
Celebrating a new dawn in communication


Thankyou
for
investing
your
dreams,
hope,
time,
energy
and
confidence
in us.
COMMUNICATIONS
AUTHORITY OF KENYA

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ACKNOWLEDGEMENT

The Authority acknowledges and appreciates the work that went into developing the 2013 - 14 Annual Report and thanks the following individuals for their dedication, commitment and professionalism:

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Mr. Liston Kirui
Mrs. Patricia Kemei
Mr. Bernard Maina
Mr. Edwin Ombega
M/s Banchale Gufu
M/s Hazel King'ori
M/s Stellah Abongo
M/s Jane Kinyanjui
M/s Lyn Cherono
Mr. Michael Kibukosya
Mr. Lukas Musembi

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
BPO	Business Process Outsourcing
BUC	Block Up Converter
BTS	Base Transmitter Stations
CA	Communications Authority of Kenya
CAP	Chapter
CB	Citizen Band
CCK	Communications Commission of Kenya
CIIP	Critical Information Infrastructure Protection
CIRT	Computer Incidence Response Team
CPI	Consumer Price Index
CPA	Consumer and Public Affairs
CS	Commission Secretary
CSP	Content Service Providers
CSR	Corporate Social Responsibility
CTMA	Competition Tariffs and Market Analysis
CTO	Commonwealth Telecommunications Organisation
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 2nd Generation
EAC	East African Community
EACO	East African Communications Organisation
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
HCA	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 Communication 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
KCCT	Kenya College of Communications Technology
KE-CIRT/CC	Kenya national 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 Cap 411A
KNLS	Kenya National Library Services
KPIs	Key Performance Indicators
LA	Legal Affairs
LAN	Local Area Network
LCS	Licensing Compliance 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
MoICT	Ministry of Information, Communications and Technology
MTR	Mobile Termination Rate

NACADAA	National Campaign Against Drug Abuse Authority
NACC	National Aids Control Council
NCPWDs	National Council for Persons with Disabilities
NCS	National Communications Secretariat
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
RFID	Radio Frequency Identification
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

Board of Directors

Ngene B. Gituku
Chairman

Mr. Ngene Gituku is the Chairman of the Board of Directors. He served as the immediate former Board Chairman of the Communications Commission of Kenya. He holds a BSc. Degree in Mathematics and Meteorology from the University of Nairobi and Diploma in Marketing.

He was appointed to the position on 23rd May, 2014 for a three-year term.

Francis Wangusi, MBS
Director General and Secretary to the Board from 2nd January 2014

Mr. Francis W. Wangusi is the Director-General of the Communications Authority of Kenya. 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).

Joseph Tiampati Ole Musuni
Principal Secretary, Ministry of Information Communications & Technology

Mr. Joseph Tiampati ole Musuni is the Principal Secretary, Ministry of Information, Communication and Technology (MoICT). He holds an Executive MBA from Eastern and Southern Africa Management Institute /Maastricht School of Management and a Bachelor of Science (Hons) Degree in Mathematics from the University of Nairobi.

Dr. Kamau Thugge is the Principal Secretary at the National Treasury.He was appointed to this position on 27th June, 2013.

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

Dr. Kamau Thugge, EBS - Principal Secretary, National Treasury

Wilbert K. Choge
Director

Mr. Wilbert Kipsang Choge was appointed as a Board Director 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 an M.Sc in Telecommunications and a B.Sc (Hons.) in Electronics from Manchester University (UK).

Mr. Mutea Iringo is the Principal Secretary in the Ministry of Interior and Coordination of National Government. He was appointed to this position on 27th June, 2013.

He holds a Master's Degree in International Studies and a Bachelor's Degree from the University of Nairobi.

Mutea Iringo
Principal Secretary, Ministry of Interior & Coordination of National Government

Grace Munjuri
Director

Ms. Grace Munjuri is a communications professional with wide experience in public relations, government and stakeholder relations as well as marketing and communication for advocacy. She has served in the board of Media Council of Kenya and was the Vice Chair of 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 as a Board Director on 20th May, 2014 for a three-year term.

Former CCK Board of Directors

Dr. Monicah Kerretts-Makau holds a PhD in Policy and Regulation with specialization in the telecommunications sector from the University of New South Wales, Sydney, Australia; MSc. in Business and Information Technology from Salford University – Greater Manchester in the UK, and a B.A in Communications (Major) Cum Laude Honours from Daystar University, Kenya. She was appointed to the CCK Board on 21st February 2011 for a three-year term.

Dr. Monica Kerretts-Makau
Retired on 2nd April 2014

Aloys Ang'asa
Retired on
2nd April 2014

Mr. Ang'asa holds a B.Ed (Economics) and MSc. (Agricultural Economics) from the University of Nairobi. He has worked in the ICT sector in various capacities for over 30 years, retiring as the Director, Competition, Markets and Tariffs Analysis in 2005 at the then Communications Commission of Kenya (CCK).

He was appointed to the CCK Board on 21st February 2011 for a three-year term.

The late Peter Ldhituachi Simani was appointed to the CCK Board on 21st February 2011 for a three year term. He served until his untimely demise in September 2013.

At the time, he was also the chairman of the Political Parties Dispute Tribunal. The late Simani was a senior lawyer distinguished advocate of the High Court of Kenya.

He held a Bachelor of Laws Degree holder from the University of Nairobi, Diploma in Law from the Kenya School of Law and a Certificate of Proficiency in French. He was a member of the Law Society of Kenya (LSK), Commonwealth Lawyers Association, International Bar Association, International Commission of Jurists and the Association of European Lawyers.

Late Peter L. Simani
Deceased on
21st Sepember 2013

Samuel K. Rutto
Retired on
2nd April 2014

Mr. Samuel K. Rutto holds a Master of Business Administration (MBA) in Management Information System from the University of Nairobi and a Bachelors Degree in Telecommunication and IT from Kenyatta University.

He also possesses PC Engineering A+ and Networking N+ Certification. He was appointed to the CCK Board on 5th December 2012 for a three-year term.

Before the enactment of the Kenya Information and Communications (Amendment) Act 2013, the Authority, then Communications Commission of Kenya had a Board of Directors who served for most of the reporting period 2013-14. The board was retired in April 2014. In line with the State Corporations Act, Principal Secretaries from the Ministries of Information Communications and Technology, National Treasury and Interior and Co-ordination of National Government were also members of the CCK Board and were retained on the current Board of Directors.

Mr. Francis Ngesa holds a Master of Arts (Economics), Bachelor of Philosophy (Economics) and Bachelor of Education in Economics.

Mr. Ngesa was appointed to the then CCK Board on 22nd May 2013 for a three-year term.

Francis Ngesa
Retired on
2nd April 2014

Christopher Kariuki
Alternate Director,
Ministry of Interior &
Coordination of
National Government.
Retired in November 2013

At the time of his appointment, Mr. Christopher Kariuki was the Chief Financial Officer in the then Ministry of State for Provincial Administration and Internal Security and Alternate Director to the Permanent Secretary, Provincial Administration and Internal Security. He holds a Bachelor of Education from the Kenyatta University and an MBA in Finance from the University of Canberra, Canada. He was appointed alternate director on 26th August, 2011 where he served until November, 2013.

Mr. John Omo holds a Master of Laws degree from the University of Sheffield, UK, and a Bachelor's degree in Law from the University of Nairobi. He is the Director of Legal Services at the Authority. He served as the Secretary to the Board until 2nd January 2014.

Mr. John Omo
Secretary to the Board until
2nd January 2014

Amb. Bruce Madete, MBS
Alternate Director,
Ministry of Information
Communications & Technology.
Retired on 25th November 2013

Amb. Madete was appointed the Alternate Director to the Permanent Secretary in the Ministry of Information and Communication on 25th April, 2012. At the time he was the Senior Director of Administration in the Ministry of Information and Communications. He has since retired. He holds a Bachelor of Arts (B.A) Honours in Government and Linguistics from the University of Nairobi. His post graduate studies include a District Officer's Paramilitary Course, Advanced Public Administration, Management of Information Systems and Strategic Leadership and Management. He served until November, 2013.

Thank you

for giving us an opportunity to serve you

CHAIRMAN'S OVERVIEW

On behalf of the Board of Directors, Management and Staff of the Communications Authority of Kenya (CA), I am happy to present to you the Authority's Annual Report for the year ended 30th June, 2014 as required under section 22 (1) of the Kenya Information and Communications Act, 1998 (KICA).

We in Kenya are not spared the global regulatory trends and it may seem that we are forever on a treadmill to stay at the forefront of these trends and at the same time set our own benchmarks in terms of regulation in the public interest.

Across the world, the consumer or end user is often placed in the context of a consumer revolution where consumers becoming ever more savvy about the products and services for which they pay their hard earned money. In Kenya, the scenario is not any different. No doubt here it must be underlined that during the period under review, the Authority addressed the issue of fixed-line and mobile charges and took action to bring down interconnection rates by implementing the second last phase of the Determination No. 2 of 2010.

Among our multifarious functions is the very pertinent one of facilitating the development of e-commerce. The year under review saw the launch of the National Public Key Infrastructure project as a mechanism for encouraging online business and designation of the Authority as a Root Certification Authority.

Taking a lead role in enhancing the security of Kenya's cyber space, the Authority not only advised the policy maker on the issue of Cybersecurity but also fully participated in the development of the National Cybersecurity Strategy which defines Kenya's cyber security vision, key objectives, and commitments to support national priorities of ICT growth and protection of critical information infrastructures.

Also, the enhanced independence and role of the Authority following the recent amendments to KICA, has come with more responsibilities. Our future actions will be geared towards overcoming challenges resulting from the implementation of the amended law as well as technological advancement, growth in ICTs and competition in the sector. We shall also take forward the issue of the Universal Service Fund to further bridge the digital divide and democratise access to information.

We, at the CA, are alive to the fact that our sector is not only an industry in its own right but also a vital support for almost all industries that contribute to the national wealth. Conscious of the critical importance of ICTs, the Authority will invest more in capacity building in the future to make for a more robust, professional, confident and vigilant regulator.

On behalf of the Board of Directors, I would like to express my appreciation to the Director General and the CA staff for the work put in during the year under review as we look forward, together, to an even more fulfilling year.

Ngene B. Gituku

Chairman of the Board

Thank you

DIRECTOR GENERAL'S FOREWORD

The year under review has seen salient changes in the country's ICT sector, key among them the enactment of the Kenya Information and Communications (Amendment) Act, 2013. The Act changed the regulator's identity to the Communications Authority of Kenya and at the same time provided it with independence from political, commercial or government interests.

This change in identity necessitated an overhaul of the former brand and all its applications. The new brand was launched on 24th June 2014 at an event that was officiated by H.E. President Uhuru Kenyatta. The Authority carried out a media campaign to sensitise the public and key stakeholders of this change.

The world continues to experience big changes in ICTs, as people, processes, data and things become increasingly connected. Policymakers are looking towards ICTs as one of the key sources of new opportunities to foster innovation and boost economic and social prosperity. According to the 2014 Economic Survey, the contribution of the Post and Telecommunication sub-sector to the country's GDP increased to KES 76.2 billion in 2013 compared to KES 71.7 billion in 2012. This growth is expected to remain as ICTs continue to permeate other sectors of the economy.

More Kenyans continued to access ICT services with 32.2 million mobile subscriptions recorded, representing 79.2 percent penetration. Internet users were estimated to be 22.3 million, while total broadband penetration went up to 7.59 percent. Access to mobile telephony services, and especially through smart phones, is a prominent contributor to the rise in internet access and broadband penetration.

Globally, mobile broadband was the fastest growing segment; however, broadband penetration levels in the country remained lower than African and Global levels which the ITU recorded as 26.7 percent in December 2013. The National Broadband Strategy launched during this financial year has outlined initiatives that will increase broadband penetration in the country.

Electronic Commerce services are gaining momentum the world over and the postal and courier sector is a vital contributor to this growth. The Authority, in a bid to propel the growth of the postal and courier sector to take advantage of the available opportunities, conducted a Postal and Courier Market Study during the year under review and presented the findings to sector players. The Authority will commence implementing the Study recommendations in the next financial year.

As the number of people accessing the internet grows, the number of cyber security incidences is also on the rise. The Authority, during the year took part in the development of the National Cybersecurity Strategy. The Strategy establishes an elaborate Cybersecurity governance structure including the national Kenya-Computer Incident Response Team/ Coordination Centre (KE-CIRT/CC). The (KE-CIRT/CC), which is resident at the CA Centre, was launched in June 2014 as the 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.

In cognizance of the new roles and responsibilities emanating from the Amended Act and the Constitution, which include equitable distribution of resources and access to services in all parts of the Country, the Authority will open an office in Eldoret and another in Mombasa. The Eldoret office branch will initially serve Western, Nyanza and North-Rift regions while the Mombasa office branch will serve the Coastal region. The offices will be in operation in the next financial year. Further, to cope with the increased responsibilities, the Authority increased its staff complement to 195 from 186.

To guide its operations for the next five years, the Authority launched its third Strategic Plan for the period 2013-18. In line with the dynamic nature of the ICT sector, the Strategic Plan reconfigures the Authority into a facilitator through five strategic pillars namely; enabling environment, market development, infrastructure and service development and institutional capacity.

In conclusion, the year under review has been one of accomplishment for the ICT industry. These achievements would not have been possible without the Authority's dedicated staff and partners. I also wish to express my gratitude to the Authority's Board of Directors and the Ministry of Information, Communications and Technology for their continued support.

Francis W. Wangusi, MBS

Director-General

for standing with us during our transition

1. PREAMBLE

This report provides the performance of the Communications Authority of Kenya (CA) for the financial year 2013/2014 (1st July, 2013 to 30th June, 2014). The Communications Authority of Kenya, formerly Communications Commission of Kenya (CCK), officially unveiled its new identity on 24th June, 2014 following the enactment of the Kenya Information and Communications (Amendment) Act 2013.

2. ESTABLISHMENT AND MANDATE OF THE AUTHORITY

The Communications Authority of Kenya is the ICT regulator whose existence and mandate is founded on 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. However, in response to technological advancement and convergence in the ICT sector, the Act was amended in 2009. The regulatory scope of the Authority includes:

1. Licensing all systems and services in the communications industry, including telecommunications, postal/courier and broadcasting;
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); and
9. Monitoring the activities of licensees to enforce compliance with the licence terms and conditions as well as the law.

Kenya Information and Communications (Amendment) Act, 2013

Following the promulgation of the Constitution of Kenya, 2010, various pre-existing laws of Kenya were subjected to amendments to align them to the new constitutional dispensation including the Kenya Information and Communications Act, 1998.

Articles 33 and 34 of the Constitution provide a broader framework for governance, licensing and regulation of ICTs. In particular, the Constitution required Parliament, within a period of three (3) years from the date of promulgation of the Constitution, to enact legislation that provides for the establishment of a body to regulate the ICT sector, which is independent of control by government, political or commercial interests and its composition reflects the interests of all sections of the society.

This is the background against which KICA was reviewed culminating in the enactment of the Kenya Information and Communications (Amendment) Act, 2013. The amended law brought with it a raft of changes with respect to administration of the regulatory body and most fundamentally the regulation of the ICT sector as follows:

a) Establishment of the Authority

1. Establishes the Communications Authority of Kenya to replace the Communications Commission of Kenya;
2. Provides independence of the Authority from control of Government, political and commercial interests; and
3. Enjoins the Authority to adhere to national values and principles of governance as provided for in Article 10 and 232 of the Constitution respectively.

b) Board of Directors

The amended law establishes a Board consisting of a Chairperson and 10 members. It also sets out eligibility criteria, qualifications and elaborate appointing and removal procedures for the Board of Directors.

c) Mandate of the Authority

In addition to the mandate above, the amended law now empowers the Authority to:

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

Other important governance aspects of the amendment law include:

1. Renaming of the Communications Appeals Tribunal as Communications and Multimedia Appeals Tribunal and expanding its mandate to include adjudication of disputes under the Media Council Act; and
2. The establishment of a new Universal Service Advisory Council (USAC), appointed by the Cabinet Secretary from amongst persons selected by the Public Service Commission, whose role is to provide strategic policy guidance for the administration and implementation of the Universal Service Fund.

3. CORPORATE GOVERNANCE

a) Function 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 of Directors 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 Authority;
(ii) Setting the vision, mission and values of the Authority;
(iii) Developing strategies to achieve the Authority's mandate;
(iv) Determining key performance indicators of 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.

b) Composition of the Board

The Board comprises 11 members consisting of the Chairperson, the Director General; the Principal Secretaries to the National Treasury, Ministry of ICT and Ministry of Interior and Coordination of National Government, and seven other directors, all of whom are non-executive.

The chairperson is appointed by the President while the seven directors are appointed by the Cabinet Secretary in the Ministry of ICT. Persons eligible to be appointed to the Board must be citizens of Kenya 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. He is, on behalf of the Board, responsible for the day-to-day affairs of the Authority.

c) 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 11 meetings.

d) 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 formed the following Committees:

(i) The Finance Committee

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

(iii) The Staff Committee

This Committee consists of five members. It is responsible for human resources and administrative matters. The Committee held three 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.

e) Universal Service Advisory Council (USAC)

Apart from the four committees mentioned, the Kenya Information and Communications Act, 1998 created USAC to advise the Board on matters related to the Universal Service Fund (USF). The Council members appointed in May 2014 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.

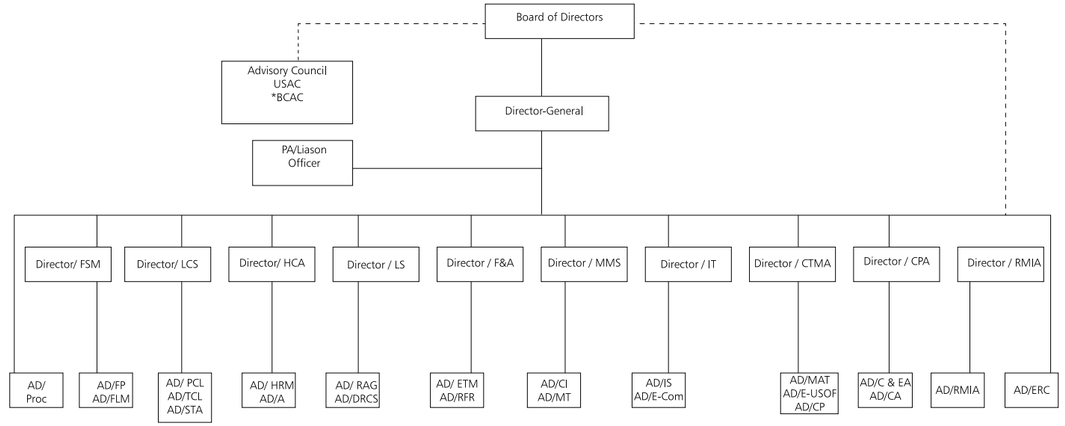
f) Capacity Building

As a practice, the Board of Directors undergoes training on corporate governance and ICT regulatory issues.

During the year under review, each Director attended at least one of these events: 8th Internet Governance Forum, 48th Meeting of ICANN, ITU Telecom World training program, Universal Postal Union (UPU) Administrative and POST EXPO Forum among others.

These trainings enhanced the Directors' understanding of the ICT industry and enabled them to continuously develop appropriate strategies necessary for effective sector regulation.

4. ORGANISATION STRUCTURE



**Section 19 of the Kenya Information and Communication (Amendment) Act 2013 repealed the establishment of the Broadcasting Content Advisory Council (BCAC). The Authority now undertakes its functions.*

KEY	
BCAC	- Broadcasting Content Advisory Council
USAC	- Universal Service Advisory Council
D/FSM	- Director/Frequency Spectrum Management
D/MMS	- Director/Multimedia Services
D/IT	- Director/Information Technology
D/CTMA	- Director/Competition, Tariffs & Market Analysis
D/LCS	- Director/Licensing, Compliance & Standards
D/CPA	- Director/Consumer & Public Affairs
D/HCA	- Director/Human Capital & Administration
D/F&A	- Director/Finance & Accounts
AD/PROC	- Assistant Director/Procurement
D/LS	- Director/Legal Services
D/RMIA	- Director/Risk Management & Internal Audit

Chapter - 1 MACROECONOMIC ENVIRONMENT

1.1 Global Economy

In 2013, the global real Gross Domestic Product (GDP) expanded at a marginally lower rate than projected. It expanded by 3 percent compared to 3.1 percent in 2012. According to the 2013-2014 Global Competitive Report, the global economy continues to slowly emerge from the one of the worst economic crises post-world war II, and is expected to continue on this upward trajectory. This has largely been facilitated by the recovery of advanced economies. Moreover, emerging and developed economies have also been important drivers in the global economic recovery. As a result, the nature of the relationship between advanced economies and emerging ones has changed, whilst emerging and developing countries have created stronger ties among themselves.

The World Economic Outlook (WEO) by the International Monetary Fund (IMF) projected that, in 2013, the Euro Zone would contract by 0.4 percent. However, contrary to this projection, the Zone showed signs of recovery from recession. Further, the report projected that the United States' economy would recover more strongly due to a tighter fiscal stance as well as continued cuts in government spending. In the emerging market economies, better economic activity could be attributed to an export rebound, whilst the Middle-East and North African countries' economies gained momentum.

Increased trade and investments with countries in emerging economies and expansion in infrastructure, has seen the growth in Sub-Saharan Africa expand and was estimated at 5.0 percent in 2013, compared to 4.9 percent in 2012. Growth in the East African Community (EAC), which was estimated at 6.1 percent in 2013, up from 5.3 percent in 2012, could be attributed to increased trade and investments with emerging economies, reduced inflation in the region, as well as improvement in the regions' current account balance.

The economic outlook for most countries and the overall global outlook is promising. Global activity and world trade continues to increase, largely due to demand from advanced economies. According to a GSMA report of 2013, a short term focus by some Sub-Saharan governments on maximising tax revenues risked stifling the potential of the ICT industry to drive both economic and social development across the region. Further, despite the stronger economic ties between advanced economies and emerging and developing economies, the latter should manage the risk of capital flow reversals.

1.2 Global Information and Communication Technology Industry

Today, the world is experiencing the biggest changes in Information and Communication Technologies (ICTs), as people, processes, data and things become increasingly connected. The "Internet of Everything" has a big role to play as the world slowly emerges from the worst financial and economic crisis in decades. Policymakers in advanced, emerging and developing economies are looking towards ICTs, since they are one of the key sources of new opportunities to foster innovation and boost economic and social prosperity.

By the end of 2013, The International Telecommunication Union (ITU) recorded 6.7 billion mobile cellular subscriptions worldwide. Growth of mobile telephony in the developing world has been a major contributor to the continuous growth in worldwide mobile cellular subscriptions. Globally, mobile cellular penetration stood at approximately 96 percent, whilst it was recorded at 120 percent and 90 percent in developed and developing countries respectively, indicating that the market continued to approach saturation levels.

According to ITU estimates in 2014, globally, there are approximately 2.9 billion people using the internet representing 40 percent of the world's population. Internet user penetration in developed countries stands at 78 percent vis-à-vis 32 percent in developing countries. The European region continues to enjoy the highest internet penetration in the world (75 percent), followed by Americas (66 percent), Arab States (41 percent), Asia and Pacific (32 percent) and Africa (19 percent).

Mobile broadband*[1] remained the fastest growing segment with continuous impressive high global growth rates in the year under review. Active broadband subscriptions grew from 1.56 billion in 2012 to 1.93 billion in 2013. ITU estimated that the number of mobile broadband subscriptions would reach 2.3 billion globally, by the end of 2014. Global active broadband penetration stood at 32 percent, while penetration rates in the developed and developing world stood at approximately 84 percent and 21 percent respectively. Africa continued to lead in mobile broadband growth.

Globally, fixed broadband services grew marginally. Fixed broadband subscriptions grew from 635 million in 2012 to 673 million in 2013. This translates to a marginal increase in penetration from 9.0 percent in 2012 to 9.4 percent in 2013. Similarly, fixed broadband penetration rates grew marginally in 2013 in both developed and developing countries, registering 26.6 percent and 5.8 percent respectively. Africa continued to record the lowest levels of fixed internet subscriptions globally.

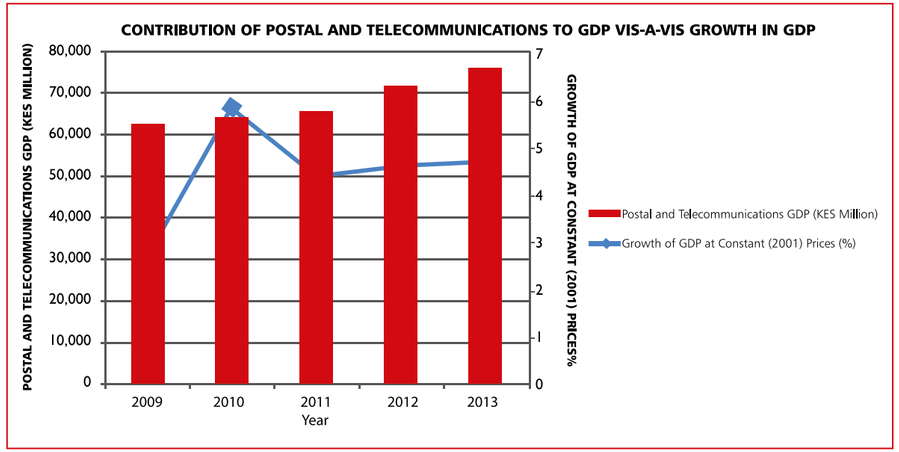
In Sub-Saharan Africa, the mobile phone continues to revolutionalise the uptake of ICT services such as mobile telephony, mobile broadband and mobile money transfer services. The availability of affordable data-enabled phones has further seen the huge impact of the mobile phone on socio-economic development across the region. According to a 2013 GSMA report on Sub-Saharan Africa mobile economy, mobile contributed to over 6 percent of Sub-Saharan Africa's GDP, higher than any other comparable region globally. This is forecast to rise to over 8 percent of regional GDP by 2020.

1.3 Local Environment

According to the 2014 Economic Survey, Kenya's Gross Domestic Product (GDP) was estimated to have expanded marginally to 4.7 percent in 2013 up from 4.6 percent in 2012. The macroeconomic environment remained fairly stable for the better part of the year despite uncertainty due to the general elections in the first quarter of 2013, rising insecurity and erratic weather patterns. Transport and communication (9.1 percent of GDP), wholesale and retail trade (10.2 percent of GDP), taxes on products and manufacturing (8.9 percent of GDP), were the key drivers of growth in 2013. Although the agricultural sector was negatively impacted by erratic weather patterns and fall in international prices, it accounted for 25.3 percent of Kenya's GDP in 2013.

In 2013, the Transport and Communication sector recorded an improved growth of 6.0 percent, compared to a revised rate of 4.7 percent in 2012. Post and telecommunication contribution to GDP increased from KES 71.7 billion recorded in 2012 to KES 76.2 billion in 2013.

Figure 1.1 Contribution of postal and telecommunications to GDP vis-à-vis growth in GDP



Source: Communications Authority of Kenya

*[1] ITU defines broadband as download speeds of atleast 256 Kilobits per second (Kbits/s)

The growth in the postal and telecommunications sub-sector at constant prices for the year 2013 was recorded at 9.3 percent compared to 6.7 percent recorded in the year 2012. Table 1.1 shows a summary of a selection of economic indicators for the past 5 years.

Table 1.1 Summary of economic indicators for the past 5 years

Indicator	2009	2010	2011	2012+	2013*
Population (Millions)	37.7	38.5	39.5	40.7	41.8
GDP at Market prices (in KES .Min.)	2,366,984.2	2,553,733.0	3,048,867.0	3,403,534.4	3,797,987.8
Growth of GDP at Constant (2001) Prices (%)	2.7	5.8	4.4	4.6	4.7
GDP Per Capita (in 2001 Prices) (KES.)	36,962.0	38,346.0	38,941.0	39,620.5	40,345.2
Transport and Communications GDP at Current Prices (KES. Millions)	234,752	257,339	303,258	328,152	345,616
Postal and Telecommunications GDP (KES. Millions)	62,508	64,413	65,923	71,729	76,167
Transport and Communication as % of GDP	9.9	10.1	9.9	9.6	9.1
Postal and Telecommunications as % of GDP	2.6	2.5	2.2	2.1	2.0
Growth of Transport and Communication at Constant (2001) Prices (%)	6.4	5.9	4.7	4.7	6.0
Growth of Postal and Telecommunications at Constant (2001) Prices (%)	10.0	4.5	4.3	6.7	9.3
Private Sector Wage Employment in Information and communication ('000s)	70.4	76.2	78.8	83.9	90.9
Public Sector Wage Employment in Information and Communication ('000s)	1.8	1.7	1.7	1.8	1.8
Consumer Prices, Annual Average [Index Numbers February 2009=100]	102.10	106.27	121.17	132.5	140.1
CPI Annual Inflation Rate (Overall) %	10.5	4.1	14.0	9.4	8.2
+Revised figures *Estimated figures					

Source: Economic Survey 2014, Government of Kenya

The communications sub-sector continued to thrive during 2013, especially in the mobile telephony and internet sub-markets. Mobile telephony continued to grow, with the mobile subscriber base growing from 30.5 million in June 2013 to 32.2 million in June 2014 while mobile money transfer services penetration marginally increased from 61.50 percent to 62.3 percent during the same period.

The year 2013 saw the highest number of Internet users ever recorded estimated at 21.3 million. This represented a 31.02 percent increase up from about 16.3 million Internet users in 2012. This impressive growth rate could 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 gadgets such as smartphones and tablets, as well as the increased affordability of internet due to special offers and affordable bundled internet provided by the operators. Internet penetration rates have been on the steady rise, there is still prospect for growth within this sub-market. Out of the available bandwidth capacity, only 42.4 percent is utilised, which shows that there is still capacity for growth in the Internet sub-market in Kenya.

Despite numerous challenges, the Authority continued to implement initiatives intended to ensure that the country meets the ITU analogue switch-off deadline, which is set for June 2015. In December 2013, the Authority issued a determination that saw the prices of digital terrestrial transmission signal distribution prices reduce drastically. Signal Distributors were obligated to charge content service providers KES 125,993.50 per Mbit for Nairobi and KES 93,202.75 per Mbit for other sites in Kenya. This move was aimed at encouraging more content service providers to roll out their content on the digital platform. Further, the Authority continued to grant Authorisations for digital TV broadcasting content service provision licences. On the other hand, the two signal distributors; Pan Africa Network Group (Kenya) Ltd (PANG) and Signet continued to roll out their national signal distribution networks across the country as obligated by the Authority, which puts Kenya in a position of readiness to commence analogue switch off.

The IMF in its 2014 World Economic Outlook, projects that the Global economy will expand by 3.7 percent in 2014, largely on account of the recovery in the advanced economies. World trade is also expected to expand at 4.8 percent in 2014; this may therefore see Kenya's volume of exports increase significantly, backed by heightened global demand for goods. As the Euro area is turning from recession to recovery, growth is expected to strengthen to 1 percent in 2014, and exports are expected to heavily contribute to this growth. Growth in emerging markets and developing countries is expected to increase to 5.1 percent in 2014 and further to 5.4 percent in 2015. In Sub Saharan Africa, growth is projected to reach 5.3 percent in 2014 owing to stronger domestic demand, higher production of mineral resources and a thriving agricultural and service sector.

Despite the prospected growth, the IMF advocates for various measures to be put in place to ensure that growth remains on an upward trend and the projections are met. These include improving the efficiency of public expenditure, implementing structural reforms aimed at promoting economic diversification and investing in strategic projects to develop energy supply and critical infrastructure.

CHAPTER II: MANAGEMENT OF SCARCE RESOURCES

Radio frequency spectrum is a national and natural resource that is held in trust and managed by the Authority on the behalf of the people of Kenya. The spectrum resource should be managed effectively and utilised efficiently.

2.1 Frequency Management

The Authority exercised its mandate to plan, allocate, assign, issue licenses, monitor, carry out surveillance and coordinate the usage of the radio frequency spectrum resource to ensure optimal and efficient utilisation.

2.1.1 Fixed Links

To facilitate provision of diverse communications services, the Authority assigned a total of 654 frequencies to various operators for deployment of new links. This was a 4.14 percent increase from the 628 frequencies assigned in the previous financial year. This is attributed to the increased growth of cellular phone networks in the rural areas especially through the use of unprotected frequency band. Overall, the number of fixed links, increased by 370, resulting in a total of 5,834 links.

The total number of fixed links decommissioned in the year under review was 284 up from 216 decommissioned during the FY 2012/13. This growth is attributed to the increased availability of optic fibre networks. Table 2.1 below shows status of fixed links in the country.

Table 2.1: Fixed Links

Frequency Band	Number of New Links			No. of Decommissioned Links			Cumulative No. of Fixed Links		
	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
5GHz	-	170	202	-	-	-	-	170	397
6GHz	8	-	6	0	-	-	113	113	119
7/8GHz	73	80	97	15	35	76	1,220	1,265	1,286
11 GHz	-	-	-	0		-	-	-	-
13GHz	99	13	21	0	30	-	835	818	839
15GHz	171	198	192	37	151	206	2,376	2,423	2,409
18GHz	0	-	4	-	-	2	8	8	10
23GHz	187	44	64	3	-	-	505	549	614
38GHz	59	16	42	0	-	-	102	118	160
Total	**597**	**521**	**628**	**55**	**216**	**284**	**5,159**	**5,464**	**5,834.00**

Source: Communications Authority of Kenya

2.1.2 Fixed Wireless Access Systems

Fixed Wireless Access (FWA) systems in the 1.7 GHz, 3.3 GHz and 3.5 GHz frequency bands decreased from 637 to 616. Additionally, the number of transceivers decreased from 2,504 to 2,423 in 2013/14. This decrease is attributed to the preference of deploying the unprotected frequency bands whose equipment is cheaper and attracts much lower frequency fees than protected and exclusive frequencies such as 3.3 and 3.5 GHz. The impact of this has been increased roll out and deployment of fixed wireless using unprotected frequency band and hence data services penetration has been on an increase in both the rural and urban areas.

Table 2.2 below shows the status of Fixed Wireless Access Systems.

Table 2.2: Fixed Wireless Access Systems

	Number of Sites			Number of Transceivers		
Frequency Band	**2011/12**	**2012/13**	**2013/14**	**2011/12**	**2012/13**	**2013/14**
1.7 GHz	23	23	23	276	276	276
3.3 GHz	99	103	107	308	270	232
3.5 GHz	536	511	486	2,001	1,958	1,915
Total	**658**	**637**	**616**	**2,585**	**2,504**	**2,423**

Source: Communications Authority of Kenya

2.1.3 Satellite Systems

The Authority licensed six Very Small Aperture Terminals (VSAT) in the financial year 2013/14 compared to three in the financial year 2012/13. The VSAT were assigned frequencies in the 6 GHz and 14 GHz bands.

2.1.4 Mobile Cellular Services

The total number of transceivers deployed for the provision of 2G services increased by 4.62 percent from 80,894 in the FY 2012/13 to 84,631 in the FY 2013/14, while those used for 3G services rose by 20.4 percent from 12,775 in the FY 2012/13 to 15,381 in the FY 2013/14 as shown in Table 2.3 below.

The increase was attributed to continued expansion of coverage area and beefing up of the capacity in the urban and rural set up for voice and data services. This increase is a reflection of the global trend where data services are on an upward trajectory. The decrease in frequency fee by the Authority in the previous financial year also contributed towards the expansion of the voice and data service as the operators ploughed back the savings arising from the reduced frequency fee into the roll out of the services. The increase has impacted the economy positively as a larger percentage of the population now have access to voice, data and value added services such as mobile money transfer services.

Table 2.3: Mobile Cellular Systems

Operator	Technology	2009/10	2010/11	2011/12	2012/13	2013/14
Essar Telecom Kenya Limited	2G	3,639	4,500	5,500	5,500	5,500
	3G	-	-	-	-	-
Telkom Kenya Limited	2G	3,458	4,492	6,230	6,391	6,903
	3G	-	1,254	2,269	2,375	3,056
Airtel Networks Kenya Limited	2G	6,966	8,791	13,452	14,788	15,981
	3G	-	162	973	1,096	1,686
Safaricom Limited	2G	39,048	48,026	46,702	54,215	56,247
	3G	3,568	3,623	78,113	9,304	10,639
Total No. of Transceivers	2G	53,111	65,809	71,884	80,894	84,631
	3G	3,568	5,039	11,053	12,775	15,381
(-) Means that the licensee had not taken up a 3G license.						

Source: Communications Authority of Kenya

2.1.5 Private Land Mobile Services

As shown in Table 2.4 below, the Authority licensed 112 fixed stations and 565 Mobiles/Portable stations.

Table 2.4: Additional Private Land Mobile Stations

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

Source: Communications Authority of Kenya

During the year, there was a reduction in the uptake of the VHF radio communication service due to a decrease in oil exploration activities as compared to the previous year.

At the end of the financial year, the cumulative total number of authorised private radio-communication networks was 4,365 fixed stations and 23,005 mobile and portable stations as shown in Table 2.5. Additionally, 590 Aircraft radio licences and 32 Amateur radio licenses were issued.

Table 2.5: Number of Private Radio-communication Stations

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

Source: Communications Authority of Kenya

2.1.6. Radio Alarm Services

The Authority licensed 17 new alarm networks compared to 37 during 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 of 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

Financial Year	No. of Alarm Networks	No. of Alarm Units
2007/08	171	28,396
2008/09	175	31,680
2009/10	179	30,429
2010/11	218	32,068
2011/12	245	38,360
2012/13	282	33,730
2013/14	299	32,023

Source: Communications Authority of Kenya

2.1.7 Management of the Digital Dividend and Mobile Broadband

Digital dividend is the UHF spectrum that will become available after the global analogue TV broadcasting switch off by June 2015. The World Radio Conference (WRC) in 2007 made a resolution on the digital dividend that identified 790-862 MHz band for wireless mobile broadband services. Following this decision, ITU embarked on a study to determine the actual channelisation plan. Subsequently, WRC in 2012 resolved to expand the band to include 694-790 MHz.

In view of the WRC 12 decision, the Authority commenced the process of migrating digital TV broadcasting channels earlier assigned within the 694-862 MHz band to channels in the 470-694 MHz band which is below CH 48. The Authority also closely monitored the network rollout progress of both PANG and SIGNET to ensure capacity availability for DTT countrywide in order to encourage analogue broadcasters to simulcast in readiness of the eventual switch-off.

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.

During the FY 2013/14, the Authority continued to enforce the procedures and guidelines for the Management and Administration of the Short Codes, Premium Rate Numbers and the Toll Free numbering resource. This involved migration of all existing short codes to a new platform to ensure compliance with the guidelines.

2.2.1 Assignment of Numbering Resources

During the FY 2013/14, the Authority assigned Numbering blocks (Mobile Telephony Numbers, Fixed Telephony and Premium Rate Numbers) to operators for the provision of end-user services, signalling point codes for facilitation of interconnection, and short codes (Toll free) for public use.

In the Mobile Telephony category, four million numbers were issued of which three million were assigned to three newly licensed Mobile Virtual Network Operators (MVNOs). In addition, the MVNOs were each assigned mobile network codes, mobile number portability routing codes and issuer identification numbers.

In the fixed telephony category, the Authority assigned a total of 247,000 numbers compared to 111,000 numbers assigned the previous year. This is as a result of uptake by Application Service Providers in the deployment of VOIP services. For the 0900 Premium Rate Number category, no numbers were assigned. This is attributed to the fact that the operators were still utilising the numbers they had been assigned in the previous year.

The Authority also assigned a total of 1,100 toll free numbers to operators for provision of services to the public. Further, blocks of Short Codes were assigned to operators for secondary assignment to Content Service Providers (CSPs) and end users. In line with the Management and Administration of the Short Codes the guidelines, a total of 10,208 Short Codes were assigned.

The numbering resources assigned by category are shown in Table 2.7.

Table 2.7: Numbering Resources Assigned

Category	2009/10	2010/11	2011/12	2012/13	2013/14
Number Blocks Assigned					
Mobile Telephony Numbers	4,000,000	11,000,000	3,000,000	2,000,000	4,000,000
Fixed Telephony Numbers	900,025	20,000	4,000	111,000	247,000
0800 Toll Free Numbers	1	20	1,024	2	1,100
0900 Premium Rate Numbers	1,000	16	34	7,001	-
Bulk SMS Short Codes	-	-	-	17,500	10,208
Other Numbering Resources Assigned					
National Signalling Point Codes	1	2	2	2	1
International Signalling Point Codes	1	-	1	-	-
Network Colour Codes	-	-	-	-	-
Short Codes (Assigned directly)	-	5	5	11	4
Issuer Identification Number	-	-	-	-	3
Mobile Network Code	-	-	-	-	3
Mobile Number Portability Routing Code	-	-	-	-	3

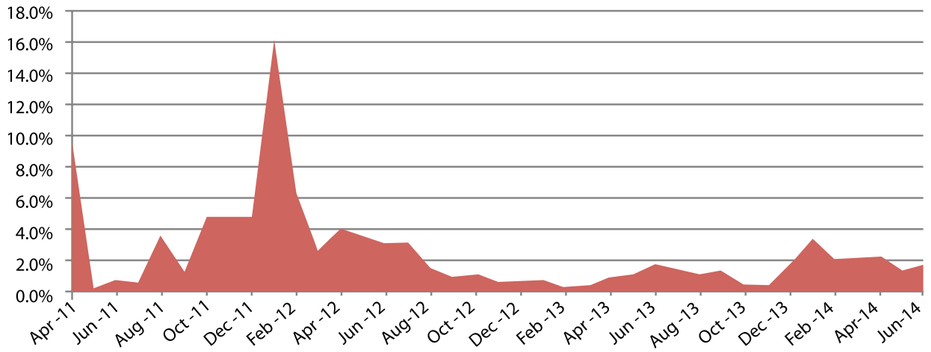
Source: Communications Authority of Kenya

2.2.2 Mobile Number Portability

Since the introduction of Number Portability in April 2011, its uptake peaked in January 2012 but thereafter declined to reach its lowest in November 2013.

However, there has been a gradual increase in demand for the service since January 2014 as illustrated in the Figure 2.1 below.

Figure 2.1: Porting incidences



Source: Communications Authority of Kenya

2.2.3 Maritime Mobile Service Identity Number

This number is useful in tracking vessels and ensuring safety while at sea. It is a requirement that all maritime vessels plying international waters and possess the functionality of the 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. In the year ending 30th June 2014, the Authority assigned six MMSI numbers bringing the total number of assignments to 25.

2.2.4 Management of the dot KE Domain Name Registry

The Dot KE Domain Name is a critical Internet resource and is also Kenya's unique identity on the Internet. As at 30th June, 2014, a total of 32,508 domain names had been registered.

Table 2.8: Dot Ke Domains Registered in Kenya

Subdomain	Use	No. of Domains	Percentage (%)
CO.KE	Companies	29,374	90.36%
GO.KE	Government Entities	301	0.93%
OR.KE	Non Profit Making Organisations	1,193	3.67%
AC.KE	Institutions of Higher Education	773	2.38%
SC.KE	Lower and Middle Level Institutions	119	0.37%
NE.KE	Personal Websites and E-mail	65	0.20%
ME.KE	Personal Websites and E-mail	546	1.68%
MOBI.KE	Mobile Content	43	0.13%
INFO.KE	Information	94	0.29%
Total		**32,508**	**100%**

Source: KENIC - www.kenic.or.ke

H.E President Uhuru Kenyatta receives a cheque of 27million US Dollars from CA Board Chairman, Mr. Ngene Gituku. The cheque was licence renewal fee for Safaricom Kenya Ltd

H.E. President Uhuru Kenyatta launches the National Public Key Infrastructure and the Kenya Computer Incident Response Team Coordination Centre (KE-CIRT/CC) at the CA Centre. Looking on is CA Director General Mr. Francis Wangusi.

The KE-CIRT/CC is mandated to coordinate responses and manage cyber security incidents nationally.

CHAPTER III: PROMOTING COMPETITION AND INNOVATION

Management and promotion of competition is fundamental in ensuring innovation in the ICT industry. Increased market efficiency results in better welfare of communications service for consumers through fair pricing and increased choice of service. To facilitate market vibrancy, the Authority continued licencing new entrants into the ICT sector, enforcing KICA and attendant Regulations, and carrying out research in emerging trends in the dynamic ICT technologies. This year also saw the amendment to KICA, whose enforcement shall be pivotal to the promotion of competition and innovation in the ICT sector in the country.

3.1 Licensing and Network Expansions

In the FY 2013/2014, there was continued vibrancy in the uptake of new licenses and especially in the Telecommunications categories where the number of licensees increased from a total of 1,558 in the FY 2012/2013, to 1,866. The growth in the Postal/Courier license categories was somewhat muted with the total number of licensees increasing slightly from 214 in the FY 2012/2013 to 224 in the FY 2013/2014.

3.1.1 Telecoms Licensing

The Authority continued to license new players into the market. The total number of licensees under the Unified Licensing Framework (ULF) increased from 1,558 the previous year, to 1,866 in the FY 2013/14, representing 19.8 percent growth. There was a gradual increase in Technical Personnel, Telecommunication Contractors, Application Service Providers, Content Service Providers and Telecommunications Vendor categories. Table 3.1 provides a summary of the total number of licences and respective categories issued in the period ending June 2014.

Table 3.1: Cumulative Number of ULF Licences

Licence Category	2009/10	2010/11	2011/12	2012/13	2013/14
Telecommunications Contractors (TEC)	187	244	314	360	448
Technical Personnel (TP)	160	210	485	576	668
Submarine Cable Landing Rights (SCR)	3	3	3	3	3
International Gateway Systems & Services (IGS)	11	11	13	13	13
Application Service Providers (ASP)	58	80	105	122	133
Content Service Providers (CSP)	82	123	156	188	221
Network Facility Providers Tier 1 (NFP T1)	4	4	4	4	4
Network Facility Providers Tier 2 (NFP T2)	10	13	17	18	19
Network Facility Providers Tier 3 (NFP T3)	4	6	10	13	15
Business Process Outsourcing (BPO)	25	32	39	39	39
Telecommunications Vendors (TEV)	63	115	162	219	300
Landing Rights Authorisation for Global Mobile Personal Communications via Satellite (GMPCS)	3	3	3	3	3
Total	**610**	**844**	**1,311**	**1,558**	**1,866**

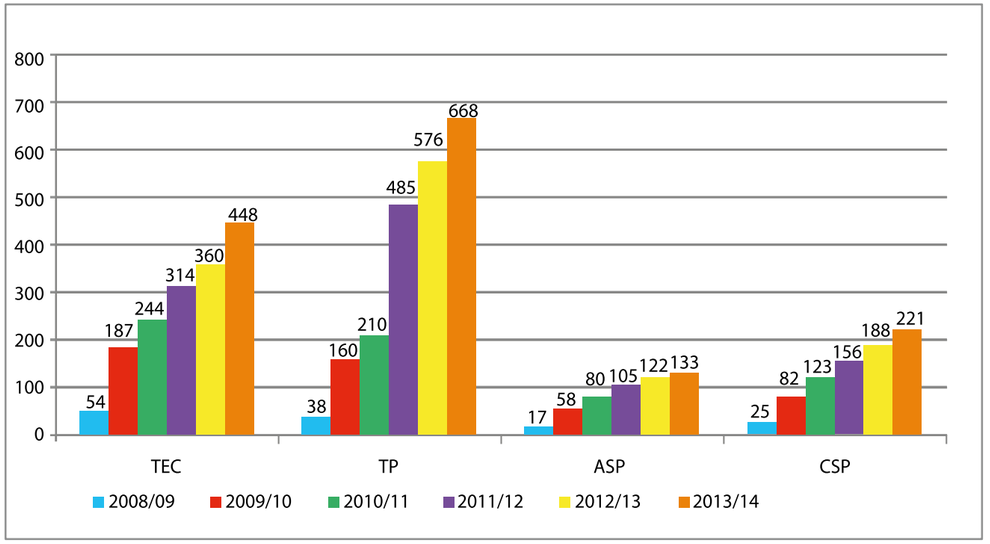
Source: Communications Authority of Kenya

Telecommunications Vendor and Telecommunications Contractor categories recorded the highest growth. This was attributed to increased demand for set-top boxes, which can only be sold by licensed TEVs, and demand for services from licensed contractors respectively.

On the other hand, there was a marginal increase in licences under the NFP Tier 2 and Tier 3 category. Major licences in the NFP Tier 1 remained stable. This category requires heavy capital investment and relies more on the availability of spectrum resources.

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

Figure 3.1 No. of Licence Applications



Source: Communications Authority of Kenya

From Figure 3.1, the growth in number of Technical Personnel (TP) was attributed to increased public awareness on the need to be licensed and the increased number of graduates in ICT fields, whereas the continued growth in the number of Content Service Providers (CSP) could be attributed to the innovations in the ICT sector.

The number of licensees in the old licensing framework continued to decline. This is apparent in Table 3.2 where the number of licensees in the old framework declined from 957 in 2012/13 to 949 in the FY 2013/14. This was attributed to some licensees migrating to the ULF while others are no longer in operation.

Table 3.2: Number of Licences under the Old Licensing Framework

Licence Category	2009/10	2010/11	2011/12	2012/13	2013/2014
Vendor and Contractor	831	825	656	645	643
Technical Personnel	261	252	217	214	209
Internet Service Providers	84	47	45	45	44
Value Added Service Providers	39	39	31	30	30
Public Data Network Operators	-	8	8	10	10
Local Loop Operators	-	10	10	10	10
Commercial VSAT (Hub Operators)	1	1	1	1	1
IBGO	5	1	-	-	-
DCNO	6	6	2	2	2
Total	**1,227**	**1,189**	**970**	**957**	**949**

Source: Communications Authority of Kenya

3.1.2 Postal Licensing and Network Development

The Authority licensed 10 new courier operators increasing the number to 224, up from 214 the previous year. The increase was attributed to sensitization of the public on the need to operate within the legislative framework.

Intra-country postal/courier operators continued to dominate the licence category of operators having increased from 123 to 130 in 2013/14 and accounting for 59.5 percent of the total number of licensed operators. This is shown in Table 3.3.

Table 3.3: Number of Licensed Postal and Courier Operators

Category of Operator	2009/10	2010/11	2011/12	2012/13	2013/14
Public Postal Licensee	1	1	1	1	1
International Operators	12	14	14	18	20
International Inbound Operators	9	11	13	13	13
Regional Operators	12	13	13	15	15
Intra-Country Operators	91	99	109	123	130
Intra-City Operators	33	37	39	43	44
Document Exchange Operators	1	1	1	1	1
Total	**159**	**176**	**190**	**214**	**224**

Source: Communications Authority of Kenya

Table 3.4: Postal and Courier Network Indicators

Network		2009/10	2010/11	2011/12	2012/13	2013/14
Postal Corporation of Kenya		1	1	1	1	1
Total Post Offices		700	697	634	622	622
Departmental Offices		504	501	477	476	476
Sub-Post Offices		196	196	157	146	146
Private Letter Boxes	Installed	414,756	427,900	431,181	432,000	432,000
	Rented	342,739	360,545	369,223	375,093	367,200
	Un-let	72,017	67,550	61,948	56,907	64,800
Letter Posting Boxes		890	890	752	890	890
Public Counter Positions		1,339	1,261	1,030	1102	1,102
Automated Public Counters		445	520	434	548	556
Non-Automated Public Counters		894	900	596	554	546
Stamp Vending Licensees		5,136	5,260	2,847	4,274	4,274
Stamp Vending Machines		280	280	280	280	280
Private Operator Outlets		601	635	683	707	707
Total Outlets (Post Offices + Private Operators Outlets)		**1,301**	**1,332**	**1,317**	**1,329**	**1,329**

Source: Communications Authority of Kenya

From Table 3.4, it is noted that the public postal operator continued to embrace new technologies as can be attested by the increase in the number of automated public counters from 548 to 556. The above trend has been as a result of the emergence of Huduma Centres; a one-stop shop of integrated government service delivery points at selected post offices countrywide.

3.1.3 National Addressing System

A National Addressing system (NAS) provides a unique identifying address to all residential and business premises. The benefits include facilitating mail delivery, promoting e-commerce, improving access across the country, emergency services (health, fire, police among others), Planning and managing essential services, enabling utility concessionaires to manage their networks more effectively and promoting revenue collection. The Government developed NAS standards in liaison with the UPU (Universal Postal Union) and successfully implemented a pilot project in the Nairobi Central Business District.

3.1.4 Licensing of Broadcasting Services

During the year, the Authority issued temporary authorizations to 24 broadcasters on the digital TV platform. The Authority also issued 2 (two) temporary authorizations for subscription management services and two (2) temporary authorizations for landing rights. The Authority has also been in pursuit of increased digital TV signal footprint by the licensed broadcasting signal distributors.

The Authority reviewed application forms, licence conditions and application evaluation criteria for various broadcasting licence categories to align them to KICA. It also developed a roadmap for licensing existing broadcasters under the new licensing regime.

During the year, the Authority developed and issued Service Level Agreement (SLA) guidelines to be used between Broadcast Signal Distributors (BSDs) and Broadcast Content Service Providers (BCSPs). It also reviewed Quality of Service requirements for broadcasting signal distributors.

3.2 Information and Communications Technology Services

3.2.1 Telecommunication Services

The telecommunications sub-sector posted moderate growth contributed by the growth of the mobile telephony industry, converse to the persistent decline in the fixed telephony industry. In a bid to boost effective competition, the Authority continued to license players in the NFP, CSP and ASP license categories that offered innovative and differentiated products and services.

3.2.1.1 Fixed Network Voice Services

The fixed voice service market has four operators namely, Telkom Kenya Limited (199,499 subscribers), Wananchi Group (Kenya) Limited (1,638 subscribers), Mobile Telephony Networks Kenya Limited (161 subscribers) and Liquid Telecommunications Kenya Limited (101 subscribers). The total number of fixed line subscriptions continued on a negative trend, as the number of subscribers fell from 216,469 in the FY 2012/13 to 201,394 in the FY/2013/14. Similarly, the wireline capacity also saw a decline from 362,627 lines to 340,005 lines during the same period. These are illustrated in Table 3.5

Table 3.5: Fixed network growth indicators

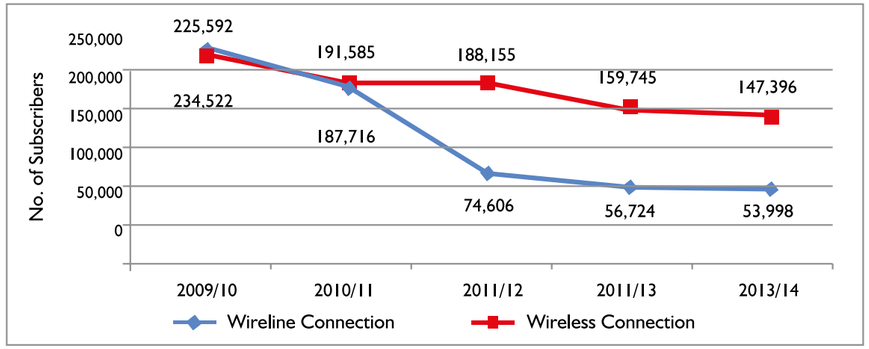
Financial Year	2009/10	2010/11	2011/12	2012/13	2013/2014
Wireline Capacity	421,528	400,764	380,135	362,627	340,005
Wireline Connections	234,522	187,716	74,606	56,724	53,998
Wireless Connections (Include LLO Subscribers)	225,592	191,585	188,155	159,745	147,396
Total Connections (Wireline and Wireless)	460,114	379,301	262,761	216,469	201,398
Urban Wireline Connections	227,486	182,084	72,368	54,758	50,481
Rural Wireline Connections	7,036	5,632	2,238	1,694	1,520
International Outgoing Traffic (Minutes)	14,761,211	11,455,952	20,058,628	16,457,407	16,498,989
International Incoming Traffic (Minutes)	38,550,399	31,866,685	17,796,496	14,444,467	12,427,119
Traffic to Mobile Networks (Minutes)	31,024,688	79,616,952	104,967,748	105,287,432	105,212,956

Source: Communications Authority of Kenya

As illustrated in Table 3.5 above, fixed wireline connections in both rural and urban areas reduced by 7.8 percent in the year under review, compared to 24.3 percent, recorded in the previous year.

Urban wireline and rural wireline connections stood at 50,481 and 1,520 respectively. Fixed voice service subscription trends are shown in Figure 3.2.

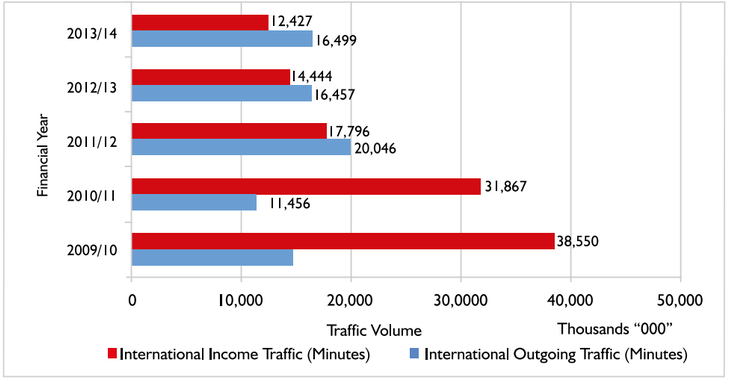
Figure 3.2: Fixed Subscriber Growth Trend in the Last Five Years



Source: Communications Authority of Kenya

In the year under review, international outgoing traffic for fixed voice saw a marginal increase of 0.25 percent up from the 17.95 percent decrease seen in the previous financial year. On the other hand, international incoming fixed voice traffic continued to drop, and saw a decrease of 1.4 percent. This is illustrated in Figure 3.3 below

Figure 3.3: Fixed Network International Traffic

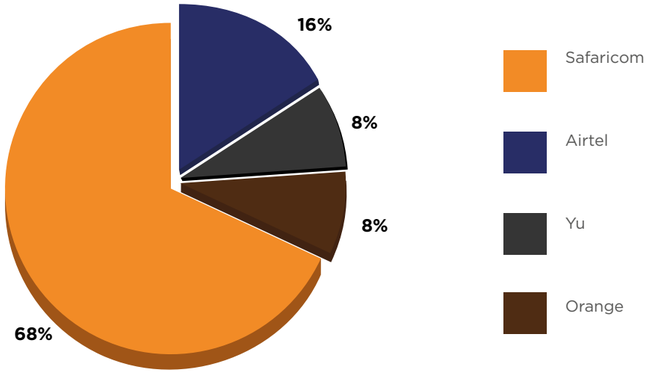


Source: Communications Authority of Kenya

3.2.1.2 Mobile Network Services

The mobile market segment in Kenya continued to see competition between the four mobile network operators; Safaricom Kenya Limited (Safaricom), Airtel Networks Kenya Limited (Airtel), Essar Telecoms Kenya Limited (yu), and Telkom Kenya Limited (Orange). Safaricom had the largest share of subscriptions with 29,928,450 subscribers by the end of June 2014, followed by Airtel with 5,068,765 subscribers, Orange with 2,685,368 subscribers and Yu with 2,563,810 subscribers. Their respective market shares are shown in Fig 3.4.

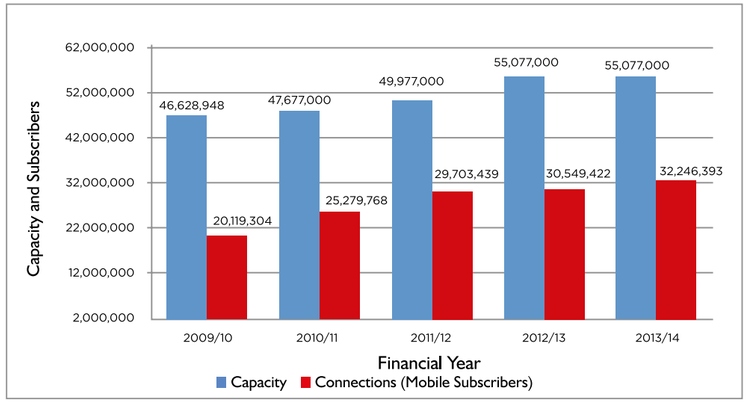
Figure 3.4: Mobile Network Services Market Share By Operator



Source: Communications Authority of Kenya

Mobile subscriptions grew from 30.55 million in the FY 2012/13 to 32.25 million in the FY 2013/14, representing a growth of 5.6 percent, which is double what was recorded last year. This growth is indicative of the continued uptake of mobile services. Moreover, operator's capacity remained constant in the year under review to stand at 55,077,000, similar to what was recorded in the previous year, as shown in Figure 3.5.

Figure 3.5: Mobile Operators Capacity and Subscribers



Source: Communications Authority of Kenya

Mobile penetration increased from 77.3 percent in the FY 2012/13 to 79 percent in the financial year 2013/14. Nonetheless, mobile penetration remained low compared to the global, developed countries and developing countries' penetration rates that stood at 93.1, 119.2 and 87.6 percent respectively, in December 2013.

In the past, year-on-year pre-paid subscriptions have out numbered post-paid subscriptions by far. This year was no exception, pre-paid subscriptions accounted for 98 percent of the total mobile cellular subscriptions whilst post-paid subscriptions accounted for 2 percent. This trend can be attributed to the income distribution patterns in Kenya, where the larger proportion of the population fall below the lower middle class category. This population forms majority of the mass market, and as such, low denomination calling cards are more attractive than the relatively more expensive payment plans offered on the post-paid service.

In the FY ending June 2014, Short Messaging Service (SMS) traffic increased by 86 percent to stand at 24.6 billion compared to 13.2 billion that was recorded in the previous year. This increase is shown in Table 3.6.

Table 3.6: Mobile Network Growth Indicators

Type	2009/10	2010/11	2011/12	2012/2013	2013/14
Capacity	46,628,948	47,677,000	49,977,000	55,077,000	55,077,000
No. of Subscribers	20,119,304	25,279,768	29,703,439	30,549,422	32,246,393
SMS	2,662,653,719	2,622,821,774	4,295,378,823	13,233,082,214	24,582,230,257

Source: Communications Authority of Kenya

The growth in SMS traffic could be attributed to the increase in use of innovative premium rate services coupled with increased promotional activities by the premium rate service providers as well as SMS bundle services offered by the Mobile Network Operators (MNOs).

In the year under review, both international incoming and outgoing mobile voice traffic decreased to 591.2 million and 504.9 million minutes respectively, compared to 767. 4 Million and 560.1 Million minutes last year. This translated to a decrease of 23 percent and 9.9 percent for international incoming and outgoing voice traffic respectively. These decreases were as a result of the increased uptake of internet services and by extension, increased use of over-the-top (OTT) content such as video chats and internet applications like Whatsapp, Skype and Viber, which are an alternative to the traditional voice and messaging services.

3.2.1.3 Mobile Money Transfer Service

Mobile telephony continues to transform national payment systems in Kenya by providing a platform that enables a wide array of financial services to cater for both individuals and businesses. These services include mobile money transfer services and mobile banking services. A fast, convenient and affordable service is very important to the consumers of mobile financial services, thus the mobile operators and banks are on their toes ensuring that they offer competitive services over the mobile platform to enhance consumers' ease of transaction. Thus, aside from the data market, the mobile money transfer market is one of the most dynamic markets with a lot of potential.

Mobile money transfer services continue to be popular among Kenyans, with Safaricom Limited (M-Pesa) having the largest market share of subscribers followed by Airtel Networks Kenya Limited (Airtel Money), Essar Telecom Kenya Limited (Yu Cash),Telkom Kenya Limted (Iko Pesa), Mobikash and Tangaza. The M-Pesa subscribers represent 73 percent of the total subscribers, while those of Airtel Money, Yu cash and Iko pesa represent 12 percent, 8 percent and 1 percent, 5 percent and 2 percent market share respectively. The total number of mobile money subscriptions grew by 2.04 percent in the financial year 2013/2014, proving that mobile money transfer services continue to be popular among Kenyans.

The mobile money transfer indicators are shown in Table 3.7.

Table 3.7: Mobile Money Transfer Indicators

Operator	June 2010	June 2011	June 2012	June 2013	June 2014
Safaricom Limited (M-Pesa)	10,232,805	14,331,941	15,083,674	17,561,999	19,776,056
Telkom Kenya Limited (Orange Money – Iko Pesa)	-	117,091	140,166	166,114	185,463
Airtel Networks Kenya Limited (Airtel Money)	378,700	2,530,916	3,751,713	4,580,467	3,238,754
Essar Telecom Kenya Limited (yu Cash)	3,881	415,779	530,149	2,291,473	2,147,139
Mobikash	-	-	-	-	1,263,655
Tangaza	-	-	-	-	503,556
Total Number of Subscribers	**10,615,386**	**17,395,727**	**19,505,702**	**24,840,404**	**27,114,623**
Total Number of Agents	**32,949**	**42,313**	**49,079**	**88,466**	**110,096**

Source: Communications Authority of Kenya

3.2.1.4 Internet Services

Data services in Kenya are delivered through various platforms that include mobile networks, fixed wireless access, satellite networks, fibre optic and cable networks. With the ever-increasing demand for fast and steady internet services, the country has seen an increased provision of free wireless internet services in public places.

The number of Internet users continued on an upward trend in the financial year 2013/2014, recording a 13.5 percent increase from the previous financial year to stand at 22.3 million Internet users. This was attributed to increased affordability of Internet services as ISPs offered innovative and affordable Internet bundles that saw the price of browsing the Internet become more affordable. Furthermore, this increase may be due to increased use of the internet for E-commerce with online shopping fast becoming popular among Kenyans, online reading of newspapers and online banking services. Table 3.8 below gives a summary of Internet subscriptions and estimated Internet users.

Table 3.8: Internet subscriptions and users

Subscriptions/Users	2009/10	2010/11	2011/12	2012/13	2013/2014
Terrestrial mobile data/Internet subscriptions	3,059,906	4,189,720	7,655,576	12,340,005	13,930,694
Terrestrial wireless data/Internet subscriptions	22,134	29,979	21,709	21,282	16,205
Satellite data/Internet subscriptions	953	960	519	1,278	646
Fixed Digital Subscriber Line (DSL) data/Internet subscriptions	9,631	15,168	11,682	11,512	12,129
Fixed fibre optic data/Internet subscriptions	4,303	22,460	49,371	58,197	69,373
Fixed cable modem (Dial Up) data/Internet subscriptions	25	-	25	25	25
Total Internet Subscriptions	**3,096,952**	**4,258,287**	**7,738,882**	**12,432,308**	**14,029,072**
Estimated Internet Users*	**7,832,352**	**12,538,030**	**14,032,366**	**19,654,925**	**22,310,044**

*Total no. Internet users =$\sum$ (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

The number of Internet subscriptions increased by 12.8 percent as compared to 60.4 percent in the previous year. Out of the total Internet subscriptions, 99.3 percent were terrestrial mobile data Internet subscriptions. This could be attributed to increased affordability and availability of smart phones that facilitate access to internet services including social media sites. However, terrestrial wireless data Internet subscriptions decreased by 23.9 percent. This was because of the fibre proliferation, whereby most organisations are opting for fixed fibre optic data as opposed to the terrestrial wireless data. The fibre optic connectivity, which has been on an upward trajectory, grew by 19.2 percent in the 2013/2014 financial year.

Internet penetration went up to 54.8 percent in the financial year 2013/2014 from 48.3 percent in the financial year 2012/2013.

3.2.1.5 Broadband Services

Broadband has over the years become a key driver of businesses by facilitating access to information through market research as well as dissemination of information to consumers through the internet. There was a marginal increase in total undersea bandwidth capacity, attributable to TEAMS increase of its fibre optic cable capacity. TEAMS undersea fibre optic capacity increased by 17.6 percent in the year under review, whereas the capacity of SEACOM, EASSY and LION2 decreased by 2.2 percent, 2.3 percent and 2.3 percent respectively. During the year under review, the undersea broadband capacity accounted for 99.93 percent of the total available bandwidth capacity. This is shown in Table 3.9.

Table 3.9: International Available Bandwidth

Financial Year	2010/11	2011/12	2012/13	2013/14
Undersea Fibre Optic Cable Capacity				
1. SEACOM Capacity (Mbps)	79,626.24	308,224.00	578,400	565,440
2. TEAMS Capacity (Mbps)	102,332.16	101,990.00	101,990	119,970
3. EASSY Capacity (Mbps)	122,880.00	122,880.00	122,880	120,000
4. LION2 Capacity (Mbps)	-	40,960.00	40,960	40,000
Total Undersea Bandwidth Capacity (Mbps)	**304,838.40**	**574,054.00**	**844,230**	**845,410**
Satellite Bandwidth Capacity (Mbps)	336.10	649.80	639.52	623.52
Total Available Bandwidth Capacity (Mbps)	**305,174.50**	**574,703.80**	**844,870**	**846,033.52**

Source: Communications Authority of Kenya

Leased international undersea bandwidth continued on an upward trajectory and reached 440,820 Mbps in the FY 2013/14. This translated to a 23.6 percent increase in capacity from the previous year. With the increased proliferation of optic fibre, the increased capacity is indicative of the need for provision of increased redundancy.

Further, leased satellite bandwidth reduced by 15.2 percent in the year under review. Nonetheless, total international bandwidth expanded by 23.6 percent, to stand at 441,006.43 Mbps in June 2014, up from 356,874.95 Mbps recorded in June last year. This is shown in Table 3.10.

Table 3.10: International Leased Bandwidth

Year	2009/10	2010/11	2011/12	2012/13	2013/14
International Undersea Bandwidth (Mbps)	20,000.00	32,151.52	264,426.00	356,655	440,820.00
International Satellite Bandwidth (Mbps)	384.12	119.00	157.78	219.95	186.43
Total International Bandwidth (Mbps)	**20,384.12**	**32,270.52**	**264,583.78**	**356,874.95**	**441,006.43**

Source: Communications Authority of Kenya

The total international bandwidth continued on an upward trend increasing by 23.57 percent in the year under review. This is indicative of the rise in demand for broadband services worldwide.

International undersea bandwidth accounted for 99.96 percent of the total international bandwidth, as compared to satellite bandwidth, which accounted for 0.04 percent of the total international bandwidth.

In the year under review, the total broadband services increased by an impressive 120.9 percent, largely attributed to the increase in mobile broadband subscriptions, which increased by 128.06 percent in the FY 2013/2014. The mobile broadband subscriptions accounted for 97.07 percent of the total broadband subscriptions. This was due to the increased use of social media sites and applications that require the use of data.

WIMAX subscriptions decreased by 9 percent, whereas fixed broadband subscriptions increased by 13.19 percent. This is due to the increase in Optic Fibre uptake as individuals and companies are opting for this type of connectivity as opposed to WIMAX. This is as shown in Table 3.11.

Table 3.11: Number of Broadband Subscriptions

Financial Year	2010/11	2011/12	2012/13	2013/14
Fixed Broadband (DSL, Satellite and Fibre)	6,552	35,265	64,850	73,404
Wireless (WIMAX)	5,646	17,282	18,634	16,958
Mobile	108,928	674,255	1,315,339	2,999,794
Total	**121,126**	**726,802**	**1,398,823**	**3,090,156**

Source: Communications Authority of Kenya

The total broadband penetration in the FY 2013/2014 went up to 7.59 percent up from 3.54 percent recorded in the previous financial year. Mobile broadband penetration stood at 7.37 percent, fixed broadband penetration was at 0.18 percent and wireless broadband penetration was 0.04 percent. The prominence in mobile broadband penetration is attributed to the relatively higher penetration level of mobile devices compared to other broadband technologies. However, the broadband penetration levels in the country are still lower than African and Global levels. According to ITU, as at December 2013 the African fixed broadband penetration was recorded at 0.3 percent while mobile broadband penetration stood at 13.3 percent. Globally, fixed broadband penetration was recorded at 9.4 percent while mobile broadband penetration stood at 26.7 percent.

3.2.2 Postal and Courier Services

The world is now a global village and as a result, E-commerce as a service is gaining a lot of momentum the world over. The Authority, cognizant of the important role the postal and courier sub-sector plays in facilitating E-commerce, conducted a postal and courier market study during the year under review and presented the findings to sector players.

3.2.3 Broadcasting Services

In preparation of the migration from analogue to digital broadcasting, the Authority continued to issue authorisations for accommodation on the Digital Terrestrial Television (DTT) networks of the licensed signal distributors. This enabled signal distributors to activate their platforms. Currently, the number of Broadcast Content Service Providers issued with this authorisation is 56 which has resulted in diversity in programming and an increase in the level of local content.

The total analogue television coverage is estimated at 58 percent of the population with the digital television signal currently covering 50 percent of the country. The remaining areas under analogue signal which are not currently covered by digital signal will be given priority during the rollout of digital TV infrastructure in time for the phased analogue switch-off deadline.

3.3 Tariffs and Competition

The Authority recognises the importance of the existence of a competitive market and continues to monitor tariffs and competition levels on services offered by its licensees. A competitive market ensures better welfare for consumers and increased market efficiency.

3.3.1 Telecommunications

Following the successful re-instatement of Determination No. 2 of 2010, that defines progressive reduction of interconnection rates (glide path) over a period of 4 years in the FY 2012/2013, the Authority ensured that the second last phase was implemented as stipulated in the said determination. 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

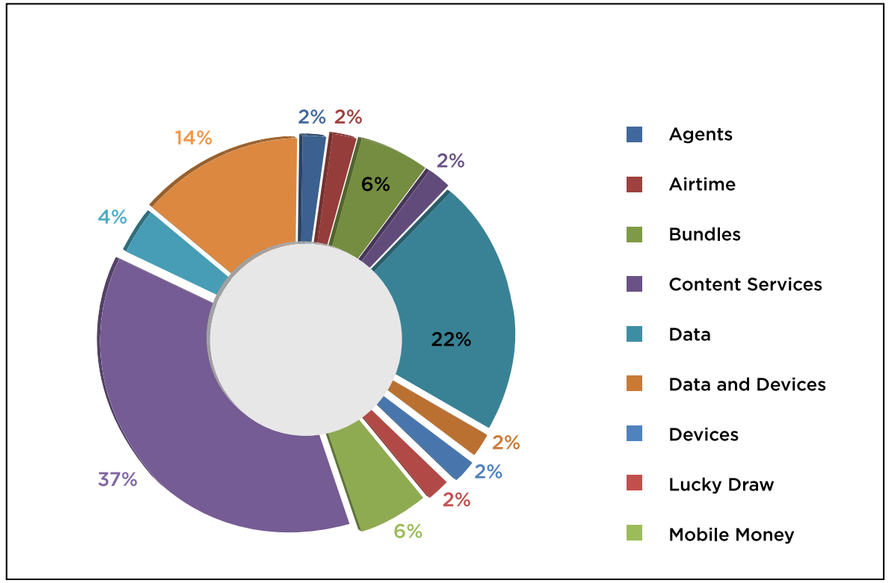
Call Termination Services and Prices	(KES)
1. Mobile Termination	**1.15**
2. Fixed Termination and Transit for Existing Regulated Services	
Local Termination	1.06
Single-tandem Termination from Tandem Exchange	
Double-tandem Termination from Tandem Exchange	2.38
Single-tandem Termination from Local Exchange	
Double-tandem Termination from Local Exchange	
Transit Local Exchange to Tandem (Single Tandem)	1.32
Transit Local Exchange to Tandem (Double Tandem)	
Tandem to Tandem Transit	
Local to Local Transit (Single Tandem)	
Local to Local Transit (Double Tandem)	

Source: Communications Authority of Kenya

The gradual reduction in call termination rates has seen the retail call rates reduce significantly over the years of implementation of the glide path. Operators shall implement the final phase of the glide path in the FY2014/2015, after which the Authority shall evaluate and guide the market accordingly.

During the year under review, the GSM operators carried out a total of 51 assorted promotions and special offers. As shown in the Figure 3.6, most (22 percent) of the promotions and special offers were targeting data users, an indication that competition is now shifting from the matured voice market to the data market sub-segment.

Figure 3.6: Promotions and special offers for GSM



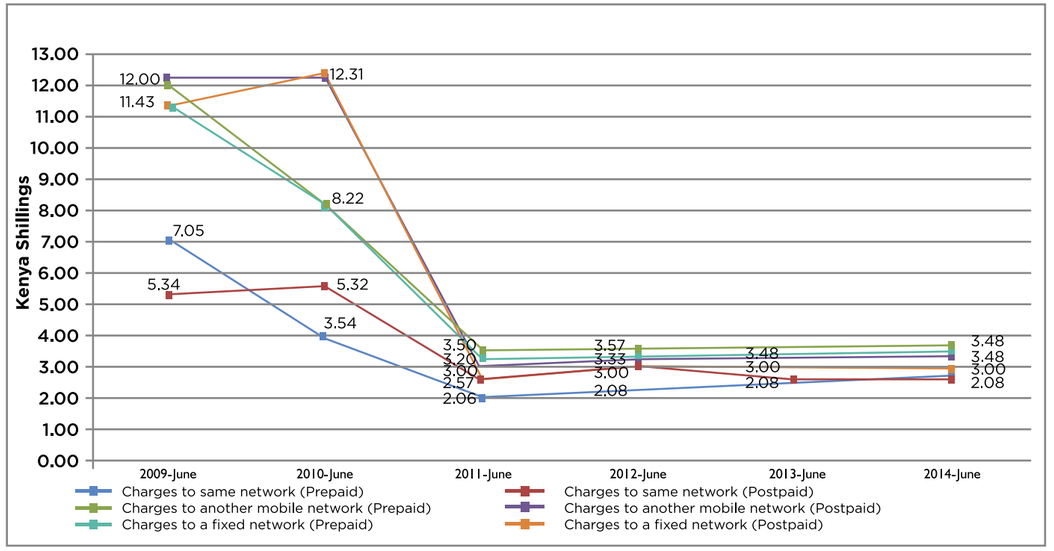
Source: Communications Authority of Kenya

3.3.1.1 Fixed and Mobile Network Services

The convergence of average on-net and off-net tariffs for both the mobile and fixed market segment, as illustrated in Figure 3.7, continued for the third year in a row.

This could be attributed to the continued implementation of the low Mobile and Fixed Termination Rates that allowed all operators to have retail price flexibility.

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



Source: Communications Authority of Kenya

As the voice market continued to grow towards maturity, the operators continued to shift their focus to other markets such as the emerging data market. Operators continued to roll out infrastructure in order to increase their capacity to cater for the increased demand for broadband services. The availability of affordable data bundles, data enabled phones, advancement in technology and the increasing availability of free Wi-Fi has resulted in a tremendous uptake of Internet services. As a result, operators have to find creative ways to leverage on this market.

3.3.1.2 Internet and Broadband

The Internet and Broadband market continues to develop and its socio-economic impact to society has seen continued increased uptake of these services. Technologies such as fibre optic cable, WIMAX, Digital Subscriber Line (DSL) and VSAT, have been employed by the operators in order to provide competitive data services to consumers. The Authority continues to employ a light-handed competition regulation approach by allowing market forces of demand and supply to foster growth in the market. However, the persistent high retail prices of data services may necessitate overt regulation in the future.

Fixed fibre optic internet subscriptions continued on an upward trend due to the fibre proliferation and increased affordability of the data packages through bundle pricing and special offers by Internet Service providers. Subscriptions to Fixed fibre optic services increased by 19.2 percent from the previous financial year to stand at 69,373, whereas subscriptions to terrestrial wireless data continued to decrease and went down to 16,205 from 21,282 in the previous financial year.

3.3.2 Postal and Courier Services

KICA gives the Postal Corporation of Kenya (PCK) exclusivity to deliver all postal items up to 350 gm and allows other operators to deliver items within this limit provided that they charge at least five times the standard tariff. The Authority monitored the implementation of this tariff rule during the year under review.

3.3.3 Electronic Transaction Services

During the year, the Authority deployed the National Public Key Infrastructure (NPKI) that will be used to technically accredit the potential E-CSP licensees. In addition, the licensing framework for the Electronic Certification Service Providers (E-CSPs) was put in place.

Kenya's NPKI comprises of a Root Certification Authority (RCA), which will be managed by the Authority and certification authorities including the Government Certification Authority (GCA). The RCA accredits Certification Authorities who will in turn issue globally recognised and trusted digital certificates to entities.

In the meantime, local entities continue to source for digital certification services from outside the country. E-CSPs will fill this gap by ensuring that the digital certification services are available locally and provided by entities that are under the local legal jurisdiction.

Digital certification services will support the on-going 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 drivers' licences, tracking status of passport/ID, job applications, among others.

3.3.4 Broadcasting Services

During the year under review, the Authority issued Determination No. 1 of 2013 on a Cost-Based Terrestrial Digital Broadcast Signal Distribution Tariff that reviewed downwards tariffs for digital signal distribution in a move geared towards facilitating a smooth migration from analogue to digital television broadcasting. The determination directed Digital Signal Distributors to charge broadcasters (also known as Content Service Providers) KES 125,990.00 per Megabit for Nairobi and KES 93,202.75 per Megabit for other sites in Kenya. Before the review, the Pan-Africa Network Group (PANG) was charging broadcasters a monthly signal distribution fee of KES 1,135,312.50 per channel in Nairobi. SIGNET on the other hand was charging KES 248,141 per mega bit (Mbit) for signal distribution services within Nairobi.

For other sites in Kenya, SIGNET was charging a uniform signal distribution fee of KES 248,141.45 per mega bit, while PANG was charging a flat monthly fee of KES 378,437.50 for signal distribution services in Mombasa, Kisumu, Nyeri, Eldoret, Kakamega, Kisii and Meru. For Malindi, Webuye, Garissa, Narok, Kericho, Isiolo, Kitale, Bungoma, Embu, Voi. In other regions, PANG was charging broadcasters a flat monthly fee of KES 126, 145.83.

In the determination, the Authority further required the two Digital Signal Distributors to publish a Reference Offer, which stipulates tariffs, product description and service level agreements in order to ensure that there is access, transparency and non-discrimination on the terrestrial signal distribution platform.

3.4 Mobile Virtual Network Operators (MVNO's)

MVNO is a mobile service provider who does not own the underlying radio access network but can issue its own SIM cards, carry out branding, marketing, billing, and customer care operations. To deliver traffic to its subscribers, an MVNO relies on the radio access network of a host mobile network operator NFP Tier 1 (HMNO). MVNO's have business arrangements with HMNO's to buy minutes of use (MOU) for sale to their own subscribers. While MVNO's typically do not have their own infrastructure, some deploy their own Mobile Switching Centres (MSC).

Licensing MVNOs encourages competition in the mobile sub-sector leading to greater choice and lower prices for consumers. MVNOs leverage on idle capacity of HMNOs to offer mobile telephony services, therefore optimising the scarce frequency resource.

MVNOs falls under the Applications Service Provider (ASP) license category in the ULF under which voice, data, SMS and related services are provided. Of note, the application process for an MVNO is similar to that of any other ASP applicant only that such application must be acompanied by confirmation from a potential HMNO, that it has extra capacity and it is willing to offer the same.

During the year under review, the Authority issued three (3) MVNO licenses to Zion Cell Kenya Limited, Finserve Africa Limited and Mobile Pay Limited.

Dr. Hamadoun Toure, ITU Secretary General, addresses delegates at the County ICT Investment Forum hosted by the Authority. The Forum was attended by County Governors and senior ICT officials from country governments.

CHAPTER IV: ENSURING COMPLIANCE AND EMPOWERING CONSUMERS

The ICT sector witnessed rapid growth and generation of a range of innovative services made available to consumers. To ensure that all licensees adhere to the conditions set out in their respective licenses, the Authority carried out monitoring activities of all license categories. Further, the Authority undertook enforcement action on licensees found flouting the license conditions.

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 provided.

4.1 Monitoring and Enforcing Compliance

The Authority has put in place an elaborate and routine programme of inspecting and monitoring licensees and their installations to ensure compliance with the laid down legal framework. The legal framework is provided for in the Kenya Information and Communications Act, 1998, the Regulations and the licence conditions. During the year under review, the Authority undertook scheduled and ad hoc inspections and quality of service monitoring in all parts of the country to assess compliance. To ensure that the integrity of public communications infrastructure is maintained, the Authority carried out Type-Approval/Acceptance of ICT equipment and conducted certification of network installations to assess conformance with set installation standards.

4.1.1 Inspections

The Authority conducted Inspections of licensees in the Telecom and Postal Courier Sub-Sectors. Telecommunications network installations were also inspected to verify compliance to standards.

4.1.1.1 Telecommunications

The Authority conducted inspections of telecommunications licensees to determine compliance with license conditions, audit the installed systems, equipment and to verify the accuracy of compliance returns. A total of 57 licensees and entities were inspected including the four (4) mobile operators (Airtel, Orange, Essar and Safaricom), one (1) undersea cable operator (Sea Submarine Communication Limited) and three (3) inspections were on ad hoc basis to address complaints from stakeholders. Specific inspections were also carried out on licensees who were non-responsive in terms of submission of compliance returns.

The Authority also carried out SIM card registration inspections to establish the level of understanding of licensees and the general public with regard to the rules and regulations governing the registration process. It was found that there is laxity in implementation of the guiding principles in the sector by both consumers and service providers. These inspections led to several arrests and prosecutions.

These inspections revealed a need to review regulations, tightening the enforcement mechanisms and enhance consumer education. To address some of these issues the Authority embarked on reviewing SIM card regulations.

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

Table 4.1: Summary of the Telecommunication Licensee Inspections

	Inspected				Compliant				Percentage Compliance (%)			
License Category	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2010/11**	**2011/12**	**2012/13**	**2013/14**
Content Service Provider (CSP)	20	16	29	5	15	15	25	5	75.0	93.8	86	100
Application Service Provider (ASP)	17	13	23	7	16	12	20	6	94.1	92.3	87	86
Network Facilities Provider (NFP)	7	5	10	7	6	5	9	6	85.7	100.0	90	86
Business Process Outsourcing (BPO)	3	2	4	-	2	2	4	-	66.7	100.0	100.0	-
International System & Services (ISS)-(IGS/SCLR)	1	5	7	6	1	5	7	5	100.0	100.0	100.0	84
Public Data Network Operator (PDNO)	3	1	1	-	1	1	1	-	33.3	100.0	100.0	-
Internet Service Provider (ISP)	12	2	-	2	6	2	-	1	50.0	100.0	-	50
Local Loop Operator (LLO)	4	3	3	-	2	2	2	-	50.0	66.7	66.7	-
Telecommunications Contractor (TEC)	4	2	-	2	3	2	-	2	75.0	100.0	-	100
Value Added Services	3	0	-	-	3	0	-	-	100.0	-	-	-
Premium Rate Services (PRS)	3	1	-	-	3	1	-	-	100.0	100.0	-	-
Private VSATS	5	4	1	-	5	3	1	-	100.0	75.0	100.0	-
Broadcasters	0	2	-	-	0	2	0	-	-	100.0	-	-
Cyber	8	-	-	10	8	-	-	7	100.0	-	-	70
Others+ (Equipment vendors, SIMCard sellers and mobile money shops)	0	8	7	18	0	6	6	10	-	75.0	86	56
Total	**90**	**64**	**85**	**57**	**71**	**58**	**75**	**42**	**78.9**	**90.6**	**88.25**	**79**

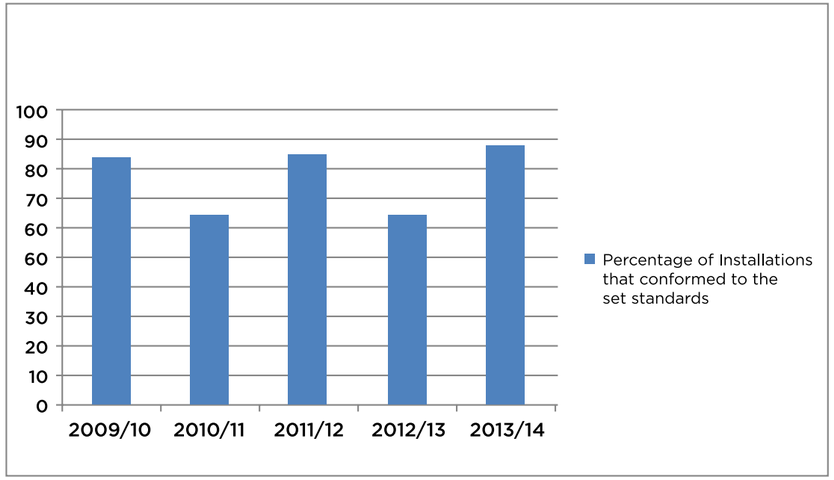
Source: Communications Authority of Kenya

4.1.1.2 Network Installation Inspections and Certification

Certification is the process of carrying out inspections on all installed telecommunication equipment to ensure network integrity and compliance with the set national and recognised international installation standards and guidelines.

During the year, the Authority inspected 186 installations in various regions of the country out of which 152 were compliant. This indicated 87.6 percent compliance rate compared to 65 percent reported in FY 2012/13. This represented a 22.6 percent increase in compliance. Licensees whose installations were not compliant were directed to rectify their installations and inform the Authority upon completion for re-inspection. During the ICT forum held in June 2014, the Authority sensitised the industry on the installation standards.

Figure 4.1: Percentage of Installations that conformed to the set standards



Source: Communications Authority of Kenya

4.1.1.3 Radio-communications

The Authority, through inspections, carries out compliance audits of licensees to establish if they are operating within the authorised parameters.

As shown in Table 4.2, the Authority inspected a total of 495 radio-communication networks in the FY 2013/14 compared to 500 inspected the previous year.

Table 4.2: Number of Radio-communications Inspections

Year	2009/10	2010/11	2011/12	2012/13	2013/14
Land Mobile Networks	210	231	259	137	108
Broadcast Transmitters	224	60	135	328	58
Alarm Networks	183	176	267	-	-
Fixed and Fixed Wireless Access (FWA) Sites	-	178	167	35	329
Total	**617**	**645**	**828**	**500**	**495**

Source: Communications Authority of Kenya

Land mobile networks inspections revealed a compliance level of 70.96 percent, a decrease from 73.5 percent recorded the previous year. The areas of non-compliance were: use of unauthorised frequencies, non-payment of frequency fees, unauthorised expansion of existing networks, and establishment of unauthorised networks. Compliance checks on Fixed and Fixed Wireless Access networks established an improved compliance level of 93.6 percent in comparison with the previous year's level of 89.7 percent. The Authority issued notices of violation and levied appropriate penalties to address the non-compliance anomalies, which were not rectified.

4.1.1.4 Postal and Courier Services

The Authority conducted inspections of postal and courier facilities to confirm compliance with the Act, Regulations and Licence Conditions. A total of 153 postal and courier licensees were inspected countrywide. Twelve (12) licensees whose outlets were not compliant were formally directed to undertake corrective measures. The measures included installation of directional signs, displaying lists of prohibited and dangerous articles, displaying tariffs, establishment of consumer complaints procedures, maintenance of complaints registers, display of license certificate and customer information. All the notified operators have undertaken corrective measures. The inspection also found eleven (11) business entities, six (6) in Western and five (5) in Coastal regions, operating illegally. The illegal business entities were arraigned in court, convicted and penalised. All have since formalised their operations by acquiring the necessary licences as per the Act.

The Authority held the Annual Stakeholders Postal and Courier Forum under the inaugural CA ICT Week. On this occasion, the Authority continued to encourage licensees to ensure their networks are secure by acquiring mail screening devices following the current terror-threats in the region. The Authority also continued to participate in national projects aimed at facilitating the development of the Postal and Courier industry including the National Addressing System (NAS).

4.1.2 Interference Resolution and Radio Monitoring

In managing the Radio Frequency Spectrum in the country, the Authority carries out Interference resolution and Radio Monitoring.

4.1.2.1 Interference resolution

In the FY 2013/14, there were a total of 22 cases of reported interference of which, 20 were resolved as shown in Table 4.3. The unresolved cases will be addressed in the FY 2014/15.

Table 4.3: Number of Frequency Interference Cases

Year	2009/10		2010/11		2011/12		2012/13		2013/14	
Frequency Band/Service	Total	Resolved	Total	Resolved	Total	Resolved	Total	Resolved	Total	Resolved
VHF, UHF and SHF	45	42	32	27	18	20	19	19	17	15
HF	4	1	3	3	1	2	3	3	-	-
Broadcasting	10	9	4	3	4	4	7	6	5	5
Total	**59**	**52**	**39**	**33**	**23**	**26**	**29**	**28**	**22**	**20**

*Resolved cases include both what was reported during the year and unresolved from the previous years that were resolved

Source: Communications Authority of Kenya

4.1.2.2 Radio-communications Monitoring

The Authority carries out frequency monitoring to determine suitability, usage and assignment of a frequency band. During the FY 2013/14, the Authority monitored a total of 35 cases comprising 9 in the VHF, UHF and SHF frequency bands, and 26 on the broadcasting frequency bands. The frequencies in the VHF and UHF frequency bands were monitored to facilitate assignment to Government agencies, diplomatic missions and private security firms. Extensive monitoring of the analogue and Digital TV coverage was done in 11 towns including Nairobi, Machakos, Mombasa, Malindi, Nyeri, Meru, Nakuru, Kisii, Kisumu, Eldoret and Webuye to determine the extent of both analogue and Digital TV coverage ahead of the planned migration to digital broadcasting. This is shown in Table 4.4.

Table 4.4: Number of Frequency Monitoring Cases

Year	2009/10	2010/11	2011/12	2012/13	2013/14
V/U/SHF	39	15	19	34	9
HF	3	1	6	4	-
Broadcast (Surveillance)		-	-	22	26
Total	**42**	**16**	**25**	**60**	**35**

Source: Communications Authority of Kenya

4.1.3 Quality of Service Monitoring

4.1.3.1 Postal and Courier operators

In the year under review, the Authority conducted inspections at 153 postal/courier outlets sampled countrywide. The inspection of the outlets continued to reveal improvement in quality of service with intra-country mail largely being delivered within the stipulated delivery standards with all intra-city, intra-country and international mail delivered at J + 3 (delivered within the third day of posting-J) at 100 percent. Mail destined for designate special hardship areas were all delivered within the set standards of J + 6 at 100 percent.

The Public Postal Licensee, the Postal Corporation of Kenya, implemented corrective measures in all the 40 post offices which were found to be non-compliant on a number of issues. The issues were failure to display tariffs and consumer service information, additional private letter boxes, directional signs and illegible date-stamp impressions. A Radio Frequency Identification (RFID) based scientific system to measure mail delivery quality standards is in the final stages of procurement. This will provide the Authority with a digital platform to monitor and provide feedback for quality improvement in the mail chain.

4.1.3.2 Broadcasting content monitoring

During the year under review, the Authority embarked on a series of activities geared towards catalysing the development of local content in the country. These activities include the development of a local content roadmap geared towards attainment of 60 percent local content compliance by free-to-air (FTA) television by the year 2018. The roadmap is as follows:

Table 4.5: Local content roadmap

Year	June 2014	June 2015	June 2016	June 2017
Local content quota	30%	40%	50%	60%

Source: Communications Authority of Kenya

To achieve the roadmap, the Authority met with the broadcasters in October 2013, to share this roadmap and continued monitoring all FTA TV channels with a view to determining their current local content compliance levels.

To determine compliance with the set local content quota, the Authority sampled and monitored nine TV stations on the analogue platform for two weeks in a given month during the watershed period (05:00am-10:00pm). The monitoring and calculations are based on the duration of individual programmes excluding advertising and promotion breaks. The performance reports were subsequently shared with the respective broadcasters on monthly and quarterly basis.

The table below summarises the local content quotas compliance report for the analogue TV broadcasters during the Financial Year 2013/2014:

Table 4.6: Local content quotas compliance report

FTA TV CHANNEL	Quarter 1 % Compliance	Quarter 2 % Compliance	Quarter 3 % Compliance	Quarter 4 % Compliance	2013/2014 % Compliance
KBC	51	56.6	54.7	39	50
QTV	38	49.8	53	47.3	44
NTV	45	46.1	48	39.4	40
GBS	54	42.8	47.4	40.7	45
K24	45	49	46	29.2	42
KTN	30	41	46	37.4	37
CITIZEN	36	39.8	48.5	41.5	40
KISS TV	14	22	25	17	20
FAMILY TV	8	8	7.02	10	8
Overall Average	**35.6**	**39**	**37.71**	**33**	**36.3%**

Source: Communications Authority of Kenya

4.1.4 Returns from Operators

Submission of compliance returns is a licence condition through which the Authority monitors compliance by licensees to the terms of their licences. Further, the information derived from these returns forms the basis upon which the Authority develops its quarterly sector statistic reports.

4.1.4.1 Returns from Telecommunication Operators

The Authority received returns from 237 telecoms licensees out of the 515 existing licensees. This was an increase in the level of compliance from 45.17 percent the previous year to 51 percent. Table 4.7 provides a summary of compliance rate of submission of returns by license category.

Table 4.7: Compliance Returns Status

Indicators	Total No. of Licensees			Operational Licensees						Licensees that Submitted Compliance Returns					
				Number			Percentage (%)			Number			Percentage (%)		
License Category	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
Network Facility Provider	28	33	35	24	23	28	85.7	69.7	80	22	20	25	78.6	60.6	71
Application Service Provider	91	116	123	57	64	75	62.6	55.2	61	50	58	55	54.9	50.0	45
Content Service Provider	147	181	205	83	91	134	56.5	50.3	65	76	100	120	51.7	55.2	59
International Systems and Services	13	13	13	13	13	13	100.0	100.0	100	13	11	12	100.0	84.6	92
Submarine Cable Landing Rights	3	3	3	3	3	3	100.0	100.0	100	3	3	3	100.0	100.0	100
Business Process Outsourcing	34	40	41	9	3	5	26.5	7.5	12	6	3	5	17.6	7.5	12
Data Carrier Network Operator	2	2	1	2	2	1	100.0	100.0	100	2	2	1	100.0	100.0	100
Public Data Network Operator	8	8	7	8	5	2	100.0	62.5	29	5	2	2	62.5	25.0	29
Local Loop Operators	9	11	10	5	2	2	55.6	18.2	20	5	2	2	55.6	18.2	20
Internet Service Provider	42	42	39	15	5	3	35.7	11.9	8	11	5	1	26.2	11.9	3
Premium Rate Services	38	38	38	16	14	16	42.1	36.8	42	15	14	11	39.5	36.8	29
Total	**415**	**487**	**515**	**235**	**225**	**282**	**56.63**	**46.20**	**56**	**208**	**220**	**237**	**50.12**	**45.17**	**51**

Source: Communications Authority of Kenya

4.1.4.2 Returns from Postal and Courier Operators

The number of postal and courier operators who submitted compliance returns rose to 101 in the FY 2013/14 compared to 74 recorded the previous year.

4.1.5 Type Approval

The Authority undertakes type approval and type acceptance of ICT equipment intended for use in the country as a means to ensure safety of consumers, interoperability of telecom networks and efficient utilisation of spectrum, and numbering resources. The processes ensure that equipment models meet national and/or international standards. In addition, the Authority does clearances for ICT equipment imported into the country.

During the year, the Authority processed a total of 406 models of various ICT equipment categories received from a total of 406 applications. A breakdown of the types of ICT equipment received is as shown in Table 4.8.

Table 4.8: Type Approval/Acceptance Applications

Equipment Type	Number of Applications					
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Data Routers	4	4	4	5	2	2
Gateway/Switches/PABX	5	4	8	4	2	2
PSTN/IP Server Equipment	-	-	2	6	-	1
Wireless Terminals/System	16	-	-	-	-	-
Transceiver-VHF/UHF	11	5	10	5	9	16
Transceiver-HF	2	-	-	-	1	-
Transceiver-Citizen Band (CB)	-	1	-	-	-	-
Low Power Wireless Terminals	46	15	62	111	58	203
Satellite Terminal	-	-	-	1	-	-
Alarm Transmitter	-	1	-	-	-	-
Broadcast Equipment	5	11	6	6	21	17
VSAT Equipment (Transceiver, BUC, HPA, etc)	11	4	3	8	5	2
Global System for Mobile Communications (GSM) Interface and BTS	45	8	13	6	6	-
CDMA Interface	-	-	-	1	-	-
VOIP Terminal	2	-	-	1	2	-
Telephone Set	2	6	2	-	-	-
Payphone	-	1		-	-	1
GSM Mobile Phones	18	33	33	60	61	101
CDMA Telephone Set	5	-	-	-	-	-
Fax Machine	5	-	-	8	3	-
Modem	-	4	-	2	-	-
DVB T2 receivers (Set-top boxes, IDTV and conditional access modules)	-	8	3	7	32	56
Microwave Equipment	-	7	3	8	2	5
Mapping system	-	1	-	-	-	-
Accepted	177	113	149	238	203	406
Rejected	-	-	-	-	1	-
Total	**177**	**113**	**149**	**238**	**204**	**406**

Source: Communications Authority of Kenya

From Table 4.8, there was a significant increase in the number of low power devices type approved. This can be attributed to more manufacturers seeking to utilise the free Industrial Scientific and Medical (ISM) band. The number of mobile phones approved within the year increased significantly and this can be attributed to the increased uptake of smart phones as well as increased consumer awareness on the need to purchase type approved phones. Due to the impending analogue to digital migration there was an increase in the number of set-top box type approved within the year.

In the year under review, the Authority processed 97 applications for equipment import clearance compared to 53 in the previous year.

4.1.6 Cybersecurity Management

Kenya's 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 Kenya. This framework consists of the National Cybersecurity Strategy, the National Computer Incident Response Team - Coordination Centre (National KE-CIRT/CC) and the National Public Key Infrastructure (NPKI). The Cybersecurity Framework was launched by H. E. President Uhuru Kenyatta in June 2014.

4.1.6.1 The National Cybersecurity Strategy

During the year under review, the Authority participated in the development of the National Cybersecurity Strategy, which was spearheaded by the MoICT. The Strategy defines Kenya's cyber security vision, key objectives, and commitments to support national priorities of ICT growth and protection of critical information infrastructures.

The Strategy establishes an elaborate cybersecurity governance structure including the National Kenya-Computer Incident Response Team/Coordination Centre (KE-CIRT/CC) and a Cybersecurity Committee. The main purpose of the Cybersecurity Committee is to participate in the implementation of the National KE-CIRT/CC, facilitate coordination and collaboration in the response to cybersecurity incidents, and other cybercrime management activities. The Authority chairs this committee.

4.1.6.2 The National KE-CIRT/CC

The National KE-CIRT/CC, which is resident at CA, was launched in June 2014 and is Kenya's national cybercrime management point of contact. Its functions include:

i. Offering advisories on cybersecurity matters and coordinating cyber incident response in collaboration with relevant actors locally, regionally and internationally;

ii. Acting as the national trusted point of contact for information security matters;

iii. Gathering and disseminating technical information on computer security incidents;

iv. Capacity building in information security and creating and maintaining awareness on cybersecurity-related activities;

v. Putting in place Network Early Warning Systems (NEWS) in order to identify possible cybersecurity incidents in advance;

vi. Collecting, compiling and disseminating national statistics on cybersecurity incidents;

vii. Carrying out research and analysis on computer security; and,

viii. Facilitating the development of a National Public Key Infrastructure (NPKI), among others.

During the year under review, the National KE-CIRT/CC continued to collaborate with relevant stakeholders in the management of cybercrime. In addition, the Authority identified two sponsors for its application to join 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 programs.

The Authority, during the year, received and responded to 31 cyber incidents. Table 4.9 shows a summary of the cyber-crime incidents received and responded to during the FY 2013/14.

Table 4.9: Cybersecurity Incidents Reported in the Financial Year 2013/14

No.	Incidents	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
1.	Defacements	-	-	-	-	-
2.	Online Abuse	1	-	4	3	8
3.	Online Fraud	-	3	-	-	3
4.	Impersonation	-	1	-	-	1
5.	Denial of Service	3	1	3	-	7
6.	SQL Injections	-	-	1	-	1
7.	Phishing	1	2	-	-	3
8.	Spamming	-	-	-	1	1
9.	Privacy Infringement	2	2	2	1	7
	Totals	**7**	**9**	**10**	**5**	**31**

Source: Communications Authority of Kenya

The response by the Authority involved analysis of the reported cases and offered technical advice towards the resolution of cyber-crime incidents.

4.1.6.3 The National Public Key Infrastructure (NPKI)

During the year under review, the National Public Key Infrastructure (NPKI) project was launched. This is a culmination of the efforts by the MoICT, CA and the ICT Authority (ICTA).

A Public Key Infrastructure (PKI) refers to a system for the creation, storage and distribution of digital certificates, which are used to verify that a particular public key (online identity) belongs to a certain entity. A PKI is a technical infrastructure that comprises of a Root Certification Authority (RCA) and a Certification Authority referred to as an Electronic Certification Service Provider (E-CSP) in Kenya's legal and regulatory framework. The PKI creates a framework for protecting communications and stored information from unauthorised access and disclosure by addressing the fundamentals of cybersecurity - confidentiality, integrity, authentication and non-repudiation. PKI is key to the rollout of e-transaction services.

4.1.7 De-activation of Counterfeit Telephone Handsets and Registration of SIM Cards

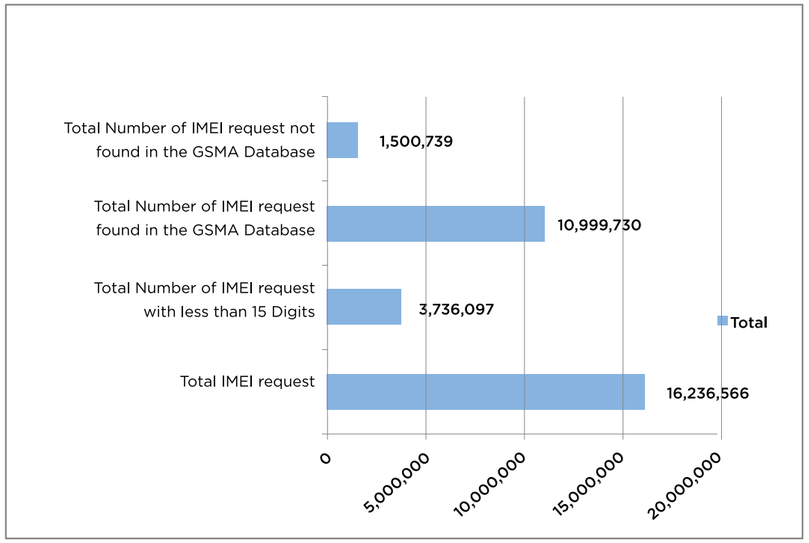
In the course of the FY 2012/13, the Authority put in place measures to ensure licensees and consumers comply with set guidelines. These measures included deactivation of counterfeit telephone handsets and registration of SIM card subscriber data. In the FY 2013/14, the Authority continued with the implementation of these measures.

4.1.7.1 De-activation of Counterfeit Telephone Handsets

The Authority continues to facilitate the 1555 short code service for the public to verify their mobile phone IMEIs at no cost.

As at June 2014, 16,236,566 IMEI requests had been received from subscribers on the four mobile networks and subsequent processing against the GSMA database was facilitated through the third party service provider. Figure 4.2 shows a summary of requests.

Figure 4.2: Summary of IMEI requests



Source: Communications Authority of Kenya

4.1.7.2 Registration of SIM cards

The enactment of the Kenya Information and Communications (Amendment) Act, 2013 empowered the Authority to develop certain regulations including those on SIM card registration. During the year, the Authority in consultation with the National Communication Secretariat identified gaps in the Kenya Information and Communications (Registration of Subscribers to Telecommunication Services) Regulations, 2012 and developed amendments to the regulations. The regulations were finalised and await publication in the Kenya Gazette.

4.2 Empowering and Protecting the Consumer

The Authority continually seeks to develop appropriate regulatory mechanisms that will protect communications service consumers. To this end, it undertakes research and surveys to have a better understanding of consumer behaviour, trends and satisfaction levels in the market. Based on the survey results, the Authority develops and implements appropriate mechanisms that would best safeguard consumers and equip them with information, skills and knowledge to enables them make better purchase decisions. Further, the Authority creates awareness of the consumer rights in the market and outlines the redress mechanisms available should they have a complaint.

4.2.1 Consumer Education and Information

The Authority availed consumer information targeting consumers of mobile, internet and postal and courier services through several channels and institutions. These included Agricultural Society of Kenya (ASK) Trade Fairs in Nairobi, Mombasa and Kisumu; the Kenyatta University Culture Week, Procurement Expo, Post Offices countrywide, ITU Telecom World Expo, CA Reception areas, and during CA Corporate events. A total of 218,944 consumer education materials were distributed during the year. The consumer advisory information was also availed on the Authority's website and social media pages.

4.2.2 Understanding Consumers

To ensure that the regulatory measures being implemented by the Authority meet the needs of consumers of ICT services, the Authority continuously monitors 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. During this period, the Authority undertook a survey to establish the level of consumer awareness on the role of the Authority and on usage of the available consumer protection mechanisms. The findings of the survey enabled the Authority to design appropriate consumer protection and awareness mechanisms.

4.2.3 Customer Service Delivery

Efforts to ensure that members of the public are aware of the Authority's service delivery commitments remained a vital activity during the year. The Authority continued to distribute copies of the Service Delivery Charter (both English and Swahili versions) to its stakeholders and the public through various channels. The Authority's service delivery standards were also prominently displayed at the main reception areas.

The efforts to improve service delivery saw the Authority engage internal and external stakeholders in reviewing its service delivery targets. This resulted in a revised Customer Service Charter, which will be published in the next financial year.

The Authority continued to determine the level of satisfaction with the services it offers through a Customer Satisfaction Survey. 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. The findings indicated a Customer Satisfaction Index of 73.9 percent compared to 72.3 percent the previous year representing a 1.6 percent increase.

4.2.4 Consumer Protection

In recognition of the need to develop mutually beneficial relationships with consumer organisations, the Authority organised a one-day consumer forum themed, *Consumer Protection Mechanisms that Transform the Lives of ICT Consumers* during the ICT Week. The forum aimed at developing strategies and synergies with consumer organisations with a view to increasing proactive and supportive participation in consumer protection and regulatory matters in the ICT sector.

The deliberations of the forum emphasised the need for the Authority to facilitate the development of ICT services that are accessible to Persons with Disabilities (PWDs) and the need for consumer organisations to work together towards the common goal of protecting consumers of communication services.

The Authority participated in marking the 2014 World Consumer Rights Day on March 15 in collaboration with the Competition Authority of Kenya and other stakeholders. The Authority used the opportunity to make consumers aware of their rights and responsibilities in the ICT sector.

The Authority, during the year commenced the review of the Kenya Information and Communications (Consumer Protection) Regulations, 2010 with a view to strengthen the consumer protection aspects of the regulations and to align it with KICA.

4.2.5 Resolution of Consumer Complaints and Enquiries

The Authority continued to receive and handle ICT consumer complaints and enquiries that came in through letters, phone calls and emails. In the period under review, 644 complaints and 383 enquiries were received.

4.2.5.1 Resolution of Consumer Complaints

A total of 644 complaints were received comprising mainly unauthorised subscriptions/charges (32 percent), billing (11 percent), service interruption (11 percent) service provision delays (5 percent) among others. The high number of unauthorised charges/subscriptions complaints were attributed to increased violations of licence conditions by a number of Content Service Providers (CSPs), who appeared to have charged their customers for content or services that were not requested for, not subscribed to and/or difficult to unsubscribe from. The Authority facilitated refunds and stoppage by the service providers in a number of cases and instituted measures to streamline the provision of these services.

Inaccurate billing was reported on voice calls and data especially on the "data bundles". Service interruption complaints were in relation to consumers experiencing constant disconnection from fixed line network and data operators.

The Authority also received a number of complaints that are not specific to its mandate and these were categorised as 'other'. Such complaints were re-directed to the various organisations whose jurisdiction they fall under.

Of the 644 complaints received, 340 were resolved and this represented a resolution rate of 53 percent, which is a decrease from 81 percent in the previous year. The decrease in the resolution rate is attributed to delayed responses and action from the respective service providers. To address this, the Authority has proposed a review of the Kenya Information and Communications (Consumer Protection) Regulations, 2010, to provide for legal timelines for responses from the service providers and complaint resolution timeframes.

A detailed trend of the complaints by category received between July 2009 and June 2014 is provided in the Table 4.10.

Table 4.10: Number of complaints received

Complaint Category	2009/10	2010/11	2011/12	2012/13	2013/14
Unauthorised Charges/Subscriptions	7	82	139	170	204
Billing	24	69	43	77	70
Service Interruptions	23	45	47	48	72
Criminal Use of Services/Facilities	2	23	13	26	43
Service Provisioning Delays/Failures/Termination	12	24	29	24	32
Quality of Service (Voice and Data)	22	57	39	23	41
Counterfeit Phones	-	-	-	17	-
Inappropriate Media Content	5	8	10	16	9
Digital Transition	-	-	-	12	28
Fraudulent Calls/SMS	1	26	18	12	28
Mobile Number Portability	-	586	91	11	10
Confidentiality/Privacy Breaches	4	6	4	9	3
Nuisance	6	3	3	8	16
Defective Terminal Equipment	30	15	9	7	14
Tariffs	1	2	1	6	6
Misleading Advertisements	5	8	5	4	3
Delivery Delays	4	3	6	3	7
Frequency Interference	1	4	6	3	7
SIM Registration	-	-	-	3	6
Identity Theft	-	-	2	2	5
Electromagnetic Radiation	1	-	1	1	
Unfair Trading Practices	2	1	3	-	3
Warranty Violations	-	-	1	0	-
Others	1	14	5	11	37
Total	**151**	**976**	**475**	**493**	**644**

Source: Communications Authority of Kenya

4.2.5.2 Resolution of Enquiries

383 consumer enquiries were received and handled in this period. 326 enquiries were resolved representing a resolution rate of 85 percent. The bulk of enquiries were by persons seeking to better understand the Authority's services or seeking more information on the digital migration process. Most of the enquiries placed in the category 'other' include employment and internship opportunities, business opportunities and some that were not specific to the Authority's mandate. The enquiries that were not specific to the Authority were re-directed to the entities under whose jurisdiction they fall.

The number of consumer enquiries increased from 121 in the previous year to 383. This was attributed to the public awareness activities carried out by the Authority during the year. A summary of the number of enquiries received between July 2009 and June 2014 is shown in Table 4.11.

Table 4.11: Number of Enquiries Handled between July 2009 and June 2014

	Number of Enquiries Received				
	2009/10	2010/11	2011/12	2012/13	2013/14
Frequency Spectrum	-	2	-	3	9
E-Commerce	1	1	-	-	-
Broadcasting	10	12	11	2	11
Authority's Services	7	17	15	9	52
Courier Services	-	-	3	1	-
Safe use of Facilities and Services	4	2	-	-	2
Subscriber Confidentiality	1	1	2	-	-
Postal Services	-	-	-	-	-
Authority Discharge of its Mandate	2	5	3	1	3
Mobile Number Portability (MNP)	-	3	-	-	1
Mandate of Authority	-	-	-	-	-
Counterfeit Phones	-	-	-	11	-
Digital Transition				10	20
SIM Card Switch-off				3	4
Spam Mail				-	1
Others	14	9	35	81	280
Total	**39**	**52**	**69**	**121**	**383**

Source: Communications Authority of Kenya

CHAPTER V: ROADMAP TO UNIVERSAL ACCESS

The liberalisation of communication services in Kenya has spurred development and economic growth in the sector. This is clearly demonstrated with the expansive network roll out to various parts of the country and the number of people with access to services. However, even with these changes there are parts of the country and communities that can only have access if supported through a deliberate intervention. For these reasons, the government in 2009 through the Kenya Information and Communications Act, 1998 created 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. These objectives will be realised through funding from the USF levy, appropriations by government, development partners and the Authority's own investment.

5.1 Operationalization and Implementation of the Universal Service Fund

The Kenya Information and Communications Act, 1998 also created the Universal Service Advisory Council (USAC) to advise the Authority and provide strategic policy guidance in administration and implementation of the USF. The first USAC was appointed in December 2012 and reconstituted in February 2013. The term of the first Council expired in January 2014 upon enactment of the Kenya Information and Communications (Amendment) Act, 2013. The new USAC members were appointed in May 2014 for a period of three years.

During the year under review, the Authority developed the Universal Service Fund (USF) governance framework whose objective is to essentially ensure efficiency in the administration and management of the fund by adopting best practices and minimizing bureaucracy in carrying out fund functions. The framework defines the roles of the Board, Universal Service Advisory Council (USAC), and the Management.

The Authority also developed the USF Implementation Strategy in an effort to inform stakeholders and the general public on the planned universal access interventions. The strategy outlines mechanisms to be employed in bridging communication access gaps in the country.

5.2Universal Access Pilot Projects

In preparation for the implementation of the USF, the Authority has undertaken a number of pilot projects including: School-based ICT centres, Community ICT access points, ICT centres in learning institutions for persons with disabilities, Web Portal for persons with disabilities and E-Resource centres in KNLS community libraries. The pilot projects act as test beds for future implementation of a national rollout.

5.2.1 Persons with Disabilities

During the year under review, the Authority continued to support the following ICT centres in learning institutions for persons with disabilities namely:

- Kibos Special School for the Visually Impaired
- Joyland Special School for the Physically Disabled
- Kuja Secondary School for the Hearing Impaired
- St Lucy School for the Visually Impaired
- Mombasa Secondary School for the Physically Disabled
- Thika High School for the Blind
- Rev Muhoro School for the Deaf
- Machakos Technical Institute for the Blind

5.2.2 ICT Centres

The Authority continued to facilitate the provision of maintenance service for school-based ICT centres and Community ICT access points namely: Mashuuru Secondary School, Kitundu Telecentre, Sirisia Telecentre, Sabatia Telecentre, Wiyumiririe Secondary School and Kamunyaka Kiumu Secondary School.

5.2.3 E-Resource Centres

The Authority supported the establishment of E-Resource Centres in 10 community libraries managed by the Kenya National Library Services (KNLS) in the FY 2012/13. It also supported the provision of internet connectivity to these centres during this period. The performance of this pilot phase has provided the Authority and the KNLS with adequate lessons for future implementation of similar initiatives in other community libraries.

Universal Service Advisory Council Members: From Left: Longole Wangiros James, Roda A. Masaviru, OGW, Kennedy J. Okongo, Michael M. Itote, Nixon Mangeka Gecheo, Catherine Ngahu, EBS (Chairperson), Samuel Gitonga Mutungi, Amb. Wellington Pakia Godo, Josephine Towett.

CHAPTER VI: CAPACITY BUILDING, IMPROVEMENT OF SYSTEMS AND WORKING ENVIRONMENT

To improve it's service delivery, the Authority continued to enhance its systems, automate its processes, and maintain a good working environment. The Authority continues to build the capacity of its human capital and endeavours to optimally manage its resources.

6.1 Human Capital

Attracting and retaining a talented and motivated workforce is one of the key objectives of the Human Capital strategy. This is key in ensuring high productivity and performance of staff in regulating and facilitating transformation of lives in the dynamic and complex ICT Sector.

During the year under review, the Authority recruited nine (9) additional staff – (6 female and 3 male) mainly at management trainee level as part of its succession planning intiatives.

By the end of June 2014, the Staff Complement stood at 195 staff, with a ratio of 47:53 female to male employees compared to a ratio of 43:57 the previous year. This is a positive improvement in bridging the gender gap and encouraging gender equality and equity.

6.2Capacity Building

With the rapid change and complexity that characterises 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 also provides capacity building and knowledge transfer opportunities for both industry and academia.

6.2.1 Organisation Learning

Cognizant of the importance of retaining a highly skilled staff, the Authority implemented its training and development policy that focused on creating a learning organisation, developed employees to attain efficient and effective performance and provided opportunities for career development.

In the FY 2013/2014, 84 percent of the employees were trained based on identified training needs and skills competence assessments. The training covered courses in Management, ICT Regulation and Technical, Organisational Effectiveness and Leadership, and Governance. The Authority's staff also attended workshops and conferences based on corporate training needs.

In realising a holistic perspective in measuring performance, the Authority reviewed its performance appraisal tool to cater for 360 degrees appraisal feedback and trained its employees on the implementation of the tool. The tool incorporates self-evaluation, peer and subordinate review as well as supervisors rating.

6.2.2 Promoting Capacity Building in the Industry

During the period under review, the Authority, as a progressive regulator facilitated the building of talent and capacity in the ICT sector. Based on identified industry capacity needs and technological trends in the market, the Authority in partnership with the Commonwealth Telecommunications Organisation (CTO) conducted two programmes for the ICT industry on Space Communications Regulations and Cloud Computing.

The Authority, in collaboration with the Common Market for East and Southern Africa (COMESA), organised a regional cyber-security forum that brought together more than 200 local, regional and international ICT stakeholders including representatives from African ICT regulators.

6.2.3 Knowledge Transfer between Industry and Academia

The Authority played its role as the link in knowledge transfer between industry and academia. It hosted five institutions for study visits, and provided attachment and internship opportunities to eighty-five students from tertiary and higher institutions of learning.

6.3 Improvement of the Working Environment

In an effort to ensure a conducive working environment for its employees, the Authority continued to improve its work environment and adhered to statutory health, safety and environmental protocols. The Authority continued to maintain a corruption free working environment enhancing its productivity and efficiency in service delivery.

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 Climate Change adaptation initiatives such as paperless meetings, use of energy saving bulbs, light sensors, automated water taps and harvesting of rain water from the CA Centre.

With the increasing use and versatile nature of ICT, obsolescence of technological equipment such as mobile devices, televisions, radios, and computers is inevitable, and thus e-waste is now a reality in Kenya. The Authority, in partnership with the National Environmental Management Authority (NEMA), facilitated sensitization training of its staff on e-waste management, and safe disposal of electronic waste, and participated in the celebration of World Environmental Day.

The Authority's Health and Safety Committee was trained on first aid, fire and safety, while the rest of staff were sensitized on safety and fire, 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 on staff satisfaction with the work environment. It yielded a satisfaction index of 86.3 percent. A slight improvement of 0.6 percent, compared to the previous year.

In mitigating work environment risk, the Authority continued to service and maintain its office equipment, machinery and property. In addition, the Authority's assets, property and equipment were insured against various risks.

6.3.2 Employee Wellness and youth Empowerment

The Authority endeavors to maintain a healthy workforce and encourages wellness and employee work-life balance, which translates to higher productivity and performance. In this regard, the Authority participated in the Kenya Communications Sports Organisation (KECOSO) annual games and continued to Chair the Governing Council for the 2nd year running. As the chairing organization, the Authority had more responsibility in ensuring that the games logistical planning was well carried out and at the same time providing administrative support through a secretariat.

KECOSO provides an opportunity for the Authority to support the Staff and Youth in showcasing their talent in sporting activities. In 2013, the KECOSO annual games were held in Kisumu and the Authority fielded seven teams in Darts, Pool, Snooker, Scrabble, Table Tennis, Golf, Football, through its team Talanta FC and Athletics, both track and field events. The Authority won the darts and golf trophies, came second in pool and snooker and was also awarded the best corporate sponsor. The Authority also retained the trophy for the Best Disciplined Team and emerged third overall out of the eleven member organizations that took part in the annual sports fete.

The Authority, in implementing its wellness strategy to ensure that staff maintained a healthy work-life balance, provided training for all its employees on Stress and Financial Management. It has also embraced flexi-working hours for lactating mothers.

6.3.3 Campaign against HIV/AIDS

The Authority's staff were sensitised on behaviour change initiatives to address blood safety and post exposure prophylaxis and stigma associated with HIV/AIDS. The peer educators were also involved in an outdoor wellness challenge facilitated by the National Organisation of peer educators (NOPE). In addition, staff participated in outreach CSR programmes by visiting Lea Toto Children's Home which caters for children born with HIV/AIDS and New Life Home Trust which offers care for abandoned and vulnerable children with a priority of those infected with HIV/AIDs.

6.3.4 Corruption Eradication Strategies

The Authority implemented its Corruption Prevention Policy and Strategy with an oversight role played by the Corruption Prevention Committee (CPC) comprising of Heads of Department and chaired by the Director General.

As part of awareness creation, the Authority sensitised staff on its Fraud and Corruption Prevention Policy, which included the procedure for reporting and managing ethical misconduct. Risk Champions were also trained on identification of risk and risk mitigation strategies including corruption related risks.

The Authority complied with the Public Officers Ethics Act (2003), by ensuring that staff Wealth Declaration Forms were submitted to the Public Service Commission within the statutory timelines. Newly recruited staff signed an Integrity Oath in compliance with the Authority's code of conduct that incorporates Article 232 and Chapter 11 of the Constitution on Leadership, Values and Principles of Public Service.

A survey was also carried out independently to determine the level of corruption perception among

staff and public stakeholders. An overall corruption perception index of 1.5 was registered, marking an improvement of 0.2 from 1.7 in the previous year, showing a positive perception of the Authority's staff propensity towards anti-corruption behavior.

6.3.5 Prevention of Drug and Substance Abuse

The Authority implemented its policy on drugs and substance abuse which focuses on creating awareness through sensitisation, information, education and communication (IEC), counseling and rehabilitation for addicted employees, as well as alcohol and drug abuse prevention strategies.

The Authority's employees were sensitised and trained on Drugs and Substance Abuse, with an emphasis on early identification of alcoholism, treatment and prevention. It undertook refresher training for its counselors and incorporated counseling, psychiatric and rehabilitative centres into the medical scheme as part of its initiative towards Employee Assistance Programmes.

6.3.6 Gender and Disability Mainstreaming

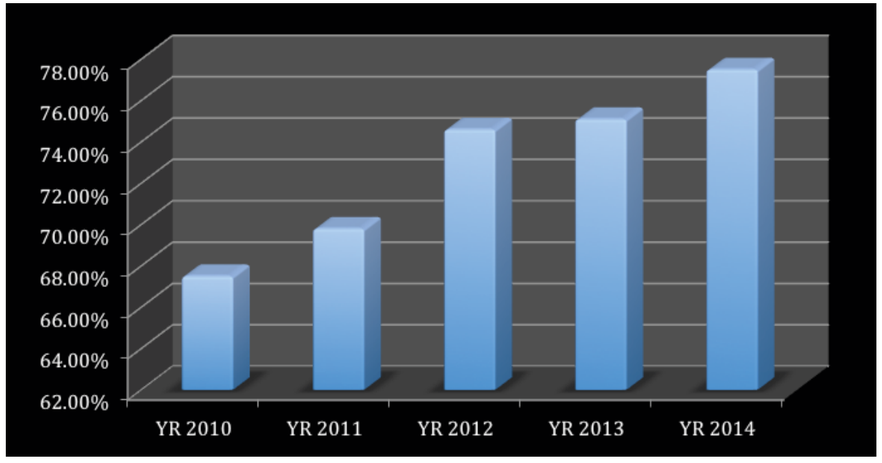
The Authority implemented its Gender Policy, by reviewing the recruitment and promotion within the departments, determining distribution spread in various committees to promote gender equity and balance and at the same time maintaining sex disaggregated data. Further, a baseline survey on gender mainstreaming was conducted and employees were subsequently sensitised. The male to female staff ratio stood at 53:47 which is well above the statutory requirements of at least a third representation of either gender in public service.

The Authority formulated its Disability Mainstreaming Action Plan that provided guidance on disability related aspects. The Authority in collaboration with the National Council for Persons with Disabilities (NCPwD) put in place a mechanism that ensures that PwDs access information relating to employment and internship opportunities. The NCPwD provided training to staff on disability etiquette.

6.3.7 Employee Satisfaction Perception Surveys

The Authority engaged an independent consultant to carry out an employee satisfaction survey aimed at identifying the elements that affect the level of employee work morale. The results of the survey indicated that employee satisfaction continued to improve as shown by the satisfaction index of 77.5 percent compared to 75.1 percent in the previous year.

Figure 6.1: Employee satisfaction survey results in the past 5 years



CA's Pool Captain, James Kinuthia, receives a trophy for winning the KECOSO 2013 Pool Competition from Ms. Jenifer Kere, Secretary, Youth, Sports and Culture, Kisumu County.

6.4 Automation of the Authority's Processes

The Authority enhanced its Integrated Management Information System (IMIS) by incorporating a Multi-Media Services (MMS) module. The module provides for automation of broadcasting-related license application, monitoring and compliance processes.

The Authority continued to sensitise its staff on the importance of maintaining confidentiality and integrity of information systems as part of the IT security measures.

The Authority installed video conferencing facilities to serve its Boardroom and other meeting rooms. The facilities will enable the Authority to conduct meetings remotely with its regional offices as well as with stakeholders. Given the increased usage of its IT systems, the Authority enhanced its IT Disaster Recovery Plan.

6.5 Regional Offices

In light of the new roles and responsibilities emanating from the Constitution, which includes equitable distribution of resources, access to services in all parts of the Country and addressing the needs of marginalised groups and minorities, the Authority embarked on establishing two regional offices in Mombasa and Eldoret. The Eldoret office branch will initially serve Western, Nyanza and North-Rift regions while the Mombasa office branch will serve the Coastal region. During the period under review, the Authority acquired two site offices and finalised their design and partitioning and procured furnishing for the offices.

6.6 Procurement and Disposal

The Authority continued to ensure that it gets value for money by procurement of goods, services and works in accordance with the Public Procurement and Disposal Act, 2005 and Regulations, 2006. This ensured fairness, transparency and accountability in its tender processes.

6.7 ISO Certifications

6.7.1 ISO 9001:2008

The Authority has maintained the ISO 9001:2008 Quality Management System (QMS) certification through regular internal and surveillance audits in addition to quarterly Management Review meetings.

The Authority increased its internal capacity for auditing and maintaining the system by training its QMS internal auditors to the level of Lead Auditors. The training provided auditors with relevant skills and knowledge related to preparation, planning and reporting of audits and assessing compliance with QMS.

6.7.2 ISO 27001:2013

As part of the process of streamlining its information security management systems, the Authority began the process of certification on the ISO 27001:2013 standard. The main objective of the Information Security Management System (ISMS) standard is to ensure confidentiality, integrity and availability (CIA) of the Authority's Information System. During the year, the Authority formed an ISMS Implementation Committee, undertook an ISMS gap analysis and trained staff on the Standard.

6.8 Risk Management

The introduction of performance contracting and results-based management initiatives in the public service demands adoption of Enterprise Risk Management (ERM) to provide a basis for management to effectively deal with risk.

Following the development of the ERM Framework in the FY 2012/13, the Authority embarked on its implementation to ensure that a risk management culture is embedded into the day-to-day activities. A Gap analysis to establish the level of adoption of best practice with regard to ERM was carried out, risk management policies were developed, awareness training on risk management requirements undertaken, and risks as well as appropriate controls identified.

ICT Cabinet Secretary Dr. Fred Matiang'i (second right) officially launches the 2013 - 2018 Strategic Plan. With him are ICT PS Joseph Tiampati (left) CA Chairman Ngene Gituku and CA Director General Francis Wangusi (right).

CHAPTER VII: CORPORATE COMMUNICATION AND INTERNATIONAL LIAISON

7.1 Engaging with Stakeholders and the Local Community

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

7.1 Engaging with Stakeholders and the Local Community

As the ICT regulator, the Authority engages all the relevant stakeholders through public consultations, meetings, workshops, public awareness campaigns, the corporate website and social media pages. In addition, the Authority continues in its endeavour to improve the lives of the less fortunate in society through various CSR initiatives.

7.1.1 Corporate Social Responsibility

The Authority takes cognizance of the various issues, outside of its mandate, that affect the society as a whole. As a socially responsible entity, it undertook initiatives aimed at improving the lives of the less fortunate in society.

The Authority continued to support FC Talanta for the second year running. The sponsorship has provided the team of young men aged 17 to 24 with a source of livelihood from their talent. The young players have continued to sharpen their skills which has seen them elevated to play in the National Super League.

The Authority visited various charity homes to provide them with foodstuff and other basic necessities. Staff visited and spent time with the children at New Life Home, Lea Toto Children's Home and Tumshangilie Mtoto wa Afrika. These homes cater for orphaned and vulnerable children. The Authority also visited Nyumba ya Wazee, a home for senior citizens. In addition to the visits, the Authority supported the construction of classrooms in Masaba DEB Primary School in Bungoma in order to provide a better learning environment.

In line with the CSR policy, the Authority supported other industry events including Media Council of Kenya Annual Journalists Excellence Awards, Public Relations Society of Kenya Annual Awards and Connected Kenya Summit. The Authority also supported social causes through the Mater Heart Run, Joyful Women Organisation, an NGO empowering women through micro-credit facilities to improve their livelihoods; the Kenya Medical Association campaign on cancer and the Kenya Diabetes Management Information Centre, to raise funds for medical care costs for diabetic children.

During the annual Kenya Communications Sports Organisation (KECOSO) Games held in Kisumu, the Authority, through its CSR kitty, donated a dais to Kisumu Polytechnic where the opening and closing ceremonies of the games were held. As a technical institution, students were incorporated in the construction of the iron structure as part of their practical studies.

CA Staff with Guy Bastable (right), the manager of New Life Home during the visit to the Home.

7.1.2 Public and Stakeholder Consultations

The ICT Industry rapidly evolves and this has an impact on the regulatory activities. To ensure an all-inclusive regulatory journey, the Authority continued to engage stakeholders on various issues arising in the industry.

The Authority was engaged in the stakeholder consultations on the review of the ICT Sector Policy and KICA. These consultations were necessitated by the need to align the ICT sector laws to the Constitution. Other key stakeholders involved in the consultations included the MoICT, the NCS, licensed Communications Service Providers, academia, consumers and consumer bodies. The consultations culminated in the Kenya Information and Communications (Amendment) Act, 2013.

In a bid to achieve 60 percent local content quota on free-to-air (FTA) television by June 2018, the Authority held consultative meetings with both broadcasters and independent content producers. These meetings provided forums through which the Authority sensitised both parties on the need for increased local content through which Kenyan identity, values, interests and nationhood are addressed. The Authority also highlighted the need for development of responsible and responsive broadcast content that caters for the varied interests of the different sections of the Kenyan community especially children and persons with disabilities.

The Authority in June 2014, held the inaugural ICT Week to facilitate focussed discussion with all stakeholders in the ICT sector. The three-day forum was segmented to cater for all stakeholder categories including a telecommunications forum, one for service providers and another for vendors, contractors and technical personnel; postal and courier; consumer; broadcasters and media forums. Presentations made during the various forums are available on the Authority's website.

7.1.3 Exhibitions and Promotional Activities

The Authority continued to engage the general public through exhibitions. In the year, the Authority took part in the Agricultural Society of Kenya (ASK) shows in Kisumu, Mombasa and Nairobi; this was an increase in participation compared to the previous year where only the Mombasa and Nairobi shows were attended. The ASK shows provided an opportunity to interact directly with the public and an avenue for distribution of information brochures.

At the Kisumu show, the Authority was ranked the best in the electronic and media services category and the second best for embracing ICT systems. In Mombasa, the Authority was ranked third in the embracing ICTs category. In Nairobi, it was ranked the best in the electronic and media services category, and second best in youth activities, empowerment and capacity building category.

On the international arena, the Authority took part in the ITU World Exhibition in Bangkok, Thailand. The four-day exhibition and parallel meeting event saw all participating nations showcase their ICT industries and share ideas and experiences that mutually enriched those in attendance. The Kenya pavilion showcased the National Broadband Strategy and the Konza Techno City as key investment opportunities. The Cabinet Secretary in the MoICT, Dr. Fred Matiang'i, who was also a panelist at the Ministerial Roundtables on Smart Cities and Digital Dividend, led the Kenya delegation.

In keeping with its tradition of engaging stakeholders, the Authority hosted Golf Tournaments in Nairobi, Kiambu, Mombasa and Kisumu. These tournaments provided a platform to informally interact with licensees and stakeholders and at the same time sell to potential investors the opportunities available in the vibrant ICT sector.

7.1.4 Public awareness campaigns

As a body mandated to serve the public, the Authority creates awareness of its initiatives to all its stakeholders through different channels.

During the year, the Authority continued to educate the general public on the migration from analogue to digital broadcasting. This communication was driven mainly on electronic and print media as well as through social media platforms. The Authority has over the years carried out several Universal Access projects on a pilot basis with the aim to increase access to ICTs in the unserved and underserved areas. To create awareness on these projects, the Authority developed and aired a documentary. The documentary was aired during prime time on local TV stations as well as through Factual Films mobile cinemas to reach the rural areas. It was also shared through the Authority's social media pages.

As a follow up on SIM registration, the Authority carried out a month long public awareness campaign on print media, radio and on social media. The campaign called on all Kenyans to ensure their SIM cards are registered. It also brought to light the penalties that apply should a subscriber fail to register or a vendor found selling SIM cards without first registering subscribers.

7.1.5 Re-branding to the new identity

The Kenya Information and Communication (Amendment) Act, 2013, provided for the change of name from the Communications Commission of Kenya to the Communications Authority of Kenya.

This change required an overhaul of the existing brand and all its applications. The Authority carried out a brand audit, which provided insights into the perceptions stakeholders had of the old body and their expectations for the new body and developed a new logo.

The public awareness campaign was carried out in three phases. The first phase focused on the achievements of the CCK in the 15 years it was in existence, this was conveyed through a documentary aired on local TV channels and adverts in print media.

The second phase involved the unveiling of the new identity through a launch event that was officiated by H.E. President Uhuru Kenyatta. Further, the new logo was applied on the Authority's premises. These activities were supported by an advertisement in radio, TV and local dailies communicating the change of identity.

This phase also saw the launch of a re-designed website, intranet and social media pages. The website was designed to create a clean and fresh look and at the same time make it easy for visitors to the page to find information. The website was created with a provision that enables persons with disabilities (PWD's) to access the information therein.

The third phase, which will be carried out in the next financial year, will be futuristic and it will communicate through advertisements and documentaries on how the Authority aims to move the ICT sector forward in Kenya.

7.1.6 International Relations and Liaison

The Authority actively took part in local, regional and international meetings on ICT matters and represented the country in the relevant bodies. In addition, the Authority maintained membership in pertinent local, regional and international affiliated organisations.

7.1.6.1 Regional and International Meetings and Conferences

The Authority continued to represent the country and meet its regional and international obligations. This is in line with its mandate of regulating the sector, capacity building and ensuring that decisions made at the national level are consistent with regional as well as international policy and regulatory best practice.

The Authority was involved in television frequency re-planning and coordinating the same with the neighboring countries in the region under the auspices of African Telecommunication Union (ATU). It hosted "The 3rd and final frequency coordination conference" in July 2013 whose aim was to complete coordination and submit modifications of the GE06 plan to ITU. The Authority successfully concluded the exercise and submitted the modifications of the GE06 plan to ITU. This exercise was done to facilitate transition from analogue to digital TV broadcasting.

During the 53rd Commonwealth Telecommunications Organisation (CTO) Council meeting held in October, 2013 , Kenya was re-elected chair of the CTO Executive Committee through the Authority's Director of Human Capital and Administration (HCA).

The Authority continued to participate in other meetings and conferences organised by various international and regional ICT organisations. These included the World Telecommunications Development Conference (WTDC) organised by ITU. The Authority also participated in the Internet Conference for Assigned Names and Numbers (ICANN), the Internet Governance Forum (IGF), the Administrative Council of the African Telecommunications Union (ATU),

CA Director General, Mr. Francis Wangusi, meets guests visiting the Kenya Pavilion during the ITU Telecom World in Bangkok, Thailand. Looking on is ITU Secretary General, Dr. Hamadoun Toure.

the Association of Regulators of Information and Communications for Eastern and Southern Africa (ARICEA), Annual General Meeting and Governing Council of the Africa Advanced Level Telecommunication Institute (AFRALTI) and the East African Communications Organisation (EACO) Assemblies.

Additionally, the Authority in liaison with other Government agencies coordinated the development and presentation of national positions to treaty making meetings and other forums organised by affiliated regional and international organisations.

7.1.6.2 Benchmarking

The Authority continued to host delegations on benchmarking visits in an effort to share its knowledge and experience in the ICT industry. The delegations hosted included: Members of the East African Legislative Assembly (EALA), the Zambia Information and Communications Technology Authority (ZICTA), ICT Regulators from Somalia and South Sudan, the Communications Regulatory Authority of Namibia (CRAN), Public Utilities Regulatory Authority (PURA) of Gambia, Central Bank of Peru, the National Defence College of Kenya and the Ministry of Communications, Science and Technology of Tanzania.

The topics of interest ranged from the overall regulatory mandate of the Authority, the digital migration process, consumer education, national broadband strategy, postal regulation, unified licensing framework, competition tariffs and market analysis, human resource management, cybersecurity, communications and public awareness and international relations.

7.1.6.3 Subscriptions to Regional and International Organisations

The Authority is the designated representative of the Kenya Government on ICT matters. As such, it continues to meet the associated financial obligation in form of subscriptions to its affiliated regional and international ICT organisations. These organisations include the ITU, UPU, CTO, EACO, PAPU, ATU, ARICEA and AFRALTI.

CHAPTER VIII: FINANCIAL INFORMATION

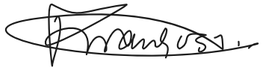
Communications Authority of Kenya Statement of Directors Responsibility as at 30 June 2013

The State Corporations Act (CAP 446) requires the directors to prepare financial statements for each financial year that give a true and fair view of the state of the financial affairs of the Authority as at the end of the financial year and the operating results for that year. It also requires the directors to ensure 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 safe guarding the assets of the Authority.

The directors accept responsibility for the annual financial statements, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgments and estimates in conformity with International Financial Reporting Standards and in the manner required by the State Corporations Act. The directors are of the opinion that the financial statements give a true and fair view of the financial position of the Authority and of its operating results. The directors further accept responsibility for the maintenance of accounting records, which may be relied upon in the preparation of financial statements as well as adequate systems of internal financial controls.

Nothing has come to the attention of the directors to indicate that the Authority will not continue as a going concern for at least the next twelve months from the date of this statement.

Bedan N. Gituku
Chairman
Date: 24/3/2014



Francis W. Wangusi, MBS
Director General
Date: 24/3/2014

Annual Reports and Accounts 2012/13

The financial report contained herein is the audited report for the FY 2012/13 as the annual accounts for FY 2013/14 are yet to be audited.

8.1 Statement of Comprehensive Income for the Year Ended 30th June 2013

The Audited Statement of Comprehensive Income for the financial year ended 30 June 2013 is reproduced herein.

Communications Authority of Kenya

Statement of Comprehensive Income

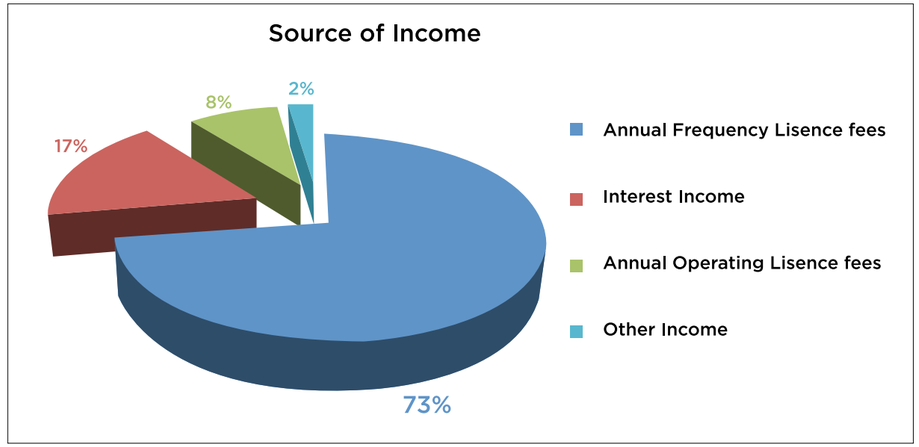
For the Year Ended 30 June 2013

	2013	2012
		Restated
	Kshs'000	Kshs'000
Income	7,303,270	8,781,256
Operating expenses	1,783,471	1,782,572
Surplus for the year	**5,519,799**	**6,998,684**
Provision Surplus Remittance at 90%	**4,967,819**	**6,298,815**
Net surplus	**551,980**	**699,868**

8.1.1 Income

The Authority earned income from Annual Frequency License fees, annual operating license fees, interest income, type approval fees and other income as illustrated in Figure 8.1.

Figure 8.1: Sources of Income



Annual Frequency License Fees comprised the Authority's main income stream as it accounted for 73 percent of total income, income from interest accouned for 17 percent while annual operating license fees accounted for 8 percent of the total income.

8.1.2 Operating Expenditure

During the FY 2012/13, KES 1.783 billion was spent on operations of the Authority compared to KES 1.782 billion during the previous period.

The expense items included in the operating expenditure are salaries and allowances, training, international obligations, professional fees, subscriptions, universal access obligations, National Communications Secretariat, corporate affairs, printing and stationery, medical expenses, postage and telephone expenses and other expenses incurred in the day-to-day running of the Authority. This expenditure was in line with the approved budget.

8.1.3 Capital Expenditure

The total capital expenditure for the year 2012/2013 was KES 168.042 million compared to KES 59.415 million incurred in the financial year 2011/12. The items accounting for this expenditure included buildings and improvements, furniture and fittings, office equipment, computers, telecommunications equipment, and motor vehicles.

8.1.4 Surplus

The surplus for the financial year 2012/2013 was KES 5.519 billion, which is a decline from KES 6.998 billion recorded in the financial year 2011/2012. This represented a decline of 21 percent in surplus as a result of downward revision of various regulatory fees which came into effect on 1st July, 2012.

The Authority remitted KES 4.96 billion to treasury; this is in line with Section 13A of the Finance Act 2010 on remittance of 90 percent of surplus into the Consolidated Fund reported in the audited financial statements after the end of each financial year. The Audited income statement for the financial year 2012/13 is reproduced in section 8.1.

8.2 Balance Sheet (Statement of Financial Position as at 30th June 2013)

The audited Statement of Financial Position as at 30th June 2013 is reproduced herein.

Communications Authority of Kenya
Statement of Financial Position as at 30 June 2013

	2013 Kshs'000	2012 Kshs'000
ASSETS		
Non Current Assets		
Property, plant and equipment	1,504,483	1,421,403
	1,504,483	**1,421,403**
Current Assets		
Trade Receivables	918,648	529,511
Cash and Cash equivalent	9,848,129	10,763,784
	10,766,777	**11,293,295**
TOTAL ASSETS	**12,271,260**	**12,714,699**
EQUITY AND LIABILITIES		
Capital and Reserves		
Owners equity	741,965	741,965
Revaluation reserve	380,681	380,681
Retained surplus	5,603,012	5,058,732
	6,725,658	**6,181,378**
Current Liabilities		
Provisional Surplus Remittance at 90%	4,964,232	6,295,228
Trade and other Payables	581,370	238,093
	5,545,602	6,533,321
TOTAL EQUITY AND LIABILITIES	**12,271,260**	**12,714,699**

The accounts were approved by the Board of Directors on 24 / 03 / 2014 and were signed on it's behalf by:

Bedan N. Gituku
Chairman

Francis W. Wangusi, MBS
Director- General

8.2.1 Assets

The total assets of the Authority amounted to KES 12.27 billion during the FY 2012/2013. This comprised of property, plant and equipment at KES 1.5 billion, Receivables amounting to KES 0.918 billion and cash equivalent of KES 9.848 billion.

8.2.2 Capital and Reserves

As at 30th June 2013, the capital and reserves of the Authority amounted to KES 6.73 billion, as compared to 6.18 billion recorded in the previous year. The capital and reserves comprise of Owners Funds, Revaluation Reserve and Retained Surplus as shown in Table 8.2;

Table 8.2: Capital and Reserves

Capital and Reserves as at 30th June 2013	KES '000'
Owners Funds	741,965
Revaluation Reserve	380,681
Retained Surplus	5,603,012
Total	**6,725,658**

8.2.3 Current Liabilities

The current liabilities of the Authority at the close of the FY 2012/13 stood at KES 5.54 billion, comprising of proposed surplus remittance to the Treasury of KES 4.96 billion and trade payables of KES 581 million.

8.2.4 Auditing of Financial Statements

In accordance with Section 20 of the Kenya Information and Communications Act, 1998, the financial statements for the financial year ended 30th June 2013 were forwarded to the National Audit office for review and audit.

The Authority's financial statements for the year 2012/2013 were audited and an unqualified opinion was issued.

8.2.5 Annual Budget Estimates and Revised Budget

In accordance with Section 19 of the Kenya Information and Communications Act, 1998, and the provisions of the Exchequer and Audit Regulations, the estimates of revenue and expenditure of the Authority for the year 2014/15 were prepared and submitted to the National Treasury through the Ministry of Information, Communications and Technology.

The total estimated income is KES 6.565 billion, while operating expenditure is estimated at KES 2.43 billion. The total budgeted capital expenditure is KES 1.141 billion.

During the FY 2013/2014, the revised budget was approved by the National Treasury with an estimated income of KES 6.76 billion, operating expenditure at KES 2.43 billion and a capital expenditure of KES 308 million.

ANNEX: SELECTED KEY COMMUNICATIONS STATISTICS AND ECONOMIC INDICATORS

Annex 1: Information and Communications Technology Statistics

Indicator	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Fixed Telephony Capacity Wireline	490,000	508,000	508,000	513,820	516,993	505,103	512,281	485,581	421,528	400,764	380,135	362,627	340,005
Wireline Connections	328,116	328,358	299,225	278,867	293,364	339,229	527,064	247,972	234,522	187,716	74,606	56,724	53,998
Wireless Connections	0	0	0	0	0	84,107	274,449	448,529	225,592	191,585	188,155	159,545	147,396
Total Wireline and Wireless Connections	328,116	328,358	299,225	278,867	293,364	347,226	527,064	696,501	460,114	379,301	262,761	216,469	201,398
Mobile Telephony Capacity	1,500,000	2,00,000	3,935,000	6,800,000	10,600,000	18,200,000	25,964,700	29,400,000	46,628,948	47,677,000	49,977,000	55,077,000	55,077,000
Mobile Telephony Connections	944,128	1,590,286	2,546,157	4,479,375	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
Mobile Money Transfer Service Subscribers	-	-	-	-	-	-	-	-	10,615,386	17,395,727	19,505,702	24,600,053	27,114,623
Total Postal Outlets	891	890	872	861	768	721	744	710	700	697	634	622	622
Private Letter Boxes	394,121	397,731	395,811	399,667	400,016	411,716	414,616	412,006	414,756	427,900	431,181	432,000	432,000
Letter Posting Boxes	1,137	1,138	1,120	1,049	1,049	966	827	890	890	890	752	890	890
Public Counter Positions	1,429	1,394	1,378	1,377	1,388	1,388	1,390	1,279	1,339	1,261	1,030	1,102	1,102
Stamp Vending Licences (PCK Issued)	299	4,466	3,733	4,088	4,242	4,125	4,609	4,505	5,136	5,260	2,847	4,274	4,274
Stamp Vending Machines	0	0	0	0	0	264	246	280	280	280	280	280	280
Private Operator Outlets	320	330	341	437	521	554	606	622	601	635	683	707	707

Source: Communications Authority of Kenya

Annex 2: Economic Indicators 2013

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012+	2013*
Population (Millions)	30.9	31.8	33.2	34.2	35.1	36.1	37.2	38.3	38.6	38.5	39.5	40.7	41.8
Growth of GDP at Constant (2001) Prices (%)	4.5	0.6	2.9	5.1	5.9	6.3	7.0	1.5	2.6	5.8	4.4	4.6	4.7
GDP Per Capita (in 2001 Prices) (KES)	0	0	31,825	32,463	33,442	34,570	36,000	35,611	35,470	36,419	38,941.0	39,620.5	40,345.2
Postal and Telecommunications GDP (KES. Millions)	22,853	30,169	33,040	30,167	36,242	43,251	54,947	56,756	62,508	64,413	65,923	71,729	76,167
Postal and Telecommunications as % of GDP	2.2	2.8	3	2.4	2.6	2.7	3.0	2.7	2.6	2.5	2.2	2.1	2.0
Growth of Postal and Telecommunications at Constant (2001) Prices (%)	66.3	32.2	10	8.5	17.7	16.5	30.3	7.8	10	4.5	4.3	6.7	9.3
Private Sector Wage Employment	24,118	24,901	25,684	31,687	39,204	47,452	61,496	62,800	70,400	76,200	78,800	83,900	90,900
Public Sector Wage Employment	1,324	1,314	1,307	1,317	1,352	1,397	1,255	1,300	1,800	1,700	1,700	1,800	1,800
Consumer Price Index, Annual Average*	131.0	133.6	146.7	163.7	180.2	76.25	79.50	92.36	102.10	106.26	121.17	132.5	140.1
CPI Inflation Rate (Overall) %	5.8	2	9.8	11.6	10.0	6.0	4.3	16.2	10.5	4.1	14.0	9.4	8.2

* Means that for 200102005: Consumer Prices, Annual Average [Index numbers October 1997=100]; and 200602010:Consumer Prices, Annual Average [Index numbers February 2009=100]

+Provisional; + Revised

Source: Adapted from the Economic Survey (Various Issues).

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