

# ANNUAL REPORT 2011-12



Opening your world



Communications  
Commission  
of Kenya



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## Key Abbreviations and Acronyms

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
BCAC	Broadcasting Content Advisory Council
BPO	Business Process Outsourcing
BTS	Base Transmitter Stations
BUC	Block Up Converter
CA	Consumer Affairs
CAP	Chapter
CB	Citizen Band
CCK	Communications Commission of Kenya
ccTLD	country code Top Level Domain
CDMA	Code Division Multiple Access
CEOs	Chief Executive Officers
CIIP	Critical Information Infrastructure Protection
CIRT	Computer Incident Response Team
CPI	Consumer Price Index
CPR	Communications and Public Relations
CS	Commission Secretary
CSP	Content Service Providers
CSR	Corporate Social Responsibility
CTMA	Competition, Tariffs and Market Analysis
CTO	Commonwealth Telecommunications Organization
dBm	Decibels (dB) measurement (m)
DCNO	Data Carrier Network Operator
DG	Director General
DMP	Dominant Market Power
DPM	Directorate of Personnel Management
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 Organization
EA-IGF	East Africa Internet Governance Forum
EASSY	East African Sub-marine Cable System
EDGE	Enhanced Data Rates for GSM Evolution
ESA	European Space Agency
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
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
HR4ICT	Human Resource for Information and Communication Technology
HRA	Human Resources and Administration
HSPA	High Speed Packet Access
IAS	Internal Audit Services
IASs	International Accounting Standards
IBC	International Broadcasting Convention
IBGO	Internet Backbone and Gateway Operator
ICANN	Internet Corporation for Assigned Names and Numbers

ICT	Information and Communications Technology
IGF	Internet Governance Forum
IGS	International Gateway Systems and Services
IMIS	Integrated Management Information System
IP	Internet Protocol
ISO	International Organization for Standardization
ISS	International System and Services
IT	Information Technology
ITU	International Telecommunications Union
IXP	Internet Exchange Point
KACC	Kenya Anti-Corruption Commission
KCCT	Kenya College of Communications Technology
KE-CIRT	Kenya national Computer Incident Response Team
KECOSO	Kenya Communications Sports Organization
KENIC	Kenya Network Information Centre
KES	Kenya Shilling
KIA	Kenya Institute of Administration
KICA	Kenya Information and Communications Act, Cap 411A
K-IGF	Kenya Internet Governance Forum
KNBS	Kenya National Bureau of Statistics
KNLS	Kenya National Library Services
KPIs	Key Performance Indicators
LA	Legal Affairs
LAN	Local Area Network
LCS	Licensing, Compliance and Standards
LLOs	Local Loop Operators
LRIC	Long Run Incremental Cost
LTE	Long Term Evolution
MACRA	Malawi Communications Regulatory Authority
Mbps	Mega Bits Per Second
MHz	Mega Hertz
MNDC	Mobile National Destination Codes
MNP	Mobile Number Portability
MOS	Mean Opinion Score
MOU	Minutes of Use
MoU	Memorandum of Understanding

MSK	Marketing Society of Kenya
MTR	Mobile Termination Rate
NACADAA	National Campaign Against Drug Abuse Authority
NACC	National Aids Control Council
NCPWDs	National Council for Persons with Disabilities
NFP	Network Facility Provider
NFP T1	Network Facility Provider Tier 1
NFP T2	Network Facility Provider Tier 2
NFP T3	Network Facility Provider Tier 3
NGN	Next Generation Networks
NPC	National Preparatory Committee
NSS	National Space Secretariat
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
PRSK	Public Relations Society of Kenya
PSTN	Public Switched Telephone Network
PWDs	Persons with Disabilities
QMS	Quality Management System
QoS	Quality of Service
RRB	Radio Regulations Board
RxLev	Received signal level
SCR	Submarine Cable Landing Rights
SDR	Software Defined Radios
SEACOM	Sea Submarine Communications
SHF	Super High Frequency
SMS	Short Message Service
SOYA	Sports Personality of the Year Award
SP-B&DM	Special Projects Broadcasting and Digital Migration
SSA	Sub-Saharan Africa
Tbps	Tera Bits Per Second
TCRA	Tanzania Communications Regulatory Authority



## Key Abbreviations and Acronyms

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
UN	United Nations
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
ZICTA	Zambia Information and Communication Technology Authority

## Acknowledgement

The Commission acknowledges and appreciates the hard work that went into developing this Annual Report. In this regard, the Commission wishes to thank the following individuals for their dedication, commitment and professionalism in developing this Annual Report.

Dr. James Njeru - Chairman  
Mr. Samuel Andati  
Mr. Bernard Maina  
Mr. Etiko Omungu  
Mr. Liston Kirui  
Ms. Isabelle Kandagor  
Ms. Patricia Kemei  
Mr. Philip Kiplagat  
Mr. Paxton Musomba  
Ms. Hazel King'ori  
Ms. Florence Keino

Special thanks go to the Consumer and Public Affairs (CPA) Department for co-ordinating the editing and design of this Annual Report.



# Fact

Be safe online.  
Cybersecurity begins  
with YOU.



CCK staff share foodstuff and other items with needy Children at Nyumbani Children's Home as part of the Commission's CSR programe. Looking on is Sr. Triza(e) Chief Matron at the Home.



The Board of Directors



Eng. Philip O. Okundi, EBS, HSC  
Chairman



Francis W. Wangusi  
Director General



Dr. Bitange Ndemo  
Permanent Secretary, Information  
and Communications



Aloys O. Ang'asa  
Director



Kariithi Njogu  
Director



Matei Ndeti  
Director



Joseph Kinyua  
Permanent Secretary, Treasury



Mutea Iringo  
Permanent Secretary, Provincial  
Administration and Internal Security



Ben N. Gituku  
Director



Amb. Bruce Madete  
Alternate Director, Information and  
Communications



Christopher Kimani  
Alternate Director, Provincial  
Administration & Internal Security



John Omo  
Secretary to the Board



Dr. Monica Kerrets-Makau  
Director



Peter L. Simani  
Director



Beatrice O. Opee  
Director

## Profiles of the Board of Directors

### **Hon. Eng. Philip O. Okundi, EBS, HSC – Chairman of the Board**

Hon. Eng. Philip O. Okundi is the Chairman of the Board of Directors of the Communications Commission of Kenya. He was first appointed in October 2008 and re-appointed for a second term in October 2011. He holds a Msc. in Telecommunications Systems Engineering from the University of Essex and a BSc. in Electrical and Telecommunications Engineering from the University of Westminster. He is a fellow of the Institution of Engineers of Kenya and the United Kingdom, and a registered Engineer and Chartered Electrical Engineer (UK).

### **Mr. Francis W. Wangusi –Director General**

Mr. Francis W. Wangusi is the Director General and Chief Executive Officer of the Communications Commission of Kenya (CCK). He holds a Master of Space Science (Satellite Communications) from the International Space University, France, and a Bachelor of Technology (Telecoms Engineering) from the University of Rome, Italy. He holds a Chartered Engineering Certificate from the Engineering Council, United Kingdom. Mr. Wangusi was appointed Director General of CCK on 12th August 2011.

### **Dr. Bitange Ndemo, EBS – Board Director**

Dr. Bitange Ndemo is the Permanent Secretary in the Ministry of Information and Communications. He holds a PhD in Industrial Economics from the University of Sheffield in the UK, a Master of Business Administration and Bachelor's Degree in Finance and Accounting from the University of Minnesota.

### **Mr. Joseph Kanja Kinyua, CBS - Board Director**

Mr. Joseph K. Kinyua is the Permanent Secretary in the Ministry of Finance. He holds a Bachelor's and Master's degrees in Economics from the University of Nairobi.

### **Mr. Mutea Iringo, EBS – Board Director**

Mr. Mutea Iringo is the Permanent Secretary in the Ministry of State in charge of Provincial Administration and Internal Security. He joined the CCK Board following his appointment as the Permanent Secretary in the Ministry of State on 29th January 2012.

### **Mr. Ben N. Gituku – Board Director**

Mr. Ben Gituku holds a BSc. degree in Mathematics and Meteorology from the University of Nairobi and a Diploma in Marketing. He was appointed to the CCK Board on 6th February 2012 for a three-year term.

### **Dr. Monica Kerretts-Makau – Board Director**

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

### **Mr. Peter Ldhituachi Simani - Board Director**

Mr. Peter Ldhituachi Simani holds a Bachelor of Laws degree from the University of Nairobi, a diploma in Law from the Kenya School of Law and a Certificate of Proficiency in French. He is a member of the Law Society of Kenya, Commonwealth Lawyers Association, International Bar Association, International Commission of Jurists and the Association of European Lawyers. He was appointed to the CCK Board on 21st February 2011 for a three-year term.

### **Ms. Beatrice O. Opee – Board Director**

Ms Opee holds an MSc. in Telecommunications from the State University of New York Institute of Technology (SUNYIT), USA, and a BSc. in Computer Science from Middle Tennessee State University. She joined the CCK Board on 12th February, 2012 for a three-year term.

### **Mr. Aloys .O. Ang'asa – Board Director**

Mr. Ang'asa holds a B.Ed (Economics) and MSc. (Agricultural Economics) from the University of Nairobi. He has worked in the communications sector in various capacities for over 30 years and was appointed to the CCK Board on 21st February 2011 for a three-year term.

### **Mr. Kariithi Njogu – Board Director**

Mr Kariithi holds two MSc. degrees in Human Biology and in Management and Organization Development from Loughborough University of Technology in the UK. He joined the CCK Board on 1st October 2006 and he is serving his second term.

### **Mr. Matei Mulili Ndeti – Board Director**

Mr. Ndeti holds a Msc. in Electrical Engineering from North Carolina A&T State University and a Bsc. in Systems Engineering from Wright State University in the USA. He was appointed to the CCK Board on 7th November 2008 for a three-year term. He retired from the CCK Board on 7th November 2011.

### **Amb. Bruce Madete, MBS – Alternate Board Director**

Amb. Madete is the Senior Director of Administration in the Ministry of Information and Communications. He holds a Bachelor of Arts degree (B.A. Hons) in Government and Linguistics from the University of Nairobi He has undertaken courses in Advanced Public Administration, Management of Information Systems and Strategic Leadership and Management. He was appointed the Alternate Director to the Permanent Secretary in the Ministry of Information and Communications on 25th April, 2012.

### **Mr. Christopher Kariuki - Alternate Board Director**

Mr. Joseph Kariuki is the Chief Financial Officer in the Ministry of State for 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 to the Permanent Secretary in charge of Provincial Administration and Internal Security on 26th August, 2011.

### **Mr. John Omo – Secretary to the Board**

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 Commission Secretary and Head of the Legal Affairs Department at CCK.

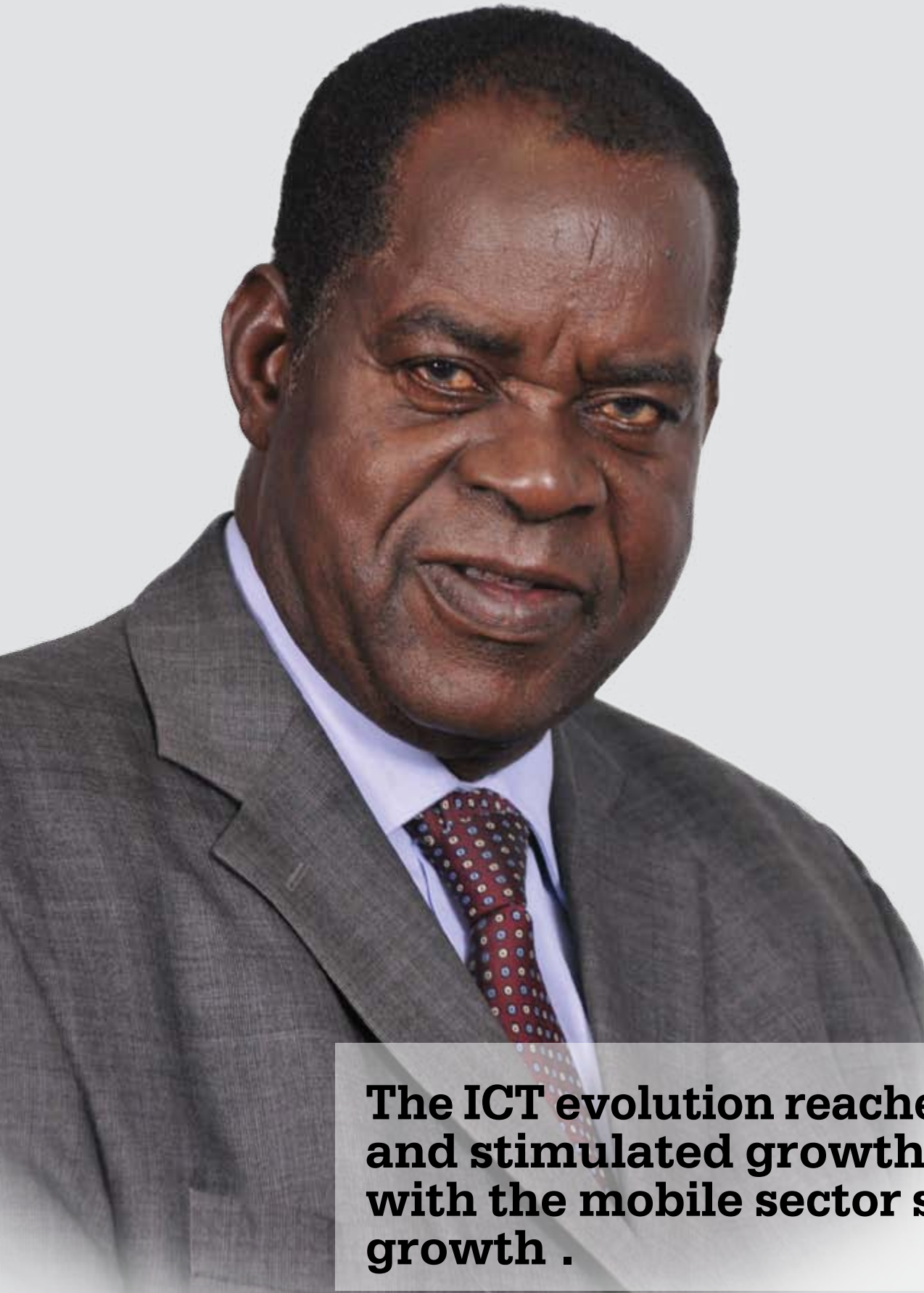


# Phishing

**This is a form of scam on the internet that tricks you into giving personal information. Avoid giving personal information online, and if you must, validate the source before you do.**







**The ICT evolution reached new milestones and stimulated growth in other services with the mobile sector spearheading this growth .**

## Chairman's Overview

On behalf of the Board of Directors, I am pleased to present to you the Commission's annual report for the year ended 30th June 2012 as required under Section 22(1) of the *Kenya Information and Communications Act, CAP 411A*.

The ICT sector in Kenya has undergone fundamental and dramatic changes since liberalization 12 years ago. The sector, which is one of our country's economic drivers, is today defined by competition, investment, dynamism, and exponential growth. The financial year 2011/12 was significant in many respects. The mobile sub-sector continued to thrive with the subscriber base expanding to 29.7 million up from 25.2 million in the previous year, representing a mobile penetration rate of 75.4 percent. Operators also increased their mobile capacity to 49.977 million compared to 47.677 million recorded in the previous year. The adoption of mobile technology in the financial sector continued to expand as banks developed innovative mobile banking (M-banking) solutions.

For the period spanning 1st July 2011 to 30th June 2012, the mobile cellular subscriber base increased by 17.5 percent while mobile money transfer subscriptions grew by 12.1 percent. The Internet sub-segment showed positive development with an estimated 14.032 million Internet users, representing Internet penetration of 35.5 percent compared to 21.2 percent in the previous year. This growth in the penetration is expected to spur the growth of the ICT industry going forward.

The Commission licensed Pan Africa Network Group (Kenya) Company Limited in October 2011 as the second national digital television (TV) broadcast signal distributor.

The second licensee is expected to facilitate faster infrastructure roll out for digital terrestrial television as the country prepares for the analogue television switch-off. This development placed Kenya firmly on course to meet the June 2015 International Telecommunication Union (ITU) deadline for transition from analogue to Digital Terrestrial Television (DTT) broadcasting. The Commission also embarked on a process of migrating analogue TV broadcasting services from the 694-862 MHz band to the 470-694 MHz band. This will ensure that the resultant digital dividend is optimally used.

During the year, there was an increase in the number of players offering a diverse range of products and services thus expanding consumer choice. The total number of licensees under the Unified Licensing Framework (ULF) increased from 844 the previous year to 1,311, representing a growth of 55.3 percent.

In order to stimulate competition and expand the reach of ICT networks throughout the country, the Commission reviewed both initial and annual operating licence fees for telecommunication services by between 20 percent and 50 percent. Type approval fees were reduced by 80 percent. Reduction of initial and annual operating fees will ensure users enjoy competitive prices for communications services. Reduction of type approval fees is expected to increase the rate of compliance in the market and the incidence of sale of non-type approved equipment. In addition, lower regulatory fees are expected to stimulate infrastructure investment and development in the un-served and underserved areas, encourage efficient utilization of assigned frequencies, as well as align the local market sector to other markets in the region. These changes will take effect from 1st July 2012.

To improve access to communications services in all parts of the country and promote national competitiveness, the Commission signed a Memorandum of Understanding (MOU) with the United States Agency for International Development (USAID) through its associate Global Broadband Innovation (GBI) programme for technical assistance to develop a National Broadband Strategy. The strategy will guide the development of an enabling policy, legal and regulatory environment for the roll out of broadband services in Kenya that will stimulate universal access in underserved and un-served areas of the country. The strategy is expected to spur growth in the ICT industry, other sectors of the economy and the provision of Government services on electronic and mobile platforms.

The Commission reviewed its Second Strategic Plan 2008-13 to align it with Vision 2030. The revised Strategic Plan will provide the basis for planning and allocation of resources and serve as the foundation for the Commission's Performance Contracting obligations with the Government.

## Chairman's Overview (cont'd)

On the international scene, Kenya continued to assert its influence in the ICT sector. In this regard, the Commission in liaison with other Government agencies, co-ordinated the development of national positions to various agenda items for the World Radio Conference (WRC-12). The positions were subsequently harmonised with those of other African governments to provide a common African position ahead of the conference. The Conference reviewed and revised the Radio Regulations, the International Treaty governing the use of radio-frequency spectrum and satellite orbits. The Commission also took part in two African Preparatory meetings for the World Telecommunication Standardization Assembly (WTSA) and the World Conference on International Telecommunications (WCIT) in November 2011 and May 2012 respectively. Further, Kenya was elected to the position of 1st vice Chair of the Executive Committee of Commonwealth Telecommunication Organization (CTO) at the 51st Council Meeting in Trinidad and Tobago in September 2011.

In all its operations, the Commission takes cognizance that its sustainability and success are dependent upon the environment and the communities in which it operates. In this regard, as part of its Corporate Social Responsibility, the Commission signed an MoU with the United Nations Children's Fund (UNICEF) to support talent development through partnership with the National Youth Talent Academy (NYTA). NYTA is a project between UNICEF and the Government of Kenya (GoK) under the Ministry of Youth and Sports Affairs and through the partnership, the Commission will sponsor a football team, Talanta United FC, for three years. This sponsorship will be utilised to develop an innovative youth development initiative to nurture local talent and provide employment and livelihood opportunities for Kenyan youth. This project will also strengthen the overall GOK-UNICEF Education and Young People project.

In conclusion, I would like to accord my sincere gratitude to the Government of Kenya, our stakeholders and the public generally for the unwavering support we have enjoyed in the past year. I also wish to acknowledge the dedicated service and commitment of my Board colleagues and the staff of the Commission.



**Eng. Philip O. Okundi**  
Board Chairman

# Passwords

**Create a password that you will remember but difficult for others to guess. Mix upper and lower case letters and also use numbers. Keep your password secret and do not allow browsers to remember your password.**



## Director General's Word



During the year under review, the ICT sector continued to contribute significantly to Kenya's national development. In particular, the Transport and Communications sector remained one of the main drivers of Kenya's Gross Domestic Product (GDP), contributing 12.7 percent.

The sector continued to make in-roads into other economic sectors, and thus paving way to provision of innovative services. The financial sector, for instance, adopted and expanded mobile technology to offer mobile banking solutions to clients. Going forward, the sector is expected to come up with more innovations in addition to M-banking, M-credit, and M-insurance.

Mobile money transfer services offered by the four mobile operators and other licensees continued to facilitate payment of utility bills and purchases through this platform. Out of the total mobile subscription of 29.7 million, mobile money transfer services had 19.5 million subscribers by the end of the period under review, representing a growth of 12.1 percent over the previous year.

The number of Internet users in the country registered positive growth during the period under review. As at June 2012, there were an estimated 14.032 million Internet users in Kenya, representing a penetration rate of 35.5 percent compared to 21.2 per cent the previous year. A key driver of the growth in internet usage was the

introduction of affordable internet access devices, including smart phones and social networking applications. The increase in usage was also attributed to aggressive and innovative promotions, special offerings and reduced tariffs launched by operators.

During the year under review, the Commission continued sensitizing licensees on the advantages of migrating from the old licensing framework to the Unified Licensing Framework (ULF). As a result, the number of ULF licensees increased from 844 the previous year to 1,311, representing a 55.3 percent growth. Further, the Commission lowered regulatory fees for most telecommunication licence categories by between 20 per cent and 50 per cent. The reduced fees will come to effect from 1st July 2012.

The postal and courier market segment registered positive growth with respect to network development, increased competition and investments. During the year, the Commission licensed 14 new postal and courier operators, increasing the number to 190 from 176 the previous year. However, the number of post offices went down from 697 to 634 over the same period. As provided for by the law, the Commission reviewed and approved adjustment of tariffs for postage of letters of up to 350 grams, private letter box and bag rentals for the Public Postal Licensee - the Postal Corporation Kenya.

The digital migration process in the country progressed with the review of the minimum technical specifications for Digital Video Broadcast- Terrestrial Second Generation (DVB-T2) Set Top Boxes (STB). Consequently, close to 30 models of STBs that comply with these minimum specifications were type approved for sale in the country. Digital signal distribution in the country was bolstered by the licensing of the second digital Broadcast Signal Distributor (BSD) - the Pan Africa Network Group (Kenya) Company Limited. The roll out of the digital signal is expected to be carried out in phases in the course of the next financial year. The transition to digital TV broadcasting will greatly facilitate optimal resource allocation and enhance the broadcasting industry value chain through the separation of signal distribution and content provision.

To create public awareness on digital migration, the Commission carried out a media campaign christened 'join the great digital migration'. The campaign was executed on a number of platforms including print, TV, radio, digital, outdoor and indoor advertising, consumer information material and road shows to educate viewers of the migration requirements.

## Director General's Word (cont'd)

During the year under review, the Commission engaged stakeholders in the mobile industry the elimination of counterfeit mobile phones in the market. Following the consultations, the Commission launched a consumer awareness campaign in the local media to create awareness on the dangers of using counterfeit phones. The switch off of counterfeit mobile handsets will be implemented in the next financial year.

Further, to sensitize consumers of postal and courier services on their rights and obligations, the Commission rolled out a three-month campaign dubbed 'Kaa Macho.'

In order to facilitate attainment of universal access to ICT services, the Commission implemented a number of initiatives during the year under review. These included taking measures to institutionalise and bring in to operation the Universal Service Fund (USF); identification of ICT access gaps and dissemination of the findings to stakeholders. In addition, the Commission facilitated the development of a USF Strategy, and the monitoring and evaluation of the implementation of the universal access pilot projects. During the year under review, the Commission also signed a Memorandum of Understanding (MOU) with the United States Agency for International Development (USAID) through its associate Global Broadband Innovations (GBI) programme for technical assistance to develop a National Broadband Strategy (NBS).

In recognition of the fact that Persons with Disabilities (PwDs) face numerous challenges in accessing, purchasing and using ICT services, the Commission held a two-day multi-stakeholder workshop under the theme 'E-Accessibility for Persons with Disabilities.' The PwDs web portal (<http://www.kenyadisability.or.ke/>) developed with the support of the Commission was launched during the said workshop. The portal provides a unified space to enable PwDs and other stakeholders to easily identify, retrieve and use web based resources / information.

The Commission developed and implemented a new organization structure in tandem with its expanded mandate in broadcasting, multi-media, electronic commerce, and the management and administration of the USF. The new structure takes cognizance of the country's development strategy, Vision 2030 and the Constitution. The revised structure, which is team-based, brings together similar activities in order to exploit synergies of related functions, improve communication and coordination. The teams are Communications Infrastructure; Regulation and Access;

Operations; Legal and Enforcement; and Risk Management and Internal Audit.

Giving back to society is a key activity the Commission has happily continued to engage in. In this regard, the Commission extended its support to Orphaned and Vulnerable Children (OVCs) and other good causes. It signed a Memorandum of Understanding with the United Nations Children's Fund (UNICEF) in partnership with the National Youth Talent Academy (NYTA) to sponsor a football team, Talanta United FC, for three years. The sponsorship worth Ksh17 million per year, will support the team in training and competitions both locally and internationally.

As the designated Government representative to affiliated regional and international intergovernmental organisations dealing with ICTs, the Commission met its obligations to these bodies. To this end, the Commission paid annual subscription to affiliated organizations and participated in key meetings and conferences organized by these bodies. The most notable meetings were the World Radio Conference (WRC-12), UPU Postal Operations Council (POC) and Council of Administration, ITU Council, East African Communications Organisation (EACO) Congress and the African Advanced Level Telecommunications Institute (AFRALTI). The Commission also hosted some meetings locally in conjunction with some of these affiliated intergovernmental organisations, most notably the UPU Postal Strategy Meeting.

All these activities could not have been realized without the support of the CCK Board and staff. I therefore wish to express my sincere gratitude to the Board and staff who worked tirelessly to achieve all the accomplishments highlighted in this report.

**Francis W. Wangusi**  
**Director General**

# Corporate Governance

The Board of Directors regards corporate governance as critical to the success of the Commission. The Board is responsible for ensuring proper and sound corporate governance as set out in the *Kenya Information and Communications Act, Cap 411A*. The Act vests the Board with the twin functions of decision making and oversight.

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

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

## The Board of Directors

### 1. Oversight Role of the Board

In fulfilling its mandate, the Board of Directors is guided by a Board Charter which outlines its functions and responsibilities. The Charter provides guidelines for the conduct of the affairs of the Board in accordance with the principles of good corporate governance and conventional business practice. The Charter sets out the specific responsibilities to be discharged by the Board members individually and collectively.

The principal role and responsibility of the Board is to establish long-term goals for the Commission and ensure that effective plans are developed and implemented within a defined organizational structure. This entails among others:

- (i) Exercising leadership, integrity and judgement in directing the Commission;
- (ii) Setting the vision, mission and values of the Commission;
- (iii) Developing strategies to achieve the Commission's mandate;
- (iv) Determining key performance indicators of the Commission, 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.

### 2. Composition of the Board

In line with the requirement under Section 6(1)(f) of the *Kenya Information and Communications Act, Cap 411A*, the Commission's Board comprised seven Directors with knowledge and experience 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 Commission and an ex-officio member of the Board. The Director General, therefore, provides the link between the Board of Directors and staff.

### 3. Board Meetings

The Board is required to meet at least four times a year. Additional Board Meetings are convened when necessary. The Board held 15 meetings of which seven were Special Board meetings.

### 4. Board Committees

Section 9 of the *Kenya Information and Communications Act, Cap 411A*, empowers the Board to form standing or *Ad hoc* Committees and to delegate the exercise of any of its powers and performance of its functions or duties to such Committees, member, officer, employee or agent of the Commission to enhance efficiency. To this end, the Board has four Standing Committees, namely Finance, Technical, Staff and Audit.

The Finance Committee, which is responsible for accounting and financial management policies of the Commission, held four meetings.

The Technical Committee - which deals with regulatory issues including granting of licences, review of the market structure and regulatory interventions - held five meetings.

The Staff Committee, which is responsible for development of human resources and related policies and their implementation, held five meetings.

The Audit Committee - which reviews internal and external audit reports and recommendations thereof and ensures that appropriate remedial actions are promptly taken by management where necessary - held four meetings.

In addition to the four standing committees, the Board established an Ad-hoc Committee on Court cases to review existing court cases involving the Commission with a view to exploring ways to resolve the cases expeditiously. The Ad-hoc Committee also developed policy guidelines for management of the Commission's external counsel and use of the Commission's Common Seal. The Committee held seven meetings during the year.

### 5. Capacity Building

The newly appointed Directors of the Board were taken through an induction programme aimed at enhancing their understanding of the Commission, its mandate, the business environment and the ICT industry.

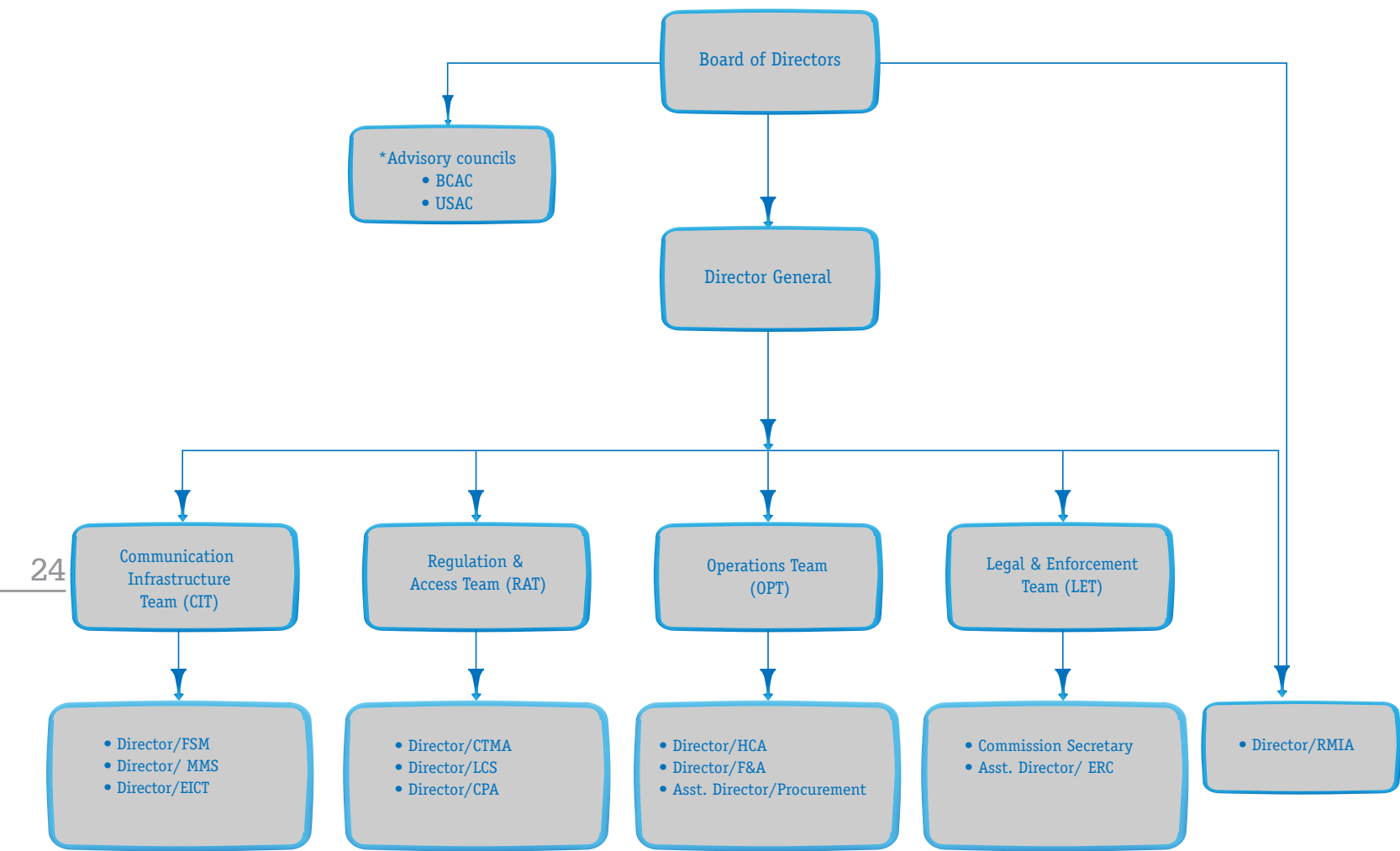
To gain better insights into global best practices in ICT regulation, Directors of the Board attended local, regional and international conferences, workshops and benchmark visits to other jurisdictions. These included POST EXPO Forum in Germany; ITU World Conference in Switzerland; Universal Postal Union (UPU) Postal Operation Council and Council of Administration, Switzerland; World Radio Conference 2012 (WRC-12), Switzerland; GSMA Mobile World Congress and Ministerial Programme, Spain; Africa-Asia Regulatory Conference in Sri Lanka. The others included the 43rd Internet Corporation for Assigned Names and Numbers (ICANN) meeting in San Jose, Costa Rica; National Association of Broadcasters (NAB) show in Las Vegas, Nevada, USA; and Postal and Courier Stakeholders Forum in Nairobi. The Board also attended training on corporate governance; strategic leadership; regulatory issues; risk management and alignment of the Commission's Strategic Plan with the Constitution.

### 6. Working Group on the Implementation of the Constitution

The Commission's Board participated in a Joint Working Group to develop a new bill in line with Article 34(5) and the Fifth Schedule of the Constitution. The Working Group consists of the Ministry of Information and Communications, National Communications Secretariat (NCS), Communications Commission of Kenya (CCK) and an independent consultant. The Working Group developed a Draft Bill to amend the *Kenya Information and Communications Act, Cap 411A*, to be in line with the Constitution. The Bill will be shared with the stakeholders for further deliberations prior to being submitted to the Ministry of Information and Communications.



# Organizational Structure



\*Advisory Councils Advise the Board and their meetings are dependent on request by the Board on Specific issues

KEY

BCAC	Broadcasting Content Advisory Council
USAC	Universal Service Advisory Council
FSM	Frequency Spectrum Management
MMS	Multimedia Services
ECIT	E-Commerce and Information Technology
CTMA	Competition, Tariffs and Market Analysis
LCS	Licensing, Compliance and Standards
CPA	Consumer and Public Affairs
HCA	Human Capital and Administration
F&A	Finance and Accounts
ERC	Enforcement and Regional Co-ordination
RMIA	Risk Management and Internal Audit

# Commission’s Mandate

The Communications Commission of Kenya is the regulatory authority for the ICT sector in Kenya. Established in 1999 ,the Commission's mandate is to license and regulate postal, information and communication services. The Commission is also mandated to facilitate development of the ICT sector including broadcasting, multimedia, telecommunications, postal services and electronic commerce.

The responsibilities of the Commission under the Act include:

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

The Constitution promulgated on 27th August 2010 attaches significant emphasis on the role of ICT sector in the country’s socio-economic development and democratization process. This has implications on the Commission's mandate and operations as a converged regulator. The Commission has, therefore, reviewed its strategic direction in order to remain dynamic, flexible and innovative and respond promptly to the changing needs of the sector in line with Vision 2030. Consequently, the Board revised the Strategic Plan 2008-13, Organization Structure and the Staff Establishment.

# Social networking

**If you cannot verify authenticity of a link, email or notification, do not open it. Always check with the sender if a link on their page seems suspicious. Always log out of a site when you are finished.**

## CHAPTER **one**

Macroeconomic Environment



1.1 Global Economy

At the beginning of the year 2011, recovery of the global economy appeared fairly certain, with economic growth for 2011 and 2012 projected by the International Monetary Fund (IMF) at 4.3 percent and 4.5 percent, respectively. However, the middle of the year saw uncertainties regarding the future economic outlook re-emerge, as growth figures for many economies had to be adjusted downward.

Emerging markets and developing economies, particularly in Asia, registered relatively strong economic growth estimated at 6.6 percent and 6.4 percent for 2011 and 2012, respectively, and attracted increased financial flows. On the other hand, the United States, Japan, and Europe experienced slow and decelerating growth with persistent high unemployment and continued financial vulnerability. After closing the output gap and reducing the excess capacity generated during the Economic Crisis, emerging and developing countries benefited from buoyant internal demand, although they later faced inflationary pressures caused by rising commodity prices.

The Real GDP growth in Sub-Saharan Africa (SSA) was estimated at 5.2 per cent in 2011 compared to 5.4 per cent in 2010. The slight drop was attributed to increased production costs due to rise in oil prices and inflation in non-oil producing countries in the region. The current account balance as a percentage of GDP improved from a deficit of 1.2 percent in 2010 to a surplus of 0.6 per cent in 2011. This may be attributed to a rise in global commodity prices and the impact of high oil prices in the oil exporting countries in the region.

Real GDP of East Africa Community (EAC) expanded by 5.9 per cent in 2011 compared to 5.8 per cent in 2010. The current account balance as a percentage of GDP for EAC deteriorated from negative 7.8 per cent in 2010 to negative 7.9 percent in 2011.

1.2 Global Information and Communication Technology Industry

ICT has evolved into becoming a multipurpose technology given the critical spill-overs to the other economic sectors and its role as a cross-industry enabling infrastructure. Access and usage of ICT has become a key enabler of overall technological readiness for any country.

Globally, the provision of mobile cellular and mobile broadband services remains very competitive in 92 percent of 142 markets

surveyed, according to the Global Competitiveness Report 2011-12. By the end of 2011, ITU estimated that the number of mobile cellular subscriptions reached close to 6 billion, representing a global penetration rate of 86.7 percent and a penetration level of 78.8 percent in developing countries. The robust penetration rates for mobile cellular and mobile broadband services have particular relevance for access to data and mobile banking services.

Mobile broadband grew faster in terms of the number of actual users and reached an estimated 1.19 billion subscriptions in more than 160 countries by the end of 2011. In developing countries, mobile broadband penetration had reached an estimated 8.5 percent by end of 2011, up from 5.3 percent in 2010. The competitive market for mobile broadband resulted in booming demand for bandwidth, squeezed margins for operators and enhanced experiences for consumers.

The ICT sector continued to record growth in 2011/12, with the exception of fixed telephony, where penetration rates have been on the decline since 2005. At the end of December 2011, the world fixed telephony penetration stood at 17.3 percent while penetration in developing countries was recorded as 11.6 percent. Globally, fixed broadband subscriptions have more than doubled over the past five years to an estimated 591 million fixed broadband subscriptions by the end of 2011. Fixed broadband penetration level stood at 4.8 percent in developing countries, compared to almost 26 percent penetration in developed countries.

Taking into consideration the critical role of ICTs, over 130 governments adopted a national policy, strategy or plans to promote broadband. Most of these policies and plans focus on building nationwide broadband infrastructure, stimulating demand through the adoption of online services and applications and extending connectivity to provide universal access.

ICT revolution and market liberalization have had a considerable impact on the postal and courier industry. This has resulted in the reduction of postal monopolies, increased competition in this market segment and enabled postal operators to take advantage of more competitive and liberalised international postal services to establish mergers, alliances and joint ventures with their fellow operators and with the private sector. These joint efforts, if properly structured, can utilize the combined strengths of one or more players to produce a comprehensive service that is greater than the sum of its parts. It is noted that access to outside expertise

and financing through such cooperative arrangements can be a significant element in rebuilding the postal business in developing countries. This has also convinced many governments that public postal operators must have autonomy and financial viability to compete effectively while at the same time providing universal postal service. To this end, governments have gone on to sponsor regulatory reforms and targeted investments in the public postal operator. The results of such reforms can be remarkable in terms of improving financial and operational performance and overall contribution to national economic growth.

Rapid advance of electronic information technologies poses the greatest threat to the traditional postal world. The increasing demand for faster, more affordable and flexible communications services means that postal services must embrace ICTs, electronic commerce and innovations to remain relevant in the global environment and keep up with today’s customer. To this end, postal and courier operators continue to partner with the telecommunication operators in embracing ICTs, electronic commerce and provision of electronic postal services.

1.3 Local Environment

The Kenya’s Gross Domestic Product (GDP) was estimated to have expanded by 4.4 percent in 2011 which was a slower growth compared to 5.8 percent registered in 2010. The main drivers of this growth were Wholesale and Retail Trade; and Transport and Communication sectors with respective contributions to growth of 17.4 percent and 12.7 percent while Electricity and Water sector weighed down the growth as its contribution shrunk by 1.3 percent. High oil and food prices as well as unfavourable weather conditions in some parts of the country were the major causes that restrained growth. Instability in the foreign exchange market experienced during the second half of 2011 further exacerbated the situation by suppressing economic activities.

The Transport and Communication sector recorded a real growth of 4.5 percent in 2011 compared to 5.9 percent in 2010. A summary of the selected economic indicators is shown in Table 1.1.

Table 1.1: Selected Economic Indicators +

Indicator	2007	2008	2009	2010+	2011*
Population (Millions)	35.8	36.7	37.7	38.5	39.5
GDP at market prices (in KES .Min.)	1,833,511	2,107,589.4	2,366,984.2	2,549,825.1	3,024,782.2
Growth of GDP at Constant (2001) Prices (%)	7.0	1.5	2.7	5.8	4.4
GDP Per Capita (in 2001 Prices) (KES.)	36,000	36,982.7	36,986.4	38,305.5	38,969.8
Transport and Communication GDP at Current Prices (KES. Millions)	194,093	216,052	234,752	253,958	292,601
Postal and telecommunications GDP (KES. Millions)	54,964	56,756	62,508	64,532	65,228
Transport and Communication as % of GDP	10.6	10.3	9.9	10.0	9.7
Postal and telecommunications as % of GDP	3.0	2.7	2.6	2.5	2.2
Growth of Transport and Communication at Constant (2001) Prices (%)	15.1	3.0	6.4	5.9	4.5
Growth of Postal and telecommunications at Constant (2001) Prices (%)	30.3	7.8	10.0	4.5	4.3
Private sector wage employment in transport and communications ('000s)	117.8	120.5	124.7	132.2	138.0
Public sector wage employment in transport and communications ('000s)	36.1	36.9	18.7	19.2	19.4
Consumer Prices, Annual Average [Index numbers February 2009=100]	79.50	92.36	102.10	106.26	121.17
CPI Annual Inflation Rate (Overall) %	4.3	16.2	10.5	4.1	14.0
* Provisional; + Revised.					

Source: Adapted from Economic Survey, 2011.

In the communication sub-sector, mobile telephony market continued to thrive with the subscriber base expanding to 29.7 million, representing a mobile penetration rate of 75.4 percent as at June 2012. The adoption of mobile technology in the financial sector continued to expand as banks developed innovative mobile banking (M-banking) solutions.

The ICT evolution reached new milestones and stimulated growth in other services with the mobile sector spearheading this growth. For the period spanning 1st July, 2011 to 30th June 2012, mobile cellular subscriber base increased by 17.5 percent, while mobile money transfer subscriptions grew by 12.1 percent.

The Internet segment showed positive development as there was an estimated 14.032 million Internet users, representing a penetration of 35.5 percent compared to 21.2 percent in the previous year. This growth in Internet penetration is expected to spur the growth of the ICT industry going forward. A key factor in the growth of Internet usage are the new affordable devices, including smart phones and social networking applications that have become increasingly popular, especially among urban youth. The sector is also expected to come up with more innovations in addition to M-banking, linking mobile money with personal bank accounts, M-credit, and M-insurance, which are expanding the reach of financial services to previously un-banked segments of the population.

The Commission licensed the Pan Africa Network Group (Kenya) Company Limited in October 2011 as the second national digital broadcast signal distributor after Signet operated by the Kenya Broadcasting Corporation (KBC). This development placed Kenya firmly on course to meet the June 2015 International Telecommunication Union (ITU) deadline for transition from analogue to Digital Terrestrial Television (DTT) broadcasting. The digital TV broadcasting system is a shared multi-frequency and multi-channel platform. The system allows for the expansion of transmission and distribution capacity which in turn allows for the separation of signal distribution and content provision markets thereby facilitating more optimal utilisation of resources and greatly enhances the industry's value.

The economic indicators for the 2012/13 show that the world real GDP growth is estimated to slow down. Similarly, the world trade growth is projected to slow to 4.8 per cent in 2012 from 6.7 percent in 2011. Growth in Europe, a major importer of Kenya's agricultural produce, is projected to slow substantially indicating a possibility of suppressed external demand. World projections for Brent crude oil prices suggest that the international oil prices are likely to be lower than the 2010 levels. With lower oil and food prices, inflation is expected to slowdown in 2012. On the other hand, the country is currently experiencing high interest rates which if persistent might lead to constrained credit to the productive sector and, therefore, impact negatively on the economy.

Based on the above world performance indicators, the growth of the Kenyan economy is likely to be subdued and is, therefore, projected to grow by between 3.5 to 4.5 percent in 2012. This growth momentum is expected to be driven by successful implementation of the devolved Government; progressive implementation of the Constitution; reforms in the governance structure of the country; sufficient rainfall and peaceful, transparent and credible elections which will send positive signals to the private sector and, therefore, boost business and investor confidence. In addition, the larger EAC common market and continued investment in infrastructure including ICT is also expected to spur growth.

# CHAPTER two

## Management of Scarce Resources



Management of scarce radio frequency spectrum and numbering resources, which the Commission manages on the behalf of the public, is essential for the provision of ICT services. As the ICT sector expanded, the Commission continued to receive and respond to the changing demands for the public resource.

### 2.1 Frequency Management

The Commission plans, allocates, assigns, licences, monitors and coordinates the usage of the radio frequency spectrum resources to ensure efficient utilization. The Commission assigned frequencies for various systems/services as follows:

#### 2.1.1 Fixed Links

The Commission assigned a total of 597 frequencies to various operators for deployment of new links to facilitate provision of diverse communications services. A total of 55 fixed links were decommissioned mainly due to increased usage of optic fibre networks. Overall, the number of fixed links increased by 542 to a total of 5,159 links. These are shown in Table 2.1.

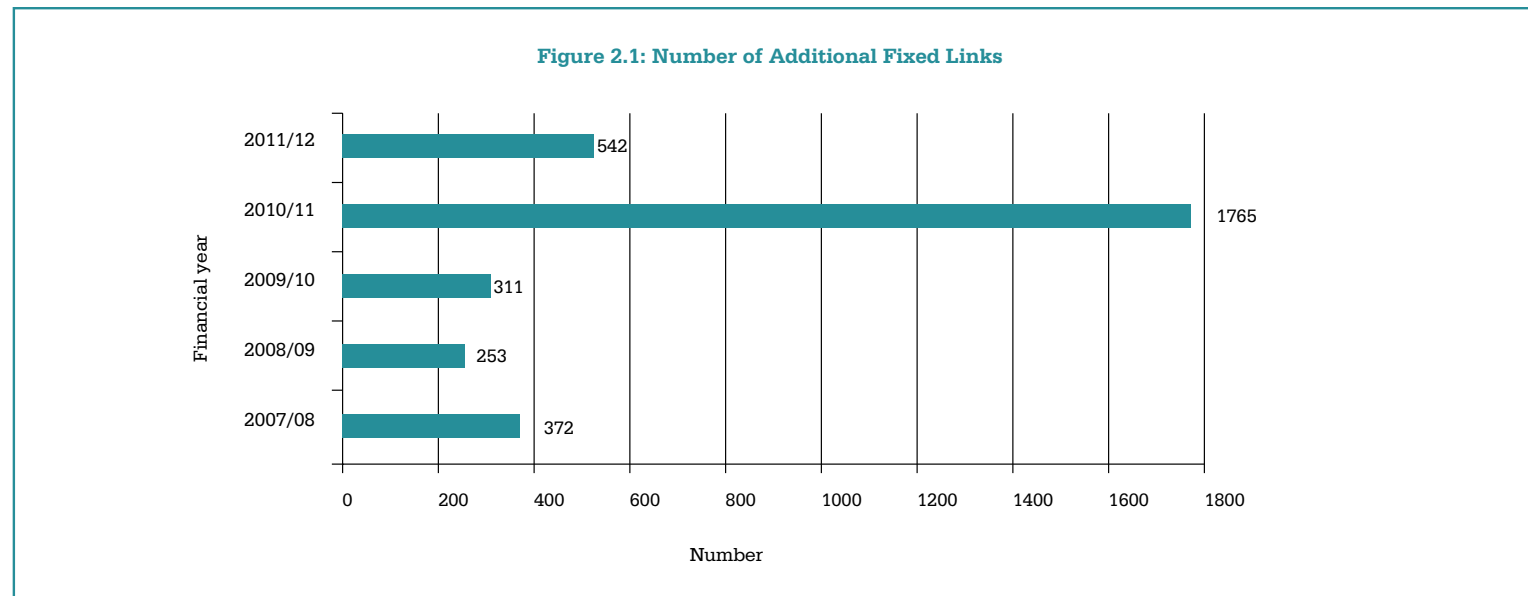
**Table 2.1: Fixed Links**

Frequency Band	Number of New Links			Number of Decommissioned Links			Growth in the Number of Fixed Links			Cumulative no. of Fixed Links	
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12	2010/11	2011/12
400MHz	28	-	-	-	-	-	28	-	-	-	-
1.5 GHz	-	-	-	70	-	-	-70	-	-	-	-
2GHz	-	-	-	6	-	-	-6	-	-	-	-
2.5GHz	-	-	-	4	-	-	-4	-	-	-	-
4GHz	-	-	-	11	-	-	-11	-	-	-	-
6GHz	8	2	8	48	-	-	-40	2	8	105	113
7/8GHz	208	382	73	143	50	15	65	332	58	1,162	1,220
10.5GHz	-	-	-	9	-	-	-9	-	-	-	-
11 GHz	9	-	-	8	-	-	1	-	-	-	-
13GHz	347	144	99	207	71	-	140	73	99	736	835
15GHz	157	1,181	171	1	86	37	156	1,095	134	2,242	2,376
18GHz	-	2	-	2	1	-	-2	1	-	8	8
23GHz	63	232	187	3	21	3	60	211	184	321	505
38GHz	3	51	59	-	-	-	3	51	59	43	102
<b>Total</b>	<b>823</b>	<b>1,994</b>	<b>597</b>	<b>512</b>	<b>229</b>	<b>55</b>	<b>311</b>	<b>1,765</b>	<b>542</b>	<b>4,617</b>	<b>5,159</b>

Source: Communications Commission of Kenya

The 1.5GHz, 2GHz, 2.5GHz, 4GHz and 10.5GHz frequency bands are no longer being used for fixed links services. However, the bands shall be deployed for other services in future.

The total number of additional fixed links declined from 1,765 in 2010/11 to 542 in 2011/12. This is illustrated in Figure 2.1.



Source: Communications Commission of Kenya

#### 2.1.2 Fixed Wireless Access Systems

The number of Fixed Wireless Access (FWA) radio communications network sites and transceivers in the 1.7GHz, 3.3GHz and 3.5GHz frequency bands increased as shown in Table 2.2.

**Table 2.2: Fixed Wireless Access Systems**

Frequency Band	Number of Sites			Number of Transceivers		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
1.7GHz	25	25	23	300	300	276
3.3 GH	54	113	99	146	354	308
3.5 GHz	305	338	536	491	578	2,001
<b>Total</b>	<b>384</b>	<b>476</b>	<b>658</b>	<b>937</b>	<b>1,232</b>	<b>2,585</b>

Source: Communications Commission of Kenya

From Table 2.2, the total number of sites and transceivers in the 1.7GHz, 3.3GHz and 3.5GHz frequency bands increased from 476 to 658 and 1232 to 2,585, respectively in 2011/12. The increase is attributed to increased demand for data services that are currently being deployed by the major operators.

#### 2.1.3 Satellite Systems

The Commission licensed one Very Small Aperture Terminal (VSAT) and assigned one uplink frequency in the KU band (11 GHz downlink and 14 GHz uplink).

#### 2.1.4 Mobile Cellular Services

The total number of transceivers deployed for the provision of 2G services increased to 71,884 from 65,809 the previous year, while those used for 3G services rose to 11,053 from 5,039 as shown in Table 2.3.

**Table 2.3: Total Number of Transceivers Deployed in the Mobile Networks**

Operator	Technology	2007/08	2008/09	2009/10	2010/11	2011/12
Essar Telecoms Kenya Limited	2G	-	1,107	3,639	4,500	5,500
	3G	-	-	-	-	-
Telkom Kenya Limited	2G	-	3,501	3,458	4,492	6,230
	3G	-	-	-	1,254	2,269
Airtel Networks Kenya Limited	2G	4,752	6,440	6,966	8,791	13,452
	3G	-	-		162	973
Safaricom Limited	2G	16,784	30,426	39,048	48,026	46,702
	3G	126	2,439	3,568	3,623	7,811
Total No. of Transceivers	2G	21,536	41,474	53,111	65,809	71,884
	3G	126	2,439	3,568	5,039	11,053
(-) means that the licensee had not taken up a 3G licence						

Source: Communications Commission of Kenya

#### 2.1.5 Broadcasting Services

The Commission continued to facilitate the migration from analogue to digital television broadcasting by re-planning the digital TV broadcasting frequencies and co-ordinating the same with neighbouring countries. This was done to ensure availability of alternative frequencies following the World Radio Conference 2012 (WRC-12) decision to allocate to other services part of the broadcasting frequency band and also to enhance compatibility of channels within the remaining Digital Terrestrial Television (DTT) frequency spectrum. The Commission also carried out an audit of the current TV frequencies to determine the number of frequencies that could be equitably and optimally assigned to the digital TV signal distributors.

#### 2.1.6 Private Land Mobile Services

The Commission licensed a total of 74 Fixed stations and 697 Mobile/Portable stations in the VHF land mobile service. In the HF Frequency band, the Commission license 11 Fixed Stations and 31 Mobile stations as shown in Table 2.4.

**Table 2.4: Additional Private Land Mobile Stations**

Frequency Band	Station Type	2007/08	2008/09	2009/10	2010/11	2011/12
VHF	Fixed	140	85	61	65	74
	Mobile /Portable	571	440	376	632	697
	Total	711	525	437	697	771
HF	Fixed	48	14	15	1	11
	Mobile / Portable	24	16	13	13	31
	Total	72	30	28	14	42

Source: Communications Commission of Kenya

A total of 79 new frequencies, which are shared in the VHF and HF bands, were assigned to private land mobile stations. The frequencies were assigned for use on 74 fixed stations and 697 portables/mobiles stations in the VHF band and 11 fixed stations and 31 mobiles in the HF band. The increase in the demand for the VHF frequencies was attributed to a sharp rise in demand for security services offered by security companies and oil exploration exercises that are ongoing in the country. On the other hand, the increase in demand for HF frequencies was as a result of increased demand arising from tour operators in the tourism industry.

The Commission renewed a total of 1,299 radio licences out of a total 4,192 573 land mobile, 705 Aircraft and 21 radio Amateurs licensees. In addition, 26 radio networks were expanded on the existing land mobile networks, while 28 radio networks were cancelled.

By the end of the financial year, there were a total of 3,262 land mobile, 88 Amateur and 843 Aircraft licensees. There were a total of 4,522 fixed stations and 22,580 mobile/portable stations on the private radio-communication as shown in Table 2.5.

**Table 2.5: Number of Private Radiocommunication Stations**

Frequency Band	No. of Fixed Stations			No. of Alarm Units		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
3-30MHz	-	-	1,088	-	-	2,104
30-136 MHz	211	211	261	843	883	1,110
138-170 MHz	2,774	2,784	2,573	18,228	18,336	15,604
170-174 MHz	-	-	522	-	-	3,544
174-230 MHz	-	-	23	-	-	
230-300 MHz	-	-	0	-	-	-
300-470MHz	-	-	55	-	-	218
170-470 MHz +	411	428	-	7,627	7,720	-
<b>Total</b>	<b>3,396</b>	<b>3,423</b>	<b>4,522</b>	<b>26,698</b>	<b>26,939</b>	<b>22,580</b>

Source: Communications Commission of Kenya

+ Note that in the Financial Year 2009/10 and 2010/11, the number of private radio-communications stations in the 170-470 MHz band were reported as follows: FY 2009/10 (411 Fixed Stations and 7,627 Mobile/Portable Stations) and 2010/11 (428 Fixed Stations and 7,720 Mobile/Portable Stations).

#### 2.1.7 Radio Alarm Services

The Commission licensed 27 new alarm networks compared to 39 in the previous year. As shown in Table 2.6, the total number of alarm units in the country increased from 32,068 in 2010/11 to 38,360 in 2011/12.

**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

Source: Communications Commission of Kenya



The 19.6 percent increase in the number of alarm units from the previous year was as a result of increased demand for the alarm/ Vehicle Locating Units (VLUs) services. The increase in demand was more pronounced in Nairobi Region which accounted for 66.35 percent (4,175 Units) followed by the Coast Region that posted 19.99 percent increase (1,258 Units). The remaining 13.65 percent (859 Units) were shared between Western and Central Regions.

2.1.8 Management of the Digital Dividend and Mobile Broadband

Digital dividend is the UHF spectrum currently occupied by broadcasting services that will become available after analogue TV broadcasting switch-off in 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 channelization plan. Subsequently, WRC-12 resolved to expand the band to include 694-790 MHz.

In view of the WRC-12 decision, the Commission commenced the process of migrating the digital TV broadcasting channels earlier assigned in the 694-862 MHz band to the 470-694 MHz band. This migration of channels will ensure that the resultant digital dividend in the 694-862 band becomes readily available for optimal use by other radio-communication services once the analogue switch-off is concluded.

2.2 Management of Numbering Resources

The Commission manages numbering resources by planning and assigning these scarce resources for provision of various services.

2.2.1 Assignment of Numbering Resources

The Commission assigned a total of 3,005,069 numbers as compared to 11,020,054 the previous year. The drop in new assignments could be attributed to operators not having exhausted previously assigned number ranges and reduced churn as a result of Subscriber Identification Module (SIM) registration. The numbering resources assigned, by category, are shown in Table 2.7.

Table 2.7: Numbering Resources Assigned

Category	2007/08	2008/09	2009/10	2010/11	2011/12
Mobile National Destination Codes	24	8	4	11	3
Mobile Subscriber Number Capacity	24,000,000	8,000,000	4,000,000	11,000,000	3,000,000
Numbers for Fixed Telephony	1,729,000	50,000	900,025	20,000	4,000
Toll Free Numbers (0800 Range)	15,010	50	1	20	1,024
Premium Rate Numbers (0900 Range)	-	-	1,000	16	34
National Signalling Point Codes	361	1	1	2	2
International Signalling Point Codes	6	2	1	-	1
Network Colour Codes	-	1	-	-	-
Short Codes for Voice	-	-	-	5	5
Total	25,744,401	8,050,062	4,901,032	11,020,054	3,005,069

Source: Communications Commission of Kenya

The 50-fold increase in the Toll Free Numbers assigned during the period could be attributed to the realisation by businesses of the need to develop innovative ways of providing customer services to clients. The Premium Rate Numbers assigned rose as a result of increase in demand for the premium rate services offered by the Content Service Providers (CSPs).

2.2.2 Numbering Audit

To ensure efficient utilization of the numbering resources, the Commission carried out a numbering audit for a sample of licensees in order to establish levels of usage of these resources. The sample comprised 31 licensees assigned a total of 42,659,685 numbers, out of which 31,715,594 were being utilized as at 30th June 2012. This represented a utilization rate of 74.4 percent. The mobile service providers recorded the highest utilization rate of over 85 percent while the national fixed network operator realized 28 percent utilization rate. The low utilization rate for the fixed telephony service could be attributed to declining subscription to this service.

2.2.3 Reclamation and Reservation of Numbering Resources

To further ensure efficiency in the utilization of the assigned numbering resources, the Commission reclaims unutilised numbering resources from its licensees for future re-assignment. The Commission reclaimed 1,450,000 numbers previously used for fixed line services. These numbers were not utilised due to the closure of some exchanges resulting from technological changes; infrastructure vandalism; and failure by licensed operators to roll out services. Table 2.8 shows the capacity of numbering resources assigned, reserved and reclaimed.

Table 2.8: Assigned, Reclaimed and Reserved Numbering Resources

NO	Type of Resource	Capacity Assigned	Reclamations	Reservations	Total
1	Toll Free Numbers	1,024	-	-	1,024
2	Short Codes	11	-	5	17
3	Fixed Telephony Numbers	40,000	1,450,000	-	1,490,000
4	Premium Rate Numbers	34	-	-	34
5	Mobile Telephony NDC	3	-	-	3
6	National Signalling Point Codes	2	-	-	2
7	International Signalling Point Codes	-	-	-	-
	Total	41,074	1,450,000	5	1,491,080

Source: Communications Commission of Kenya

2.2.4 Implementation of New Guidelines

The Commission developed Procedures and Guidelines for the Management of Telecommunications Short Codes and Premium Rate Numbers. This was motivated by the need to ensure efficient utilization of the resources in view of increased demand for Premium Rate Services.

2.2.5 Harmonization of Numbering Management Procedures within East Africa

The Commission worked with other East African Countries under the East Africa Communications Organization (EACO) to harmonize procedures and use of certain categories of numbering resources for common services. This involved identification of particular Short Codes for some services considered useful in supporting safety and other common services considered of greater social value in the East African Community as shown in Table 2.9.

Table 2.9: Harmonized Numbering Resources in the East African Community

Services	Agreed Short Codes for Harmonization+
1. Customer Service+	100
2. Emergency Services for Lake Victoria	110
3. Emergency and Police	112
4. Child Help Line	116
5. Voicemail Deposit	121
6. Voicemail Retrieval	123
7. Recharge	130
8. Check Balance	131

Source: Communications Commission of Kenya

+ The implementation of the harmonized numbers is still ongoing.

The Commission, in collaboration with the other EACO members, identified additional services and alerts for future Short Code harmonization. These services and alerts include ambulance, rescue, fire, pandemic outbreaks, traffic, anti-corruption, terrorism, hazards, disaster and cyber threats.



John Omo, Company Secretary, and Amb. Bruce Madete, Alternate CCK Board Director, flag off the Digital Migration roadshow in Nairobi.

# CHAPTER three

## Promoting Competition and Innovation



The Commission is alive to the fact that well managed competition has the effect of enhancing innovation and creating an efficient market. The Commission continued licensing new entrants into the ICT sector, enforcing the *Kenya Information and Communications Act, CAP 411A* and Regulations and carrying out research in emerging and new technologies. This was aimed at encouraging competition and innovation so that consumers and business users have a wider range of options at their disposal and can enjoy fair prices.

3.1 Licensing and Network Expansions

The Commission recognises the importance of having sufficient number of players in the market as a means of stimulating competition and expanding the reach of ICT networks throughout the country. In this regard, the Commission continued to issue licences to new and existing players in the ICT industry. As a result, there was an increase in the number of players offering a diverse range of products and services thus expanding consumer choice. Further, the Commission continued with the process of renewing licences that were due for renewal.

3.1.1 Telecoms Licensing

The total number of licensees under the Unified Licensing Framework (ULF) increased from 844 the previous year to 1,311, representing a 55.3 percent growth. The Commission continued to sensitize licensees on the advantages of migrating from the old licensing framework to the ULF that is technology and service neutral. The Commission also reviewed and lowered most of the telecommunication licence fees for both initial and annual operating licence fees that will be effective from 1st July 2012. Table 3.1 provides a summary of the licences issued in the year under review.

Table 3.1: Cumulative Number of ULF Licences

Licence Category	2008/09	2009/10	2010/11	2011/12
Telecommunications Contractors (TEC)	54	187	244	314
Technical Personnel (TP)	38	160	210	485
Submarine Cable Landing Rights (SCR)	2	3	3	3
International Gateway Systems & Services (IGS)	7	11	11	13
Application Service Providers (ASP)	17	58	80	105
Content Service Providers (CSP)	25	82	123	156
Network Facility Providers Tier 1 (NFP T1)	3	4	4	4
Network Facility Providers Tier 2 (NFP T2)	7	10	13	17
Network Facility Providers Tier 3 (NFP T3)	3	4	6	10
Business Process Outsourcing (BPO)	20	25	32	39
Telecommunications Vendors (TEV)	43	63	115	162
Landing Rights Authorization for Global Mobile Personal Communications via Satellite (GMPCS)	3	3	3	3
Total	222	610	844	1,311

Source: Communications Commission of Kenya

The increase in the number of ULF licensees resulted from high growth registered in Technical Personnel, Telecommunications Vendors and Telecommunication Contractors that grew by 131 percent, 40.9 percent and 28.7 percent respectively. The growth in the number of Technical Personnel and Telecommunications Contractors may be attributed to increased consumer awareness. The growth in the number of Telecommunication Vendors is attributed to increased demand for vending licences resulting from increased demand for set top boxes as the country transitions to digital TV broadcasting.

The growth in the number of Application Service Providers (ASP) and Content Service Providers (CSP) could be attributed to a vibrant ICT sector, diverse and innovative services and products offered and increased demand for content and application services in the country. On the other hand, there was an increase in licences under the NFP Tier 2 and Tier 3 categories. This was a result of licensee that migrated from the old licensing framework and new entrants. Major licences in the NFP Tier 1 remained the same as was in the previous year, largely due to scarcity of frequency resources required for the deployment of networks and services.

The Commission reviewed and lowered application as well as annual operating licence fees for most telecommunication licence categories by between 20 percent and 50 percent. The revised fees will take effect from 1st July 2012. The reduction in the fees, advantages inherent in the ULF, together with the innovative content development and services, are expected to further stimulate the increase in the number of ULF licences and market activities in the coming years.

There was a sustained decline in number of licensees in the old licensing framework as more licensees in this category migrated to the ULF. Some others were cancelled for various reasons such as failure to commence business within the stipulated time frame. This is apparent in Table 3.2 where the number of licensees in the old framework declined from 1,189 in 2010/11 to 970 in 2011/12.

The number of licensees in the old licensing framework declined as more licensees continued to migrate to the ULF. The decline, however, was slow and this may be attributed to the relatively low annual operating fees for the old licensing framework compared to the ULF. This has incentivized licensees to remain in the old licensing regime. The number of licensees in the old regime is depicted in Table 3.2.

Table 3.2: Number of Licenses in the Old Licensing Framework

Licence Category	2007/08	Sep-2008	2009/10*	2010/11*	2011/12*
Vendor and Contractor	917	937	831	825	656+
Technical Personnel	315	326	261	252	217
Internet Service Providers	108	-	84	47	45
Value Added Service Providers	65	73	39	39	31
Public Data Network Operators +	24	-	-	8	8
Local Loop Operators	31	-	-	10	10
Commercial VSAT (Hub Operators)	-	-	1	1	1
IBGO	-	-	5	1	-
DCNO	12	14	6	6	2
Total + +	1,472	1,350	1,227	1,189	970
* Licensees who have not migrated to the ULF framework.					
+ The decline of the old Vendor and Contractor licensees which was as a result of update of the database.					
+ + VSAT Terminal (through Local Hubs and External Hubs) licence categories are longer part of the old licensing framework.					

Source: Communications Commission of Kenya

3.1.2 Postal Licensing and Network Development

The Commission licensed 14 new postal and courier operators, increasing the number to 190 from 176 the previous year. This was due to a successful public awareness campaign on postal and courier services regulatory requirements. The increase may also be attributed to continued monitoring and enforcement exercises carried out across the country as well as publication of enforcement activities particularly court action against illegal operators.

Intra-country postal/courier operators remained the largest category of operators increasing from 99 in 2010/11 to 109 in 2011/12, accounting for 61.9 percent of the total number of licensed operators. This was followed by the intra-city operator category that accounted for 22.2 percent. These are shown in Table 3.3.

**Table 3.3: Number of Licensed Postal and Courier Operators**

Category of Operator	2007/08	2008/09	2009/10	2010/11	2011/12
Public Postal Licensee	1	1	1	1	1
International Operators	14	15	12	14	14
International Inbound Operators	11	11	9	11	13
Regional Operators	10	11	12	13	13
Intra-Country Operators	75	87*	91	99	109
Intra-City Operators	36	38	33	37	39
Document Exchange Operators	1	1	1	1	1
<b>Total</b>	<b>148</b>	<b>164</b>	<b>159</b>	<b>176</b>	<b>190</b>

*\*This figure was revised from 88 reported in 2009/10 Annual Report.*

*Source: Communications Commission of Kenya*

The postal and courier market segment continued to register positive growth in respect to network development. There was increased competition and investment in the market segment as demonstrated by the expansion of outlets and the number of licensed courier operators. The number of private operators' courier outlets grew from 635 in 2010/11 to 683 in 2011/12, while the number of post offices reduced from 697 to 634 over the same period. The private letter box is still the most widely used avenue by the public postal licensee-Postal Corporation of Kenya (PCK)-for the delivery of postal articles. The number of installed boxes increased to 431,181 from 427,900 in 2010/11 as shown in Table 3.4.

**Table 3.4: Postal and Courier Network Indicators**

Network	2007/08	2008/09	2009/10	2010/11	2011/12
Postal Corporation of Kenya	1	1	1	1	1
Total Post Offices	744	710	700	697	634
Departmental Offices	495	495	504	501	477
Sub-Post Offices	249	198	196	196	157
Private Letter boxes Installed	414,616	412,006	414,756	427,900	431,181
Rented	335,438	340,148	342,739	360,545	369,223
Un-let	79,178	71,859	72,017	67,550	61,948
Letter Posting Boxes	827	890	890	890	752
Public Counter Positions	1,390	1,279	1,339	1,261	1,030
Automated Public Counters	94	430	445	520	434
Non-Automated Public Counters	1,296	849	894	900	596
Stamp Vending Licensees	4,609	4,505	5,136	5,260	2,847
Stamp Vending Machines	246	280	280	280	280
Private Operator Outlets	606	622	601	635	683
<b>Total Outlets (Post Offices + Private Operators Outlets)</b>	<b>1,350</b>	<b>1,332</b>	<b>1,301</b>	<b>1,332</b>	<b>1,317</b>

*Source: Communications Commission of Kenya*

Despite the recognition of the fact that the postal and courier operators must embrace new technologies in their operations to remain relevant in the current ICT environment, the number of automated public counters declined from 520 in 2010/11 to 434 in 2011/12 as a result of closure of several postal offices whose counters had been automated. This is shown in Table 3.4.

### 3.1.3 Licensing of Broadcasting Services

The Commission continued developing the Broadcasting Guidelines, Broadcasting Code of Practice and the Broadcasting Licensing Framework to facilitate licensing of broadcasters. The English version of the Broadcasting Complaints Form developed in the previous year was translated to Kiswahili in line with the Constitution and in order to facilitate use of the form by majority of consumers.

To fast-track the rollout of broadcasting signal distribution infrastructure, the Commission licensed a second signal distributor, Pan Africa Network Group (Kenya) Company Limited, in addition to the public broadcaster, Kenya Broadcasting Corporation (KBC). The two signal distribution service platforms are expected to host TV content service providers. The Commission issued provisional authorization to 35 TV content providers to have their content accommodated on the DTT platforms on pilot basis pending the conclusion of the ongoing court cases.

The Commission reviewed the minimum technical specifications for Digital Video Broadcast- Terrestrial Second generation (DVB-T2) Set Top Boxes (STB). Subsequently the STBs that comply with these minimum specifications were type approved for sale in the country.

### 3.1.4 Electronic Transactions Licensing

The Commission commenced the process of developing a framework for licensing Certification Authorities/Certification Service Providers that are mandated to issue digital certificates to Government agencies, industry and the general public for secure online communication. A digital certificate certifies the ownership of a public key and private key by the holder of the certificate. Digital certificates are used to encrypt online data as well as digitally sign electronic documents to ensure non-repudiation in the online environment. The framework for creating a secure method for exchanging information based on public key cryptography is known as the Public Key Infrastructure (PKI).

## 3.2 Information and Communications Technology Services

### 3.2.1 Telecommunication Services

The telecommunications sub-sector continued to post considerable growth mainly contributed by the mobile telephony industry. To bolster effective competition, the Commission continued to license players in the NFPs, CSPs and ASPs licence categories who offered innovative products and services.

#### 3.2.1.1 Fixed Network Voice Services

The fixed voice market segment continued to be served by two operators: Telkom Kenya Limited (TKL) and Flashcom Kenya Limited. Of the two, Telkom Kenya commanded 98.3 percent of the market share in terms of subscriptions. The total number of fixed line subscriptions (including wireless) was on a downward trend for the third year running as fixed subscriptions reduced from 379,301 in June 2011 to 262,761 in June 2012. This led to a decline in fixed tele-density from 0.95 percent recorded in 2010/11 to 0.67 percent. The fixed wireline capacity also decreased from 400,764 to 380,135 lines in the same period as shown in Table 3.5.



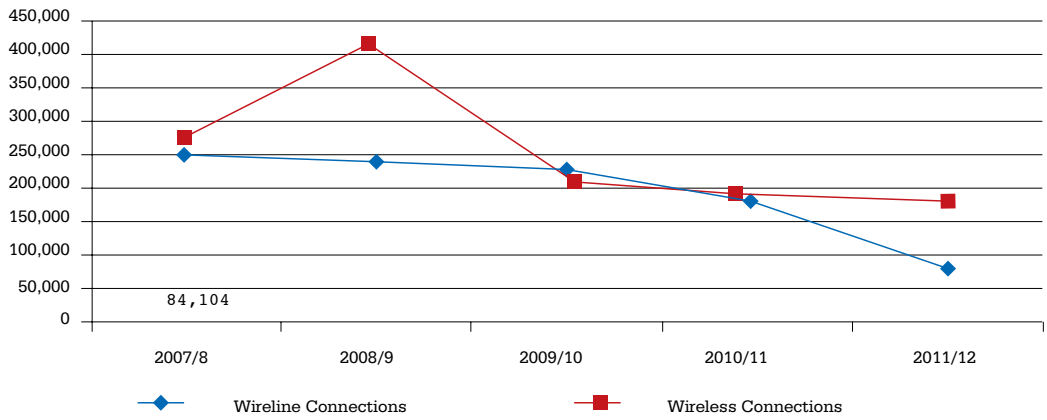
Table 3.5: Fixed Network Growth Indicators

Financial Year	2007/08	2008/09	2009/10	2010/11	2011/2012
Wireline Capacity	512,281	485,581	421,528	400,764	380,135
Wireline Connections	252,615	247,972	234,522	187,716	74,606
Wireless Connections (Include LLO Subscribers)	274,449	419,047	225,592	191,585	188,155
Total Connections (Wireline and Wireless)	527,064	696,501	460,114	379,301	262,761
Urban Wireline Connections	246,927	240,533	227,486	182,084	72,368
Rural Wireline Connections	5,688	7,439	7,036	5,632	2,238
International Outgoing Traffic (Minutes)	15,582,304	14,471,643	14,761,211	11,455,952	20,058,628
International Incoming Traffic (Minutes)	83,148,332	88,538,230	38,550,399	31,866,685	17,796,496
Traffic to Mobile networks (Minutes)	98,238,064	34,103,924	31,024,688	79,616,952*	104,967,748

Source: Communications Commission of Kenya  
\*2010/11 figures revised.

As shown in Table 3.5, fixed wireline connections in urban and rural areas both declined by 60.3 percent to stand at 72,368 and 2,238 connections, respectively. The reduction in these connections could be attributed to the interrupted landline service resulting from frequent cable vandalism. The trend in wire line and fixed wireless connections are shown in Figure 3.1

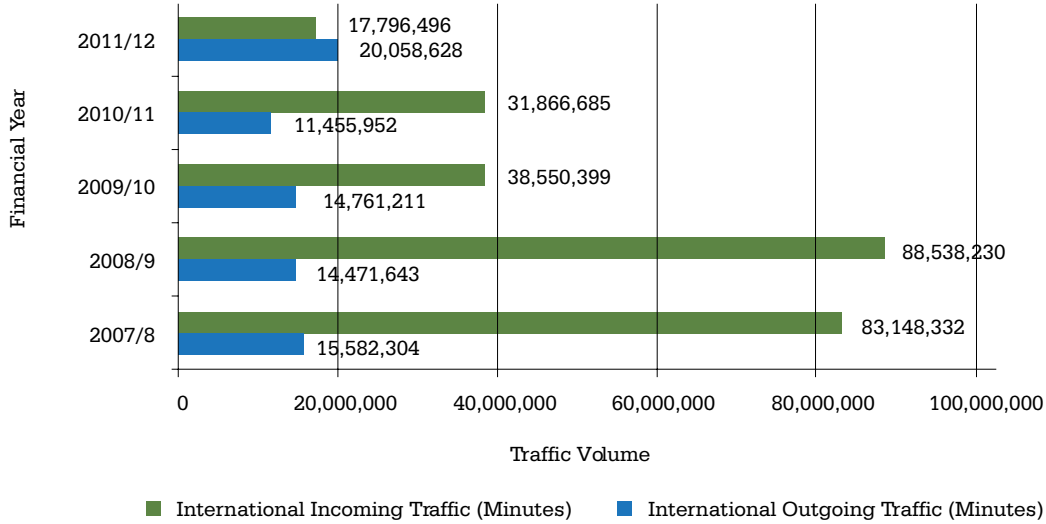
Figure 3.1: Fixed Subscriber Growth Trend in the last Five Years



Source: Communication Commission of Kenya

The outgoing international traffic for fixed voice showed a reversed trend having risen by 75 percent to stand at 20.05 million minutes. This could be attributed to reduced tariffs for calls to certain zones around the world including United States, India, China and Canada. However, the fixed voice incoming international traffic continued to decline for the third year running. Apart from competition from other alternatives such as mobile cellular telephony, the reduction was correlated to the decline in fixed connections. Movement in outgoing and incoming international traffic is shown in Figure 3.2

Figure 3.2: Fixed Network International Traffic

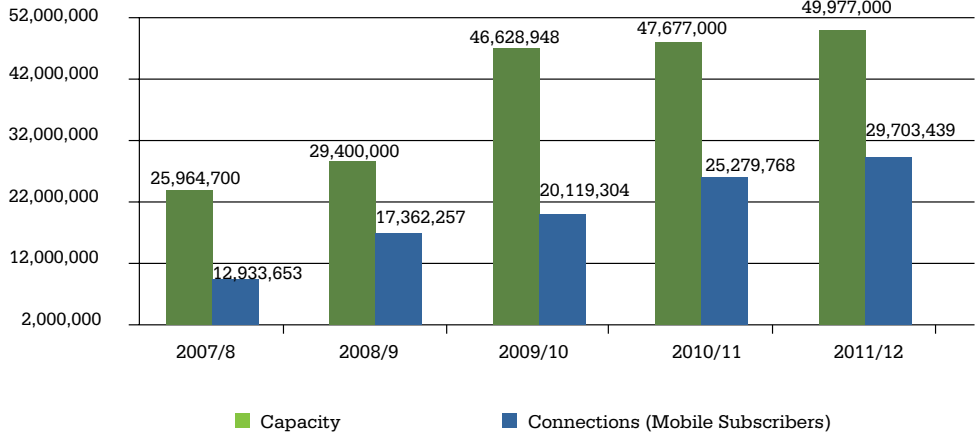


Source: Communications Commission of Kenya

3.2.1.2 Mobile Network Services

The mobile market segment continued to experience competition amongst the four mobile network operators, namely Safaricom Limited (Safaricom), Airtel Networks Kenya Limited (Airtel), Essar Telecoms Kenya Limited (yu), and Telkom Kenya Limited (Orange). Mobile cellular subscriptions grew from 25.2 million in June 2011 to 29.7 million in June 2012, representing a 17.5 percent growth. Operators also increased their mobile capacity to 49.977 million compared to 47.677 million recorded in the previous year. Figure 3.3 shows the mobile network growth indicators.

Figure 3.3: Mobile Operator's Capacity and Subscribers



Source: Communications Commission of Kenya

There was an increase in mobile penetration in tandem with the increase in mobile subscription. The mobile cellular penetration increased to 75.4 percent up from 63.6 percent recorded the previous year. However, the level of penetration is still below the global developed and developing countries penetration rates which the ITU estimated at 85.7 percent, 117.8 percent and 77.8 percent respectively by the end of December 2011.

The composition of the number of mobile cellular subscriptions continued to be dominated by prepaid subscriptions which accounted for 99.1 percent of the total subscriptions. The high number of prepaid customers could be linked to mobile phone companies marketing and supply chain strategy and the prevalence of low denomination prepay calling cards, which are as low as KES 5.00, and therefore affordable to a majority of Kenyans.

The volume of SMS messages decreased marginally by 14.2 percent to 2,251,250,747 down from 2,622,821,774 in June 2011 as shown in Table 3.6.

**Table 3.6: Mobile Network Growth Indicators**

Type	2007/08	2008/09	2009/10	2010/11	2011/12
Capacity	25,964,700	29,400,000	46,628,948	47,677,000	49,977,000
No. of Subscribers	12,933,653	17,362,257	20,119,304	25,279,768	29,703,439
No. of Transceivers	21,662	43,913	56,679	70,848	82,937
SMS	287,145,378	2,728,869,614	2,662,653,719	2,622,821,774	2,251,250,747

*Source: Communications Commission of Kenya*

The 4.8 percent rise in the number of transceivers is attributed to the rollout of the 3G networks by Airtel Networks Kenya Limited and Telkom Kenya Limited; expansion of the existing 2G networks; increased coverage in underserved areas and expansion of capacity resulting from increased traffic. The decline in SMS messages is as a result of the reduction in voice tariffs and availability of innovative mobile messaging applications that run on the Internet platform.

Mobile networks recorded increased international incoming traffic to the tune of 678,278,282 minutes up from 605,209,985 minutes recorded the previous year. On the other hand, international outgoing traffic increased to 641,213,491 minutes from 505,840,566 minutes the previous year. These represent increases in international incoming and outgoing traffic of 12.1 percent and 26.8 percent, respectively. The increase in international outgoing traffic could be attributed to customers taking advantage of the reduced international calling rates by all the four mobile operators to an average of KES 3.00 per minute in certain tariff bands (United States of America, India, China, and Canada).

#### 3.2.1.3 Mobile Money Transfer Service

Mobile technology continued to provide a set of applications that facilitate a variety of financial transactions via mobile phone such as purchasing airtime, transferring money and paying bills. Mobile payment systems have also transitioned from a pure money transfer system into a mobile payment platform that allows schools, hospitals and other organizations to send and receive payments. All mobile operators currently provide mobile money services with Safaricom's M-Pesa having the highest market share of 77.3 percent in terms of subscription. The subscriptions are shown in Table 3.7.

**Table 3.7: Mobile Money Transfer Service Subscribers\***

Operator	June 2010	June 2011	June 2012
Safaricom Limited (M-Pesa)	10,232,805	14,331,941	15,083,674
Telkom Kenya Limited (Orange Money - Iko Pesa)	-	117,091	140,166
Airtel Networks Kenya Limited (Airtel Money)	378,700	2,530,916	3,751,713
Essar Telecom Kenya Limited (yu Cash)	3,881	415,779	530,149
<b>Total Number of Subscribers</b>	<b>10,615,386</b>	<b>17,395,727</b>	<b>19,505,702</b>
* This excludes Mobikash Africa Limited and Mobile Pay Limited Subscribers.			

*Source: Communications Commission of Kenya*

Other operators who offer mobile money transfer services are Mobikash Africa Limited and Mobile Pay Limited who are licensed as Content Service Providers.

#### 3.2.1.4 Internet Services

Internet and data services in Kenya continued to be provided on mobile, fixed wireless access, satellite, fibre optic and cable networks. These services are consumed by individuals, households, Government and corporate users such as banks, hospitals and education institutions that require fast and reliable Internet connections.

The stagnation of revenue growth in the voice market necessitated a shift of focus by operators to nascent economic markets in the industry such as the data. Mobile operators are now actively engaged in the data market and have deployed wireless mobile broadband networks that have speeds higher than 7 Mbps. Internet and data service providers partnered with CSPs to boost content development in an effort to attract growth in Internet and data traffic.

The number of Internet users increased by 11.9 percent, rising to 14.032 million. A key factor in the growth of Internet usage was the introduction of affordable Internet access devices, including smart phones and social networking applications. The increase in usage was also attributed to aggressive and innovative promotions, special offerings and reduced tariffs launched by operators. A summary of Internet subscriptions is shown in Table 3.8.

**Table 3.8: Internet Subscriptions and Estimated Internet Users**

Subscriptions/Users	2008/09	2009/10	2010/11	2011/12+
Terrestrial mobile data/Internet subscriptions	1,562,065	3,059,906	4,189,720	7,655,576
Terrestrial wireless data/Internet subscriptions	8,602	22,134	29,979	21,709
Satellite data/Internet subscriptions	26	953	960	519
Fixed Digital Subscriber Line (DSL) data/Internet subscriptions	7,822	9,631	15,168	11,682
Fixed fibre optic data/Internet subscriptions	851	4,303	22,460	49,371
Fixed cable modem (Dial Up) data/Internet subscriptions	21	25	-	25
Total Internet Subscriptions	1,824,203	3,096,952	4,258,287	7,738,882
Estimated Internet Users*	3,648,406	7,832,352	12,538,030	14,032,366
+ Note that the figures for the FY 2011/12 for KDN are up to end of March 2012.				
* The number of Internet users is estimated by multiplying by 1 the number of mobile data/internet subscriptions, by 10 terrestrial wireless subscriptions, and by 100 fixed DSL, Fibre optic and satellite subscriptions. There is no scientific method of estimating internet users; for the purpose of this report the methodology adopted is borrowed from the recommendation from ITU and Internet Market Study 2006 carried out by the Commission.				

*Source: Communications Commission of Kenya*



The number of Internet subscriptions rose by 81.7 percent to 7,738,882 from 4,258,287 recorded the previous year. This was dominated by terrestrial mobile users that represent 98.9 percent of total subscriptions as shown in Table 3.8. The growth in subscriptions could be attributed to reduction in mobile data bundle rates and increased access to social networking sites through mobile phones that are increasingly becoming popular among marketers and the youth.

The high speed fixed fibre optic data/Internet subscriptions grew by 119.8 percent, an indication that the country is taking advantage of the technology to transmit telephone signals, Internet communication and cable television signals.

There was an increase in Internet penetration from 21.2 percent recorded in 2010/11 to 35.5 percent in 2011/12. This level of penetration is above global and developing countries penetration rates which the ITU estimates at 32.5 percent and 24.4 percent, respectively at the end of December 2011. However, it is still below the developed countries penetration rate which the ITU estimates at 70 percent at the end of December 2011.

3.2.1.5 Broadband Services

Broadband provides access to new technologies and allows companies to explore new business opportunities, access customers and obtain information about market prices. Better access to information makes markets work more efficiently and raises producer incomes. It is with this realisation that the Commission entered into a Memorandum of Understanding (MoU) with United States Agency for International Development (USAID) through its associate Global Broadband Innovations (GBI), which outlined collaboration on the development of Broadband Strategy for the country.

The total international undersea bandwidth capacity rose to 574,054 Mbps from 304,838.40 Mbps recorded in 2010/11. The 88.3 percent increase in the capacity is attributed to the landing of the fourth undersea cable, Lower Indian Ocean Network (LION2), in April 2012. Out of the total available bandwidth capacity, the undersea capacity accounted for 99.89 percent. This is shown in Table 3.9.

Table 3.9: International Available Bandwidth

Financial Year	2010/11	2011/12
Undersea Fibre Optic Cable Capacity		
1. SEACOM Capacity (Mbps)	79,626.24	308,224.00
2. TEAMS Capacity (Mbps)	102,332.16	101,990.00
3. EASSY Capacity (Mbps)	122,880.00	122,880.00
4. LION2 Capacity (Mbps)	-	40,960.00
Total Undersea Bandwidth Capacity (Mbps)	304,838.40	574,054.00
Satellite Bandwidth Capacity (Mbps)	336.10	649.80
<b>Total Available Bandwidth Capacity (Mbps)</b>	<b>305,174.50</b>	<b>574,703.80</b>

Source: Communications Commission of Kenya

The leased undersea capacity increased by more than eight-fold to reach 264,426.00 Mbps in 2011/12. Furthermore, leased satellite bandwidth rose by 32.6 percent to reach 157.78. This is a result of the need for provision of redundancy. Thus, total international leased bandwidth increased by more than seven-fold to reach 264,583.78 Mbps from 32,270.52 Mbps in June 2011. This is shown in Table 3.10.

Table 3.10: International Leased Bandwidth

Year	2007/08	2008/09	2009/10	2010/11	2011/12
International Undersea Bandwidth (Mbps)	-	-	20,000.00	32,151.52	264,426.00
International Satellite Bandwidth (Mbps)	909.44	2,746.55	384.12	119.00	157.78
<b>Total International Bandwidth (Mbps)</b>	<b>909.44</b>	<b>2,746.55</b>	<b>20,384.12</b>	<b>32,270.52</b>	<b>264,583.78</b>

Source: Communications Commission of Kenya

This tremendous increase in the international leased bandwidth signals the increased demand for international connectivity particularly through the fibre optic undersea cable. Further, 46.04 percent of the total international available bandwidth is leased compared to 10.57 percent posted the previous year. This shows a significant increase in the uptake of bandwidth capacity and also indicates the greater capacity that the country has in terms of broadband international connectivity.

Out of the total international leased bandwidth, the international undersea bandwidth accounted for 99.94 percent compared to 99.63 percent the previous year; indicating increased uptake of the undersea bandwidth. The increase in leased bandwidth has been fuelled by increased demand for bandwidth derived from among others the increased usage of social media sites by Internet subscribers.

The total number of broadband subscriptions stood at 726,802 compared to 121,126 recorded the previous year. The broadband subscription by category is shown in Table 3.11.

Table 3.11: Broadband Subscriptions

Financial Year	2010/11	2011/12
Fixed Broadband (DSL, Satellite and Fibre)	6,552	35,265
Wireless (WIMAX)	5,646	17,282
Mobile	108,928	674,255
<b>Total</b>	<b>121,126</b>	<b>726,802</b>

Source: Communications Commission of Kenya

The five-fold increase in the total number of broadband subscription was fuelled by among others the increased usage of social media sites in the country particularly on the mobile devices. This is evident from mobile broadband subscription which constitutes 92.8% of the total subscriptions.

Total broadband subscription stood at 1.84 percent with mobile broadband penetration recorded at 1.71 percent being the highest followed by fixed broadband (0.09 percent) and wireless broadband at 0.04 percent. Both the fixed and mobile broadband penetration in Kenya is less than the African average of 0.2 percent and 5 percent respectively.

Kenya is connected to the rest of world via three undersea cables. Fibre cuts on two cables were experienced during the period. However, this did not disrupt international connectivity as traffic was diverted to the third cable and satellites due to well designed resilient local network infrastructure.

### 3.2.2 Postal and Courier Services

The Commission continued to engage with the postal and courier operators with a view to improving the regulatory environment and to spur provision of postal and courier services. Towards this end, the Commission successfully hosted the 4th Annual Postal and Courier Stakeholders' Forum on 24th April 2012 that brought together over 100 participants drawn from stakeholders in the sector. These included courier operators, the public postal licensee, Ministry of Information and Communications, consumer organisations, training institutions, suppliers of security equipment, the Kenya Police and Kenya Revenue Authority.

### 3.2.3 Broadcasting Services

To enhance competition in the provision of digital TV signal distribution services in Kenya, the Commission licensed one additional national signal distributor, Pan Africa Network Group (Kenya) Company Limited (PANG). The licence requires PANG to roll out its DVB-T2 systems in at least 12 sites in its first year ending 6th October 2012. The sites are Nairobi, Mombasa, Malindi, Nyeri, Kisii, Kisumu, Nakuru, Eldoret, Kakamega, Webuye, Meru and Garissa.

The Commission conducted a study to assess competition in the broadcasting industry and disseminated the findings to stakeholders. The study identified market barriers; effectiveness of broadcast spectrum assignment process; extent of dominance and anticompetitive behaviour in the specific market segments. The study also examined the effectiveness of the existing legal and regulatory framework in supporting a robust competition policy for the broadcasting industry. The Commission will commence the implementation of the recommendations of the study in the next financial year.

## 3.3 Tariffs and Competition

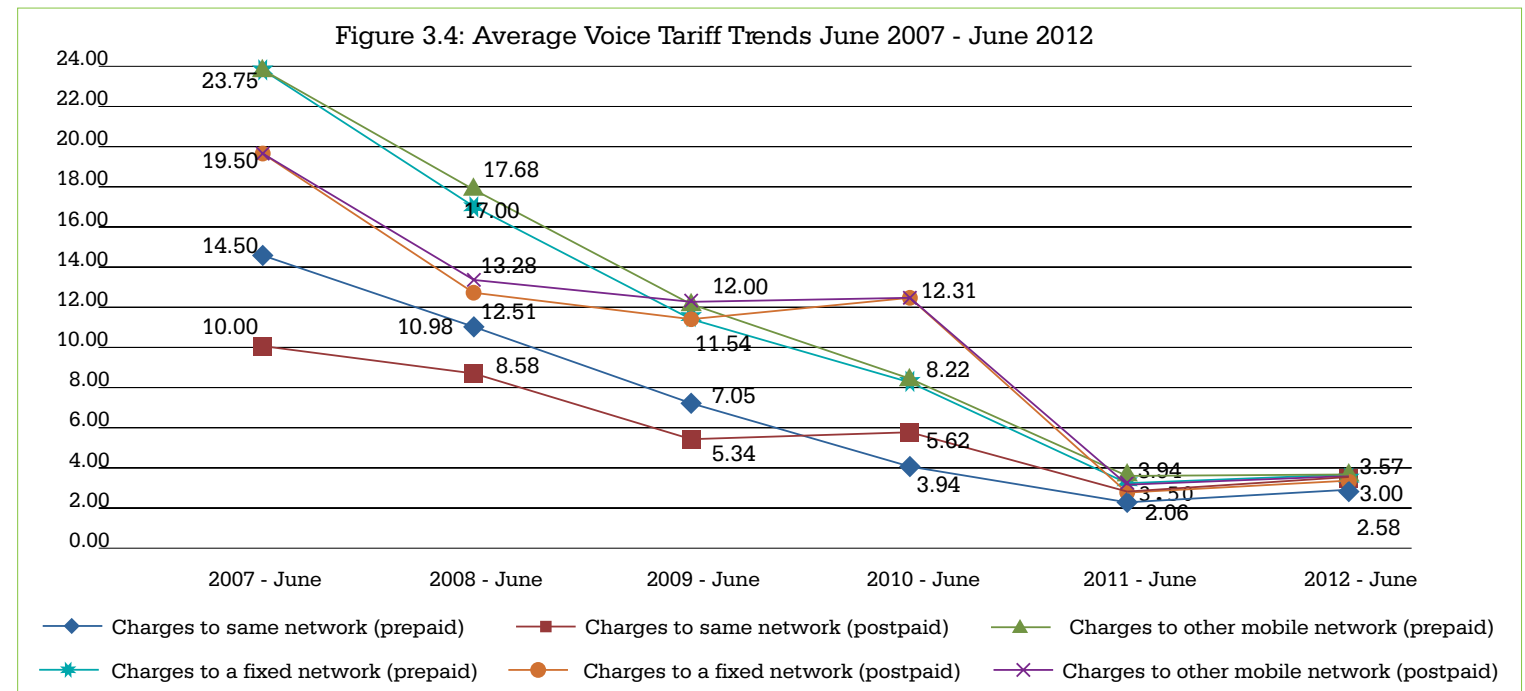
### 3.3.1 Telecommunications

The Commission issues technical, costing and other relevant guidelines to guide licensees in interconnection and negotiating Interconnection Agreements thereof. The Commission retained 2010/11 Mobile Termination Rate (MTR), Fixed Termination Rate (FTR) and fixed transit rates issued in the Determination No. 2 of 2010 on 16th August 2010 for a period of one year, from 1st July, 2011 to 30th June, 2012. This decision was arrived at following representations by some industry players to review the termination and transit rates.

The suspension of the glide path to the Determination resulted in stable tariffs and slowed stiff competition experienced in the previous year. However, operators shifted their concentration to promotions and special offers in order to acquire additional customers on their networks. The Commission also continued to ensure fair and non-discriminatory infrastructure sharing and co-location among operators.

#### 3.3.1.1 Fixed and Mobile Network Services

Despite the suspension of the glide path for MTR, FTR and fixed transit rates, the competitive landscape in both mobile and fixed market segments continued to thrive. This provided operators with greater retail price flexibility and narrowed the spread between the on-net and off-net tariffs during the review period as shown in Figure 3.4.



Source: Communications Commission of Kenya

The suspension of the Determination No. 2 of 2010 glide path led to a convergence in the pre-paid and post-paid tariffs trend for both on-net and off-net calls for mobile and fixed services. The trend is shown in the in Figure 3.4.

The price competition that was triggered by the issuance of the Determination No. 2 continued and among other factors contributed to the increase in mobile cellular penetration from 63.6 percent in 2010/11 to 75.4 percent in 2011/12. The stakeholders in the ICT industry raised concerns on the value proposition of the price competition in the mobile voice market on the economy and sustainability of the mobile industry. As a result, the Commission contracted the Kenya Institute for Public Policy Research and Analysis (KIPPRA) to assess the impact of retail price competition in the mobile voice market on the Kenyan economy.

#### 3.3.1.2 Internet and Broadband

The Commission continued to allow market forces to spur the growth of the nascent Internet and broadband market. Operators in this market segment offered innovative data products and services using several technologies such as fibre optic cable, WIMAX, Digital Subscriber Line (DSL) and VSAT. These products and services were competitively priced as more promotions and special offers were designed and offered by the operators as customer acquisition and retention strategies.

The availability of the undersea fibre optic cables expanded the choice to downstream players and customers and resulted in reduction of wholesale prices for bandwidth. This reduction incentivized most operators to migrate from costly satellite to fibre for their international connectivity. Despite this reduction, there has not been a commensurate reduction in retail bandwidth other than increased speed of broadband services. This is evidenced by the high broadband tariffs experienced in the Business Processing Outsourcing (BPO) market in Kenya compared to other BPO markets in Philippines, India and Mauritius. The country is expected to benefit from the increased international Internet connectivity.

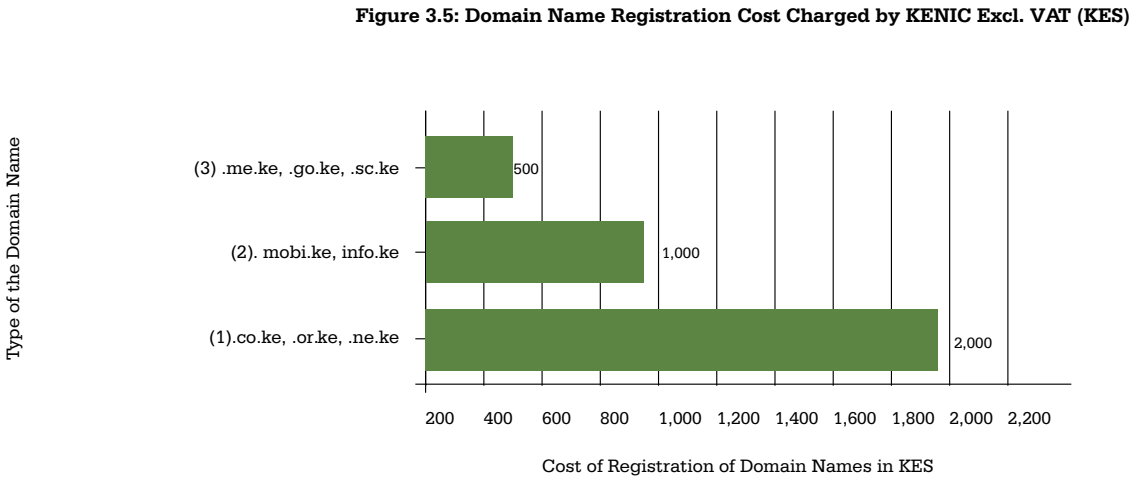


3.3.2 Postal and Courier Services

Tariffs of regulated postal services were adjusted as provided for by the law. Regulated services comprise postage of letters up to 350 grams, private letter box and bag rentals. The Commission reviewed and approved adjustment of tariffs by the Public Postal Licensee, Postal Corporation Kenya. In this regard, charges for basic domestic ordinary letter of 20 grams went up by 20 percent while those of basic domestic registered letter category increased by 14.3 percent. For basic international mails, increases ranged from 11.1percent to 172.7 percent depending on their demand elasticities. Further, the rental fees for private letter boxes for Corporate and Individual Users went up by 42.9 per cent, while those of Special Group of Corporate and Sub-Post office Users increased by 18.4 per cent and 14.3 per cent respectively. The increases were occasioned by the need to align the tariffs to the cost of service provision which had gone up.

3.3.3 Electronic Transaction Services

The Commission is mandated under the *Kenya Information and Communications Act, CAP 411 A* (KICA), to license and regulate Certification Authorities and management of the domain name registration. The domain name registration tariffs for .KE ccTLD ranged from KES 500 to KES 2,000 . This is shown in Figure 3.5.



Source: Kenya Network Information Centre (KENIC)

3.3.4 Broadcasting Services

The Commission reviewed and approved channel rental tariffs for the provision of the signal distribution services submitted by Kenya Broadcasting Corporation (KBC) and Pan African Group (Kenya) Company Limited (PANG). KBC is charging a monthly fee of KES 350,000 per channel per site while PANG has implemented a three tier charging methodology dependant on location ranging from USD 13,125, to USD 1,458 per channel per site.

3.4 Emerging Issues and Innovations

The Commission researches on emerging issues and new technologies in the ICT industry with a view to keeping abreast of new developments to enrich the regulatory framework. In this regard, the Commission generated information papers on Internet Protocol (IP) Interconnection; Critical Information Infrastructure Protection (CIIP); Inclusion of Standardization in Higher Education Curriculum; and Broadband Strategy.

3.4.1 Internet Protocol (IP) Interconnection

This study provided basic information on IP based interconnection models. In the current digital age, most networks use Internet Protocol to communicate thus rendering traditional network interconnection inappropriate. Migration towards Next Generation Networks (NGN), which are IP based, brings about major changes to networks and services in terms of new protocols and new architectures, hence the need to adjust interconnection models and principles. This will affect both technical and commercial aspects.

3.4.2 Critical Information Infrastructure Protection (CIIP)

The study on CIIP reviewed the existing national legal framework as well as benchmarked with other administrations where CIIP has been adopted. The study looked at a number of issues including infrastructure, policy, governance and outreach dimensions.

CIIP is pertinent where access to information is enhanced through broadband connections. Information infrastructure is the backbone of all other critical infrastructure and should be protected against physical and electronic attacks. Kenya has experienced insecurity targeting physical and electronic networks and hence the need for protection.

3.4.3 Inclusion of Standardization in Higher Education Curriculum

This study proposed introduction of educational content on ICT standardization and policy into higher education curricula in line with ITU initiative. The outcome of the study will assist the Commission of Higher Education (CHE), Kenya Bureau of Standards (KEBS) and institutions of higher learning to enhance curriculum.

3.4.4 Broadband Strategy

Currently, Kenya does not have a National Broadband Strategy. Based on the recognition that broadband is a key driver of socio-economic development and national competitiveness, the Commission signed a Memorandum of Understanding (MOU) with the United States Agency for International Development (USAID) through its associate Global Broadband Innovations (GBI) Programme in order to develop a Broadband Strategy.

Under the partnership framework, USAID provide technical assistance towards the development of a National Broadband Strategy. The strategy will guide the development of an enabling policy, legal and regulatory environment for the roll out of broadband services in Kenya. The strategy is expected to spur growth in the ICT industry, other sectors of the economy and the provision of Government services on electronic and mobile platforms. The strategy will bolster the Government's efforts of transforming Kenya into a knowledge-based economy in line with Kenya's development strategy, Vision 2030.

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## CHAPTER **four**

Ensuring Compliance and  
Empowering Consumers



One of the key requirements of regulatory authorities is to ensure that their licensees comply with the law and licence conditions and protect consumers. In this regard, the Commission ensures that its licensees comply with the Act, Regulations and licence conditions; empowers and protects consumers of ICT services with respect to prices charged, quality and diversity of those services.

4.1 Monitoring and Enforcing Compliance

The Commission undertakes both scheduled and unscheduled radio frequency spectrum and quality of service monitoring and inspections to ensure that licensees comply with the various requirements under the Act, Regulations and licence conditions. The Commission also type-approves/accepts ICT equipment and certifies network installations to ensure conformance with set equipment specifications and installation standards. The Commission also ensures the security of the cyber space.

4.1.1 Inspections

The Commission inspected telecommunication network installations, radiocommunications and postal/courier facilities as detailed below.

4.1.1.1 Telecommunications

A sample of telecommunication operators was inspected to verify compliance with licence conditions. The Commission further undertook inspections to investigate the existence of unauthorized operators with a view to stemming such operations in the market. Table 4.1 gives a summary of inspections carried out during the year under review.

Table 4.1 Summary of Telecom Inspections

	Licence Category	Verification of Compliance Returns		Audit		General Licence Conditions	
		2010/11	2011/12	2010/11	2011/12	2010/11	2011/12
1	Content Service Providers (CSPs)	9	12	5	7	18	16
2	Application Service Providers (ASPs)	10	10	4	5	12	13
3	Network Facilities Providers (NFPs)	2	5	-	1	6	5
4	Business Process Outsourcing (BPO)	1	2	1	-	1	2
5	International System & Services (ISS)-(IGS/SCLR)	1	5	-	-	1	5
6	Public Data Network Operators (PDNOs)	3	1	-	-	3	1
7	Internet Service Providers (ISPs)	6	2	-	-	8	2
8	Local Loop Operators (LLOs)	2	1	-	-	3	3
9	Telecommunications Contractors (TECs)	1	2	-	-	3	2
10	Value Added Services	1	-	-	-	3	-
11	Premium Rate Services (PRS)	-	1	-	-	3	1
12	Private VSATs	-	-	-	-	3	4
13	Broadcasters	-	-	-	-	-	2
14	Unauthorized Operators	-	-	-	-	-	8
	Total	36	41	10	13	64	64

Source: Communications Commission of Kenya

The Commission carried out a total of 64 inspections of telecommunications licensees with a focus on Content Service Providers (CSPs)/ Premium Rate Service Providers (PRSPs), and Application Service Providers (ASPs)/Internet Service Providers (ISPs). The inspections entailed physical visits to offices and licensee facilities to check on their general compliance with the licence conditions. There were also 41 telecommunications inspections carried out to verify the accuracy of the submitted information in the compliance returns.

The Commission audited 13 new licensees to obtain pre-inspection information and gauge their understanding of the licence obligations. The inspections also entailed verification of billing system accuracy and confirmation of reported cases of violations.

The inspections showed a 90.6 percent compliance rate compared to 78.9 percent achieved in the previous year, representing an increase of 11.7 percentage points. The compliance rates for various licence categories are shown in Table 4.2.

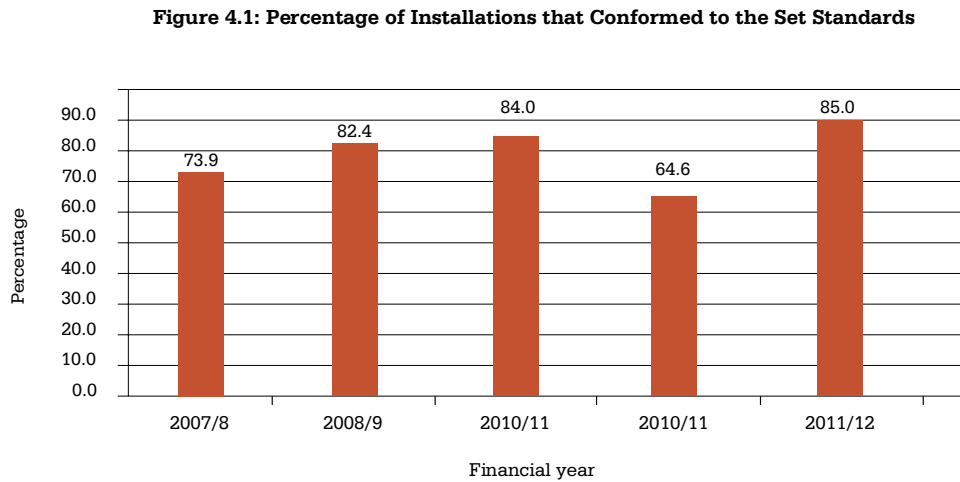
Table 4.2 Summary of Telecom Licensees Inspected for the FY 2010/11 and 2011/12

	Licence Category	Inspected		Re-Inspected		Compliant		Percentage Compliance (%)	
		2010/11	2011/12	2010/11	2011/12	2010/11	2011/12	2010/11	2011/12
1	Content Service Providers (CSPs)	20	16	5	3	15	15	75.0	93.8
2	Application Service Providers (ASPs)	17	13	5	3	16	12	94.1	92.3
3	Network Facilities Providers (NFPs)	7	5	3	3	6	5	85.7	100.0
4	Business Process Outsourcing (BPO)	3	2	1	-	2	2	66.7	100.0
5	International System & Services (ISS)-(IGS/SCLR)	1	5	1	-	1	5	100.0	100.0
6	Public Data Network Operators (PDNOs)	3	1	0	-	1	1	33.3	100.0
7	Internet Service Providers (ISPs)	12	2	2	-	6	2	50.0	100.0
8	Local Loop Operators (LLOs)	4	3	2	1	2	2	50.0	66.7
9	Telecommunications Contractors (TECs)	4	2	1	-	3	2	75.0	100.0
10	Value Added Services	3	0	0	0	3	0	100.0	-
11	Premium Rate Services (PRS)	3	1	0	-	3	1	100.0	100.0
12	Private VSATs	5	4	0	-	5	3	100.0	75.0
13	Broadcasters	0	2	0	0	0	2	-	100.0
14	Cyber Cafes	8	-	0	-	8	-	100.0	-
15	Suspected illegal operators	0	8	0	-	0	6	-	75.0
	Total	90	64	20	10	71	58	78.9	90.6

Source: Communications Commission 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 set national and recognized international installation standards and guidelines issued by the Commission. The Commission completed the revision of the Installation Guidelines which are available on the corporate website. Further, the Commission inspected 80 installations in various regions of the country out of which 68 were compliant. This represented 85.0 percent compliance rate compared to 64.6 percent reported in 2010/11, as shown in Figure 4.1.



Source: Communications Commission of Kenya

The 20.4 percentage point increase was attributed to increased surveillance and sensitization by the Commission. Licensees whose installations were not compliant were directed to rectify their installations and inform the Commission upon completion for re-inspection.

In response to reports of cases of unlicensed personnel and contractors carrying out installation work, the Commission, through public notices, advised the public to only utilize services offered by the Commission's licensees. The notice also directed unlicensed technical personnel and contractors to apply for licences.

4.1.1.3 Radiocommunications

The Commission verifies, through inspections, licensee compliance and operating parameters of the associated assigned radio spectrum. The Commission inspected a total of 828 radiocommunication networks compared to 645 inspected the previous year, representing an increase of 28.4 percent. This is shown in Table 4.3.

Table 4.3: Number of Inspections

Year	2007/08	2008/09	2009/10	2010/11	2011/12
Land Mobile Networks	425	296	210	231	259
Broadcast Transmitters	45	65	224	60	135
Alarm Networks	-	149	183	176	267
Fixed Link and Fixed Wireless Access (FWA) Sites	-	-	-	178	167
Total	470	500	617	645	828

Source: Communications Commission of Kenya

The Commission carried out compliance checks on fixed links and fixed wireless access networks. The compliance level was at 86.7 percent compared to 57.9 percent the previous year. To address the non-compliance, the Commission issued notices of violation and subsequently levied appropriate penalties where anomalies were not rectified.

4.1.1.4 Postal and Courier Services

Inspection of postal and courier facilities were undertaken to confirm compliance with the Act, Regulations and licence conditions. A total of 100 postal and courier licensees were inspected countrywide. Out of these, 72 licensees were compliant. The licensees whose outlets were not compliant were formally directed to undertake corrective measures. The measures included displaying list of prohibited articles, displaying tariffs, showing signage direction of the office, maintenance of complaints register, and display of the licence certificate.

The Commission carried out a re-inspection of the 28 non-compliant licensees and established that 25 of them had become compliant as at 30th June 2012. The commission notified the three licensees that were not compliant to do so failing which the Commission shall carry out enforcement as per the Act, Regulations and licence conditions.

During the inspection exercises, the Commission identified a total of 13 persistent illegal operators in the Coast (6), Central (2), Eastern (2) and Rift Valley (3) regions. These operators were arraigned in court and convicted for offering postal services without requisite licences. Successful postal enforcement was attributed to the Commission's co-operation with law enforcement agencies.

Global and domestic postal and courier systems are increasingly faced with security threats. The Commission, in collaboration with the Kenya Revenue Authority (KRA), conducted a security audit of selected border points and made an assessment of security procedures at international mail entry/exit points aimed at sealing the security and revenue loopholes.

The Commission, based on the recommendations of the audit, initiated the following measures to ensure that postal and courier networks are secure: encouraged licensees to acquire mail screening devices; proposed the development of a postal and courier curriculum to include security issues and proposed that security agencies share postal security incidents with the Commission. In addition, the Commission through the 4th Annual Postal and Courier Forum sensitized the postal and courier operators on the need to observe declaration of contents before acceptance of the articles or sealing of covers at acceptance points.



#### 4.1.2 Monitoring

##### 4.1.2.1 Radiocommunications Monitoring

There were 23 cases of reported interference in addition to the six cases that remained unresolved in the 2010/11 financial year. All the 29 frequency interference cases were resolved as shown in Table 4.4.

**Table 4.4: Number of Frequency Interference Cases**

Year	2008/09		2009/10		2010/11		2011/12	
	No. of Cases	No. Resolved	No. of Cases	No. Resolved	No. of Cases	No. Resolved	No. of Cases	No. Resolved
VHF, UHF and SHF	49	46	45	42	32	27	23	23
HF	1	1	4	1	3	3	1	1
Broadcasting	0	0	10	9	4	3	5	5
<b>Total</b>	<b>50</b>	<b>47</b>	<b>59</b>	<b>52</b>	<b>39</b>	<b>33</b>	<b>29</b>	<b>29</b>

Source: Communications Commission of Kenya

Frequency clearance is carried to determine suitability and usage of a frequency band. During the year under review, a total number of 25 cases were monitored for clearance compared to 16 in the previous year. The frequencies in the HF, VHF and UHF frequency bands were monitored to facilitate assignment to private security firms, Government organs and diplomatic missions. This is shown in Table 4.5.

**Table 4.5: Number of Frequency Clearances**

Year	2008/09	2009/10	2010/11	2011/12
V/U/SHF	37	39	15	19
HF	7	3	1	6
<b>Total</b>	<b>44</b>	<b>42</b>	<b>16</b>	<b>25</b>

Source: Communications Commission of Kenya

##### 4.1.2.2 Quality of Service Monitoring in Telecommunication Services

The Commission monitors the Quality of Service (QoS) of cellular mobile networks in order to protect consumers by ensuring that they get quality telecommunications services. In this regard, QoS monitoring was carried out on the four cellular mobile networks to verify their compliance with the QoS targets in the operator's licences and in response to consumer complaints.

The measurements were carried out in sampled areas across the country. Where consumer complaints were found to be genuine, operators were advised to improve quality of service in the affected areas, which in most cases, they immediately responded to. The results of the assessment and compliance status of the operators are summarized in the Table 4.6.

**Table 4.6: Mobile Operators' Compliance with Quality of Service Parameters**

QoS Parameter	2012/13 Targets	2009/ 10 to 2011/12 Targets	Safaricom Limited		Airtel Networks Kenya Limited (Airtel)		Essar Telecoms Kenya Limited (Yu)		Telkom Kenya Limited (Orange)	
			Achieved	Status	Achieved	Status	Achieved	Status	Achieved	Status
Completed Calls	≥95%	≥90%	83%	N/C	88%	N/C	90%	C	90%	C
Call Set up Success Rate	≥95%	≥90%	85%	N/C	88%	N/C	93%	C	92%	C
Dropped Calls	≤2%	≤2%	2%	C	2%	C	2%	C	2%	C
Blocked calls	≤5%	≤10%	14%	N/C	10%	C	8%	C	8%	C
Speech Quality (MOS Values)	95% of calls to have MOS > .3.1	95% of calls to have MOS >2.7	86%	N/C	85%	N/C	57%	N/C	92%	N/C
Handover Success Rate	≥95%	≥85%	99%	C	97%	C	99%	C	99%	C
Call Set up Time	< 13.5 sec	<13.5 Secs	9 Sec	C	8 Sec	C	8 Sec	C	8 Sec	C
Signal Strength (RxLev-dBm)	Outdoor = - 102 dBm, Indoor = -95 dBm, In car = - 100 dBm	Outdoor (≥) -102 dBm	-81 dBm	C	-85 dBm	C	-81 dBm	C	-75 dBm	C

Source: Communications Commission of Kenya

Key: C - Compliant; and N/C - Non Compliant

From Table 4.6 above, all the four operators complied with QoS targets on Handover Success Rate, Call Set-Up Success Rate, Dropped Calls and Signal Strength. However, none of the operators met the target on Speech Quality.

The operators were required to meet at least 80 percent of the total number of QoS parameters and targets in order to be deemed compliant. Table 4.7 provides a summary of the percentage compliance achieved by each operator for the last three years.

**Table 4.7: Mobile Operators' Overall Compliance with Quality of Service Targets**

Operator	Target QoS Parameters		Performance Achieved (%)		
	Number	Percentage (%)	2009/10	2010/11	2011/12
Safaricom Limited	8	80	37.5	75	50.0
Airtel Networks Kenya Limited	8	80	87.5	75	62.5
Telkom Kenya Limited	8	80	37.5	50	87.5
Essar Telecom Kenya Limited	8	80	50.0	75	87.5

Source: Communications Commission of Kenya

From Table 4.7, two operators namely Telkom Kenya Limited and Essar Telecom Kenya Limited met the minimum target of seven out of eight mandatory Key Performance Indicators (KPIs). Airtel Networks Kenya Limited met five out of the eight mandatory KPIs while Safaricom Limited scored only four out of the eight mandatory KPIs.

4.1.2.3 Quality of Service Monitoring in Postal and Courier Operators

The inspection of a sample of postal and courier outlets revealed a notable improvement in quality of service with mail largely being delivered within the stipulated delivery standards. There was also an improvement in the number of outlets displaying service tariffs during the year from 90 percent to 92 percent.

4.1.3 Returns from Operators

4.1.3.1 Returns from Telecommunication Operators

The Commission monitors conformance in respect to the terms and conditions of the licences it issues, one of the conditions being the submission of compliance returns. The returns provide crucial industry data on revenues, investments, network rollout, services offered, subscriber numbers, tariffs, service outlets and employment levels to name but a few.

The Commission received returns from 208 telecoms licensees out of the 235 that were operational. The year saw the level of compliance by operational licensees jump to 88.51 percent from 54.89 percent in the previous year due to the Commission's effective enforcement activities. Table 4.8 gives a summary of compliance rate submission by licence category.



Members of the public listen keenly to consumer information disseminated during the ‘Kaa Macho’ road show at Mama Ngina Drive, Mombasa.

Table 4.8: Compliance Returns Status 2009/10 - 2011/12

Indicators	Total No. of Licensees			Operational Licensees						Licensees that Submitted Returns					
				Number			Percentage %)			Number			Percentage %)		
Licence Category	2009/ 10	2010/ 11	2011/ 12	2009/ 10	2010/ 11	2011/ 12	2009/ 10	2010/ 11	2011/ 12	2009/ 10	2010/ 11	2011/ 12	2009/ 10	2010/ 11	2011/ 12
Network Facility Providers	18	23	28	12	18	24	66.7	78.3	100.00	12	16	22	100	69.57	91.67
Application Ser- vice Providers	57	77	91	38	49	57	66.7	63.6	61.54	33	46	50	86.8	59.74	87.72
Content Service Providers (CSP)	86	120	147	31	55	83	36	45.8	56.46	24	69	76	77.4	57.50	91.57
International Sys- tems and Services	11	11	13	10	11	13	90.9	100	100.00	10	8	13	100	72.73	100
Submarine Cable Landing Rights	3	3	3	2	3	3	66.7	100	100.00	2	1	3	100	33.33	100
Business Process Outsourcing (BPO)	25	31	34	4	7	9	16	22.6	26.47	3	8	6	75	25.81	66.67
Data Carrier Net- work Operators	4	7	2	4	6	2	100	85.7	100.00	4	6	2	100	85.71	100.
Public Data Net- work Operators	12	8	8	7	6	8	58.3	75	100.00	7	7	5	100	87.50	62.50
Local Loop Opera- tors	12	10	9	8	7	5	66.7	70	55.56	8	5	5	100	50.00	100
Internet Service Providers (ISPs)	59	47	42	25	19	15	42.4	40.4	35.71	25	11	11	100	23.40	73
Premium Rate Services (PRS)	34	39	38	15	15	16	44.1	38.5	42.11	15	15	15	100	38.46	93.75
Total	321	376	415	156	196	235	59.5	65.45	70.71	143	192	208	91.7	54.89	88.51

Source: Communications Commission of Kenya

4.1.3.2 Returns from Postal and Courier Operators

The number of postal and courier operators who submitted compliance returns reduced to 66 from 109 recorded the previous year. The Commission undertook initiatives to increase the compliance rate through sensitization of licensees during the 4th Postal and Courier Forum and the issuance of reminders to all operators.

#### 4.1.4 Type Approval

The Commission undertakes type approval/acceptance of ICT equipment intended for use in the country to verify whether or not the equipment meet national and recognized international standards. This ensures safety of consumers, interoperability of telecom networks and efficient utilization of spectrum and numbering resources.

The Commission received and processed 155 applications for equipment type approval/acceptance. These comprised 238 different models of equipment. The summary of equipment type approved/accepted are shown own in Table 4.9.

**Table 4.9: Type Approval/Acceptance Applications Handled**

Equipment Type	2007/08	2008/09	2009/10	2010/11	2011/12
Data Routers	6	4	4	4	5
Gateway/Switches/PABX	11	5	4	8	4
PSTN/IP Server Equipment	9	-	-	2	6
Wireless Terminals/System	11	16	-		-
Transceiver-VHF/UHF	16	11	5	10	5
Transceiver-HF	3	2	-	-	-
Transceiver-Citizen Band (CB)	-	-	1	-	-
Low Power Wireless Terminals	29	46	15	62	111
Satellite Terminal	2	-	-	-	1
Alarm Transmitter	-	-	1	-	-
Broadcast Equipment	7	5	11	6	6
VSAT Equipment (Transceiver, BUC, HPA, etc)	13	11	4	3	8
Global System for Mobile Communications (GSM) Interface and BTS	1	45	8	13	6
CDMA Interface	2	-	-	-	1
VOIP Terminal	-	2	-	-	1
Telephone Set	2	2	6	2	-
Payphone	1	-	1		-
GSM Mobile Phones	9	18	33	33	60
CDMA Telephone Set	5	5	-	-	-
Fax Machine	2	5	-	-	8
Modem	-	-	4	-	2
Set-Top Box	-	-	8	3	7
Microwave Equipment	-	-	7	3	8
Mapping system	-	-	1	-	-
Accepted	129	177	113	149	238
Rejected	-	-	-	-	-
<b>Total</b>	<b>129</b>	<b>177</b>	<b>113</b>	<b>149</b>	<b>238</b>

Source: Communications Commission of Kenya

Table 4.9 shows that majority of equipment received were Low Power Wireless Terminals and GSM mobile phones, which make up 46.6 percent and 25.2 percent respectively. This could be attributed to the fact that the low power wireless terminals (less than 100 mW) do not attract licence fees. Further, the Commission processed 51 applications for equipment import clearance compared to 70 in the previous year.

#### 4.1.5 Cyber Security Management

Cyber security has attracted global attention and has become a key item in the information agenda of many countries and ICT related organizations. Cyber security is a set of measures designed to protect the cyber environment from attacks. International best practice requires that every country establishes a national framework for the management of cyber crime. This entails developing the necessary policies, legal and regulatory framework as well as a technical implementation of the same through the establishment of a National Computer Incident Response Team (CIRT).

The *Kenya Information and Communications Act, Cap 411A*, mandates the Commission to establish a National Cyber security management framework and license Certification Service Providers (CSPs) to issue digital certificates. Further, the *Kenya Information and Communications (Electronic Certification and Domain Name Administration) Regulations, 2010*, provides a regulatory framework for carrying out this mandate.

The Commission established the Kenya Computer Incident Response Team Coordination Centre (KE-CIRT/CC) that serves as the national co-ordination and collaboration centre for cyber security management. The functions of the KE-CIRT/CC are to put in place preventive measures to detect any potential threats (proactive); investigate and resolve cyber crime (reactive); and carry out research, analysis and capacity building on cyber security (research and development).

In order to operationalize the KE-CIRT, the Commission signed an MoU with the ITU on the implementation of the facility. In addition, the Commission facilitated the formation of the National Cyber Security Steering Committee (NCSC) consisting of Kenya ICT Board (KICTB), Ministry of Information and Communications, law enforcement agencies, CCK, Directorate of E-Government, Telecommunications Service Providers Association of Kenya (TESPOK), Kenya Education Network (KENET), Consumers Federation of Kenya (COFEK) and Central Bank of Kenya (CBK). The Committee oversees coordination of cyber security management between the KE-CIRT/CC and various stakeholders.

The Commission in conjunction with the Ministry of Information and Communications facilitated a national CIRT capacity building workshop which attracted participation from all the East African countries. Further, the commission, through the KE-CIRT/CC provided a number of reactive advisories as summarized in Table 4.10.

**Table 4.10: Cyber Security Incidents Reported in the Financial Year 2011/12**

No.	Incidents	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Number of Advisories
1.	Phishing	1	-	3	2	6
2.	SQL Injection	1	1	1	-	3
3.	Impersonation	-	2	1	2	5
4.	Website Defacements	2	1	1	1	5
5.	Financial Fraud	-	-	1	-	1
6.	Espionage	-	-	-	2	2
7.	Malware	-	-	-	2	2
	<b>Totals</b>	<b>4</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>24</b>

Source: Communications Commission of Kenya



4.2 Empowering and Protecting the Consumer

To protect consumers of ICT services, the Commission develops and implements education programmes that equip consumers with information, skills and knowledge to enable them make better purchase decisions as well as to demand their rights in the market. These programmes are informed by the understanding that knowledgeable consumers stimulate competition in the market as service providers strive to satisfy their demand for quality services and products. The Commission also makes various interventions and provisions for and on behalf of consumers of ICT products and services.

4.2.1 Consumer Education and Information

The Commission developed and rolled out a three-month consumer education campaign that targeted consumers of postal and courier services. The main objective of the campaign dubbed “Kaa Macho” was to increase awareness among consumers on a variety of issues that included postal and courier service options, the rights and responsibilities of consumers in relation to the purchase and use of postal and courier services. The campaign also sought to encourage postal and courier operators to adhere to the law and licence conditions in their operations. The campaign, carried out through the media and consumer outreach activities, saw the Commission interact with consumers in eight (8) regions of the country.

The campaign sensitized consumers on the importance of seeking relevant information on various aspects of the products and services available in the market. Consumers were encouraged to become assertive and seek information on the terms and conditions of the services offered; complaint resolution mechanisms; establish whether their providers had licences; geographical reach of service providers among other important service dimensions. As part of the campaign, the Commission developed consumer advisory materials on five thematic areas: mail fraud, postal addressing, postal and courier service options, safe handling of postal articles and packaging of postal articles.

In order to ensure that consumers have easy access to consumer advisory information provided by the Commission during its consumer education campaigns and outreach activities, the Commission distributed a total of 237,533 brochures through several channels and institutions. These included the Postal and Courier Consumer Education Campaign, Post Offices, Cybercafés, Public Libraries operated by Kenya National Library Services (KNLS), Mombasa International Show, Nairobi International Trade Fair and during other events hosted and organized by the Commission. The consumer advisory information was also posted onto the Commission’s website.

4.2.2 Understanding Consumers

The Commission undertook a consumer behaviour and trends survey to understand the behaviour of consumers with regard to purchase and usage of ICT services; motivation to switch service providers; sources of ICT information and the level of trust they attribute to the sources. The survey also sought to establish the level of consumer awareness of the role of the Commission and their level of usage of the Commission’s consumer protection mechanisms. The findings of the survey enabled the Commission design appropriate consumer protection and awareness mechanisms.

4.2.3 Customer Service Delivery

Efforts to ensure that members of the public were enlightened of the Commission’s service delivery commitments remains a vital activity of the Commission. This ensures that the Commission’s service delivery standards are not only maintained but undergo continuous improvement. To this end, the Commission continued to distribute copies of the Service Delivery Charter to stakeholders and the general public through various functions and channels. A total of 4,000 copies of the Charter (in both English and Kiswahili versions) of the Charter were distributed during the year under review.

The Commission undertakes an annual survey as a means of determining the level of satisfaction of its customers with its services. The survey carried out in 2011/12 determined the Customer Satisfaction Index to be 71 percent compared to 75 percent in the previous year. The four percentage point drop was attributed to low ranking of the Commission by its partners and affiliates on account of service delivery as well as on Corporate Social Responsibility (CSR). The Commission was given lower ratings in procurement and contracting by suppliers of goods and services. The Commission will improve its service delivery processes by implementing an internal service charter as a means of minimizing internal delays and re-evaluate its corporate social responsibility strategies.

4.2.4 Consumer Protection

The Commission’s role of protecting consumers of ICT services and products in Kenya in regard to the prices, quality and variety of such services and products are concerned remains fundamental. The Commission continued to pursue regulatory intervention measures on behalf of consumers where they faced challenges with their service providers.

Persons with Disabilities (PwDs) form an integral part of consumers of ICT services and hence require protection like any other consumer. Taking cognizance of the fact that PwDs face numerous challenges in accessing, purchasing and using ICT services, the Commission held a two-day multi-stakeholder workshop under the theme “E-Accessibility for Persons with Disabilities”. The workshop saw the launch of the PwDs web portal (<http://www.kenyadisability.or.ke/>) that provides a unified space to enable Persons with Disabilities and other stakeholders to easily identify, retrieve and use web-based resources / information. The portal provides a one-stop shop for information, services and communications channel to support persons involved in the disability field.

4.2.5 Resolution of Consumer Complaints and Enquiries

The Commission continued to resolve consumer complaints and enquiries filed by consumers of ICT services and other stakeholders. These were aimed at improving customer service delivery and protect consumers.

4.2.5.1 Resolution of Consumer Complaints

To enhance protection mechanisms, the Commission continued to facilitate the resolution of consumer complaints. The Commission received a total of 475 complaints. Of these, 29 percent related to unauthorized subscriptions or charges. Mobile Number Portability (MNP) accounted for 19 percent, Service interruptions 10 percent, Billing 9 percent, and Quality of service – voice and data 8 percent. Other notable complaints were on Fraudulent Calls and SMS (4 percent), Service provision delays/failures/termination (6 percent) and criminal use of service or facilities (3 percent). A detailed distribution of the complaints by category received is provided in Table 4.11.

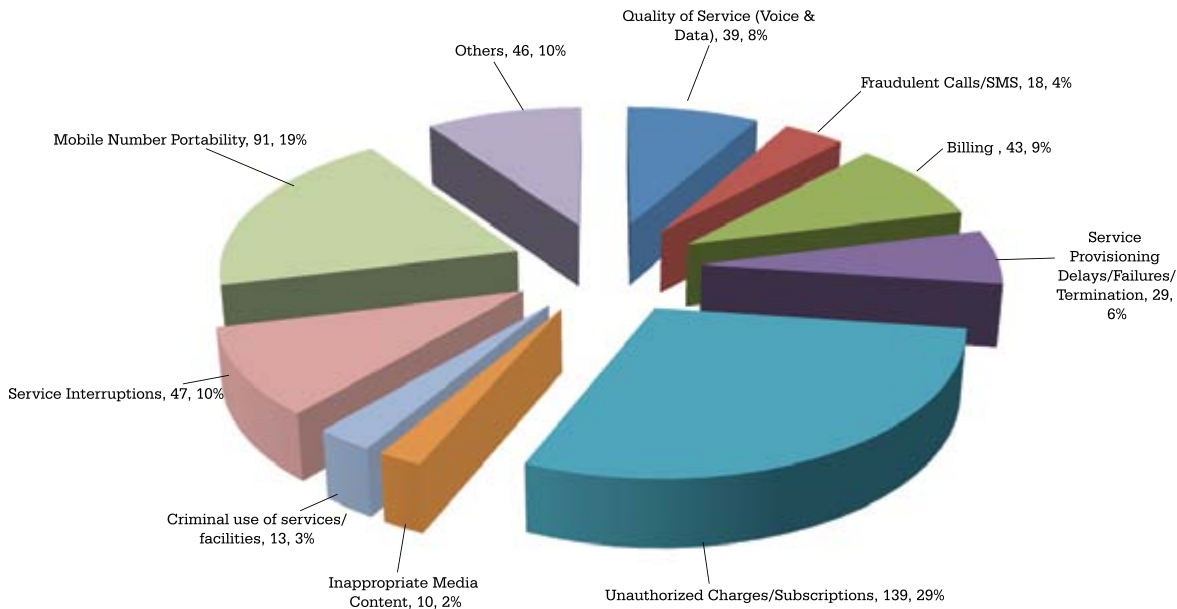
Table 4.11: Number of Complaints Received

Complaint Category	Number of Complaints Received		
	2009/10	2010/11	2011/12
Defective Terminal Equipment	30	15	9
Quality of Service (Voice and Data)	22	57	39
Fraudulent Calls/SMS	1	26	18
Billing	24	69	43
Unfair Trading Practices	2	1	3
Confidentiality/Privacy Breaches	4	6	4
Service Provisioning Delays/Failures/Termination	12	24	29
Frequency Interference	1	4	6
Misleading Advertisements	5	8	5
Unauthorized Charges/Subscriptions	7	82	139
Electromagnetic Radiation	1	-	1
Inappropriate Media Content	5	8	10

Tariffs	1	2	1
Nuisance	6	3	3
Criminal Use of Services/Facilities	2	23	13
Delivery Delays	4	3	6
Service Interruptions	23	45	47
Warranty Violations	-	-	1
Identity Theft	-	-	2
Mobile Number Portability	-	586	91
Others	1	14	5
Total	151	976	475

Source: Communications Commission of Kenya

Figure 4.2: Distribution of Complaints Received by Category in 2011/12



Source: Communications Commission of Kenya

Out of the 475 complaints received during the year, 230 were resolved while 245 are in the process of being resolved. This is shown in Table 4.12

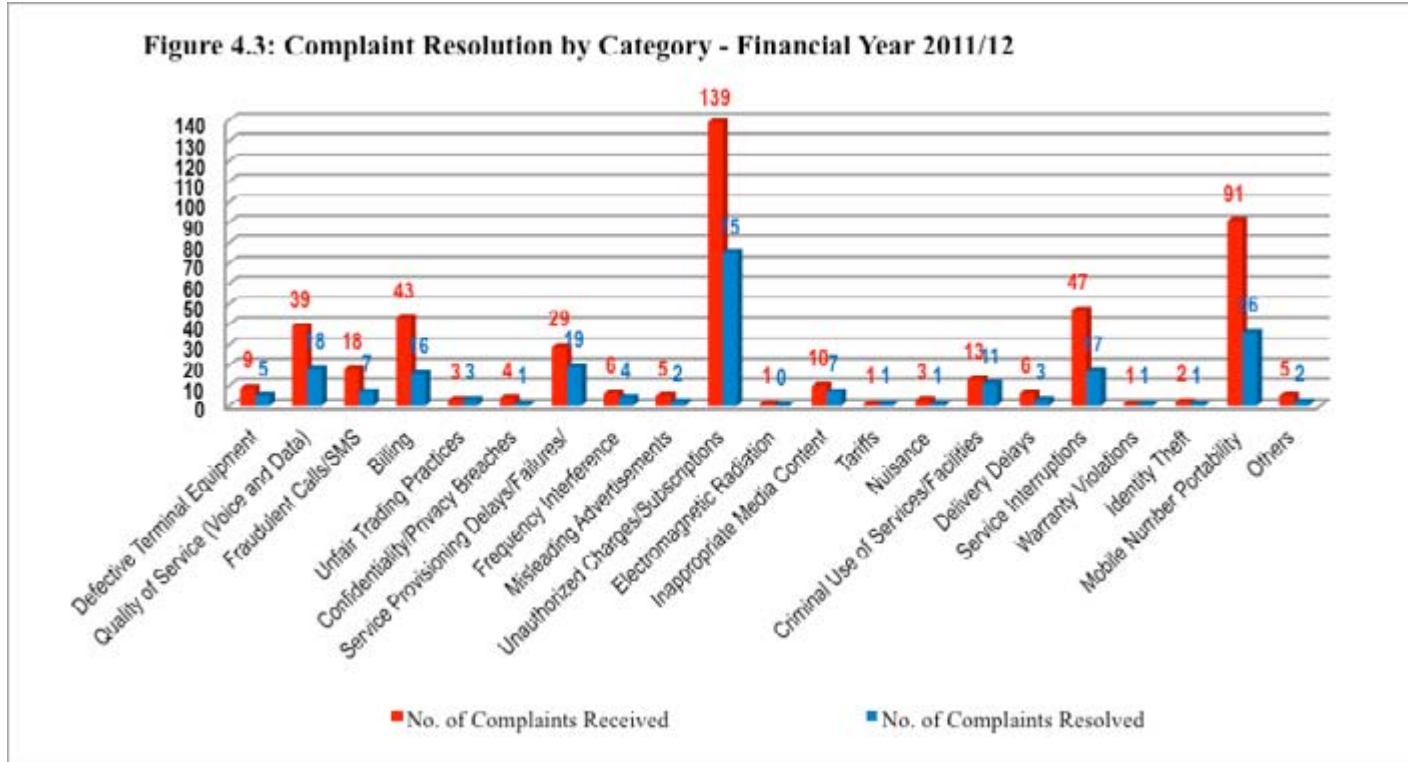
The complaints on unauthorized charges ranked high. These complaints were attributed to increased violations of licence conditions by a number of CSPs, who appeared to have charged their customers for content that was not requested for. The Commission facilitated refunds and stoppage by the service providers in a number of cases and instituted measures that will lead to the streamlining of the provision of these services

Table 4.12: Number of Complaints Handled in 2011/12

Complaints Resolution by Category	No. of Complaints Received	No. of Complaints Resolved
Defective Terminal Equipment	9	5
Quality of Service (Voice & Data)	39	18
Fraudulent Calls/SMS	18	7
Billing	43	16
Unfair Trading Practices	3	3
Confidentiality/Privacy Breaches	4	1
Service Provisioning Delays/Failures/Termination	29	19
Frequency Interference	6	4
Misleading Advertisements	5	2
Unauthorized Charges/Subscriptions	139	75
Electromagnetic Radiation	1	
Inappropriate Media Content	10	7
Tariffs	1	1
Nuisance	3	1
Criminal use of services/facilities	13	11
Delivery Delays	6	3
Service Interruptions	47	17
Warranty Violations	1	1
Identity Theft	2	1
Mobile Number Portability	91	36
Others	5	2
Total	475	230

Source: Communications Commission of Kenya

Out of the 475 complaints received, 230 were resolved while 245 were in the process of being resolved at the end of the financial year. The overall complaints resolution rate was, therefore, 48 percent in 2011/12 compared to 34 percent in 2010/11 as illustrated in Figure 4.3.



Source: Communications Commission of Kenya

The increase in the resolution rate was attributed to the enhanced legal framework (Consumer Protection Regulations), use of automated systems to handle complaints and the improvement in response from some service providers. A few challenges still remained but the Commission will address them with the service providers to ensure prompt resolution of complaints. The Commission will also enhance resolution measures to ensure speedy outcomes.

**4.2.5.2 Resolution of Enquiries**

The Commission received a total of 69 consumer enquiries. Majority of these enquiries related to the Commission's services, (21.7 percent) and broadcasting (15.9 percent). More than half (50 percent) of all enquiries were on issues not relevant to the Commission and were referred to relevant agencies. The number of enquiries received by the Commission is shown in Table 4.13.

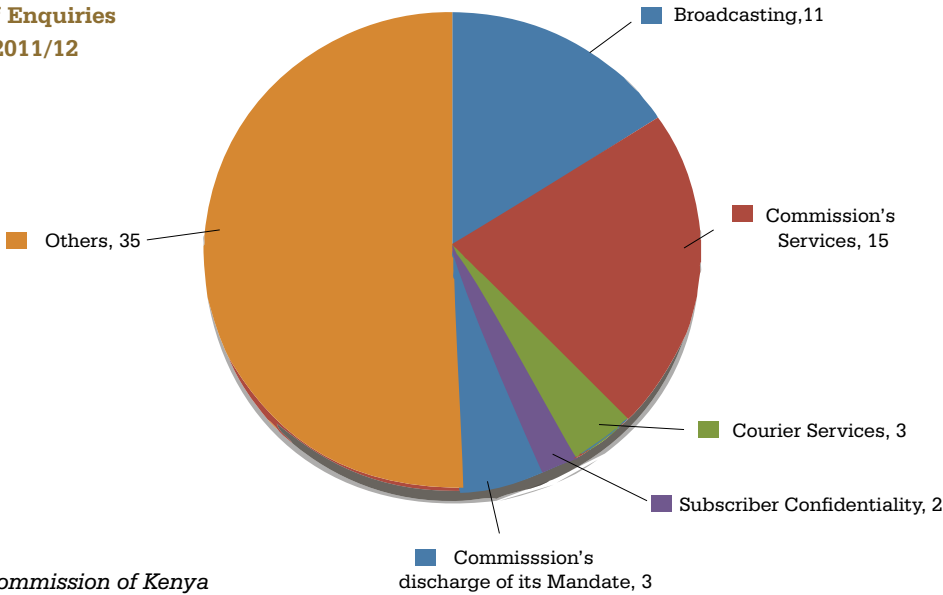
**Table 4.13: Number of Enquiries Handled in 2010/11**

	Number of Enquiries Received		
	2009/10	2010/11	2011/12
Frequency	-	2	-
E-Commerce	1	1	-
Broadcasting	10	12	11
Commission's services	7	17	15
Courier Services	-	-	3
Safe use of facilities and services	4	2	-
Subscriber Confidentiality	1	1	2
Postal Services	-	-	-
Commission's discharge of its mandate	2	5	3
Mobile Number Portability (MNP)	-	3	-
Mandate of Commission	-	-	-
Others	14	9	35
<b>Total</b>	<b>39</b>	<b>52</b>	<b>69</b>

Source: Communications Commission of Kenya

The distribution of the categories of enquiries received by the Commission is shown in Figure 4.4.

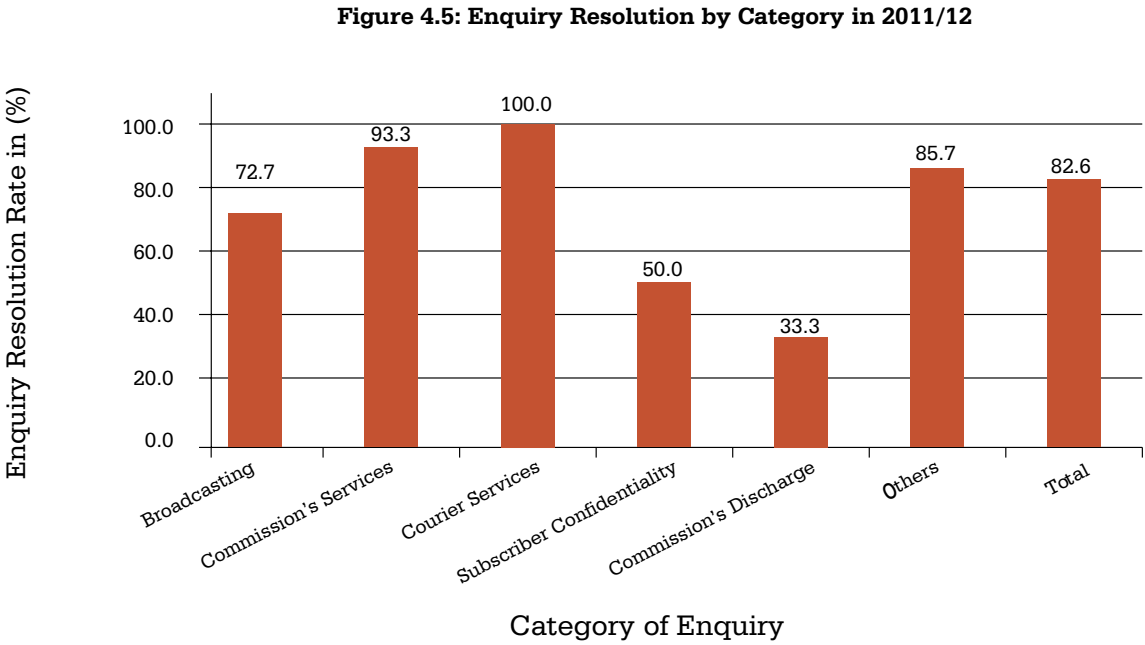
**Figure 4.4: Distribution of Enquiries Received by Category in 2011/12**



Source: Communications Commission of Kenya



Figure 4.5 provides more details on the resolution rates of enquiry by category handled by the Commission in 2011/12.



Source: Communications Commission of Kenya

The 69 enquiries were received out of which 57 were resolved, representing an enquiry resolution rate of 82.6 percent. This compares with 52 enquiries received in the previous year out of which 80.8 percent were responded to.

# Spam

**This is unsolicited mail sent either via e-mail or mobile phone. Spam control software can be used to filter spam messages. Be cautious who you give your e-mail address or mobile number to.**

# Suspicious e-mails

**Do not open suspicious mail. Be careful about opening attachments and links on unsolicited mail. Remember to scan suspicious e-mails for viruses before opening**

## CHAPTER **five**

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Roadmap to  
Universal Access



ICT is a key catalyst in the realisation of economic, social and political pillars of the Vision 2030. This places universal access to ICT services among the key development priorities for the country. Based on this recognition, the Universal Service Fund (USF) was established with a view to facilitating widespread access to ICT services, promote innovation and capacity building and further spur development of this industry.

The *Kenya Information and Communications Act, CAP 411A*, mandates the Commission to manage and administer the USF to ensure consumers of ICT services have access to affordable, secure and reliable services in all parts of the country. Over the last five years, the Commission has continued to discharge this mandate through implementation of universal access projects on pilot basis in various parts of the country using its funds. This mandate will, however, be fully realized once the USF is made operational.

The Commission undertook a number of initiatives aimed at realizing the universal access to ICT services. The activities implemented included institutionalization and operationalization of the USF; identification of ICT access gaps and dissemination to stakeholders; development of USF Strategy; and the monitoring and evaluation of the implementation of the universal access pilot projects.

**5.1 Institutionalization of the Universal Service Fund**

Section 102 (A) of The *Kenya Information and Communications Act, CAP 411A*, provides for the establishment of the Universal Service Advisory Council (USAC) which will be responsible for advising the Commission and providing strategic policy guidance in the management of the USF. The law vests the Minister for Information and Communications with power to appoint USAC members.

**5.2 Operationalization of Universal Service Fund**

The MoU between USAID and the Commission also provides for the development of the USF strategy and administration of the Fund with the goal of enhancing ICT connectivity and access to ICT enabled services in un-served and under-served areas of Kenya. To this end, the Commission in consultation with USAID developed USF Program Concepts to be considered for support through the USF. The USF will be operationalized once the USAC members are appointed by the Minister.

**5.3 Studies**

The Commission undertakes studies to establish ICT usage and access in order to inform intervention measures that are required to rollout services in the un-served and under-served areas. To this end, the Commission disseminated to stakeholders the findings of the National ICT Survey and the ICT Access Gap study that were concluded in 2010/11. The National ICT Survey provided data on the usage of voice, data and postal services in the country, while the Access Gap Study identified the key determinants of access and usage of ICT services; cost associated with lack of access of the services and identified the access gaps in different market segments. The reports of the survey and study are available on the Commission's website..



*USAID Kenya Mission Director, Ms. Erna Kerst (right), and CCK Director General Mr. Francis W. Wangusi (centre) address the media during the signing of the MoU at the CCK Centre. Looking on is Mr. Matano Ndaro, Director in charge of Competition, Tariffs and Market Analysis (CCK).*

**5.4 Implementation of the Universal Access Pilot Projects**

The Commission continued implementing a number of pilot projects funded using internally generated resources as it awaits the operationalization of USF. These projects included a Web Portal for Persons with Disabilities (PwDs) and 10 E-Resource Centres. Further, the Commission continued to monitor and evaluate the universal access pilot projects implemented in the previous years.

**5.4.1 Web Portal for Persons with Disabilities**

The Commission took measures to ensure that Persons with Disabilities (PWDs) access ICT services. Recognizing that more than 3,000,000 PWDs in the country face challenges in accessing information, the Commission in collaboration with United Disabled Persons of Kenya (UDPK) and the National Council for Persons with Disabilities (NCPWDs) supported the establishment of a national web portal for PWDs. The web portal ([www.kenyadisability.or.ke](http://www.kenyadisability.or.ke)) was developed and officially launched in May 2012. The web portal is a one-stop shop for information services and communications channel that supports everyone involved in the disability



5.4.2 E-Resource Centres

Consistent with its strategic objective of facilitating increased access to ICT services, the Commission continued supporting the establishment of public access points using internally generated funds as it awaits the operationalization of the USF. This was achieved through collaboration with the Kenya National Library Services (KNLS) in line with the MoU entered between the two institutions in the previous financial year to set up E-Resource Centres in 10 rural Community Libraries located in Ditzoni (Kilifi County), Ukunda (Kwale County), Lagam (Elgeyo Marakwet County), Habasweni (Wajir County), Mwingi (Kitui County), Murang'a (Murang'a County), Lusumu (Kakamega County), Laikipia (Laikipia County), Mandera (Mandera County) and Werugha (Taita Taveta County).

The Commission supplied and installed 10 computers, provided requisite furniture, other hardware and software including two-year Internet connectivity in each library. The E-Resource Centres provide capacity and training in ICTs and access to Internet services to the targeted beneficiaries in rural areas.



Ditzoni E-Resource Centre in Kilifi County equipped by CCK

5.5 Monitoring and Evaluation of the Universal Access Pilot Projects

The Commission in 2007 established 20 ICT access points on a pilot basis in selected locations in Kenya. 16 of the centres are school-based while four are public access points targeting rural communities. The main objectives of these pilot projects were to provide access to affordable ICT services and build ICT capacity among students and communities in high-cost un-served and under-served areas. The projects were also meant to provide

lessons and guidance to the Commission and other stakeholders on future strategies for implementing similar initiatives on a broader scale.

The Commission monitored and evaluated the projects to assess the overall performance and future sustainability of the centres. The key outcome from the monitoring and evaluation is that the ICT Centres established both in schools and local communities directly responded to citizens' needs and deepened access and utilization of ICT services. If these projects are scaled up to a national level, they have the potential to enable the country achieve universal access to ICT services.



Mutomo Community ICT Access Centre in Kitui County

CHAPTER  
six

Capacity Building,  
Improvement of Systems and  
Working Environment

The Commission continued to improve its systems, structures and work environment to enhance efficiency in service delivery while ensuring optimum allocation and utilization of its capacity, resources and management of its human capital.

6.1 Human Capital Development

The Commission developed and implemented a new organization structure to cover its expanded mandate in broadcasting, multi-media, electronic commerce, and management and administration of the Universal Service Fund. The new structure takes cognizance of the country's development strategy, Vision 2030 and the Constitution of Kenya, 2010, that attaches significant emphasis on the role of the ICT sector in the country's socio-economic development and the democratization process. The revised structure which is team-based brings together similar activities in order to exploit synergies of related functions, improve communication and co-ordination. The teams are: Communications Infrastructure; Regulation and Access; Operations; Legal and Enforcement; and Risk Management and Internal Audit.

The Commission regulates a highly dynamic sector that requires its employees to be flexible and adaptable to change in order to keep abreast with the complexities, innovations and emerging technologies in the sector. The Commission, therefore, invests in building capacity of its staff, the ICT sector and encourages knowledge transfer between industry and academia.

6.1.1 Human Resource Development

In realization of the importance of maintaining and retaining a motivated, skilled and talented workforce, the Commission continued with its capacity building strategies to address the challenges in the sector. At the end of June 2012, the staff complement stood at 152 compared to 150 the previous year. The increase was occasioned by entry of three staff and the exit of one. The male to female employee ratio stood at 60:40 at the end of the year, which is consistent with the constitutional requirements on gender parity in public institutions.

A total of 117 members of staff, at a male to female ratio of 62:38, were trained based on the identified training needs/gaps and skills/competency assessment. The training covered management, leadership, corporate governance, ICT policy and regulation and technical skills. Further, as part of organization development, the Commission carried out relevant training programmes in areas

such as financial planning and budgeting, risk assessment, first aid safety, quality management and customer service delivery.

6.1.2 Knowledge Transfer between Industry and Academia

The Commission continued providing attachment and internship opportunities to students in line with its policy of knowledge transfer between industry and academia. Towards this end, 72 students from universities and tertiary institutions comprising 58 percent female and 42 percent male were attached to the Commission. Additionally, three groups of college students were hosted on one-day familiarization visits to the Commission.

6.1.3 Promoting Capacity Building in the Industry

The Commission in collaboration with the Commonwealth Telecommunications Organisation's (CTO's), Partnership for Development Training (PDT) conducted three ICT capacity building project programmes for the sector. The programmes were: Market Based Spectrum Pricing (economic perspective); Towards the Era of E-Transactions; and Next Generation Networks (NGN). The participants in these programmes were drawn from CCK, ICT sector and other stakeholders.

6.2 Improvement of the Working Environment

In ensuring an enabling working environment for its employees, the Commission adhered to statutory health, safety and environmental requirements. The Commission maintained a corruption free working environment to enhance productivity, efficiency and improved service delivery. Further, the Commission carried out surveys to gauge staff satisfaction with the working environment.

The Commission's employees planted a total of 71 trees within the Commission's premises as part of its initiative towards conserving the environment and in commemoration of the Late Peace Nobel Laureate Hon. Prof. Wangari Maathai.

6.2.1 Occupational Health and Safety

The Commission continued to service and maintain its office equipment, machinery and property. The Commission's assets, property and equipment were insured against various risks. Further, as a means of mitigating risk and ensuring quick response in the event of danger, the Commission renewed maintenance contracts for the fire-suppression system and installed panic control equipment.

The Commission constituted a Health and Safety Committee. The members of the Committee were subsequently trained on First Aid, Health and Safety. The Commission through an independent Consultant also carried out a Health and Safety Audit of its premises, to establish areas that need improvement.

In ensuring wellness and work-life balance, the Commission's employees participated in the 2011 Kenya Communications Sports Organizations (KECOSO) games in Nyeri. The games draw participants from the Ministry of Information and Communications and the Ministry of Transport, and the associated public/state-corporations therein. The sports categories in which the Commission participated included golf, table-tennis, athletics and field events, pool and darts.

6.2.2 Campaign against HIV/AIDS

The Commission organized a staff awareness programme that advocated for behaviour change in the fight against HIV/AIDS. The awareness included voluntary counselling, testing and training. One of the Commission's Peer Educators attended training on Management and Administration of HIV/AIDS projects sponsored by Regional Aids Training Network (RATN). The Commission through its peer educators also participated in the marking of the HIV/AIDS World Day.

6.2.3 Anti-Corruption Strategies

In tandem with the Government's policy on zero tolerance to corruption, the Commission continued to ensure that it remains a corruption-free environment. The Integrity Committee and new staff were trained on ethics and corruption prevention. In addition, staff were sensitized on integrity matters through the CCK weekly e-bulletin.

In line with its core values of integrity, fairness and accountability, the Commission continued to ensure that its staff maintained high levels of integrity. To this end, the Commission engaged Ethics and Anti-Corruption Commission (EACC) to undertake integrity testing within the Commission. The results shall be provided in the next financial year.

The Commission engaged independent consultants to carry out a Risk Assessment and a Corruption Perception Survey. The survey results indicated that prevalence, spread and pressure of corruption at the Commission was low. The Commission will continue pursuing measures aimed at ensuring zero tolerance to corruption.

6.2.4 Prevention of Drug and Substance Abuse

Prevention of Drugs and Substance Abuse is important in ensuring an effective and productive workforce and society as a whole. Five Peer Educators/Workplace Counsellors were trained on alcohol and drug abuse prevention and counselling. The Commission's employees were sensitized on the effects of drugs and substance abuse through an open day interactive forum.

6.2.5 Gender and Disability Mainstreaming

The Commission's policy on disability mainstreaming is anchored in the *Persons with Disabilities Act, 2003*. The policy reiterates the Commission's commitment to being an equal opportunity employer and is designed to promote inclusion in all its activities and to address the barriers that may exclude People with Disabilities (PwDs) from full and equal participation. The Commission engaged one physically challenged intern. Further, in making the environment more friendly to PwDs, the Commission constructed a ramp at the entrance of the building and provided designated parking. The Commission also facilitated training to institutions and schools for PwDs.

The Commission continued to comply with gender mainstreaming requirements and re-constituted the Gender Mainstreaming Committee. The Commission's staff consists of 60 percent male and 40 percent female. The Commission collected sex disaggregated data and ensured that gender is mainstreamed in appointments, promotions, recruitment, trainings and membership in various Committees.

6.2.6 Employee and Work Environment Perception Surveys

The Commission carried out an independent survey to determine employee job and work environment satisfaction levels. The results of the survey indicated that employees were fairly recording a job satisfaction index of 74.6 percent, an improvement of 4.8 percentage points from the previous year. On the other hand, the work environment survey yielded an index of 81.5 percent which was slightly lower by 0.67 percentage point recorded the previous year.



6.3 Automation of the Commission's Processes

The Commission enhanced its Integrated Management Information System (IMIS) by upgrading and reviewing the functionalities of its modules. The deployment of the IMIS to a larger extent resulted in a paperless working environment within the Commission. The Human Resources Management Information System (Perpay) was upgraded to a web-based version. Individual staff details, including current and past pay slips are now accessible online to staff members. Other benefits of the system include online leave and loan applications, and medical claims processing.

The Commission upgraded its corporate Local Area Network (LAN) backbone from copper to fibre optic in order to increase the speed of data transmission.

6.4 Procurement and Disposal

The Commission ensured the spirit of fairness, transparency and accountability in its tendering processes by adhering to the *Public Procurement and Disposal Act, 2005*, and Regulations, 2006. This enabled the Commission get value for money in the procurement of goods, services and works. Out of the total number of contracts awarded for supply of goods, services and works, 10 were worth at least KES 5 million each as shown in Table 6.1.

Table 6.1: Tenders awarded worth over 5 KES Million

No.	Item Description	Firm Awarded the Tender	Tender Amount (KES, EUR)
1.	Tender for concept development, implementation and management of the Commission's allocated stands at Mombasa and Nairobi Agricultural Society of Kenya (ASK) Shows	Scanad	KES 10,682,063
2.	Tender for supply and delivery of the signal generator	Broadband Communications Ltd	EURO 50,193.60
3.	Tender for design and printing of calendars and diaries for 2012	Express DDB Kenya Ltd and Ramco Printing Works	KES 10,338,640
4.	Tender provision of catering services for the United Nations-Internet Governance Forum (UN-IGF) 2011 Gala Dinner	Carnivore Restaurant Ltd	KES 12,330,000
5.	Tender for provision of audio visual services for the IGF meeting	Nairobi Projectors Services Ltd	KES 9,462,120
6.	Tender for provision of internet connectivity services for E-Resource Centres	MTN Business Ltd	KES 14,203, 488.80
7.	Tender for procurement of media, Public Relations, collateral and other related activities for anti-counterfeit campaign	Scanad	KES 48,674,182.61
8.	Tender for provision of media, Public Relations collateral and other related activities for Digital Migration Awareness campaign	Scanad	KES 45,445,497.36
9.	Tender for upgrade of Commission's Local Area Network (LAN) backbone connectivity from Copper to Fibre	Circuit Business Systems Ltd	KES 5,859,423.55
10.	Tender for study on impact of competition in the mobile voice market on telecommunications sector and macro economy in Kenya	Kenya Institute of Public Policy Research and Analysis (KIPPRA)	KES 6,119,526

Source: Communications Commission of Kenya

The Commission continued to implement the supplier monitoring and evaluation system in order to ensure economy and efficiency in the procurement process. Five motor vehicles were disposed of through public tender while unserviceable obsolete stores were disposed of through public auction.

6.5 ISO 9001:2008 Certification

The Commission is ISO 9001:2008 certified. The role of a Quality Management System (QMS) is to enable an organization achieve intended goals and objectives as set out in policies and strategic plans. To achieve this, the Commission documented and implemented a suitable QMS to enable it deliver its services more efficiently. Following a successful certification audit, the Commission was re-certified for a period of three years ending May 2015.

In addition, as per the requirement by the Standard for regular reviews and audits of the QMS, the Commission undertook quarterly management reviews and biannual audits to assess the suitability of the system in meeting customer needs and satisfaction.

6.6 Risk Management in the Commission

Effective risk management is vital to ensure a healthy entrepreneurial culture within any organization that wishes to improve performance. The underlying premise of enterprise risk management is that every entity exists to provide value for its stakeholders. All entities face uncertainty and the challenge for management is to determine how much uncertainty to accept as it strives to grow stakeholder value. Uncertainty presents both risk and opportunity, with the potential to erode or enhance value. Enterprise risk management enables management to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value.

The Commission carried out in-house training for Management and developed a draft risk register and attendant risk matrix in line with the Treasury Circular No. 3/2009 on Public Financial Management (PFM) Reforms. These tools will enable the Commission implement an effective risk management system.



Moses Okello(left) guides CCK Director General Mr. Francis Wangusi, Amb. Franklin Esipira (Ministry of Gender and children Affairs) and Amb. Bruce Madete (Ministry of Information and Communications) through the Web Portal for Persons with Disability (PwD) during its launch.



# Wireless surfing

Wireless network is very convenient but it also makes your computer vulnerable. Ensure you use authorized wireless networks and disable the auto-connect feature in your wireless setting. Use passwords to protect your information from anyone trying to spy in on the wireless network.

## CHAPTER **seven**

Corporate Communication  
and International Liaison

Kenya, is a member of the international community and is expected to meet its obligations as stipulated in the local, regional and international treaties or agreements relating to ICT. The Commission continued to play an active role in local, regional and international initiatives aimed at contributing to policy development. In raising its profile and contributing to policy development, the Commission undertook several activities through stakeholder consultative forums, workshops, Corporate Social Responsibility (CSR) and marketing communications.

7.1 Engaging with Stakeholders and Local Community

The Commission continued to engage stakeholders in the ICT industry through public consultations, media campaigns, the corporate website and social media pages. Additionally, the Commission continued to touch the lives of the less fortunate in society through various CSR activities.

7.1.1 Corporate Social Responsibility

The Commission provided for the less fortunate in society by visiting various charity homes and contributing towards their needs. The contributions included food supplies, stationery and other items specific to the needs in each of the homes. The beneficiary homes included Shangilia Mtoto wa Africa, Nyumbani Children’s Home and SOS Villages. These homes cater for vulnerable children in society. The Commission also donated foodstuff, clothing and other basic amenities to Nyumba ya Wazee in Kasarani, Nairobi.

The Commission also signed a Memorandum of Understanding (MoU) with the National Youth Talent Academy (NYTA) to sponsor a football team dubbed Talanta United FC for three years. This sponsorship shall not only nurture the football talent in the young men aged 17 to 24 years, but also provide them with a source of livelihood.

Further, the Commission continued to promote exceptional performance in sports by sponsoring the annual Sports Personality of the Year Awards (SOYA). The Mater Heart Run also received support from the Commission for the eighth year running. To encourage excellence in the media fraternity and development of local content in television and film industries, the Commission sponsored the Media Council of Kenya Journalists Awards and the Kalasha Awards, respectively. Further, the Commission contributed towards girl’s education through support to the Kianda School Endowment Fund, a project of the Kianda Foundation that offers bursaries to bright and needy girls.

7.1.2 Public and Stakeholder Consultations

The Commission continued to engage stakeholders through consultations for input on its regulatory initiatives. Most notable were the consultations on counterfeit mobile phones with mobile service providers, mobile manufacturers, Anti-Counterfeit Agency (ACA) and other relevant Government agencies. The consultations in the launch of an anti-counterfeit mobile phone consumer awareness campaign ahead of the switch off of fake handsets to digital television broadcasting. The commission also engaged vendors and media owners in developing the roadmap to the transition

The Commission hosted the 4th Annual Postal and Courier Stakeholders Forum whose main focus was on security of items that go through the postal and courier networks. In the spirit of inclusivity, the Commission shall, where necessary, continue to engage industry players, consumers and the general public in relevant issues that affect the ICT sector.

7.1.3 Exhibitions and Promotional Activities

The Commission continued to participate in the Mombasa and Nairobi ASK shows with a view to disseminating information to consumers on ICT services. The shows and other relevant industry trade fairs provide an opportunity to interact directly with consumer and the public. In Mombasa, the Commission’s stand was recognized as the best media trade and best electronic media stand. In Nairobi, the Commission’s stand was recognized as the best media trade stand and the best stand exhibiting information and documentation services.

The stand was also ranked 2nd best in the non-agricultural stand and the 3rd best in the Kenya Government stand categories.

The Commission continued with its tradition of hosting Golf Tournaments to interact with licensees and stakeholders in various regions of the country. During the year under review, the Commission sponsored Golf Tournaments in Nyeri and Nairobi.

For the third year running, the Commission took part in the 2011 Kenya Communications Sports Organization (KECOSO) games in Nyeri. The games brought together over 600 participants from ministries of Transport, and Information and Communications and State Corporations under the two Ministries. The Commission was, for the third time, recognized as the most disciplined team.

The Commission participated in the ITU World 2011 themed ‘Talk, Take Action, Collaborate and Connect’. The event provided Kenya with a platform to showcase its growing ICT industry to a unique gathering of heads of state, government ministers, international industry players, heads of regulatory agencies and digital innovators.

7.1.4 Media Campaigns

During the year under review, the Commission carried out a number of media campaigns geared towards sensitizing consumers on their rights and obligations. In this regard, the Commission undertook a media campaign dubbed ‘Kaa Macho’ aimed at educating consumers on their rights and responsibilities in the postal and courier sector. Further, the Commission carried out a media campaign on counterfeit phones aimed at educating consumers and the general public on the dangers associated with use of counterfeit handsets The campaign also educated consumers on what to look out for when buying mobile phones.

To support the migration from analogue to digital TV broadcasting, the Commission rolled out a campaign to sensitize consumers on the benefits of digital TV broadcasting. The campaign dubbed ‘Join the great digital migration’ also educated consumers on the basic requirements for migrating to digital TV broadcasting. The Commission will commence road shows in all areas where the digital signal has been rolled out within the next financial year in order to enhance consumer awareness on the benefits of the transition.

7.1.5 Improvement of the Corporate Website

To provide up to date information to a wide array of stakeholders, the Commission continued improving its corporate website. In this regard, the corporate website was optimized for access through handheld/mobile devices. The optimization was informed by the fact that the mobile handset is the leading access medium for the internet in Kenya. Online interactions were enhanced further through opening and managing content on the corporate social media accounts particularly on Facebook, Twitter, YouTube and Flickr. The Commission also established a blog page where discussions and interactions on the platform are set to begin in the next financial year.

7.2 International Relations and Liaison

The Commission is the designated government representative to affiliated intergovernmental bodies dealing with ICTs. To this end, the Commission takes part in local, regional and international meetings organised by these bodies. The Commission also hosts meetings and other events with affiliated intergovernmental bodies. In preparation for key treaty-making conferences, the Commission works with relevant stakeholders to co-ordinate development of national positions for presentation in relevant meetings. Further, the Commission meets the financial obligations to local, regional and international affiliated organizations.

7.2.1 Regional and International Meetings and Conferences

During the year under review, the Commission participated in meetings and conferences organized by various international and regional ICT organizations. The most notable included the Universal Postal Union (UPU) Postal Operations Council (POC) and Council of Administration (CA) meetings, Pan African Postal Union (PAPU) Administrative Council, the World Radio Conference (WRC-2012), and International Telecommunication Union (ITU) Study Groups. The Commission also participated in the African Telecommunication Union (ATU) Administrative Council and the East African Communications Organisation (EACO) Congress.

The Commission in liaison with relevant government agencies and other industry stakeholders coordinated the development of national positions to treaty making meetings and other forums organized by affiliated regional and international organizations. Some of the meetings included the WRC-12. The Commission not only consolidated the country position but equally sought to harmonize with the African Common positions ahead of the conference which was held in Geneva in January 2012 in Geneva, Switzerland. The Conference reviewed and revised the Radio Regulations, the international treaty governing the use of radio-frequency spectrum and satellite orbits. Further, the Commission presented the resolutions adopted at the WRC-12 to relevant local stakeholders through a workshop.

The Commission also took part in two African Preparatory meetings for the World Telecommunication Standardization Assembly (WTSA) and the World Conference on International Telecommunications (WCIT) in November 2011 and May 2012, respectively. The WTSA and WCIT meetings are scheduled to take place in December 2012.

The Commission's active participation and contribution to the international ICT agenda earned Kenya the position on the Executive Council of the Commonwealth Telecommunications Organisation (CTO) during the 51st CTO Council meeting held in September 2011. Kenya's entry into the CTO Executive Committee formed an addition to the other positions held by Kenya in the ITU Council, PAPU Administrative Council, UPU Council of Administration , among others. In the quest to broaden Kenya's participation and influence in the international sphere, the Commission was at the forefront in campaigning for Kenya's candidatures for the positions of Secretary General in the PAPU and Director General in the UPU. The elections are scheduled for August and October 2012, respectively.

In the year under review, the Commission hosted the 6th Internet Governance Forum (IGF) in Nairobi in September 2011.

# CHAPTER eight

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## Financial Information



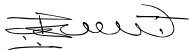
8.1 Statements of Directors' Responsibilities

The *Kenya Information and Communications Act, Cap 411A*, and the *State Corporations Act (Cap 446)* require the Board of Directors to prepare financial statements for each financial year that give a true and fair view of the financial affairs of the Commission as at the end of the financial year and the operating results for that year. It also requires the Directors to ensure the Commission keeps proper accounting records, which disclose with reasonable accuracy at any time the financial position of the Commission. They are also responsible for safeguarding the assets of the Commission.

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 Commission 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.

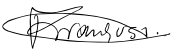
Nothing has come to the attention of the directors to indicate that the Commission will not continue as a going concern for at least the next 12 months from the date of this statement.

Hon. Eng. Philip Okundi



(Chairman)

Francis W. Wangusi



Director General

Date ..**28<sup>th</sup> September 2012**.....

Annual Reports and Accounts 2010/11

The draft annual accounts for financial year 2011/12 are yet to be audited. Therefore, the financial report contained herein is for the audited report for 2010/11.

8.2 Income

During the 2010/2011 financial year the Commission earned a total of KES 6.471 billion. This represents a 24.5 percent improvement on the income reported in the year 2009/10 of KES 5.19 billion. Frequency Spectrum Management fees comprised the Commission's main income stream as it accounted for 86.4 percent of total income. Annual operating licence fees during the financial year 2010/2011 increased by KES 31 million from KES 613 million recorded the previous year.

During the 2010/2011 financial year, interest income decreased to KES 174 million compared to KES 249 million realised in the 2009/10 financial year. This decrease was brought about by a low rate of interest on Treasury Bills in which the Commission invests cash that is not required for immediate use.

8.3 Operating Expenditure

During the financial year 2010/2011, KES 1.550 billion was spent on operations of the Commission compared to KES 1.696 billion during the previous period. The expense items included in the operating expenditure are salaries and allowances, training, travelling, professional fees, subscriptions, universal access obligation, 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 Commission.

8.4 Capital Expenditure

The total capital expenditure for the year 2010/2011 was KES 81.7 Million compared to KES 88 million incurred in the financial year 2009/2010. The items accounting for this expenditure included equipment, motor vehicles, furniture and fittings, buildings and improvements, software development among others

8.5 Surplus

The surplus before provision for Surplus Remittance for the financial year 2010/2011 was KES 4.921 billion. This represented a 40 percent increase from the surplus of KES 3.499 billion remitted during the financial year 2009/10.

The Commission provided for payment of surplus to the Treasury 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. Audited income statement for the financial year 2010/11 is reproduced in Table 8.1.

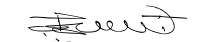
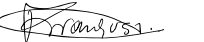
Table 8.1: Income and Expenditure Account

Communications Commission of Kenya		
For the Year Ended 30 June 2011		
	2011	2010
	KES'000	KES'000
Income	6,471,785	5,195,291
Operating Expenses	1,550,536	1,696,279
Surplus for the Year	4,921,249	3,499,012
Less Corporation Tax	-	1,059,294
Less Provision for Surplus Remittance at 90%	4,429,124	-
Net Surplus	492,125	2,439,718

8.6 Balance Sheet

The total assets of the Commission amounted to KES 10 billion during the 2010/2011 financial year, comprising of property plant and equipment of KES 1.4 billion, trade receivables of KES 1 billion and cash and cash equivalent of KES 7.6 billion. The audited balance sheet statement for the financial year 2010/2011 is reproduced in Table 8.2.

Table 8.2: Balance Sheet as at 30 June 2011

Communications Commission of Kenya	2011	2010
	KES'000	KES'000
ASSETS		
Non Current Assets		
Property, plant and equipment	1,447,229	1,430,151
Investment In KCCT	-	2,404,266
	1,447,229	3,834,417
Current Assets		
Trade Receivables	1,046,226	1,123,793
Cash and cash equivalent	7,599,745	3,679,023
	8,645,745	4,802,816
TOTAL ASSETS	10,093,200	8,637,233
EQUITY AND LIABILITIES		
Capital and Reserves		
Owners Equity	741,965	741,965
Revaluation Reserve	380,681	380,681
Retained Surplus	4,359,262	6,276,953
	5,481,908	7,399,599
Current Liabilities		
Proposed for Dividends Unpaid	-	1,000,000
Provisional Surplus Remittance	4,429,124	-
Trade and other Payables	182,168	237,634
	4,611,292	1,237,634
TOTAL EQUITY AND LIABILITIES	10,093,200	8,637,233
The accounts were approved by the Board of Directors on		
27th. September, 2011and were signed on it's behalf by:		
Hon. Eng. Philip Okundi  Chairman	Francis W. Wangusi  Director-General	

8.7 Capital and Reserves

As at 30th June 2011, the capital and reserves of the Commission amounted to KES 5.48 billion. The liabilities of the Commission at the close of the 2010/11 financial year stood at KES 4.6 billion, comprising proposed surplus remittance to the Treasury of KES 4.42 billion and trade payables of KES 182 million. An extract of the balance sheet statements for the financial year 2010/11 is reproduced in Table 8.2.

8.8 Annual Budget Estimates and Revised Budget

In accordance with Section 19 of the *Kenya Information and Communications Act, Cap 411A*, and the provisions of the *Exchequer and Audit Regulations*, the estimates of revenue and expenditure of the Commission for the year 2012/13 were prepared and submitted to the Ministry of Information and Communications. The total estimated income is KES 6.22 billion, while operating expenditure is estimated at KES 1.89 billion. The total budgeted capital expenditure is KES 336 million.

# Annex

## Communications Statistics and Economic Indicators

Notes

ANNEX: SELECTED KEY COMMUNICATIONS STATISTICS AND ECONOMIC INDICATORS

Annex 1: Communications Statistics											
Indicator	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
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
Wire line Connections	328,116	328,358	299,225	278,867	293,364	339,229	527,064	247,972	234,522	187,716	74,606
Wireless Connections	0	0	0	0	0	84,107	274,449	448,529	225,592	191,585	188,155
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
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
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
Mobile Money Transfer Service Subscribers	-	-	-	-	-	-	-	-	10,615,386	17,395,727	19,505,702
Total Postal Outlets	891	890	872	861	768	721	744	710	700	697	634
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
Letter Posting Boxes	1,137	1,138	1,120	1,049	1,049	966	827	890	890	890	752
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
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
Stamp Vending Machines	0	0	0	0	0	264	246	280	280	280	280
Private Operator Outlets	320	330	341	437	521	554	606	622	601	635	683

Source: Communications Commission of Kenya

Annex 2: Economic Indicators 2010											
Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010+	2011*
Population (Millions)	30.9	31.8	33.2	34.2	35.1	36.1	37.2	38.3	38.6	38.5	39.5
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
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	38,969.8
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
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
* Means that for 200102005: Consumer Prices, Annual Average [Index numbers October 1997=100]; and 200602010:Consumer Prices, Annual Average [Index numbers February 2009=100]											

Source: Adapted from the economic survey (various issues).



