/15	2011/12	2012/13	2013/14	2014/15		
3-30MHz	1,088	1053	1004	945	2,104	2,085	1968	2053		
30-136 MHz	261	1032	250	261	1,110	3,146	1083	1095		
136-174 MHz	2,573	3,299	3059	3126	15,604	19,426	19741	20241		
174-230 MHz	23	1	-	1	-	4	1	5		
230-300 MHz	0		-	-	-	-	-	-		
300-470MHz	55	49	52	49	218	213	212	213		
Total	4,522	4,422	4365	4,426	22,580	22,835	23,005	23,647		

Source: Communications Authority of Kenya

In addition, the Authority issued 605 Aircraft and 25 Amateur radio licences.

2.1.6: Radio Alarm Networks

connections. Whereas there was a slight decrease in the number of alarm networks, the total number of alarm units connected increased marginally by 0.15 per cent compared to the previous year.

2.1.7: Radio Alarm Units

Alarm radio networks in the country stood at 297 with 32,072 The Authority licensed 17 new alarm networks compared to 37 in the previous year. The total number of alarm units in the country decreased from 33,730 in FY 2012/13 to 32,023 in FY 2013/14 as a result of closure of the Vehicle Logic Units (VLU) networks by some providers who opted to use GSM and GPS based tracking systems. This is shown in Table 2.6.

Table 2.6: Number of Alarm Networks and Units								
	2010/11	2011/12	2012/13	2013/14	2014/15			
No. of Alarm Networks	218	245	282	299	297			
No. of Alarm Units	32,068	38,360	33,730	32,023	32,072			

Source: Communications Authority of Kenya

2.1.8: Digital TV Broadcasting Frequencies

Table 2.7 below shows the status of digital TV frequency assignments for the period ending 30th June 2015.

Table: 2.7: Status of Digital TV Frequ	uencies Assignments	
Category	Licensee	TV Channels Assignments
Common Courier Signal Distributors	Signet Signal Distributors Limited	137
Common Carrier Signal Distributors	Pan Africa Network Group (Kenya) Company Limited	118
	Africa Digital Network Limited	21
Self-Provisioning signal distribution	Lancia Digital Broadcasting Limited	14
	GOTV Kenya Limited	12
Total		302

Source: Communications Authority of Kenya

2.1.9: Maritime Mobile Service Identity

It is a requirement that all maritime vessels operating across international waters and are installed with Global Maritime Distress Safety System (GMDSS), must have a Mobile Maritime Service Identity (MMSI) in compliance with the Safety of Life at Sea (SOLAS) Convention. This identity is useful in tracking vessels and ensuring safety at sea. In the year ending 30th June 2015, the Authority assigned eight (8) MMSIs, bringing the total number of assignments to 33.

2.1.10: Management of the Digital Dividend

Digital dividend is the UHF spectrum available after the global analogue TV broadcasting switch off in June 2015. The first dividend in the 790-862 MHz band for wireless mobile broadband services was identified during the World Radio Communication Conference (WRC) in 2007. The ITU then embarked on a study to determine the actual channelization plan. Subsequently, WRC-2012 resolved to expand the band to include 694-790 MHz also known as Digital Dividend II.

In view of the WRC-12 decision, the Authority completed the process of migrating digital TV broadcasting channels earlier assigned within the 694-862 MHz band to channels in 470-694 MHz band, which provides upper limit of terrestrial television broadcasting to channel 48. The signal distributors have rolled out DTT signals countrywide and the analogue switch off was completed. In this regard, a portion of the 790-862 MHz band has been assigned for the roll out of LTE Mobile broadband network on trial basis. The Digital Dividend II in the 694-790 MHz band is in the agenda of WRC-15 and is expected to be available after the Conference.

2.2. Management of Numbering Resources

The Authority administers and manages the various numbering resources to operators and service providers to facilitate provision of various services.

To better enhance the management and administration of numbering resources, the Authority initiated the review of the Kenya Information and Communications (Numbering) Regulations, 2010.

2.2.1: Assignment of Numbering Resources

During the period under review, the Authority continued to assign numbering resources to operators. The numbers are essential in the facilitation of interconnection between operators and in provision of services to end-users.

Mobile Service Providers were assigned four (4) additional National Destination Codes (NDCs) to facilitate mobile telephony, while fixed telephony service providers were assigned 35 Central Office Codes (CoC). Content Service Providers were assigned 200, 0900 Premium Rate Numbers and 8300 bulk short codes to facilitate the provision of value added services. Eight (8) short codes were also assigned to various government ministries, departments and agencies to facilitate e-government services.



The numbering resources assigned by category are shown in Table 2.8.

Table 2.8: Numbering Resources Assigned					
Category	2010/11	2011/12	2012/13	2013/14	2014/15
Number Blocks Assigned			'	'	
Mobile NDC	11	3	4	4	4
Fixed CoC	20	4	111	247	35
0800 Bulk Toll Free Numbers	20	1,024	2	1,100	0
0900 Bulk Premium Rate Numbers	16	34	7,001	-	200
Bulk SMS Short Codes	-	-	17,500	10208	8300
Other Numbering Resources Assigned				·	
National Signalling Point Codes	2	2	2	1	1
International Signalling Point Codes	-	1	-	-	0
Short Codes (Assigned directly)	5	5	11	4	8
Issuer Identification Number	-	-	-	3	0
Mobile Network Code	-	-	-	3	0
Mobile Number Portability routing code	-	-	-	3	0

Source: Communications Authority of Kenya

*1 Mobile National Destination Code (NDC) is equivalent to 1,000,000 mobile telephony subscriber numbers.

*1 Fixed telephony Central Office Code (CoC) is equivalent to 1,000 fixed telephony subscriber numbers.

2.2.2: Mobile Number Portability

Service Providers joined the MNP service provision environment. The 2013/2014 were activated during 2014/2015.

Mobile Number Portability (MNP) services continue to be offered to
During the period, the monthly average ports increased to 257 mobile subscribers in the market. During the year, three Mobile Virtual compared to 195 in the previous year as shown in Figure 2.1. The majority of porting requests were executed within three hours as three mobile number portability routing codes assigned in the period shown in Figure 2.2. This is attributed to automated porting processes by the service providers and increased consumer awareness.

Figure 2.1: Annual Porting Incidences

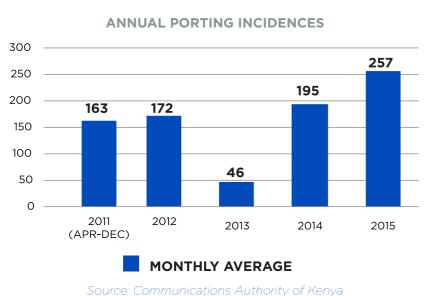
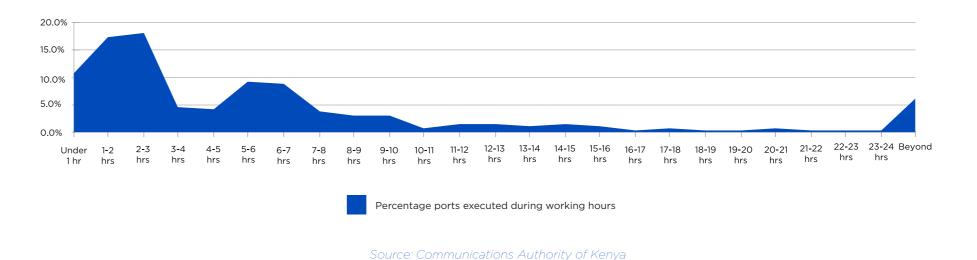


Figure 2.2: Average Porting Execution Times

PERCENTAGE PORTS EXECUTED DURING WORKING HOURS



The Authority, in conjunction with mobile service providers, also embarked on the process of reviewing the MNP guidelines with a view to enhancing MNP performance and end-user quality of experience.

2.2.3: Management of the dot KE Domain Name Registry

The Authority was given additional mandate through the KICA,

1998 and as amended in 2013, to promote and facilitate efficient management of critical Internet resources as well as the development of a framework for facilitating the investigation and prosecution of

cybercrime offences. The Dot KE Domain Name is Kenya's unique identity on the Internet.

As at 30th June 2015, the Kenya Network Information Centre (KENIC) had registered a total of 47,184 domain names as shown in Table 2.9:

Table 2.9: D	ot Ke Domains Registered in Kenya		
Cook do acción			No. of Domains
Subdomain	Use	2013/14	2014/15
CO.KE	Companies	29,374	43,486
GO.KE	Government Entities	301	325
OR.KE	Non Profit Making Organizations	1,193	1491
AC.KE	Institutions of Higher Education	773	885
SC.KE	Lower and Middle Level Institutions	119	175
NE.KE	Personal Websites and E-mail	65	93
ME.KE	Personal Websites and E-mail	546	566
MOBI.KE	Mobile Content	43	51
INFO.KE	Information	94	112
Total		32,508	47,184

Source: KENIC - www.kenic.or.ke



The Authority is mandated to manage and promote competition in the ICT sector to facilitate innovation and increased market efficiency for the welfare of consumers. Efforts towards this end have led to fair prices and the evolution of a wider variety of services.

To facilitate market vibrancy, the Authority continued licensing new entrants, regulating tariffs in non-competitive market segments and carrying out research in emerging technological trends in the ICT sector. In addition, the Authority continued to enforce the Tariff and Fair Competition and Equality of Treatment Regulations, 2010 in order to promote competition and increase service affordability.

3.1. Licensing of Communication Services

The Authority, in exercising its mandate, licenses service providers in the telecommunication, broadcasting and postal and courier services sub-sectors.

3.1.1: Telecoms Licensing

The total number of licensees under the Unified Licensing Framework (ULF) increased to 2,155 from 1,866 the previous year, representing a 15.5 per cent growth, which was slightly lower compared to the previous year's growth of 19.8 per cent.

Table 3.1 provides a summary of the licensing categories and respective licences issued during the period.

Table 3.1: Cumulative Number of ULF Licenses					
Licence Category	2010/11	2011/12	2012/13	2013/14	2014/15
Telecommunications Contractors (TEC)	244	314	360	448	542
Technical Personnel (TP)	210	485	576	668	714
Submarine Cable Landing Rights (SCR)	3	3	3	3	3
International Gateway Systems & Services (IGS)	11	13	13	13	14
Application Service Providers (ASP)	80	105	122	133	163
Content Service Providers (CSP)	123	156	188	221	261
Network Facility Providers Tier 1 (NFP T1)	4	4	4	4	3
Network Facility Providers Tier 2 (NFP T2)	13	17	18	19	22
Network Facility Providers Tier 3 (NFP T3)	6	10	13	15	19
Business Process Outsourcing (BPO)	32	39	39	39	44
Telecommunications Vendors (TEV)	115	162	219	300	393
Landing Rights Authorization for Global Mobile Personal Communications via Satellite (GMPCS)	3	3	3	3	3
Total	844	1,311	1,558	1,866	2,155

Source: Communications Authority of Kenya

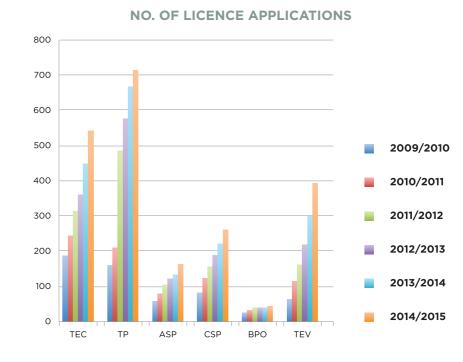
Table 3.1 shows that the high growth was registered under the Application Service Providers, Content Service Providers, Technical Personnel Telecommunications Vendor and Telecommunications Contractor categories.

The Application Service Provider licence category registered a 22.5 per cent growth mainly due to the licensing of companies offering vehicle-tracking services. The increase in the number of applicants in this category was as a result of the public notice issued by the Authority in January 2015 warning against provision of vehicle-tracking services without a licence.

The Telecommunications Equipment Vendors (TEV) license category registered a 31 per cent growth on the back of increased demand for set top boxes prior to the analogue TV signal switch off and the requirement that set top boxes be sold only by licensed TEVs.

The steady growth in the number of licensees from the FY 2008/09 to the FY 2013/14 is shown in Figure 3.1.





Source: Communications Authority of Kenya

It is to be noted that certain licence categories in the old licensing framework increased marginally owing to a data clean up exercise undertaken by the Authority during the year. This is indicated in Table 3.2 where the total number of licensees increased compared to the previous year.

Table 3.2: Number of Licences under the old Licensing Framework								
Licence Category	2010/11	2011/12	2012/13	2013/14	2014/15			
Vendors and Contractors	825	656	645	643	637			
Technical Personnel	252	217	214	209	251			
Internet Service Providers	47	45	45	44	58			
Value Added Service Providers	39	31	30	30	30			
Public Data Network Operators	8	8	10	10	12			
Local Loop Operators	10	10	10	10	10			
Commercial VSAT (Hub Operators)	1	1	1	1	1			
Internet Backbone and Gateway Operator (IBGO)	1	-	-	-	-			
Data Carrier Network Operators (DCNO)	6	2	2	2	2			
Total	1,189	970	957	949	1001			

Source: Communications Authority of Kenya

3.1.2: Postal Licensing

During the year under review, a number of activities were undertaken in the postal sub-sector. These included the review of the market structure to facilitate market entry for new firms and creation of wider geographical areas of operation for existing firms. The review of the market structure reduced the licensable areas from seven to three, and reduced the operating fees significantly.

Additionally, the Authority subjected the draft Postal Security Guidelines and e-commerce Guidelines to public review. Once adopted, the guidelines will enhance mail security monitoring and propel the uptake of e-commerce.

The Authority licensed 17 new courier operators, increasing the

number to 241 from 224 in the previous year. The increase was attributed to enhance sensitization on the need to operate within the legal framework. The Intra-country postal/courier category was the most popular licence category with licensees increasing from 130 the previous year, to 143 in 2014/15 Financial Year. The private courier network category also registered growth with outlets increasing to 2117 as a result of the entry of new players and expansion to new towns by existing licensees.

Table 3.3 provides a summary of the number of licensed operators by category while Table 3.4 provides a summary of licensee outlets and services offered.

able 3.3: Number of Licensed Postal and Courier Operators								
Category of Operator	2010/11	2011/12	2012/13	2013/14	2014/15			
Public Postal Licensee	1	1	1	1	1			
International Operators	14	14	18	20	22			
International Inbound Operators	11	13	13	13	14			
Regional Operators	13	13	15	15	15			
Intra-Country Operators	99	109	123	130	143			
Intra-City Operators	37	39	43	44	45			
Document Exchange Operators	1	1	1	1	1			
Total	176	190	214	224	241			

Source: Communications Authority of Kenya

Network	2010/11	2011/12	2012/13	2013/14	2014/15
Postal Corporation of Kenya	1	1	1	1	1
Total Post Offices	697	634	622	622	623
Departmental Offices	501	477	476	476	477
Sub-Post Offices	196	157	146	146	146
Private Letter Boxes Installed	427,900	431,181	432,000	432,000	432,000
Rented	360,545	369,223	375,093	367,200	375,840
Un-let	67,550	61,948	56,907	64,800	56,160
Letter Posting Boxes	890	752	890	890	890
Public Counter Positions	1,261	1,030	1102	1,102	1,100
Automated Public Counters	520	434	548	556	716
Non-Automated Public Counters	900	596	554	546	384
Stamp Vending Licensees	5,260	2,847	4,274	4,274	4274
Stamp Vending Machines	280	280	280	280	280
Private Operator Outlets	635	683	707	707	2117
Total Outlets (Post Offices + Private Operators Outlets)	1,332	1,317	1,329	1,329	2,740

Source: Communications Authority of Kenya

| 35

3.1.3: Licensing of Broadcasting Services

The Authority implemented the licensing framework for broadcasting services by receiving and processing licence applications for various broadcasting services. The Authority received a total of 84 applications for Commercial Free to Air TV broadcasting, Subscription Management, Self-Provisioning Signal Distribution and Terrestrial Subscription broadcasting services. As at the end of the year, the applications were at different stages of processing prior to issuance of the relevant licences.

To ease the process of licence application, the Authority reviewed broadcasting licence application process by merging the general application and specific application forms into one.

The broadcasting market structure was reviewed to introduce Self Provisioning Signal Distribution Services, which saw three firms submit applications and subsequently issued with temporary authorization pending licensing. The introduction of Self Provisioning Signal Distribution Services was as a result of the review of the ICT policy guidelines of 2006 through gazette notice of 17th October 2015.

3.1.4: Electronic Transactions Services

The Authority is mandated under the Kenya Information and Communications Act of 1998 to license and regulate Electronic Certification Service Providers (E-CSPs). The licensing framework for the Electronic Certification Service Providers (E-CSPs) enables applicants to be issued with Digital Signatures. Digital certification services will support the rollout of e-Government services by enhancing the security of online transactions. Some of the e-Government services include submission of tax returns, company registration, renewal of driver's licence, tracking status of passport/ID/job applications, among others. By the end of the financial year, one company had applied for an E-CSP licence.

3.2. Information and Communications **Technology Services**

3.2.1: Telecommunication Services

Mobile telephony continued to spearhead the growth in telecommunications sub-sector while fixed telephony remained on a declining path. The Authority continued licensing players in the NFP. CSP and ASP categories that offered innovative and differentiated products and services.

3.2.1.1: Fixed Network Voice Services

During the period under review, the fixed voice service market saw the exit of Liquid Telecommunications Kenya Limited. The three operators currently offering fixed voice services include Telkom Kenya Limited (39,323 subscribers), Wananchi Group (Kenya) Limited (48,345 subscribers) and Mobile Telephony Networks Kenya Limited (197 subscribers). The total number of fixed line subscriptions reduced drastically to stand at 87,774 in the FY 2014/15 compared to 201,394 recorded in the previous period. This decline can be attributed to Telkom Kenya Limited terminating their CDMA service. Fixed wireline capacity also declined significantly to 75,407 from 340,005 recorded during the previous year. This is illustrated in Table 3.5

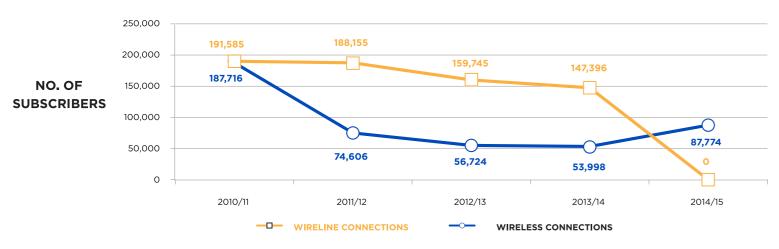
Table 3.5: Fixed network growth indicators					
Financial Year	2010/11	2011/12	2012/13	2013/14	2014/15
Wireline Capacity	400,764	380,135	362,627	340,005	75,407
Wireline Connections	187,716	74,606	56,724	53,998	87,774
Wireless Connections (Include LLO Subscribers)	191,585	188,155	159,745	147,396	0
Total Connections (Wireline and Wireless)	379,301	262,761	216,469	201,398	87,774
Urban Wireline Connections	182,084	72,368	54,758	50,481	87,774
Rural Wireline Connections	5,632	2,238	1,694	1,520	0
International Outgoing Traffic (Minutes)	11,455,952	20,058,628	16,457,407	16,498,989	13,398,004
International Incoming Traffic (Minutes)	31,866,685	17,796,496	14,444,467	12,427,119	10,598,469
Traffic to Mobile networks (Minutes)	79,616,952	104,967,748	105,287,432	105,212,956	107,889,935

Source: Communications Authority of Kenya

As at the end of the FY 2014/15, there were no rural wireline connections. compared to the 1,520 recorded in the previous year. Conversely, urban wireline connections increased by 73.9 per cent to stand at 87,774 in the FY 2014/15 up from 50,481 recorded in the previous year. Despite

the sharp decline in rural wireline connections, the increase in urban wireline connections resulted in a 68.8 per cent to growth in total fixed wireline connections compared with the decline of 7.8 per cent reported in the previous year. This is illustrated in Table 3.1 above.



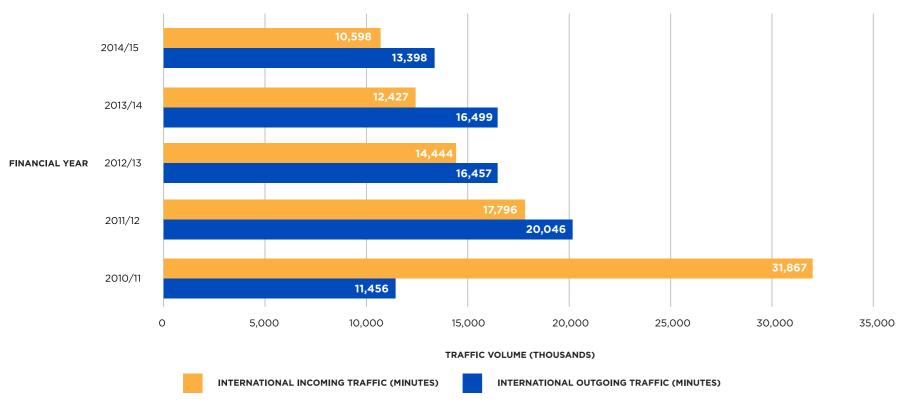


Source: Communication Authority of Kenya

by 19 per cent converse to the marginal increase of 0.25 per cent illustrated in Figure 3.2. reported in the previous financial year. Similarly, international incoming

In the FY 2014/15 international outgoing fixed voice traffic decreased fixed voice traffic declined by 15 per cent in the year under review, as

Figure 3.2: Fixed Network International Traffic



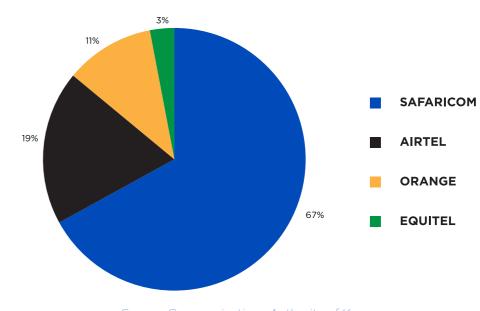
Source: Communications Authority of Kenya

3.2.1.2: Mobile Network Services

Limited, Telkom Kenya Limited (Orange) and Finserve Kenya Limited are shown in Fig 3.3. (Equitel). By the end of June 2015, Safaricom had the largest share

During the year, the mobile market segment in Kenya saw the exit of subscriptions with 24,183,903 subscribers, followed by Airtel with of Essar Telecoms Kenya Limited (Yu). In total, the market had four 7,002,464 subscribers. Orange and Equitel had 4,053,111 subscribers operators, namely, Safaricom Kenya Limited, Airtel Networks Kenya and 873,643 subscribers, respectively. Their respective market shares

Figure 3.3: Mobile Network Services Market Share per Operator

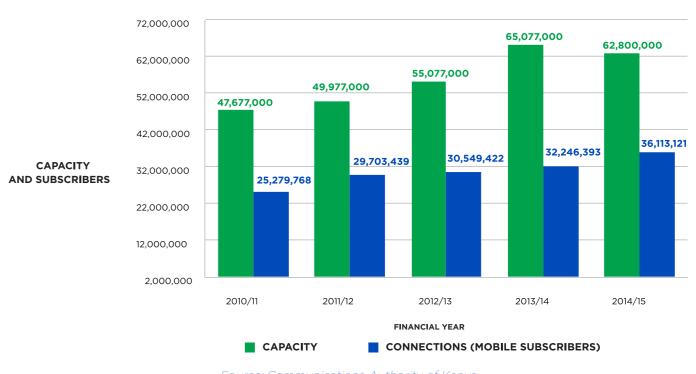


Source: Communications Authority of Kenya

During the year under review, mobile subscriptions increased from 32.25 previous year. On the other hand, due to the exit of Yu from the market, a growth of 12 per cent, which is double the growth recorded in the in Figure 3.4.

million recorded in the previous year to 36.11 million. This represents operators' capacity reduced from 65,077,000 to 62,800,000 as shown

Figure 3.4: Mobile Operators Capacity and Subscribers



Source: Communications Authority of Kenya

Mobile penetration continued on an upward trajectory to stand at 84 average penetration rate for Africa, which stood at 71.2 per cent at the the previous year. Kenya's mobile penetration rate is higher than the stood at 96.8 per cent at the end of 2014.

per cent at the end of the FY 2014/15 up from 79 per cent recorded in end of 2014. It is, however, lower than the global penetration rate that

| 38

37

There continued to be a huge margin between pre-paid and post-paid targeting the growing middle-income earners. subscriptions. During the FY 2014/15, pre-paid subscriptions accounted for 97.33 per cent of the total mobile cellular subscriptions whilst postpaid subscriptions accounted for only 2.67 per cent.

steady growth in post-paid subscriptions fuelled by innovative options

Short Messaging Service (SMS) traffic increased at a significantly lower rate of 11.64 per cent in the FY 2014/15, compared to the growth of 86 per cent recorded in the previous year. SMS traffic stood at Whereas pre-paid subscriptions were predominant, there was a 27,443,621,730 in the year under review as illustrated in Table 3.6

Table 3.6: Mobile Net [,]	ork Growt	th Indicators
------------------------------------	-----------	---------------

Туре	2010/11	2011/12	2012/2013	2013/14	2014/15
Capacity	47,677,000	49,977,000	55,077,000	65,077,000	62,800,000
No. of Subscribers	25,279,768	29,703,439	30,549,422	32,246,393	36,113,121
SMS	2,622,821,774	4,295,378,823	13,233,082,214	24,582,230,257	27,443,621,730

Source: Communications Authority of Kenya

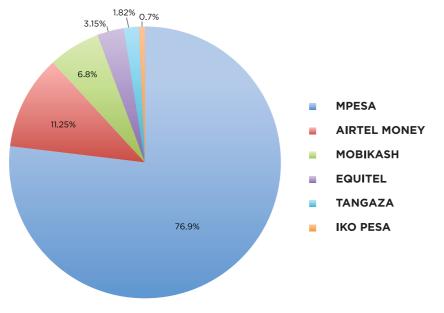
Though at a declining rate, the continued growth in SMS traffic can be attributed to the SMS bundled services offered by Mobile Network The mobile money transfer market in Kenya has seen significant in the international calling rates in the East African Region. This was payment platform for their customers at competitive prices. also indicative of the reduction of international calling rates or the availability of cheaper international calling plans both in Kenya and in other countries.

3.2.1.3: Mobile Money Transfer Service

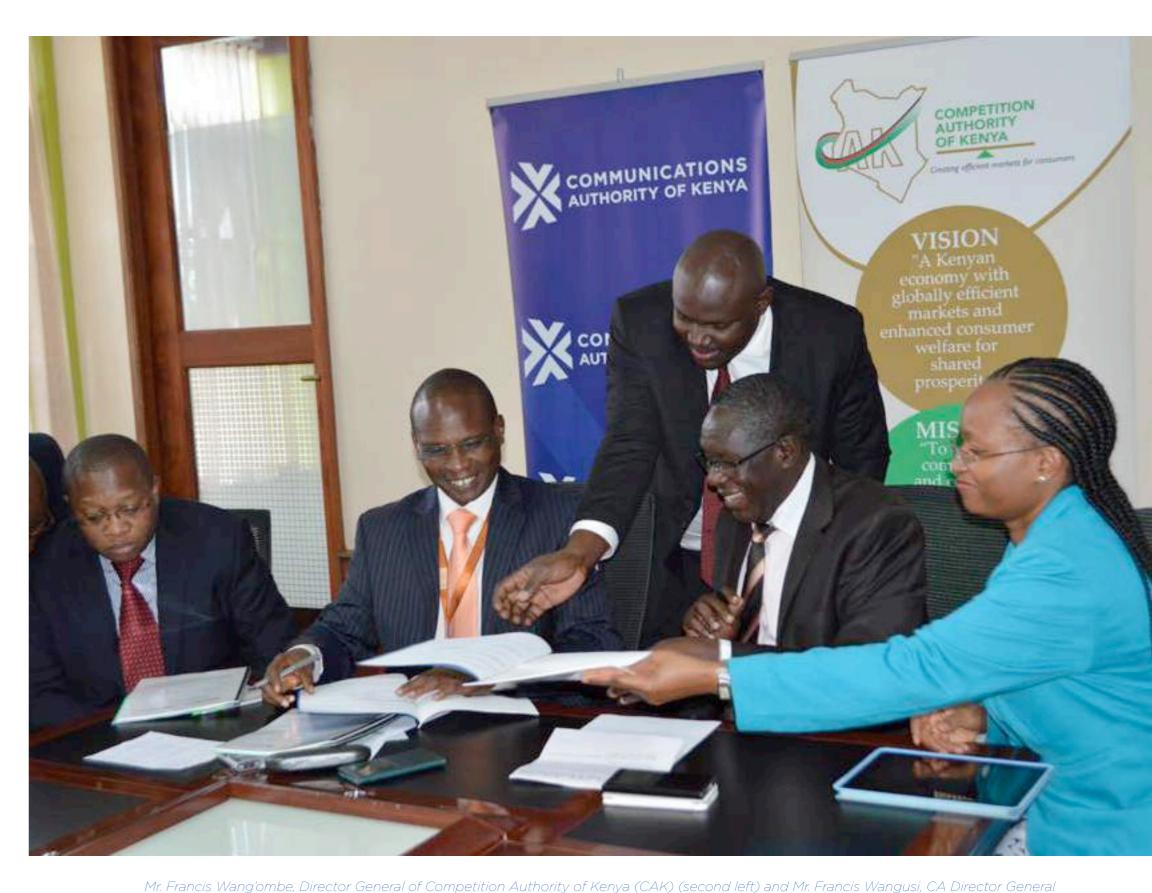
Operators (MNO's) and increased uptake of premium rate services. evolution since its inception. The mobile money platform has During the FY 2014/15, there was an increase in both international transformed from a simple person-to-person money transfer service, incoming and international outgoing mobile voice traffic, to stand to a platform through which an array of financial transactions can be at 629.58 million minutes and 471.48 million minutes, respectively, executed. These services include withdrawal and deposit of cash to in comparison to 591.2 million and 465.7 million minutes reported in bank accounts, utilities payment, purchase of goods and services and, the previous period. This increase translated to a growth of 6.5 per micro-credit services. The evolution of this market has seen convergence cent and 1.2 per cent, respectively. The growth in traffic experienced of services as traditional banking institutions have now ventured into during the year under review was as a result of significant reduction the telecommunications space in order to provide a convenient mobile

> During the FY 2014/15, the mobile money market also witnessed the exit of Essar Telecom Kenya Limited (Yu Cash) and the entry of Finserve Kenya Limited (Equitel). Figure 3.5 shows the market shares for mobile money operators.

Figure 3.5: Mobile Money Operators Market Shares



Source: Communications Authority of Kenya



(centre) sign an Memorandum of Understanding (MOU) that will see the two regulators collaborate in executing their mandate on matters of common jurisdiction. Looking on are senior officers from CA and CAK.

Annual Report 2014 - 2015

during the period under review in comparison to 2.04 per cent growth money transfer indicators.

The total number of mobile money subscribers grew by 2.31 per cent recorded during the previous period. Table 3.7 illustrates the mobile

Table 3.7: Mobile Money Transfer Indicators					
Operator	June 2011	June 2012	June 2013	June 2014	June 2015
Safaricom Limited (M-Pesa)	14,331,941	15,083,674	17,561,999	19,776,056	21,338,328
Telkom Kenya Limited (Orange Money - Iko Pesa)	117,091	140,166	166,114	185,463	192,531
Airtel Networks Kenya Limited (Airtel Money)	2,530,916	3,751,713	4,580,467	3,238,754	3,119,812
Essar Telecom Kenya Limited (yu Cash)	415,779	530,149	2,291,473	2,147,139	0
Mobikash	-	-	-	1,263,655	1,714,170
Tangaza	-	-		503,556	503,556
Equitel (Finserve Ltd)	-	-	-	-	873,643
Total Number of Subscribers	17,395,727	19,505,702	24,840,404	27,114,623	27,742,040
Total Number of Agents	42,313	49,079	88,466	110,096	129,357

Source: Communications Authority of Kenya

3.2.1.4: Internet Services

Mobile networks, fixed wireless access, satellite networks, fibre optic and cable networks are the mediums through which Internet services are delivered in Kenya. Internet service providers have continued to roll out infrastructure to provide fast and steady Internet connection in various parts of the country, especially in major towns. The increased uptake of data-enabled devices as well as the reduction in prices of data services has led to the increased access and usage of the Internet.

During the FY 2014/15, the number of Internet users continued on an upward trajectory recording a growth of 33 per cent to stand at 29.67 million users at the end of the period. The growth in Internet services is also attributed to the increased popularity of social media and overthe-top (OTT) content as a medium of communication where people can share messages, photos, videos and information easily.

Table 3.8: Internet Subscriptions and Users					
Subscriptions/Users	2010/11	2011/12	2012/13	2013/14	2014/15
Terrestrial mobile data/Internet subscriptions	4,189,720	7,655,576	12,340,005	13,930,694	19,809,709
Terrestrial wireless data/Internet subscriptions	29,979	21,709	21,282	16,205	17,721
Satellite data/Internet subscriptions	960	519	1,278	646	635
Fixed Digital Subscriber Line (DSL) data/Internet subscriptions	15,168	11,682	11,512	12,129	2,597
Fixed fibre optic data/Internet subscriptions	22,460	49,371	58,197	69,373	93,598
Fixed cable modem (Dial Up) data/Internet subscriptions	-	25	25	25	25
Total Internet Subscriptions	4,258,287	7,738,882	12,432,308	14,029,072	19,924,285
Estimated Internet Users*	12,538,030	14,032,366	19,654,925	22,310,044	29,672,419

*Total no. Internet users = Σ (1MD+10TW+100FFOS) where MD is the number of mobile data/internet subscriptions: TW is the terrestrial wireless subscriptions; and FFOS by 100 is fixed DSL, Fibre optic and satellite subscriptions. There is no scientific method of estimating internet users; for the purpose of this report the methodology is adopted from the recommendation from ITU.

Source: Communications Authority of Kenya

Internet subscriptions grew to 19.92 million, a 42.02 per cent increase compared to 12.8 per cent recorded in the previous year. Mobile data/Internet subscriptions accounted for 99.42 per cent of the total subscriptions during the FY 2014/15. This trend ascribed to the increased availability of low cost data-enabled phones and devices, as

well as the variety of affordable data bundles offered by MNO's.

Wireless data/Internet subscriptions increased by 9.36 per cent in the FY 2014/15 compared to a decrease of 23.9 per cent recorded in the previous financial year. Similarly, fixed fibre optic data/Internet

subscriptions expanded by 34.9 per cent in the period under review.

Internet penetration continued on an upward trend to stand at 66.99 per cent in the FY 2014/15 compared to 54.8 per cent recorded in the previous period.

3.2.1.5: Broadband Services

Broadband has been recognized as a key infrastructure in facilitating socio-economic development in Kenya. Some benefits accruing from access to broadband services include job creation, increased investment opportunities, improved education and training services, improved national safety and security services, access to e-government services, and enhanced business processes.

During the period under review, the total undersea bandwidth capacity nearly doubled owing to an increase in the fibre optic capacity of TEAMS and SEACOM. The undersea fibre optic cable capacity of TEAMS and SEACOM increased by 583.5 per cent and 36.18 per cent, respectively, while the capacity of EASSY and LION2 declined by 67.68 per cent and 1.95 per cent, respectively, as shown in Table 3.9.

Table 3.9: International Available Bandwidth					
Financial Year	2010/11	2011/12	2012/13	2013/14	2014/15
1. SEACOM Capacity (Mbps)	79,626.24	308,224.00	578,400	565,440	770,000
2. TEAMS Capacity (Mbps)	102,332.16	101,990.00	101,990	119,970	820,000
3. EASSY Capacity (Mbps)	122,880.00	122,880.00	122,880*	120,880	39,063
4. LION2 Capacity (Mbps)	-	40,960.00	40,960	40,000	39,220
Total Undersea Bandwidth Capacity (Mbps)	304,838.40	574,054.00	844,230	846,290	1,668,283
Satellite Bandwidth Capacity (Mbps)	336.10	649.80	639.52	214.4*	278.00
Total Available Bandwidth Capacity (Mbps)	305,174.50	574,703.80	844,869.52*	846,504.40	1,668,561

Source: Communications Authority of Kenya

In the FY 2014/15 total international leased capacity increased to 788,484.78 Mbps, up from 441,006.43 Mbps recorded in the last financial year, representing a growth of 78.79 per cent. This can be attributed to an increase in leased international undersea bandwidth, which reached 788,300 Mbps during the period under review.

Conversely, international satellite bandwidth reduced marginally to stand at 184.78 Mbps as at June 2015. The increase in total leased international capacity indicates the continued increase in demand for provision of redundancy to cater for the increased rollout of fibre optic technology. This is shown in Table 3.10.

Table 3.10: International Leased Bandwidth					
Year	2010/11	2011/12	2012/13	2013/14	2014/15
International Undersea Bandwidth (Mbps)	32,151.52	264,426.00	356,655	440,820.00	788,300.00
International Satellite Bandwidth (Mbps)	119.00	157.78	219.95	196.40	184.78
Total International Bandwidth (Mbps)	32,270.52	264,583.78	356,874.95	441,006.43	788,484.78

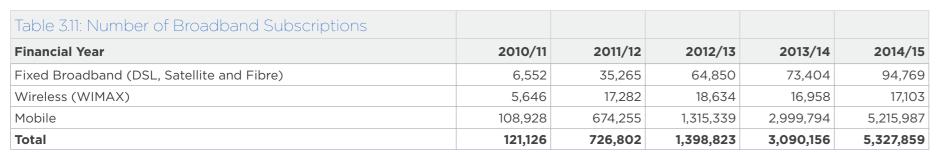
Source: Communications Authority of Kenya

During the period under review, total international bandwidth increased by 97.11 per cent, indicative of the continued growth in demand for broadband services to facilitate communication and access to information globally.

Total broadband subscriptions grew by 72.41 per cent during the period under review, mainly due to the continued increase in mobile broadband subscriptions, which grew by 73.88 per cent by June 2015.

Similarly, fixed broadband subscriptions and WIMAX subscriptions increased by 29.1 per cent and 0.86 per cent respectively over the same period. Mobile broadband subscriptions accounted for 98 per cent of the total broadband subscriptions in the FY 2014/15. This growth can be attributed to increased demand for high-speed broadband services by individuals and corporates. Broadband subscription indicators are shown in Table 3.11.





Source: Communications Authority of Kenya

During the period under review, total broadband penetration grew to 12.39 per cent, up from 7.59 per cent recorded in the previous year. Penetration of Mobile broadband, fixed broadband and WIMAX stood at 12.13 per cent, 0.22 per cent and 0.04 per cent, respectively as at the end of the financial year.

Despite the gradual growth in mobile broadband penetration in Kenya, it still falls below the global penetration rate and the average mobile broadband penetration rate in Africa. As at December 2014, the ITU recorded Global and African mobile broadband penetration rates at 37.2 per cent and 12.9 per cent, respectively. Similarly, Global and African fixed broadband penetration rates were recorded at 10.3 per cent and 0.4 per cent, respectively.

3.2.2: Postal and Courier Services

Traditional postal mail services have been on a decline across the globe over the past few years. Nonetheless, with increased uptake of e-commerce services, there is potential for a vibrant courier market. and a great opportunity for the public postal licensee to continue to diversify its services. Following the completion of the postal and courier market study in the previous year, the Authority revised the licence categories of the postal and courier sub-market in order to encourage entry of more players into the market.

3.2.3: Broadcasting Services

Total television footprint remained at 58 per cent of the population with the digital television signal increasing from 50 to 58 per cent of the national population footprint. The areas that were initially covered by analogue television signal were totally covered by the digital television signal intime for the analogue switch off deadline.

3.3. Tariffs and Competition

Cognizant of the important role competitive markets play in ensuring market efficiency and consumer welfare, the Authority continued to monitor tariffs and competition levels of services offered by licensees.

3.3.1: Telecommunications

In the FY 2014/2015, the Authority implemented the final phase of the interconnection rates, as stipulated in Determination No. 2 of 2010. The determination defines progressive reduction of interconnection rates (glide-path) over a period of 4 years. Given that the glide path had come to an end, the Authority made a decision to observe the market for a period of two years, during which the current termination rates shall continue to apply. The Mobile Termination Rate (MTR), Fixed Termination Rate (FTR) and Fixed Transit Rates that were implemented during the year under review are shown in Table 3.12.

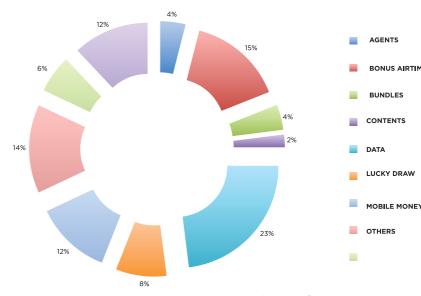
Table 3.12: Mobile and Fixed Termination Rates for 2013/2014	1
Call Termination Prices (KES)	
1. Mobile Termination	0.99
2. Fixed Termination and Transit for Existing Regulated Services	
Local Termination	0.99
Single-tandem Termination from Tandem Exchange	0.99
Double-tandem Termination from Tandem Exchange	
Single-tandem Termination from Local Exchange	0.99
Double-tandem Termination from Local Exchange	
Transit Local Exchange to Tandem (Single Tandem)	
Transit Local Exchange to Tandem (Double Tandem)	
Tandem to Tandem Transit	No tariff cap
Local to Local Transit (Single Tandem)	No tariii cap
Local to Local Transit (Double Tandem)	

Source: Communications Authority of Kenya

During the year under review, the GSM operators carried out a total during the year. As shown in Figure 3.6, 23 per cent of the promotions of 49 assorted promotions and special offers compared to 51 that were carried out in the previous financial year. This marginal drop can continues to shift from the matured voice market to the data market be attributed to the exit of Essar Telecoms Limited from the market sub-segment.

and special offers targeted data users, indicating that competition

Figure 3.6: Promotions and Social Offers for GSM



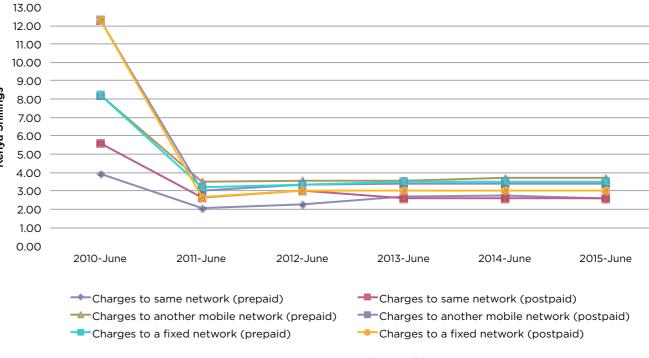
Source: Communications Authority of Kenya

3.3.1.1: Fixed and Mobile Network Services

mobile and fixed market segment, as illustrated in Figure 3.7, continued for the fourth year running. This could be attributed to the continued the glide-path was effected on 1st July 2014.

The convergence of average on-net and off-net tariffs for both the implementation of the low Mobile and Fixed Termination Rates that allowed all operators to have retail price flexibility. The last phase of

Figure 3.7: Average voice tariff trends for the past 5 years



Source: Communications Authority of Kenya

44 43

The on-net and off-net price differential is marginal, signalling maturity of the voice market. Subsequently, focus has shifted mainly to the data market that has become the new competitive frontier. Operators continued to increase their network capacity by rolling out new infrastructure, in order to cater for the growing demand for broadband services. The availability of affordable data bundles, data-enabled phones, advancement in technology, availability of many affordable Over-The-Top (OTT) services as well as the increasing availability of free Wi-Fi has resulted in a tremendous uptake of Internet services. Operators now have an opportunity to find innovative ways to leverage on this market.

3.3.1.2: Internet and Broadband

The Internet and Broadband market has been growing steadily over the years. Continued uptake of these services has had a profound socio-economic impact especially in terms of access to information and markets, and facilitation of communication through Over-The-Top content (OTT). Fibre optic cable, WIMAX, Digital Subscriber Line (DSL) and VSAT technologies were employed by the operators in order to provide competitive data services to consumers. The Authority continued employing a light-handed competition regulation approach during the year under review, to foster growth in this nascent market.

3.3.2: Postal and Courier Services

KICA, 1998 gives the public postal licensee, Postal Corporation of Kenya (PCK), exclusivity to deliver all postal items up to 350g. The Act further allows other operators to deliver items within this limit provided that they charge at least five times the standard tariff. During the year under review, the Authority monitored the implementation of this tariff rule.

3.3.3: Broadcasting Services

During the year under review, the Broadcast Signal Distributors continued to implement the rates stipulated in Determination No. 1 of 2013 on Cost-Based Terrestrial Digital Broadcast Signal Distribution Tariff. The said determination directed Digital Signal Distributors to charge broadcasters (also known as Content Service Providers) KES.125, 990 per Megabit for Nairobi and KES.93, 202.75 per Megabit for other sites in Kenya. Before the review, Pan Africa Network Group (PANG) charged broadcasters a monthly signal distribution fee of KES1,135,312.50 per channel, while SIGNET charged KES248,141 in Nairobi. For other sites in the country, PANG charged KES378,437.50 while SIGNET charged KES248,141.45.



Director General Francis Wangusi flags off the Digital Migration caravan at Uhuru Park. Loooking on is the Master of Ceremonies, Charles Bukeko, and members of the public.



2015

All licensees are required to comply with the conditions set out in their respective licences. The Authority continuously monitors their activities to ensure adherence to licence conditions. Where a licensee is found to have contravened their licence condition(s), the Authority undertakes appropriate enforcement action.

The Authority continued to empower consumers of ICT services by providing them with information and resolving complaints with respect to prices charged and quality of service offered by licensees.

4.1. Monitoring and Enforcing Compliance

During the year, the Authority undertook inspections and quality of service monitoring in all parts of the country to verify compliance. The Authority also conducted certification of network installations to assess conformance with set installation standards. In addition, the Authority carried out Type-Approval/Acceptance of ICT equipment to ensure that the integrity of public communications infrastructure is maintained. The Authority also carried out inspection of broadcasters and took enforcement action on non-compliant licensees.

4.1.1: Inspections

The Authority conducted inspections to confirm licensees' operational compliance status. This also involved the inspection of telecommunications network installations to verify compliance with set standards.

4.1.1.1: Telecommunications

The Authority conducted 108 inspections on telecommunications licensees across the country, which was an increase of 89 per cent compared to the previous year. These inspections were focused on licensees offering end user services as well as infrastructure networks offering wholesale services.

The compliance levels improved to 87 per cent compared to 79 per cent the previous year.

The compliance rates for various licence categories are shown in Table 4.1.

Table 4.1: Summary of the Telecomm	unication	License	e Inspect	tions					
		No. Ins	nspected No. Compliant			mpliant	% Compliance in		
License Category	2011/12	2012/13	2013/14	2014/15	2011/12	2012/13	2013/14	2014/15	2014/15
Content Service Providers (CSP)	16	29	5	39	15	25	5	35	89.7
Application Service Providerss (ASP)	13	23	7	25	12	20	6	22	88
Network Facilities Provider (NFP)	5	10	7	14	5	9	6	12	85.7
Business Process Outsourcing (BPO)	2	4	-	1	2	4	-	1	100
International System & Services (ISS)-(IGS/SCLR)	5	7	6	13	5	7	5	12	92.3
Public Data Network Operators (PDNO)	1	1	-	2	1	1	-	1	50
Internet Service Providers (ISP)	2	-	2	3	2	-	1	0	33
Local Loop Operators (LLO)	3	3	-	-	2	2	-	-	-
Telecommunications Contractors (TEC)	2	-	2	2	2	-	2	2	100
Premium Rate Services (PRS)	1	-	-	1	1	-	-	1	100
Private VSATS	4	1	-	-	3	1	-	-	-
Broadcasters	2	-	-	-	2	0	-	-	-
Cybecafe's	-	-	10	-	-	-	7	-	-
General (BTS Sites, Equipment vendors, SIM Card distributers, cybercafés and mobile money shops)	8	7	18	8	6	6	10	8	100
Total	64	85	57	108	58	75	42	94	87

Source: Communications Authority of Kenya

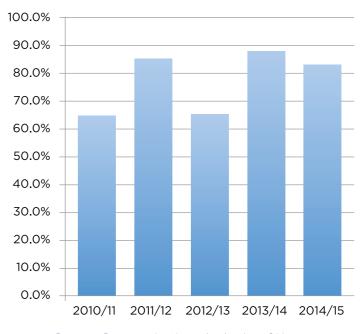
4.1.1.2: Network Installation Inspections and Certification

Certification is the process of carrying out inspections on installations of telecommunications equipment to ensure network integrity and compliance with set national and international installation standards.

During the year, the Authority inspected 81 installations in various regions of the country of which 67 installations were compliant with

the set standards. This was a compliance rate of 82.7 per cent, a slight decline compared to 87.6 per cent the previous year. Licensees whose installations were not compliant were directed to rectify their installations and inform the Authority upon completion for reinspection.





Source: Communications Authority of Kenya

4.1.1.3: Radio-communications

The Authority conducted on-site inspections at 217 radio installation bands. Browsites, which comprised 76 Land Mobile, and 141 broadcast installations (Sound FM (75) and TV (66)) countrywide. Land Mobile services the numb comprise the radio communication in the HF, VHF and UHF frequency Table 4.2.

bands. Broadcasting Services comprise of Sound Broadcasting in the FM frequency band and Analogue and Digital TV. A comparison of the number and nature of inspections conducted is summarized in Table 4.2

Table 4.2: Number of Inspections Conducted for the last Five years								
Year 2010/11 2011/12 2012/13 2013/14								
Land Mobile Networks	231	259	137	108	76			
Broadcast Transmitters	60	135	328	58	141			
Fixed & Fixed Wireless Access	178	167	35	329	-			
Total	469	561	500	495	217			

Source: Communications Authority of Kenya

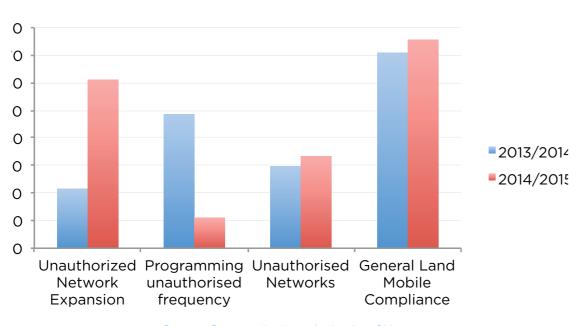
In support of the digital migration process, the inspections focused on Broadcast Transmitters installations across the country.

The findings of the inspection of Land Mobile networks revealed a compliance level of 75.68 per cent compared with 70.96 per cent

noted in the previous year. The compliance level with respect to broadcasting services was 81.92 per cent compared with 68.12 per cent in the previous year. The overall compliance level for on-site inspection was therefore 78.80 per cent.

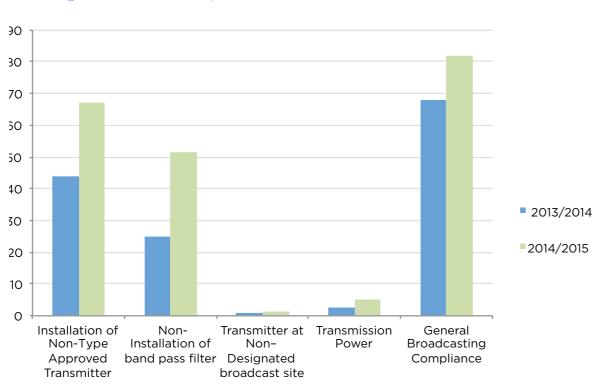
49

Figure 4.2. Non-Compliance in the Land Mobile networks installations



Source: Communications Authority of Kenya

Figure 4.3: Non-Compliance in Sound FM Broadcast Installations



Source: Communications Authority of Kenya

4.1.1.4: Enforcement Activities

The Authority took enforcement action against these stations and down four broadcasters who failed to comply with the directive.

During the year, the Authority carried out surveillance on broadcasting ceased their operations. Additionally, following phase 1 of the Analogue stations. Eight sound FM stations were found to be operating illegally. TV switch off covering Nairobi and its environs, the Authority shut

4.1.1.5: Postal and Courier Services

A total of 241 inspections were conducted on postal and courier licensees across the country. These inspections comprised of 132 inspections on the Postal Corporation of Kenya and 109 inspections on Courier licensees. In the course of these inspections, 22 licensee outlets were found to be non-compliant. The non-compliant licensees thereafter undertook corrective measures and updated the Authority on the same.

4.1.2: Interference Resolution and Radio Monitoring

To ensure efficient use of the Radio frequency spectrum, the Authority carries out interference resolution and Radio monitoring activities. Interference resolution is the use of scientific methods to solve disruption of transmission cases occasioned by frequencies superimposing on each other. Radio monitoring is the determination of frequency properties to determine its suitability for use.

4.1.2.1: Interference resolution

In the FY 2014/15, there were a total of 15 cases of reported interference of which, 12 were resolved as shown in Table 4.3.

able 4.3: Number of Frequency Interference Cases												
Year	201	0/11	2011/12		2012/13		2013/14*		2014/15**			
Frequency Band/Service	Received	Resolved	Received	Resolved	Received	Resolved	Received	Resolved	Received	Resolved		
VHF, UHF and SHF	32	27	18	20	19	19	17	15	13	10		
HF	3	3	1	2	3	3	-	-	-	-		
Broadcasting	4	3	4	4	7	6	5	5	2	2		
Total	39	33	23	26	29	28	22	20	15	12		

* Resolved cases include both what was reported during the year and unresolved from 2013/14.

**The unresolved cases 2014/15 will be carried over for resolution in 2015/16.

Source: Communications Authority of Kenya

4.1.2.2: Frequency Monitoring

Frequency monitoring is carried out to determine suitability, usage and assignment of frequency bands. During this period, the Authority received 77 requests to monitor frequencies comprising 2 in the HF bands, 13 in the V/UHF bands and 62 in the broadcasting frequency

bands. Extensive monitoring to determine the extent of both analogue and Digital TV coverage was carried out in 27 sites in Nairobi, Machakos, Mombasa, Voi, Nyahururu, Nyeri, Meru, Nakuru, Kisii, Narok, Kisumu, Eldoret, Webuye, Kapenguria, Lodwar, Lokichogio, Kabarnet, Migori, Garissa, Kitui, Namanga, Sololo, Isiolo, Moyale, Marsabit, Bungoma and Kakamega. This is as shown in Table 4.4.

Table 4.4: Number of Frequency Monitoring Cases					
Year	2010/11	2011/12	2012/13	2013/14	2014/15
V/U/SHF	15	19	34	9	13
HF	1	6	4	-	2
Broadcast (Surveillance)	-	-	22	26	62
Total	16	25	60	35	77

Source: Communications Authority of Kenya

4.1.2.3: Quality of Service Monitoring (Voice)

The Authority continued to monitor the QoS levels of voice services offered by three Mobile Network Operators. Monitoring was conducted across the country with emphasis on areas with large populations such as cities, towns and trading centers. Feedback through complaints submitted by members of the public further

enabled focused tests in areas with reported poor coverage.

The three operators performed similarly where each achieved 62.5 per cent compliance with the set key performance indicators. This was similar to the previous year where the same performance was recorded.

Table 4.5: Operator Compliance Status.

Key Performance Indicator		Performance								
	Airt	el	Oran		Safari	icom				
Call Set-up Time (in seconds)	5.31 Sec	С	7.78 Sec	С	5.99 Sec	С				
Call Set-up Success Rate (CSSR)	91.1%	NC	85.6%	NC	90.7%	NC				
Call Drop Rate	1.5%	С	1.9 %	С	2.0 %	С				
Speech Quality (MOS)	3.13 %	С	3.41%	С	3.53%	С				
Block Rate	8.9%	NC	14.5%	NC	9.3%	NC				
Call Completion Rate	89.6%	NC	83.6%	NC	88.8%	NC				
RX Level	-75.65 dBm	С	-71.11 dBm	С	-70.46 dBm	С				
Call Handover rate	98.16 %	С	95.75%	С	97.27 %	С				
Overall Compliance	62.5%	NC	62.5%	NC	62.5%	NC				

C-Compliant ; **NC-**Non-Compliant

Source: Communications Authority of Kenya

4.1.2.4: Quality of Service Monitoring (Postal)

The inspections conducted on the Postal Corporation of Kenya and Courier outlets indicated that mail was being delivered within the stipulated delivery standards. Captured data confirms that intra-city, intra-country and international mail was delivered at J+3 (delivered within the third day of posting) at 100 per cent. Mail destined for designated special hardship areas were all delivered within the set standards of J+6 (delivered within the sixth day of posting) at 100 per cent.

To implement a scientific way of establishing mail delivery Quality of Service (QoS) levels, the Authority installed automated QoS equipment in 19 Post offices across the country. This equipment uses Radio Frequency Identification System (RFID) technology to monitor test mail delivery timelines between the Post Offices where this equipment has been installed. The test mails are generated by independent panellists (these are persons appointed by the Authority) who are resident within the towns where the Post Offices are located. The monitoring system was still in the test phase by the close of the financial year.

4.1.2.5: Broadcasting content monitoring

In exercise of its mandate, the Authority monitored a sample of broadcasting licensees to verify compliance with programming standards. The following are compliance levels on various broadcasting content parameters monitored during the year.

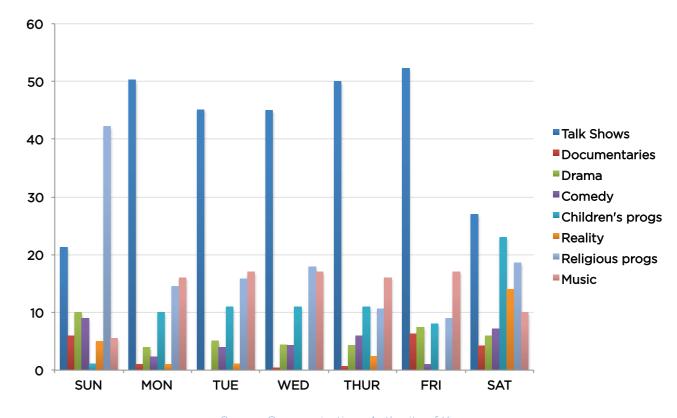
(i) Local content

During the year under review, the Authority monitored a sample of TV broadcasters to determine their compliance with the set local content quota of 40 per cent. The baseline of local content aired by sample TV stations stood at 39 per cent at the end of the year under review up from 33.5 per cent recorded in the previous year.

(ii) Programming Genre Performance on FTA TV

The Figure 4.5 shows the performance of various programming genres on FTA TV during the period under review. Talk shows had the largest share of local programming with a weekly average of 41.6 per cent, while religious based programming was second.

Figure 4.5: Performance of various Programming Genres on FTA TV



Source: Communications Authority of Kenya

(iii) Accessibility Mechanism for Persons with Disabilities

During the period under review, only three TV stations provided accessibility mechanisms to broadcasting services by Persons with Disabilities (PWDs) especially those with hearing and visual impairment. Broadcasters are obligated to provide sign language interpretation and captioning during news and events of national importance in an effort to ensure PwDs are not disenfranchised from access to information.

(iv) Compliance with other Broadcasting Standards

During the year under review, the Authority noted a number of areas of non-compliance by broadcasters:

- a) Protection of minors/children: Two FM stations and one TV station were found to be in breach of this standard. The prevalent offending content in the FM stations monitored were discussions on adult content aired during breakfast shows, contrary to the watershed period guidelines.
- b) Accuracy and impartiality: Four TV stations were found to be in breach of this standard by airing misleading information on digital migration.

c) Advertising: Licensees are obligated to ensure that advertisements broadcast are lawful, honest, and decent and conform to the principles of fair competition. During the period under review, four stations were found to have aired misleading advertisements. Consequently, the Authority penalized the offending stations.

4.1.3: Returns from Operators

The Authority continued monitoring compliance by licensees to the terms of their licences through the licensing requirement of submission of compliance return forms. These forms are also the means by which the Authority collects market information that forms the basis of statistics reports published by the Authority every quarter.

4.1.3.1: Returns from Telecommunication Operators

The Authority received returns from 255 telecoms operational licensees. This represented a submission level of 71.62 per cent, compared to the previous year level of 84.04 per cent.

Table 4.6 indicates the compliance returns submission status of various licence categories.

Table 4.6: Compliance Returns Stat	us for the F	Y 2014/1	5							
Indicators Licence Category	Operational Licensees			Licensees that Submitted Compliance Returns						
					Number			Percentage (%)		
	2012	2013	2014	2012	2013	2014	2012/13	2013	2014	
	/13	/14	/15	/13	/14	/15		/14	/15	
Network Facility Provider	23	28	31	20	25	24	60.6	71	77.42	
Application Service Provider	64	75	107	58	55	75	50.0	45	70.09	
Content Service Provider (CSP)	91	134	170	100	120	132	55.2	59	77.65	
International Systems and Services	13	13	13	11	12	12	84.6	92.3	92.3	
Submarine Cable Landing Rights	3	3	3	3	3	3	100.0	100	100.0	
Business Process Outsourcing (BPO)	3	5	7	3	5	7	7.5	12	100.0	
Data Carrier Network Operator /	_	-			7		1000	100	50.0	
PDNO	/	3	4	4	3	2	100.0	100	50.0	
Local Loop Operators	2	2	2	2	2	2	18.2	20	100.0	
Internet Service Provider (ISP)	5	3	3	5	1	0	11.9	3	0.0	
Premium Rate Services (PRS)	14	16	16	14	11	10	36.8	29	62.5	
Total	225	282	356	220	237	255	97.77	84.04	71.62	

Source: Communications Authority of Kenya

4.1.3.2: Returns from Postal and Courier Operators

The Authority received a total of 213 compliance returns compared to 104 returns the previous year representing a 105 percent increase. The improvement is attributed to the Authority enhancement of its compliance monitoring mechanism. Additionally, through the ICT Week forum, the Authority sensitized licensees on the need to make regular and prompt submission of compliance returns.

4.1.4: Type Approval

The Authority undertakes type approval and type acceptance of ICT equipment intended for use in the country to ensure conformity to national and/or international standards and interoperability of telecommunication networks. During the year, the Authority received, processed and approved 428 applications for type approval as shown in Table 4.7.



Equipment Type	Number of Applications						
	2010/11	2011/12	2012/13	2013/14	2014/15		
Data Routers	4	5	2	2	2		
Gateway/Switches/PABX	8	4	2	2	12		
PSTN/IP Server Equipment	2	6	-	1	-		
Wireless Terminals/System		-	-	-	-		
Transceiver-VHF/UHF	10	5	9	16	22		
Transceiver-HF	-	-	1	-	-		
Transceiver-Citizen Band (CB)	-	-	-	-	-		
Low Power Wireless Terminals	62	111	58	203	147		
Satellite Terminal	-	1	-	-	-		
Alarm Transmitter	-	-	-	-	-		
Broadcast Equipment	6	6	21	17	7		
VSAT Equipment (Transceiver, BUC, HPA, etc.)	3	8	5	2	-		
Global System for Mobile Communications (GSM) Interface and BTS	13	6	6	-	-		
CDMA Interface	-	1	-	-	-		
VOIP Terminal	-	1	2	-	-		
Telephone Set	2	-	-	-	-		
Payphone		-	-	1	-		
GSM Mobile Phones	33	60	61	101	186		
CDMA Telephone Set	-	-	-	-	-		
Fax Machine	-	8	3	-	-		
Modem	-	2	-	-	-		
DVB T2 receivers (Set-top boxes, IDTV and conditional access modules)	3	7	32	56	44		
Microwave Equipment	3	8	2	5	8		
Total	149	238	204	406	428		

Source: Communications Authority of Kenya

Table 4.7 shows that there was a significant decline in the number of low power devices type approved from 203 in the previous year to 147 in the year under review. The number of mobile phone models approved within the year increased to 186 from 101 the previous year. The increase is attributed to high rate of introduction of new mobile phone models given high demand in the market.

The Authority continued to facilitate the entry of communications equipment in to the country through provision of customs clearances. In the year under review, the Authority processed 81 applications for equipment import clearance compared to 97 applications in the previous year.

4.1.5: Cyber Security Management

The Cybersecurity Framework aims at enhancing the security of Kenya's cyber space and as a result creating confidence in the use and adoption of ICTs in the country. The National Computer Incident Response Team - Coordination Centre (National KE-CIRT/CC), resident at the Authority, is Kenya's national cybercrime management point of contact. Its mandate is to offer technical advisories and coordinate responses to cyber security matters at the national level in collaboration with the relevant actors locally, regionally and internationally. Figure 4.6 below explains the functions of the National KE-CIRT/CC.



Figure 4.6: Functions of the National KE-CIRT/CC



Source: Communications Authority of Kenya

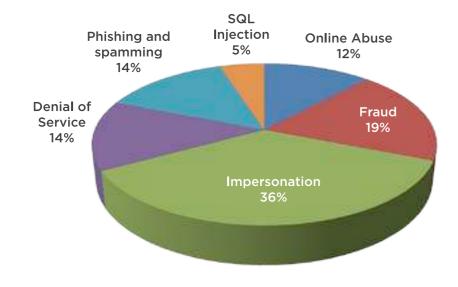
for Incident Response and Security Teams (FIRST), an international confederation of trusted CIRTs who cooperatively handle computer attacks. security incidents and promote incident prevention programmes.

The Authority received and responded to various cyber incidents ranging from online abuse, online fraud, online impersonation via email

The Authority, through the facilitation of the ITU, joined the Forum and social media, denial of service attacks where cyber criminals make online services unavailable, SQL injections, phishing and spamming

> Figure 4.7 below shows a summary of the cyber-crime incidents received and responded to during the FY 2014/15.

Figure 4.7: Cybercrime Incidents reported in 2014/15 Financial Year



Source: Communications Authority of Kenya



Dr. Alfred Mutua, Machakos County Governor, officially launches the County Consumer Forums dubbed Kikao Kikuu in Machakos. Looking on is Mr. Francis Wangusi, CA Director General, and Machakos County officials.

| 57 | 58 The reactive response by the Authority involved analysis of the reported cases, offering technical advice and resolution of the cybercrime incidents.

4.1.6: De-activation of Counterfeit Telephone Handsets

The Authority continued to facilitate the availability of Short Code 1555 service for use by the public to verify their mobile phone IMEIs and determine whether their mobile phones are genuine. As at the end of the financial year, a total of 16,375,873 IMEI requests were received from mobile subscribers and processed against the GSMA database.

Table 4.8: IMEI Verification Requests			
	2013/14	2014/15	Total Requests
Number of Requests Where the IMEI Was Not Found*	1,500,739	13,658	1,514,397
Number of Requests Where the IMEI Was Less Than the required 15 Digits*	3,736,097	42,989	3,779,086
Number of Requests Where the IMEI Was Found	10,999,730	82,660	11,082,390
Total Number of Requests	16,236,566	139,307	16,375,873
*These are instances where the device was a counterfeit			

Source: Communications Authority of Kenya

4.2. Empowering and Protecting the Consumer

The Authority is mandated to protect consumers of ICT services. To undertake this responsibility, the Authority continually develops appropriate regulatory mechanisms aimed at protecting consumers. These mechanisms include carrying out consumer awareness campaigns; research and surveys to better understand consumer behaviour; improved service delivery; and handling complaints and responding to enquiries.

4.2.1: Consumer Education and Information

The Authority availed consumer information targeting consumers of mobile, Internet and postal services through several platforms. These included the Agricultural Society of Kenya (ASK) Trade Fairs in Nairobi, Mombasa and Kisumu; Postal Corporation of Kenya outlets countrywide; EACO ICT Exhibition; CA Regional Offices; County ICT Consumer Forums; CA Reception areas; and at CA Corporate events. A total of 69,586 consumer education materials were distributed during the year. The consumer information was also availed on the Authority's website and social media pages.

During the year, all consumer information materials were redesigned and printed to adopt the new corporate brand. In addition, content on Child Online Protection was consolidated into a comprehensive guide.

The Authority launched County ICT Consumer Forum dubbed 'Kikao Kikuu' with the tag line Toa Maoni Yako Kuhusu Mawasiliano. The Forum sought to empower consumers with information on their rights and responsibilities. At the same time, the Forum raised awareness on the Authority's role in protecting consumers. The Forum provided a platform for consumers to directly interact with communication service providers; consumer rights organizations and the Authority on areas of concern with regard to ICT services through panel discussions and exhibitions.

During the year, the Authority held five County ICT Consumer Forums in Machakos, Nakuru, Mombasa, Nairobi and Uasin Gishu Counties.

4.2.2: Understanding Consumers

The Authority carried out consumer surveys to better understand consumers' needs and develop appropriate regulatory and protection measures. The surveys monitor the behaviour of consumers with regard to purchase and usage of ICT services; motivation to switch service providers; sources of ICT information and the level of trust they attribute to the sources. The surveys also seek to establish the level of consumer awareness on the Authority's role in consumer protection and their level of usage of the available consumer protection mechanisms.

4.2.3: Service Delivery

The Authority continued to create awareness on its service delivery commitments. The service delivery commitments were shared on the Authority's notebooks, which were sent out to licensees and other stakeholders. Further, these commitments were shared at the Authority's main reception to all those that sought services and through corporate activities and all consumer education and outreach initiatives. During the year, the Authority reviewed and published the Service Delivery Charter under the new brand.

Through a Customer Satisfaction Survey carried out in the 4th Quarter of the FY 2014/15, the Authority continued to determine the level of satisfaction with the services it offers. The overall satisfaction index for the Authority in the financial year 2014/2015 stood at 71.03 per cent compared to 73.9 per cent in the previous financial year. The survey targeted both internal and external customers. External customers included Licensees, Suppliers, Consumers, Partners and Affiliates while internal customers are the Authority's employees.

4.2.4: Consumer Protection

As ICTs become more widespread and with many more people accessing the services, it is imperative for the regulator to protect consumers with regard to prices, quality and variety of services.

During the 2015 ICT week, consumer issues were incorporated in all the sessions. Discussions mainly focused on the need for communication service providers to uphold consumer rights with regards to pricing, billing, compensation policies, quality of service, customer care for complaints and enquiries management and after sales services.

4.2.5: Resolution of Consumer Complaints and Enquiries

Consumers of ICT services continued to send in complaints and enquiries. A total of 262 complaints and 1,903 enquiries were received during the year. Majority of the complaints and enquiries were received via dedicated e-mails chukuahatua@ca.go.ke and/or info@ca.go.ke and through the Authority's social media pages while a small number being reported through telephone calls, physical mail and office visits.

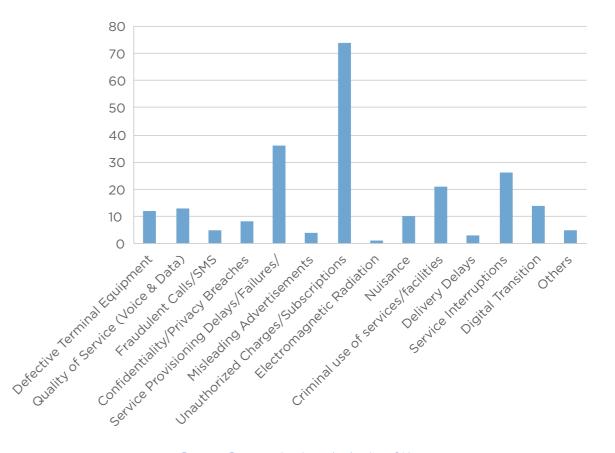
4.2.5.1: Resolution of Consumer Complaints

A total of 262 complaints were recorded during the year, representing a 40 per cent drop from 644 complaints received in the previous year. This was attributed to increased consumer awareness on the complaints process where the first port of call is the service provider. Out of the 262 complaints, 139 were resolved and 123 are still being processed, representing a resolution rate of 53 per cent.

Unauthorized charges and subscriptions by CSPs was the source of the highest rate of complaints at 28.2 per cent of the total number complaints. Consumers complained of subscription without their consent and difficulty in unsubscribing from those services even after stopping the services. Service interruptions were the second highest complaint category at 12.74 per cent. This consisted mainly of consumers experiencing constant disconnection from the fixed line network and constant Internet and TV service interruptions. Other categories that recorded high complaints were billing on especially the data bundles, quality of service and criminal use of facilities mainly related to threatening phone calls.

A summary of consumer complaints and the resolution rate is summarised in Figure 4.8 and Table 4.9.

Figure 4.8: Complaints received



Source: Communications Authority of Kenya



Table 4.9: Summary of Consumer Compaints Resolution Resolved In Progress Category Number Defective Terminal Equipment 12 5 Quality of Service (Voice & Data) 13 6 Fraudulent Calls/SMS 5 30 Billing 12 18 Confidentiality/Privacy Breaches 8 2 Service Provisioning Delays/Failures/Termination 36 20 16 Misleading Advertisements 2 2 4 Unauthorized Charges/Subscriptions 74 46 28 Electromagnetic Radiation 10 Nuisance 4 6 Criminal use of services/facilities 21 14 Delivery Delays 3 3 26 10 16 Service Interruptions Digital Transition 14 9 5 Others 5 4 262 139 123 Total

Source: Communications Authority of Kenya

The trend of complaints by category received over the last five years is provided in Table 4.10.

Table 4.10: Number of Complaints Received							
	Number of Complaints Received						
Complaint Category	2010/11	2011/12	2012/13	2013/14	2014/2015		
Unauthorized Charges/Subscriptions	82	139	170	204	74		
Billing	69	43	77	70	30		
Service Interruptions	45	47	48	72	26		
Criminal Use of Services/Facilities	23	13	26	43	21		
Service Provisioning Delays/Failures/Termination	24	29	24	32	36		
Quality of Service (Voice and Data)	57	39	23	41	13		
Counterfeit Phones			17				
Inappropriate Media Content	8	10	16	9			
Digital Transition			12	28	14		
Fraudulent Calls/SMS	26	18	12	28	5		
Mobile Number Portability	586	91	11	10			
Confidentiality/Privacy Breaches	6	4	9	3	8		
Nuisance	3	3	8	16	10		
Defective Terminal Equipment	15	9	7	14	12		
Tariffs	2	1	6	6			
Misleading Advertisements	8	5	4	3	4		
Delivery Delays	3	6	3	7	3		
Frequency Interference	4	6	3	7			
SIM Registration			3	6			
Identity Theft	-	2	2	5			
Electromagnetic Radiation	-	1	1		1		
Unfair Trading Practices	1	3	-	3			
Warranty Violations	-	1	0				
Others	14	5	11	37	5		
Total	976	475	493	644	262		

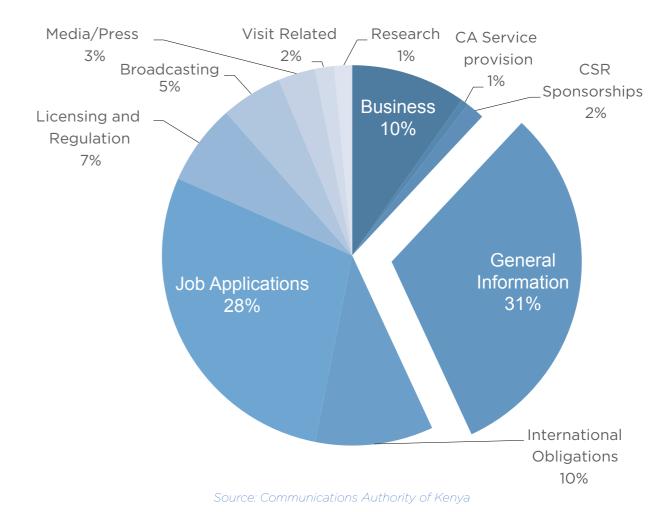
Source: Communications Authority of Kenya

4.2.5.2: Response to Enquiries

During the year, the Authority consolidated enquires from all the platforms including <u>info@ca.go.ke</u> and social media pages. This saw the number of enquiries increase from 383 the previous year to 1,903.

The bulk of the enquiries was on general information, as well as entities looking for business opportunities and individuals seeking employment and internship opportunities. The proportional representation of enquiries is highlighted in Figure 4.9:

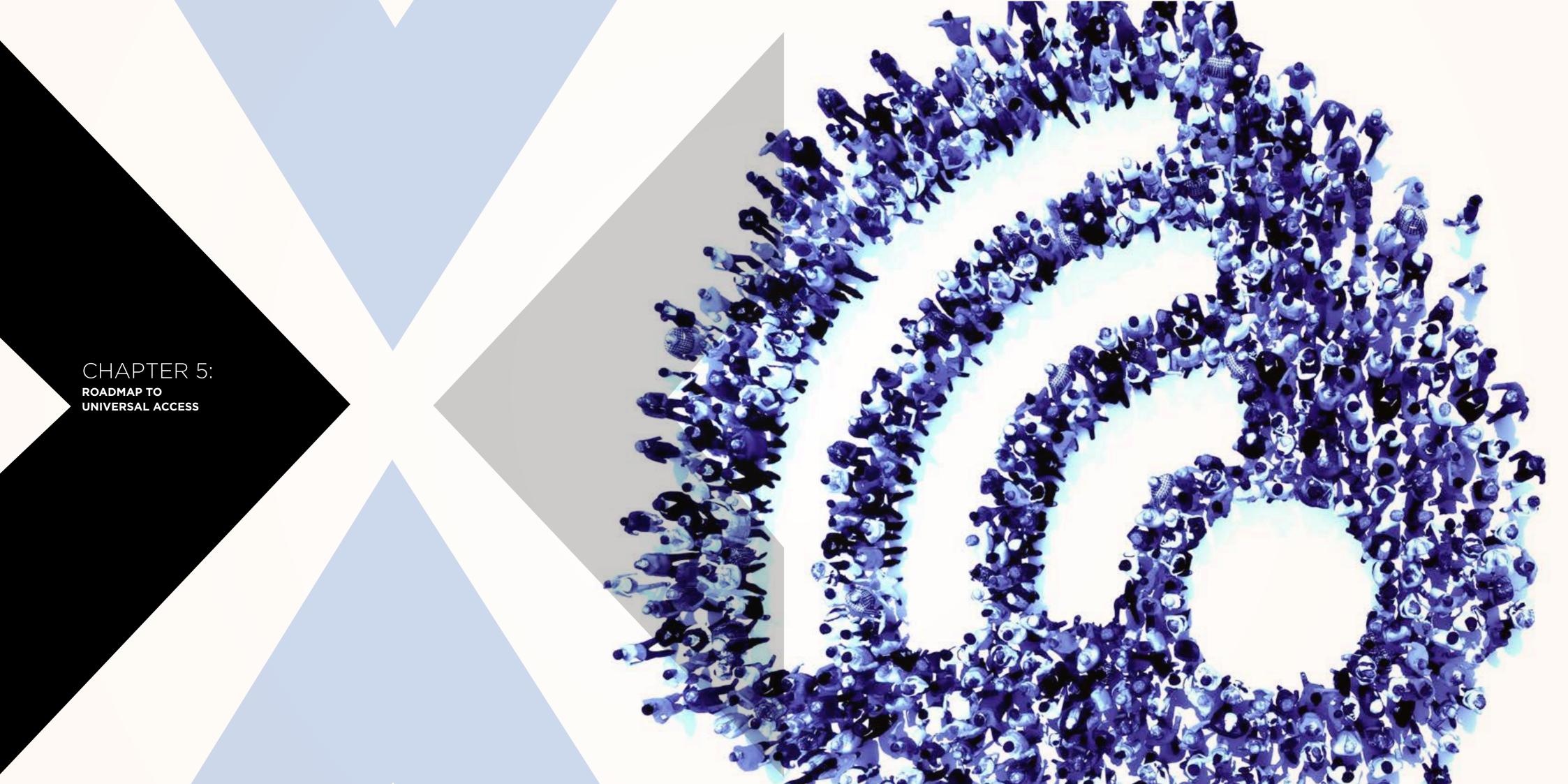
Figure 4.9: Enquiries received



The Authority responded to all enquiries touching on its mandate including CA service provision, Licensing and regulation and broadcasting. Other enquiries addressed related to the Authority's CSR sponsorships, request to visit the Authority, and those from the media. Research-related enquiries that were relevant to the Authority were addressed through provision of feedback while enquiries not

relevant to the Authority were directed to the relevant institutions. Enquiries on international obligations were mainly from regional and international affiliated organizations seeking information and updates.

Enquiries on the general information, job applications and business categories, which are unrelated to the Authority's mandate, were acknowledged and responded to appropriately.



Over the last 15 years, the growth and development of the communications industry in the country has been largely guided by forward-looking regulations and competition in the market. This has gone a long way in ensuring that communication services become accessible and affordable to majority of the population. However, even with these regulatory interventions, there are large areas in Kenya with significant population sizes that still lack access to basic ICT services. This is attributed mainly to low population density and perceived low Average Revenue Per User (ARPU). To address this challenge, the *Kenya Information and Communication Act, 1998* established the Universal Service Fund (USF) to be managed and administered by the Authority.

The main objective of the Fund is to support widespread access to ICT services, capacity building in ICTs and support technological innovations. This will be realized through funding from the USF levy, the Authority, appropriations by government and development partners. The USF is designed to leverage operations in high cost areas through provision of grants and subsidies.

5.1. Implementation of the Universal Service Fund

Section 102A (1) of the *Kenya Information and Communication Act, 1998* established a Council to be known as the Universal Service Advisory Council (USAC). The mandate of USAC is to oversee and provide strategic policy guidance in the implementation of the Universal Service Fund (USF). The current USAC members were appointed on May 9, 2014 for three year term.

5.2. Capacity building

To enhance the capacity of the Council, the members attended three trainings namely: USO Guidelines and Best Practices Workshop, USF Global Trends and Corporate Governance. These trainings focused on global best practices in the management of USF, formal and informal rules and regulations that govern institutions and ethical leadership and management of institutions. In addition, four members of the

Council undertook a benchmark visit to the Universal Service Provision Fund (USPF) of Nigeria.

5.3. Supporting Capacity Building in ICTs

During the year under review, the Authority committed to continue supporting Internet connectivity, hardware and software maintenance in learning institutions for Persons with Disabilities for a further three years. These centres include:

- 1. Machakos Technical Institute for the Blind
- 2. Kibos Secondary School for the Visually Impaired
- 3. St. Lucy School for the Visually Impaired
- 4. Kuja Secondary School for the Deaf
- 5. Rev. Muhoro School for the Deaf
- 6. Joyland Special School for the Physically Disabled
- 7. Mombasa Secondary School for the Physically Disabled

The Authority also committed to continue supporting the cost of Internet connectivity in Kitundu Community ICT Centre in Makueni.

5.4. E-Resource Centres

The Authority has over the last three years worked in partnership with Kenya National Library Services (KNLS) to support the establishment of e-resource centres in 10 public libraries in various rural parts of the country. Based on the lessons learnt and positive outcome registered in the project and the demand for ICT skills including the electronic educational materials, the Authority committed to support the extension of e-resource centres to an additional 46 public libraries spread across 27 counties.

5.5. USF levies

Following rigorous industry consultations, collection of USF levies commenced in March 2015. As at 30th June 2015 the Fund had accumulated a total of Kshs.2.67 billion inclusive of the Authority's seed contribution of Kshs.1 billion.

UNIVERSAL SERVICE ADVISORY COUNCIL (USAC)



Dr. Catherine Ngahu, EBSChairperson



Amb. Wellington Pakia Godo Member



Nixon Mageka Gecheo Member



Kennedy J. Okong'o Member



Josephine Towett Member



Michael M. Itote Member



Longole Wangiros James Member



Rhoda A. Masaviru, OGW Member



Samuel Gitonga Mutungi Member

USAC is mandated to overseee and provide strategic guidance in the implementation of the Universal Service Fund (USF). The current USAC members were appointed on 9 May 2014 for a three-year term.

CHAPTER 6: . COMMUNICATIONS AUTHORITY OF KENYA CAPACITY BUILDING, IMPROVEMENT OF SYSTEMS AND WORKING ENVIRONMENT COMMUNICATIONS AUTHORITY OF KENYA

The Authority recognizes the importance of a good working environment in ensuring efficient service delivery. To this end, the Authority continued to improve its systems, structures and working conditions while ensuring optimum allocation and utilization of its capacity, resources and management of its human capital.

6.1. Human Capital

One of the objectives of the Authority's human capital strategy is to attract, maintain and retain a highly skilled and competent workforce. During the year under review, the Authority recruited eight additional staff to build its human capital and for succession planning.

Five members of staff retired from the Authority, while another five separated from the Authority. The Staff Complement at the end of the year stood at 193, with a female to male ratio of 48:52 compared to a ratio of 47:53 the previous year. This is a positive improvement in bridging the gender gap and encouraging gender equality and equity.

6.2. Capacity Building

With the rapid change and complexity that characterizes the ICT industry; there is an ever-increasing demand to keep abreast with the innovations and technology. It is therefore necessary to invest in the human capital to ensure they are in synchrony with the dynamism in the sector. The Authority continued to provide capacity building and knowledge transfer opportunities for both industry and academia.

6.2.1: Organisation Learning

The Authority continued to implement its training and development policy that focuses on creating a learning organization. During the year, 92 per cent of employees were trained based on identified training needs and skills and competence-based assessments. The Tender, Procurement and Evaluation Committees were trained on the procurement process in line with the Public Procurement Act. The Authority also sponsored 13 staff for Masters Programme in Communications Management.

6.2.2: Promoting Capacity Building in the Industry

During the period under review, the Authority, in partnership with the Commonwealth Telecommunications Organization (CTO), under its Programme for Development and Training (PDT), conducted two capacity building workshops for the ICT industry. These were *Cyber Security: A Proactive Approach* and *Building a National ICT Security Policy*. These workshops provided useful information to the National and Sector CIRTs on curbing fraud and offensive incidents in the cyber space.

To foster better labour relations, the Authority facilitated training for the Joint Central Committee of the Communication Workers Union comprising the Management, Union Officials, and Shop Stewards on Effective Collective Bargaining and Negotiation.

6.2.3: Knowledge Transfer between Industry and Academia

During the year, the Authority provided attachment and internship opportunities to 67 students from tertiary and higher institutions of learning. In addition, the Authority hosted students from Masinde Muliro University, Mt Kenya University, Jomo Kenyatta University for Agriculture and Technology, and Mombasa Technical University for study visits. In this way, the Authority played its role in knowledge transfer between industry and academia.

6.3. Improvement of the Working Environment

The Authority took various steps to enhance its compliance to statutory health, safety and environmental requirements. The Authority maintained a corruption free working environment to enhance productivity, efficiency and improved service delivery and promoted national cohesion and national values. Further, the Authority carried out surveys to gauge staff satisfaction with the working environment.

6.3.1: Occupational Health and Safety

During the year under review, the Authority continued to improve the working environment to enhance creativity and productivity. The Authority continued to implement its Health Safety and Environment Policy through initiatives such as paperless meetings, use of energy saving bulbs, light sensors, automated water taps and rain water harvesting.

With the increasing use and versatile nature of ICT, obsolescence of technological equipment such as mobile phones, TV, radios, and computers is inevitable; hence e-waste is now a reality in Kenya. During the year, the Authority provided sensitization training of all staff on e-waste management, and safe disposal of electronic waste.

The Health and Safety Committee/Fire Marshals were trained comprehensively on first aid, fire and safety. The rest of staff were sensitized on fire and safety and participated in a fire drill. The Authority's premises were also audited for safety in compliance with the Health, Safety and Environment, Fire and Other Places of Work Rules (2007).

The Authority undertook a survey with an independent consultant on staff satisfaction with the work environment which yielded a satisfaction index of 86.8 per cent. This was a marginal improvement of 0.5 per cent, compared to the previous year.

In mitigating risk, the Authority continued to service and maintain its office equipment, machinery and property. Obsolete items were disposed off, and the Authority's assets, property and equipment were insured against various risks. The Authority also secured two of its premises in Nairobi by constructing boundary walls.



CA staff working together to accomplish an outdoor task during a past team building activity.

6.3.2: Employee Wellness and Youth Empowerment

In ensuring wellness and work-life balance, the Authority's employees participated in the 35th Kenya Communications Sports Organizations (KECOSO) Games in Eldoret. The annual games draw participants from MoICT, Ministry of Transport and Infrastructure and the Ministry of Sports, Culture and the Arts and associated public/state-corporations. The Authority chaired the KECOSO Governing Council during the year.

The Authority fielded players in Football through its sponsored team, Talanta FC, Darts, Pool, Snooker, Scrabble, and Athletics comprising track and field events, Table tennis and Golf. During the games, the Authority sponsored a Half Marathon.

6.3.3: Corruption Eradication Strategies

The Authority implemented its Corruption Prevention Policy and strategies with an oversight role played by the Corruption Prevention Committee chaired by the Director General and represented by Heads trained the Committee on their role in corruption prevention and on in the previous year. Corruption Risk Assessment. The Authority developed its Corruption Risk Assessment strategy and consequently implemented the mitigating factors under its Corruption Prevention Plan.

The Authority reviewed its Fraud and Corruption Prevention Policy to incorporate Article 232 of the Constitution and the Leadership and Integrity Act, 2013. This was in compliance with Constitutional requirements on leadership and values of public service. The Authority continued to create awareness on maintaining ethics and integrity responsibility. through its electronic weekly bulletin. Seven Risk Champions were also trained on identification of risk and risk mitigation strategies including 6.4. Regional Offices corruption-related risks.

the level of corruption perception among staff and public stakeholders. On a scale of 0-5 where zero represents no perception of corruption, the overall corruption perception index was recorded at 1.12 compared consumer-related issues. to 1.50 in the previous year.

6.3.4: Prevention of Drugs and Substance Abuse

The Authority, through an independent consultant, carried out a survey to establish the prevalence of alcohol and drug abuse at the workplace. The Authority's employees were sensitized and trained on Drugs and Substance Abuse, with an emphasis on early identification of Alcoholism, treatment and prevention. The Authority also trained internal counsellors and incorporated Counseling, Psychiatric and Rehabilitative centers into its medical scheme as part of its initiative towards Employee Assistance Programmes.

6.3.5: Gender and Disability Mainstreaming

The Authority implemented its Gender Policy, by reviewing the recruitment and promotion within the departments, as well as the gender distribution spread in the various committees to promote gender equity

and balance. During the review period, employees were sensitized on gender mainstreaming and a baseline survey conducted to determine the level of Gender Mainstreaming in the Authority. The gender ratio stood at 52:48 which is well above the statutory requirements of at least a third representation of either gender in public service.

The Authority formulated a Disability Mainstreaming Action Plan for the financial year. The Authority works hand in hand with the National Council for Persons with Disabilities to ensure that PwDs have access to information relating to opportunities within the Authority. The Authority, through affirmative action, engaged PwDs to train staff on service provision to persons with disabilities.

6.3.6: Employee Satisfaction Surveys

During the year under review, an independent employee satisfaction survey was carried out to identify the elements that affect the level of employee work morale. The results of the survey indicated employees are fairly satisfied at a recorded job satisfaction index of 80.2 per cent. of Department. The Ethics and Anti-Corruption Commission (EACC) This is a 2.7 per cent improvement compared to satisfaction recorded

6.3.7: Culture Change

The Authority embarked on a Culture Change Initiative to harmonize the values and behaviours aimed at building a culture of high performance and service delivery. The driver of the change was the Director General as the Chief Change Champion. The Authority adapted the mantra 'Change is Me' emphasizing the fact that change is everyone's

The Authority, in its efforts to further enhance provision of services at A survey was also carried out by an Independent Consultant to determine the grassroots level, opened two offices in Eldoret to cover the Western Region, and in Mombasa to cover the Coast Region. The offices provide a wide range of services, including licence application, and handling of

> The Western Region office, located on the first floor of the KVDA Plaza in Eldoret town, serves the greater Rift Valley and Western Kenya. The region covers 12 counties Uasin Gishu, Nandi, Trans Nzoia, Baringo, Turkana, Elgeyo Marakwet, West Pokot, Samburu, Kakamega, Vihiga, Bungoma and Busia.

> The Coast Region office is located on the third floor of NSSF building in Mombasa. The office serves six counties, namely Mombasa, Tana River, Taita Taveta, Kwale, Kilifi and Lamu.



Mr. Ngene Gituku, CA Board Chairman, officially opens the Coast Regional office at NSSF Building in Mombasa. The office, headed by a Regional Manager, serves the counties in the Coast region. The Authority also has the Western Regional Office at KVDA Plaza in Eldoret and serves counties in the greater Rift Valley and Western regions.

×

| 74

6.5. Automation of the Authority's Processes

6.5.2: Implementation of a Network Management System (NMS)

The Authority implemented a Network Management System (NMS) during the year. This application allows CA network administrators to manage IT network's independent components within the wider network management framework. CA network administrators use it to monitor both software and hardware components in the Authority's network. The NMS records data from the network's devices and applications to carry out central reporting to the Authority's system administrators.

6.5.3: Deployment of a Dual Stack System (IPv4 and IPv6)

With impending exhaustion of the Internet Protocol version 4 (IPv4) addresses, it has become a high priority for organizations to deploy Internet Protocol version 6 (IPv6). The Authority accomplished this by configuring a dual stack, whereby devices on the network were configured on both IPv4 and IPv6 capabilities. IPv6 is superior to

IPv4 in Security, Auto configuration, better Quality of Service, greater Mobility of devices among others.

6.5.4: Upgrade of the Authority's Internet Connectivity

During the year, the Authority upgraded its Internet connectivity to a higher capacity. Further, Internet connectivity was extended to cover the two regional offices in Mombasa and Eldoret.

6.6. Procurement and Disposal

The Authority continued to ensure that procurement of goods, services and works was done in accordance with the Public Procurement and Disposal Act, 2005 and Regulations, 2006. This ensured that the tendering process was guided by principles of fairness, transparency and accountability. The Authority awarded contracts worth **Kshs.108,034,251.02** to the Youth, Women and persons with disabilities in conformance with the government policy. The contracts worth Kshs.5 million and above for goods, services and works are shown in Table 6.1.

Tab	le 6.1: Tenders Awarded Over 5 Million		
No	Item Description	Firm Awarded the Tender	Tender Amount
1	Tender for provision of concept development, fabrication and branding; production of information materials, promotional items; and management of the CA Show stands	Scanad	Kshs.26, 891,017.92
2	Tender for provision of consultancy services on perception and survey on the proportion of population accessing information on CA and its services	Quadz Consulting Limited	Kshs.6,703,524
3	Supply and installation of new fire alarm control panel, detectors and accessories	M/s Mullard Fire Protection	Kshs.7,609,034.22
4	Tender for conduction of boundary wall at Afralti	Tratiz Enterprises	Kshs.52,420,572.75
5	Tender for conduction of boundary wall at Kahawa RSMS station	Emec Services Ltd	Kshs.116,784,654
6	Tender for design, printing and supply of calendars and note books with pens	Ashdown and Express DDB Kenya	Kshs.11,157,106
7	Tender for provision of consultancy services to carry out research on consumer trends, behavior and profiling	SBO Research Ltd	Kshs.16,425,600
8	Tender for supply, delivery, installation, training and commissioning of Radio and TV Broadcast logger	New Edge Solutions Ltd	USD.364, 309.60
9	Tender for consultancy service to undertake Systems audit on Integrated Management Information System	Ernst & Young	Kshs.5,537,278.56
10	Tender for creative, design and execution of County ICT forums in Mombasa, Trans Nzoia, Machakos, Nakuru and Nairobi	Scanad	Kshs.39,011, 253.56
11	Tender for provision of consultancy services to develop, install and maintain service delivery monitoring and evaluation framework and tracking system.	Technobrain Ltd	Kshs.20,495,599.20
12	Tender for provision of creative, production, implementation of integrated communication plan and launch of child online protection campaign.	Scanad	Kshs.78,644,627
13	Tender for cleaning and fumigation of CA headquarters building and Kahawa Station	Kleansly H.P. Services Ltd	Kshs.6,439,471.20
14	Tender for supply, delivery installation and maintenance of computer hardware and associated items.	Circuit Business Systems Ltd	Kshs.8,883,700.00

No	Item Description	Firm Awarded the Tender	Tender Amount	
15	Tender for supply and delivery of portable Radio Monitoring receivers	Broadband Communications Networks Ltd	Euros 273,353.20	
16	Tender for supply and delivery of Six (6) portable TV Analyzers	Geoscintex	Kshs.8,166,500.00	
17	Tender for supply and delivery of a Set Top Box Automated Test System	Broadband Communications Networks Ltd	Kshs.5,608,063.41	
18	Tender for supply and delivery of laptops and tablets	Coshire Enterprises and Ashdown Ltd	Kshs.10,720,000	
19	Tender for Expansion of Broadcast Logger Capacity at CA Headquarters	New Edge Solution Ltd	USD.256,919.12	
20	Tender for supply, delivery of assorted ICT hardware	JoWorldSpecicom TechnologiesSymphonyComputer Revolution Africa	Kshs.14,420,401.81	
21	Tender for Provision of consultancy services to undertake broadcast signal distribution cost model	Analysys Mason	USD.253,395	
22	Tender for provision of insurance brokerage services	Pacific Insurance Services LtdMiran Insurance Brokers LtdCanopy Insurance Brokers Ltd	Kshs.14,276,541.67	
23	Tender for provision of grounds and landscape maintenance at CA Centre, Kahawa and South B Stations	M/s Farmline (E.A) Ltd	Kshs.9,351,608	
24	Supply and deliver four (4) Portable Hand Held Spectrum Analyzers	Progressive Technologies Limited,	Kshs.19,487,000	
25	Tender for building and civil works at the Authority's SMMS Sites in Nakuru, Kisumu and Eldoret	Netco Investment Company LimitedBiatek Construction Company LtdDapalk Consortium Company Ltd	Kshs.12,920,170.00	
26	Tender for provision of consultancy services to undertake feasibility study of the Convention Centre	AAKI Consultants Architects and Urban Designers	Kshs.21,507,850	
27	Provision of upgrade of the National KE-CIRT/CC tools	International Telecommunication Union (ITU)	CHF.310,595	
28	Tender for provision of support, maintenance and licences for the Missions Status Leadership Dashboard for a period of three years	McKinney Rogers Kenya Limited	Kshs.8,039,781.36	

Source: Communications Authority of Kenya

6.7. ISO Certifications

6.7.2: ISO 9001:2008

During the year, the Authority continued to maintain its Quality Management System. Towards this end, the Authority undertook Internal Audits and quarterly Management Reviews of the system in addition to external surveillance audits.

6.7.3: ISO 27001:2013

As part of streamlining its information security management systems, the Authority began the process of implementing the ISO 27001:2013 standard, on Information Security Management System (ISMS). The main objective of the standard is to implement a model for establishing, implementing, operating, monitoring, reviewing, maintaining and improving the Authority's Information Security Management System (ISMS).

During the year, the Authority's ISMS committee developed various documents, including the ISMS Manager's documents, operational procedure manuals and departmental ISMS objectives. The committee also carried out an Information Security Risk assessment.

Further, ISMS pre-certification audit was conducted to reassure

the Authority that a viable and robust ISMS framework existed and to enable the Authority assess its level of preparedness for ISMS certification.

6.8. Risk Management

The Authority undertook the process of identifying, addressing, prioritizing, and eliminating potential sources of failure to achieve objectives. Having established an Enterprise Risk Management (ERM) Framework, the Authority embarked on automation of the ERM processes to ensure efficiency in risk management activities. Automation allowed incorporation of staff in responding to attestation questions, key risk indicators and compliance questions. Automation will also assist the Authority with incidence management, which is a key aspect of both the risk management and the Information Security Management System.

73



n carrying out its overall mandate, the Authority engaged relevant stakeholders, carried out public awareness campaigns and gave back to society through its Corporate Social Responsibility (CSR) initiatives. Further, the Authority continued to represent Kenya in local, regional and international ICT activities.

7.1. Engaging with Stakeholders and Local Community

The Authority engaged stakeholders in the ICT and other industries as well as the local community on its key initiatives.

7.1.1: Corporate Social Responsibility

As a socially responsible organization, the Authority carries out Corporate Social Responsibility (CSR) initiatives in the ICT industry and in other areas.

The Authority supported industry events including Connected Kenya Summit, Media Council of Kenya Annual Journalists Excellence Awards and Public Relations Society of Kenya Annual Awards. To celebrate the 150th Anniversary of the International Telecommunication Union (ITU), the Authority supported Postal Corporation of Kenya (PCK) in the production of a commemorative stamp.

The Authority's sponsorship of Talanta Football Club entered its third year. The three-year sponsorship has provided a team of 30 young men aged between 17 and 24 years with the opportunity to make a living off their talent. The team has grown its football skills that has seen it participate in the National Super League.

To improve the lives of the less fortunate in society, the Authority visited various charity homes and provided them with basic necessities. Staff visited and spent time with the children at Nyumbani Children's Home, Kawangware Street Children's Home and Tumshangilie Mtoto. These homes cater to orphaned and vulnerable children. The Authority also extended its support to Nyumba ya Wazee, a home for the aged.

During the year, the Authority supported Masaba DEB Primary School in Bungoma County by donating books and furnishing the classrooms and staffroom. The Authority also supported Gathaithi Mixed Secondary School in Kiambu County with a computer laboratory equipped with 30 computers. These projects will provide students with a better learning environment and equip them with basic ICT skills.

The Authority supported other social causes through Mater Heart Run and Joyful Women Organization, an NGO empowering women through micro-credit facilities to improve their livelihoods. Further, in recognition of Kenyan sports men and women, the Authority supported the Sports Man of the Year Awards (SOYA).

7.1.2: Public and Stakeholder Consultations

The ICT industry in Kenya is characterised by rapid growth and innovation and as the industry regulator, the Authority continues to ensure an all-inclusive regulatory journey through continuous engagement.

Following the amendment of the KICA in 2013, the Authority, together with the MoICT, communications service providers, academia, consumer bodies and general public reviewed a set of 10 sector regulations to align them with the Act. Awareness of the review and consultative process was done through public notices in the local newspapers, social media, website updates and direct contact with licensees. In addition, the Authority held both public and stakeholder forums.

The Authority held the second annual ICT Week that focused on discussing industry trends and issues affecting licensees. The five-day event targeted telecommunication service providers, vendors, contractors and technical personnel; postal and courier; consumers and broadcasters.

In its efforts to meet the 17 June 2015 global deadline on Analogue switch off, the Authority carried out several consultations with key stakeholders in the digital migration process. The stakeholders included Set Top Box vendors, broadcasters, content developers and digital signal distributors. Further, the Authority also engaged broadcasters on the draft Programme Code and Complaints Handling Procedure. Once finalised, the two instruments will be used to regulate broadcasting.

Through the Corporate website and public notices in the local dailies, the Authority engaged stakeholders and the general public in other regulatory initiatives including: Transition to IPv6 and Domain Name Security Extensions (DNSSEC); Minimum specifications for Integrated Digital TV sets; Quality of Service Parameters in the Postal/Courier Sector; Postal, e-commerce and Security Frameworks; Review of the Unified Licensing Framework licence; and Licensing and regulatory framework for Dot.ke domain name registry services.



Communications Authority of Kenya staff visit Tumshangilie Mtoto childrens home.

7.1.3: Exhibitions and Promotional Activities

To create awareness of the new brand and sensitize the public about its mandate, the Authority participated in several exhibitions locally, regionally and internationally.

The Authority took part in the Kisumu, Mombasa and Nairobi Agricultural Society of Kenya (ASK) shows and Trade Fairs. The Authority's stand in these exhibitions provided an opportunity for direct interaction with the public. The Authority scooped awards for the best stand in the Electronic and Media services category in all the three shows. Other awards included Community service, embracing the show theme, youth empowerment and embracing ICT systems.

The Authority exhibited its services and regulatory initiatives during the *Kikao Kikuu* forums in Machakos, Nakuru, Nairobi, Mombasa and Eldoret. To informally engage with stakeholders and at the same time

sell investment opportunities available in the ICT sector, the Authority hosted golf tournaments in Nairobi, Mombasa and Eldoret.

As a member of the East African Communications Organization (EACO), the Authority took part in the annual EACO Congress and Exhibition in Kampala, Uganda. The exhibition brought together regulators, communication service providers, ICT equipment vendors and start-up companies using ICTs to showcase their products and services, create awareness on emerging technologies, exchange ideas, benchmark and network.

On the international arena, the Authority took part in the ITU Telecom World 2014 exhibition. The exhibition provided a platform for member states, innovators and ICT companies across the globe to showcase their technologies, skills, ICT projects and resources. Kenya showcased the National Broadband Strategy, Public Key Infrastructure Project and the country's achievements and investment potential in the ICT sector.



Director General, Mr. Francis Wangusi, takes H.E. President Uhuru Kenyatta through the CA Stand at the Mombasa Show. Looking on, are ICT Cabinet Secretary, Dr. Fred Matiang'i and Mombasa County Governor, Mr. Ali Hassan Joho.

7.1.4: Public Awareness Campaigns

As part of regulating the ICT industry, the Authority carries out public awareness campaigns through various channels with the aim of sharing information with its key stakeholders and the general public.

During the year, the Authority concluded the re-branding awareness campaign following the unveiling of the new identity. This included advertisements on print and electronic media, interaction on social media, corporate website as well as redesigning all corporate information materials.

The digital migration awareness campaign continued in earnest as the country prepared to fully migrate to the digital broadcasting platform. The campaign included road shows in towns across the country, continuous social media engagement, advertisements on print and electronic media and taking part in talk shows in various broadcasting stations.

The Authority completed the process of planning and developing content for the Child Online Protection campaign. The campaign aims to educate children, parents/guardians and teachers on the dangers in the cyber space. To this end the Authority formalised partnerships with organisations focused on children rights and protection as well as communication service providers. These included Department of Children Services, Childline Kenya, UNICEF, Plan International, The Cradle, Kenya Scouts Association, Kenya Girl Guides Association as well as Google Kenya, Safaricom, Telkom Kenya (Orange) and Airtel. The campaign will be launched in the next financial year.

7.2. International Relations and Liaison

As the country's representative in regional and international ICT matters, the Authority maintained membership in, and took part in activities organised by key ICT organisations. Active participation in these forums ensures that Kenya is abreast with the current ICT trends, regulatory best practice and policy decisions.

7.2.2: Regional and International Meetings and Conferences

During the ITU Plenipotentiary Conference in October 2014, Kenya was re-elected to the ITU Council until 2018. In addition, Kenya's Mr. Stanley Kibe was re-elected to the ITU Radio Regulations Board. These successes were achieved through the joint effort of Ministry of Foreign Affairs and International Trade, MoICT and the Authority.

In preparation for the World Radiocommunications Conference (WRC) to be held in November 2015, the Authority spearheaded the development of the national position. The WRC is held under the auspices of the ITU every four years to review and if necessary revise radio regulations governing the use of the radio-frequency spectrum and the geostationary-satellite and non-geostationary-satellite orbits.

The national position was developed through a National Preparatory Committee (NPC) whose membership comprised organizations that utilize a significant portion of radio frequency spectrum resource. The NPC held several meetings and also participated in other meetings within East Africa and other African regions with the aim of harmonizing divergent views on various agenda items ahead of the global meeting.

Kenya, through the MoICT and the Authority, took part in the ITU Telecom World Leadership Summit. The Summit was designed to equip leading decision-makers from government and industry with a clear understanding of the most important current and near-future developments in the ICT sector as well as to provide an overall context for future policies and strategies. In addition, the Authority sponsored the Smart Africa initiative luncheon held during the Telecom World. Smart Africa, launched in 2013, brings together African governments, the private sector and international organizations to promote and ensure affordable access to broadband and ICTs in general, ushering Africa into the knowledge economy. Kenya spearheads the Financial and Digital inclusion pillar of the initiative.

The Authority, in liaison with other Government agencies, coordinated the development and presentation of national positions to treaty-making meetings and other forums organized by affiliated regional and international ICT organizations. The most notable forums during the year were the ATU Plenipotentiary Conference, ITU Plenipotentiary Conference, UPU Council of Administration and EACO Congress.

The Authority participated in other meetings and conferences organized by various international and regional ICT organizations. These included several meetings organized by the ITU, African Telecommunications Union (ATU), Universal Postal Union (UPU), Pan-Africa Postal Union (PAPU), Commonwealth Telecommunications Organisation (CTO), Association of Regulators of Information and Communications for Eastern and Southern Africa (ARICEA), Africa Advanced Level Telecommunication Institute (AFRALTI), East African Communications Organization (EACO) Congress, Internet Corporation for Assigned Names and Numbers (ICANN) and Internet Governance Forum (IGF).

7.2.3: Benchmarking

Information sharing is vital in the ICT industry to ensure skills are transferred and capacity is built. To this end, the Authority hosted several delegations on benchmarking missions. These delegations included: Nigeria Communications Commission (NCC), Tanzania Communications Regulatory Authority (TCRA), Ministry of Communications, Science and Technology of Tanzania, Uganda Communications Commission (UCC) and Zambia Information and Communications Technology Authority (ZICTA).

The topics of interest ranged from effective competition regulation in the ICT sector, broadcast content regulation, the overall regulatory mandate of the Authority, the digital migration process, consumer education, national broadband strategy, cybersecurity, communications and public awareness and international relations.

7.2.4: Subscriptions to Regional and International Organizations

As the designated representative of the Kenya Government on ICT matters, the Authority meets the associated financial obligations to its affiliated regional and international ICT organizations. These organizations include the ITU, UPU, CTO, EACO, PAPU, ATU, ARICEA and AFRALTI.



8.1. Corporate Governance

The Board of Directors regards corporate governance as critical to the success of the Authority. The Board is responsible for ensuring sound corporate governance as set out in the Kenya Information and Communications Act, 1998. The Act vests the Board with twin functions of decision making and oversight.

The Board acknowledges the importance of good corporate governance in building a competitive and vibrant ICT industry and enhancing stakeholder confidence in the regulatory environment. To this end, the Board provides leadership and strategic direction for the Authority in fulfillment of its statutory mandate.

The business of the Board is conducted in accordance with the best practices anchored in principles of accountability and transparency as well as compliance with relevant laws and regulations. In this context, the Authority discharges its mandate based on strong corporate governance principles through application of high and consistent ethical standards.

Auditors

The Auditor General is responsible for the statutory audit of the Authority in accordance with Section 20 of the Kenya Information and Communications Act, 1998.

By Order of the Board

Francis Wangusi, MBS **Director General** COMMUNICATIONS AUTHORITY OF KENYA

8.2. Statement of Directors' Responsibilities

Section 20(2) of the Kenya Information and Communications Act, 1998, Public Financial Management Act of 2012 and the State Corporations Act (CAP 429), require the Directors to prepare financial statements in respect of that Authority, which give a true and fair view of the state of affairs of the Authority at the end of the financial year/period

and the operating results of the Authority for that year/ period. The Directors are also required to ensure that the Authority keeps proper accounting records, which disclose with reasonable accuracy at any time the financial position of the Authority. They are also responsible for safeguarding the assets of the Authority.

The Directors are responsible for the preparation and presentation of the Authority's financial statements, which give a true and fair view of the state of affairs of the Authority for and as at the end of the financial year ended June 30, 2014. This responsibility includes: (i) maintaining adequate financial management arrangements and ensuring that these continue to be effective throughout the reporting period;(ii) maintaining proper accounting records, which disclose with reasonable accuracy at any time the financial position of the Authority; (iii) designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of the financial statements and ensuring that they are free from material misstatements, whether due to error or fraud; (iv) making accounting estimates that are reasonable in the circumstances.

The Board of Directors accepts responsibility for the Authority's financial statements, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgements and estimates, in conformity with International Public Sector Accounting Standards (IPSAS), and in the manner required by KICA Act and State Corporations Act. The Board of Directors are of the opinion that the Authority's financial statements give true and fair view of the state of Authority's transactions during the financial year ended June 30, 2014, and the Authority's financial position as at that date. The Directors further confirm the completeness of the accounting records maintained for the Authority, which have been relied upon in the preparation of the Authority's financial statements as well as the adequacy of the systems of internal financial control.

Nothing has come to the attention of the Directors to indicate that the Authority will not remain a going concern for at least the next 12 months from the date of this statement.

Approval of the financial statements

The Authority's financial statements were approved by the Board on 29th September 2014 and signed on its behalf by:

Director General

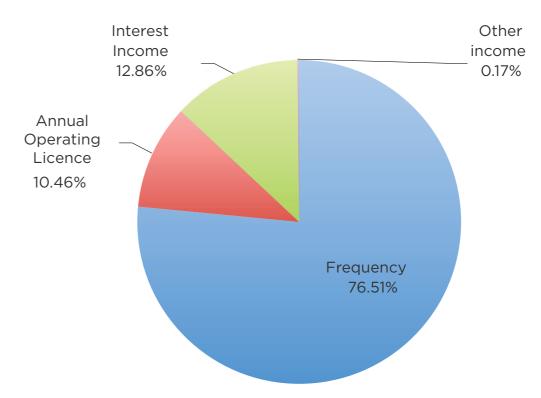
Chairman

8.3. Revenue

Annual frequency licence fees comprised the Authority's main income accounted for 10 per cent. Other income accounted for less than one stream as it accounted for 77 percent of total income. Interest income accounted for 12.86 percent while annual operating licence (AOL) fees

per cent, as illustrated in the figure below.

Figure 8.1 Sources of Income





Communications Authority of Kenya Statement of Financial Position As at 30 June 2014 2013 2014 Restated Kshs'000 Note Kshs'000 **ASSETS Current Assets** Cash and cash equivalents 12 10,376,490 9,848,129 Receivables from non-exchange transactions 13 894.079 623.816 14 423,382 294,832 Receivables from exchange transactions Tax Recoverable 11(c) 315,054 1,877 12,009,005 10,768,654 **Total Current Assets** Non-Current Assets 17 1,612,460 1,504,483 Property, plant and equipment Total Non-Current Assets 1,612,460 1,504,483 TOTAL ASSETS 13,621,465 12,273,138 LIABILITIES **Current Liabilities Provisional Surplus Remittance** 4,964,232 Trade and other Payables from exchange transactions 15 2.714.532 292.457 Payments received in advance 16 674,543 288,913 3,389,075 5,545,602 **Total Current Liabilities** TOTAL LIABILITIES 3,389,075 5,545,602 10,232,390 Net Assets 6,727,536 18 741,965 741,965 Owners' Equity 23 (a) 380,681 380,681 Revaluation reserve Accumulated Surplus 23(b) 9,109,744 5,604,890

of many os

Total Net assets and Liabilities

Director GeneralFrancis W. Wangusi, MBS
Date: 29th September 2014

Mell

Chairman of the BoardBedan N. Gituku
Date: 29th September 2014

10,232,390

6,727,536

8.4. Expenditure

Operating Expenditure

In the financial year 2013/2014, Kshs.2.23 billion was spent on the Authority's operations compared to Kshs.1.78 billion in the previous year. This represents an increase of Kshs.448 million, which was mainly attributed to the increase in staff and activities of the Authority.

Capital Expenditure

The total capital expenditure for the F/Y 2013/14 amounted to Kshs.144.5 million compared to Kshs.168 million in the previous year. Fixed assets acquired during the year included telecommunications equipment, motor vehicles, Improvements at Head Office Building and purchase of office equipment, furniture and fittings.

Surplus

The surplus for the year, before 30% corporation tax remittance to Kenya Revenue Authority, was Kshs.5.0 billion compared to Kshs.5.5 billion the previous year. This reflected a decrease of Kshs.487 million which can be attributed to the decrease in regulatory licence fees.

Tax Remittance

During the year, the Authority paid Ksh.1.82 billion corporation tax to the Kenya Revenue Authority, in accoradance with the Public Financial Management Act, 2012.

8.5. Audit of Financial Statements

The Authority's financial statements for the Financial year 2013/2014 were audited by the Kenya National Audit Office which later issued an unqualified audit opinion on the Financial Statements.

Assets

The total assets of the Authority amounted to Kshs.13.6 billion, compared to Kshs.12.2 billion in the previous year. This represented an increase of Kshs.1.3 billion. The assets comprised of property, plant and equipment at Kshs.1.6 billion, cash and cash equivalents of Kshs.10.3 billion and receivables of Kshs.1.7 billion.

Current Liabilities

As at the end of the Financial Year, the current liabilities stood at Kshs.3.3 billion, which comprised mainly of trade payables. This was a decrease of Kshs.2.2 billion, as compared to the previous year, which stood at Kshs.5.6 billion.

Capital and Reserves

As at the end of the year, capital and reserves amounted to Kshs.10.2 billion, compared with Kshs.6.73 billion the previous year. The capital and reserve comprise of owners funds, revaluation reserve and retained surplus.

Capital and Reserves

	000'
Revaluation reserve 38	1,965
	0,681
Accumulated surplus 9,10	9,744
Total 10,232	,390

8.6. Annual Budget Estimates and Revised Budget

In accordance with section 19 of the KICA, 1998 and the provisions of the Exchequer and Audit Regulations, the estimates of revenue and expenditure of the Authority for the FY 2015/16 were prepared and submitted to the National Treasury through the MoICT.

The total income for financial year 2015/16 is estimated at Kshs.6.99 billion, while operating expenditure is estimated at Kshs.3.35 billion. Capital expenditure is estimated at Kshs.1.57 billion

During the F/Y 2014/15, the revised budget was prepared and approved by the National Treasury, with an estimated income of Kshs.7.1 billion, operating expenditure of Kshs.2.92 billion and capital expenditure of Kshs.1.2 billion.



×

ANNEX: SELECTED KEY COMMUNICATIONS STATISTICS AND ECONOMIC INDICATORS

Annex 1: Information and Communications Technology Statistics										
Indicator	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Fixed Telephony Capacity Wireline	516,993	505,103	512,281	485,581	421,528	400,764	380,135	362,627	340,005	75,407
Wire line Connections	293,364	339,229	527,064	247,972	234,522	187,716	74,606	56,724	53,998	87,774
Wireless Connections	0	84,107	274,449	448,529	225,592	191,585	188,155	159,545	147,396	0
Total Wireline and Wireless Connections	293,364	347,226	527,064	696,501	460,114	379,301	262,761	216,469	201,398	87,774
Mobile Telephony Capacity	10,600,000	18,200,000	25,964,700	29,400,000	46,628,948	47,677,000	49,977,000	55,077,000	65,077,000	62,800,000
Mobile Telephony Connections	6,484,791	9,304,818	12,933,653	17,362,257	20,119,304	25,279,768	29,703,439	30,549,422	32,246,393	36,113,121
Mobile Money Transfer Service Subscribers	-	-	-	-	10,615,386	17,395,727	19,505,702	24,600,053	27,114,623	27,742,040
Total Postal Outlets	768	721	744	710	700	697	634	622	622	623
Private Letter Boxes	400,016	411,716	414,616	412,006	414,756	427,900	431,181	432,000	432,000	432,000
Letter Posting Boxes	1,049	966	827	890	890	890	752	890	890	890
Public Counter Positions	1,388	1,388	1,390	1,279	1,339	1,261	1,030	1,102	1,102	1,100
Stamp Vending Licences (PCK Issued)	4,242	4,125	4,609	4,505	5,136	5,260	2,847	4,274	4,274	4274
Stamp Vending Machines	0	264	246	280	280	280	280	280	280	280
Private Operator Outlets	521	554	606	622	601	635	683	707	707	2117

Source: Communications Authority of Kenya

Annex 2: Economic Indicators										
Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013+	2014*
Population (Millions)	35.1	36.1	37.2	38.3	38.6	38.5	39.5	40.7	41.8	43.0
Growth of GDP at Constant (2001) Prices (%)	5.9	6.3	7.0	1.5	2.6	8.4	6.1	4.6	5.7	5.3
GDP Per Capita (in 2001 Prices) (KES)	33,442	34,570	36,000	35,611	35,470	80,688.5	83,297.9	84,721.2	87,105.4	89,240.5
Information & Communication GDP at Constant (2009) (KES Millions)	36,242	43,251	54,947	56,756	62,508	86,492	105,606	108,186	121,447	137,779
Information & Communication as % of GDP	2.6	2.7	3.0	2.7	2.6	2.2	1.6	1.6	1.5	1.2
Growth of Information & Communication at Constant (2009) Prices (%)	17.7	16.5	30.3	7.8	10	17.4	22.1	2.4	12.3	13.4
Private Sector Wage Employment ('000)	39,204	47,452	61,496	62,800	70,400	1,396.4	1,440.8	1,493.6	1,599.8	1,669.4
Public Sector Wage Employment ('000)	1,352	1,397	1,255	1,300	1,800	619.8	643.3	662.1	683.3	700.8
Consumer Price Index, Annual Average*	180.2	76.25	79.50	92.36	102.10	106.3	121.2	132.5	140.1	149.7
CPI Inflation Rate (Overall) %	10.0	6.0	4.3	16.2	10.5	4.1	14.0	9.4	8.2	9.0
*Estimated figures +Revised figures										

Source: Economic survey 2015

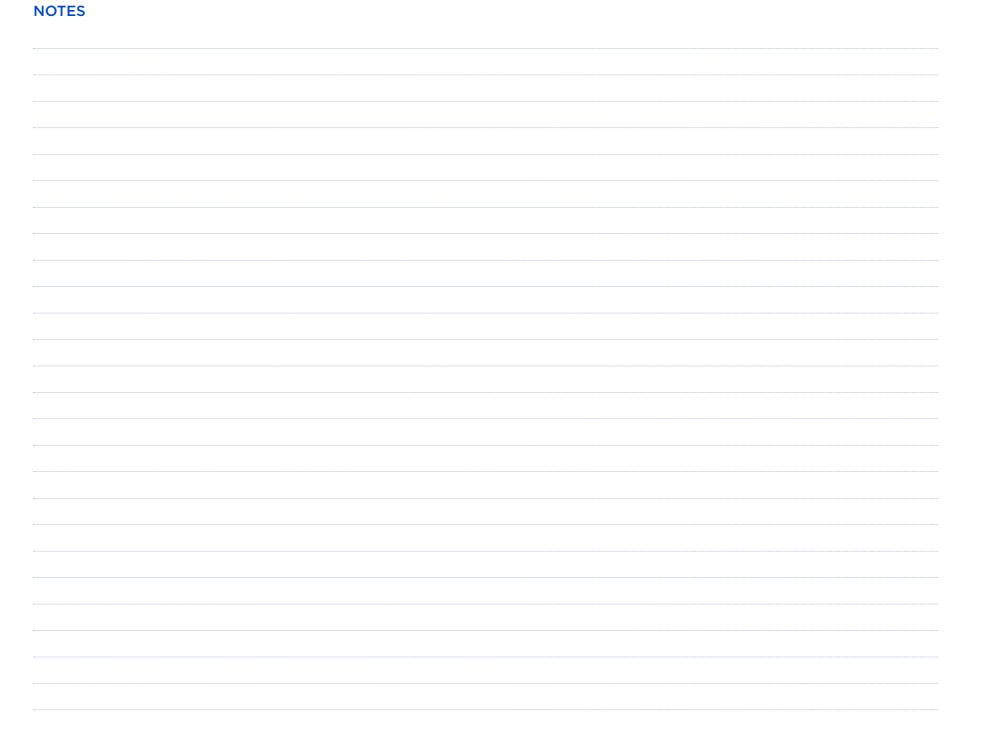
5

Reporting Cybercrime in Kenya

Internet users can report cyber-crime incidents to the National KE-CIRT/CC through:

- i. The Authority's website, http://www.ca.go.ke, under the "Information Security" Section;
- ii. The Authority's National KE-CIRT/CC website, http://www.ke-cirt.go.ke, under the "Report an Incident" Section;
- iii. Send an email to: incidents@ke-cirt.go.ke;
- iv. Tel Hotlines: +254-703-042700; +254-730-172700
- v. Visit the Authority's National KE-CIRT/CC located at the CA Centre along Waiyaki Way.
- vi. Via a letter addressed to:

The Director General
Communications Authority of Kenya (CA)
CA Centre, Waiyaki Way
P.O. Box 14448
NAIROBI 00800



NOTES	

NOTES



Communications Authority of Kenya CA Centre, Waiyaki Way Mobile: 0703 042 000, 0730 172 000 Tel: +254 (20) 4242 000, 2441 081-4 Postal Address: P.O. Box 14448, Nairobi, 00800 Email: info@ca.go.ke Web: www.ca.go.ke

CommunicationsAuthorityofKenya

@CA_Kenya