



# 2021 - 2022 ANNUAL REPORT



COMMUNICATIONS  
AUTHORITY OF KENYA





## Our Vision

A Digitally Transformed Nation.

## Our Mission

Building a connected society through enabling Regulation, Partnership and Innovation.

## Our Values

- Integrity
  - Innovation
  - Excellence
- 



## ACKNOWLEDGEMENT

The Authority acknowledges and appreciates the hard work that went into developing this Annual Report and wishes to thank the following individuals:

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## CHAIRMAN'S FOREWORD

I am pleased to present the Authority's Annual Report for the Financial Year 2021/2022. The report provides an outline of our strides in the continued fulfilment of our vision to create a digitally transformed nation. The year saw key leadership changes in the Authority kickstarted by entry of Mr. Ezra Chiloba as Director General in September 2021, exit of Sen. Kembi-Gitura as the Board Chairman in February 2022 as well as entry of new members to the Board of Directors.

We recognize the central role that the ICT sector plays as a catalyst for growth in all other sectors of the economy. It is evident that ICTs provide the foundation for national transformation and realization of the Vision 2030 whose pillars were entrenched in our 4th Strategic Plan that will be ending in 2023. The plan focusses on ensuring universal access to ICTs, creating an enabling environment and building internal capacity.

Towards this end, the Authority continued with the rollout of USF funded initiatives including the voice infrastructure and services project, education broadband connectivity, automation of the occurrence book and crime management system for the National Police Service and installation of software for the visually impaired in E-resource centres. These initiatives are aimed at bridging the digital divide in the provision of ICT services in un-served and underserved areas of the country. Notably, the Authority launched the second phase of the Voice Infrastructure and Services Project in Akiramet sub-location in West Pokot County. To enhance the general election preparedness, we collaborated with mobile network operators to enhance broadband coverage in the country.

In a bid to create an enabling environment, the Authority embarked on the law reform process in order to develop and implement forward-looking regulation to foster competitive and efficient markets in the ICT sector. The Authority is optimistic that this shall create a competitive and robust ICT sector that will not only create a conducive enabling environment for ICTs to thrive but it shall also avail diverse and more affordable ICT services to consumers. On the inverse, the increased adoption of digital technologies by individuals and organisations has widened the cyber threat/attack landscape. It is in light of this reality that the Authority has continued to build the capabilities of the National KE-CIRT/CC with people, processes and technologies towards enhancing Kenya's cyber readiness and resilience.

To meet the challenges posed by dynamic ICT landscape and regulate effectively, we continued to enhance our internal capacity through enhancing the expertise of our staff and upgrade of regulatory tools. This is intended to increase productivity, streamline operations and respond to customers' ever-changing needs. Notably, we expanded the reach of our monitoring facilities by commissioning a new remote monitoring station in Nyeri.

I commend the Board of Directors, Management and members of Staff for their resilience in delivering the achievements during the year. Additionally, achievements would not have been possible without the support of the Ministry of ICT, Innovation and Youth Affairs, our Licensees, Strategic partners, all other key stakeholders and the general public.



**Captain Gilbert Macharia Kibe**  
Chairman of the Board





## DIRECTOR GENERAL'S MESSAGE

ICTs are constantly evolving to meet growing demand and use cases from consumers to not only work and connect but also remain informed and entertained. We enable this through a progressive regulatory environment and constant engagement with our stakeholders that is targeted at spurring the development of a connected society and narrow the digital divide.

Towards this we promoted access to broadband; spurred competition in the telecommunications sub-sector; ensured diversity and plurality of views in the competitive broadcasting industry; empowered and protected consumers as well as rolled out mobile cellular infrastructure and services in unserved and underserved areas of the country.

People, businesses and the government expect access to fast, affordable, reliable and secure broadband connections. To facilitate this, MNOs expanded their mobile network coverage by deploying additional 3G, 4G and 5G transceivers across the country marking a growth rate of 7.2 percent. Subsequently, broadband subscriptions grew by 9.5 per cent to 30.1 million with mobile broadband accounting for 97.0 percent of the total broadband subscriptions.

To promote investment and enhance competition, the Authority upgraded the Jamii Telecommunications Limited's License from Network Facility Provider Tier 2 license to Network Facility Provider Tier 1. This brought the total number of Mobile Network Operators to four. Further, to ensure plurality and diversity of viewers in broadcasting sector and the media that everyone trusts and values, we allocated FM broadcasting frequencies to 79 FM stations which comprised of 65 commercial and 14 Community FM stations. We also revoked 33 FM sound broadcasting frequency assignments from 22 broadcasters who failed to meet the subsector's stipulated compliance requirements.

In line with consumer protection, the Authority monitored quality of service for the three mobile network operators across counties to ensure that the services provided by the operators meet the set quality parameters. The level of compliance for Airtel Networks Kenya Limited, Safaricom PLC and Telkom Kenya Limited was recorded as 78.6 per cent, 95.0 per cent and 71.4 per cent, respectively. To further protect consumers of ICT services, we also embarked on a SIM cards validation exercise to weed out illegally registered and unregistered SIM cards from the network operators.

In efforts towards the attainment of universal access to ICTs in the unserved and underserved areas, we rolled out mobile cellular infrastructure and services in 15 sub-locations across the country. These sub-locations are part of 101 sub-locations targeted in Phase II of the Mobile Cellular Infrastructure and Services Project. The completion of this project will enable approximately 269,842 people to access ICT services in the unserved and underserved areas in the country. As the ICT sector expands, we maintain our quest to bring more into the digital universe and pursue our vision of a digitally transformed nation. We rely not only on the internal resources but also on collaboration with other stakeholders to deliver on this vision.

These achievements would not have been realized without the dedication of staff as well as strategic and policy guidance received from the Board of Directors and our parent Ministry of ICT, Innovation and Youth Affairs. We look forward to a vibrant FY 2022/23.



**Ezra Chiloba**  
Director General



# ENRICHING LIVES WITH OVER 200 FM RADIO STATIONS AND OVER 150 TV STATIONS

The Communications Authority of Kenya (CA) is responsible for licensing and regulating Kenya's broadcasting industry to ensure responsible use of broadcasting platforms and bring you a wide variety of content.

For more information visit [www.ca.go.ke](http://www.ca.go.ke)



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Acronyms and Abbreviations	
Abbreviation	Definition
ASP	Application Service Provider
BTS	Base Transmitter Stations
BUC	Block Upconverter
ccTLD	Country Code Top-Level Domain
CIRT	Computer Incident Response Team
COP	Child Online Protection
CSP	Content Service Provider
DDOS	Distributed Denial of Service
DSL	Digital Subscriber Line
DTH	Direct To Home
DTT	Digital Terrestrial Television
DVB	Digital Video Broadcasting
E-CSP	Electronic Certification Service Providers
FTA	Free-To-Air
Gbps	Gigabits per second
GHz	Gigahertz
IDTV	Integrated Digital Television
IP	Internet Protocol
ISPC	International Signaling Point Codes
KE-CIRT/CC	Kenya National Computer Incident Response Team/Coordination Centre
KICA	Kenya Information and Communications Act
LTE	Long Term Evolution
MHz	Mega Hertz
MNDC	Mobile National Destination Code
NFP	Network Facilities Provider
NPKI	National Public Key Infrastructure
NSPC	National Signaling Point Codes
PRN	Premium Rate Number
SHF	Super High Frequency
UHF	Ultra-High Frequency
USF	Universal Service Fund
VHF	Very High Frequency
VoIP	Voice over Internet Protocol
VSAT	Very Small Aperture Terminal
WIMAX	Worldwide Interoperability for Microwave Access





**Establishment and Mandate of the Authority**

The Authority, established under the Kenya Information and Communications Act, 1998 is mandated to license and regulate the ICT sector. We achieve this mandate through the following key functions:

- a. Licensing of telecommunications, postal, courier and broadcasting systems and services;
- b. Management of the country’s frequency spectrum and numbering resources;
- c. Facilitation of development and management of a national cyber security framework;
- d. Facilitation of E-commerce development;
- e. Type approval of communication equipment;
- f. Management of competition within the Sector;
- g. Management and Administration of the Universal Service Fund;
- h. Regulating tariffs (retail and wholesale) for communication services;
- i. Safeguarding of ICT consumer rights; and
- j. Facilitation of development of E-commerce.

**Leadership**

**Board of Directors**

Section 6(1) of the Kenya Information and Communications Act, 1998 (KICA) vests the management of the Authority with Board of Directors. The Board consists of a chairperson and 10 other members.

**Functions of the Board of Directors**

The Board individually and collectively performs the following duties set out in the Board Charter:

- i. Exercise leadership, integrity and judgment in directing the Authority;
- ii. Set the vision, mission and values of the Authority;
- iii. Develop strategies to achieve the Authority’s mandate;
- iv. Determine key performance indicators of the Authority, set targets and monitor performance;
- v. Ensure that internal structures and policies are in place;
- vi. Identify and manage key risk areas; and
- vii. Ensure preparation of annual financial statements and reports and disclosure of information to stakeholders.

**SECTION A: ABOUT US**

THE FOLLOWING MEMBERS SERVED IN THE BOARD:



**Capt. Gilbert Macharia Kibe**

**Chairman of the Board of Directors since 13th May 2022**

Capt. Gilbert Kibe was appointed to the position for a three-year term with effect from 13<sup>th</sup> May 2022.

Capt. Kibe is a trained pilot and holds a Commercial Pilots Licence with Single & Multi-Engine Land, Instrument Rating from the Anglo-American International Flight Academy. He holds a post graduate degree (MBA) in Aviation Management from Moi University.

Capt. Kibe is a visionary leader with a prolific 42-year career encompassing management, training, policy development, and implementation. He has provided strategic leadership at the senior level in the Corporate and Government sectors.

He has previously served as the Director General in the Kenya Civil Aviation Authority, Director Business Development in Home Afrika Ltd, Director Marketing Eagle Air Uganda and Managing Director Bahati Ridge Development.

He currently serves as the Chairman ICAO Regional Aviation Safety Group – Africa & Indian Ocean Islands and ICAO – Africa Flight Procedure Program (AFPP).



**Sen. Kembi Gitura, MGH**

**Chairman of the Board of Directors until 8th February 2022**

Sen. Kembi Gitura was the Chairman of the Board from 18th April 2021 to 8th February 2022.

He is an Advocate of the High Court of Kenya and holds a Bachelor of Laws Degree (Hon.) from the University of Nairobi. He is a member of the Law Society of Kenya and the East Africa Law Society.

He has over 16 years work experience in the Public Service having served as the Member of Parliament for Kiharu Constituency, Assistant Minister for Agriculture in Charge of Crop Development and Marketing, Assistant Minister for Foreign Affairs in Charge of Africa. He also served as an Ambassador to the Kingdom of Belgium, Duchy of Luxembourg and the European Union, Senator for Murang’a County and Deputy Speaker of the Senate.

Sen. Gitura has also served as a Board Chairman at the Kenya Medical Supplies Authority (KEMSA).





### **Mr. Ezra Chiloba**

**Director General from 29th September 2021.**

Born in 1978, Mr. Chiloba was appointed the Director General of the Authority with effect from 29<sup>th</sup> September 2021.

He holds an MSc in Major Programme Management (MMPM) from the University of Oxford and an MA in Public Policy (MPP) from the Central European University (Hungary). He graduated with a Bachelor of Laws degree from the University of Nairobi and is an Advocate of the High Court of Kenya.

Prior to this appointment, he was a Principal Partner at Chil & Kemp Strategies Ltd. He also served as the Chief Executive Officer/Commission Secretary of the Independent Electoral and Boundaries Commission (IEBC). Mr. Chiloba also worked with other reputable international and local organizations including the United Nations.

He has over 15 years' experience in public sector management including policy, leadership, legislation, financial, stakeholder, and risk management.

He has previously served as a Board Member of the Youth Enterprise Development Fund.



### **Mrs. Mercy Wanjau, MBS**

**Acting Director General until 28th September 2021**

Born in 1972, Mrs. Wanjau was the Acting Director General of the Authority with effect from 22<sup>nd</sup> August 2019.

She holds LLM from the University of Cape Town and LLB (Hons.) from the University of Nairobi. She is an Advocate of the High Court of Kenya. In addition, she is an Eisenhower Fellow and a published author with the ITU and the United Nations Conference on Trade and Development. She also holds a postgraduate certificate in regulation of telecommunications in developing and transitional economies.

Mrs. Wanjau is a commercial lawyer, regulatory and governance expert who has been involved in design and harmonization of ICT policy and regulation at the local, regional and international level for over 15 years.

A Certified Secretary and Professional Mediator, she has previously consulted with KPMG South Africa, PwC Kenya and also had a stint in commercial legal practice. She also served on international secondment at the International Telecommunications Union (ITU), the UN specialized agency for ICTs.



**Ms. Esther Koimett, CBS**

**Principal Secretary, State Department of Broadcasting and Telecommunications, MIIYA**

Born in 1957, Ms. Esther Koimett is the Principal Secretary for the State Department of Broadcasting and Telecommunications, Ministry of ICT, Innovation and Youth Affairs (MIIYA). She serves in the Board in her capacity as Principal Secretary.

She holds a Masters of Business Administration (MBA) and Bachelors of Commerce (B. Com) degrees from the University of Nairobi.

She has over 25 years' experience in the public service having served as a Permanent Secretary in the Ministry of Tourism and Information and as the Managing Director of Kenya Post Office Savings Bank, amongst other senior positions.



**Dr. Julius Muia, CBS**

**Principal Secretary, The National Treasury.**

Born in 1960, Dr. Muia is the Principal Secretary at the National Treasury. He also served as the Principal Secretary at the State Department for Planning - the National Treasury and Planning.

He is an alumnus of the University of Nairobi's School of Business, Dr Julius Muia graduated with a First-Class Honours degree

in Accounting; Master's Degree and PhD in Finance from the same university.

His professional qualifications include Certified Public Accountant (CPA-K); Certified Public Secretary (CPS-K), Associate Kenya Institute of Bankers; Associate Chartered Institute of Arbitrators; and Certified Coach. Dr. Muia has over 25 years' experience in leadership in Kenya and UK.



**Dr. (Eng) Karanja Kibicho, CBS**

**Principal Secretary, Ministry of Interior and Coordination of National Government.**

Born in 1967, Dr. Kibicho is the Principal Secretary State Department of Interior, Office of the President.

He holds a doctorate degree in Mechanical Engineering from the University of Cape Town, South Africa, a Masters of Science degree in Mechanical Engineering and a Bachelor of Science in Mechanical Engineering.

Dr. Kibicho has taught in various institutions of higher learning, including Jomo Kenyatta University of Agriculture and Technology (JKUAT) where he served as the Chairman and Senior Lecturer in the Department of Mechanical Engineering. He also served as an external examiner at the University of Dar es Salaam, a visiting lecturer at the Central University of Technology, Free State, South Africa and a part-time Lecturer at the University of Cape Town.



**Ms. Kentice Tikolo, OGW**

**Independent Director**

Born in 1964, Ms. Tikolo was first appointed to the Board on 29th April 2016 for a three-year term that lapsed on 28th April 2019. She was re-appointed for a further three-year term effective 6<sup>th</sup> January 2020.

Ms. Tikolo holds a Master of Science degree in Public Relations from the University of Stirling in Scotland, and a Bachelor of Education degree from Kenyatta University.

She is a communications expert with over 15 years' experience in Strategic Corporate Communications and Public Relations.

She is the founder and Managing Director of Impact Africa Limited, a Strategic Public Relations & Communications firm, based in Nairobi, Kenya. Prior to going to private business, worked at the Kenya Wildlife Service as the Head of Corporate Communications.





**Ms. Patricia Kimama**  
**Independent Director**

Born in 1973, Ms. Kimama was first appointed to the Board on 29th April 2016 for a period of three years that lapsed on 28th April 2019. She was re-appointed for a further three-year term effective 6th January 2020. Ms. Kimama holds a Post Graduate Degree in Senior Management Leadership Program from Strathmore University, a Master's Degree in Project Management from George Washington University, a Master's Degree in Business Administration (Strategic Management) from Daystar University and a Bachelor's of Science from Moi University. She has 20 years' experience in spanning the banking, telecommunication and water industries, and recently served as the Chief Operations Officer at Britam Asset Managers.



**Prof. Levi Obonyo (Ph.D)**  
**Independent Director**

Born in 1966, Prof. Obonyo was appointed to the Board on 20<sup>th</sup> May 2014 and re-appointed on 29th April 2016 for a further term of three (3) years that lapsed on 28th April 2019. He was re-appointed for a further three-year term effective 6th January 2020. Prof. Obonyo holds a PhD in Mass media and Communications from Temple University Philadelphia, USA, and a Masters of Arts Degree in Communication from Wheaton Graduate School. He also holds a Postgraduate Diploma in Tertiary Education from Potchefstroom University for Christian Higher Education, and a Bachelor of Arts Degree in Communication from Messiah College, USA. He has extensive experience in communication and media practice, strategy and policy formulation. He previously served as the Chairman Media Council of Kenya (MCK) and President of the East African Communication Association. He has also served as a member of the Advisory Council of the Kenya National Commission to UNESCO (KNATCOM) specializing on communications. Prof. Obonyo is currently an Associate Professor of Communication and Media Studies, and the Dean of the School of Communication at Daystar University.



**Ms. Laura Chite**  
**Independent Director**

Born in 1972, Ms. Chite was appointed to the Board on 17th July 2021 for a period of three years. She holds a Bachelor of Arts in Economics and Sociology from Egerton University, Kenya. Ms. Chite has over 20 years of experience in the ICT sector. She is the founder of HerNovation and was the Acting CEO at CIO East Africa (now CIO Africa). She previously worked at Microsoft in a Marketing and Communications role. Ms. Chite is on the Advisory Board for Kisumu Rugby Football Club and currently serves as the Chairperson of iGov Africa.



**Mr. Mahmoud Mohamed Noor**  
**Independent Director**

Born in 1974, Mr. Noor was appointed to the Board on 17th July 2021 for a period of three years. He holds a Bachelor's Degree in Computer Science from the University of the Valley, Diploma in Telecommunications from Kenya College of Communications Technology, & United States Telecommunications Training Institute, and a Diploma in Management from Kenya Institute of Management. Mr. Noor is an ICT Consultant and Youth Advisor, with experience spanning over 23 years. He previously was the Operational Manager for East and North Africa at Seacom. Mr. Noor founded Swahili Pot Hub.



**Mr. Jackson Kiprotich Kemboi**  
**Independent Director**

Born in 1976, Mr. Kemboi was appointed to the Board on 17th July 2021 for a period of three years. He holds a Master's degree in Human Resource Management and a Bachelor of Arts degree in Political Science & Public Administration both from Moi University. He is a private surveyor in Uasin Gishu, Elgeyo Marakwet, Nandi and Trans Nzoia Counties. Mr. Kemboi also serves as a Board member of Kenya Investment Authority.



**Mr. Paul Mureithi**  
**Independent Director**

Born in 1958, Mr. Mureithi was appointed to the Board on 17th July 2021 for a period of three years. He has over 25 years' experience in telecommunications having worked at the defunct Kenya Posts, Telecommunications Corporation and Telkom Kenya Limited. He is a Director of Tymstar Motors Limited, Tymtrack Limited, Mweiga Homes Limited, and Dualway Properties Limited.



**Mr. Peter Wanjohi**  
**Alternate Director to the Principal Secretary,**  
**Interior and Coordination of National Government**

Born in 1965, Mr. Wanjohi was appointed to the Board on 7th February 2018. He holds a Bachelor of Business Administration degree from New Port University. He is the Director of State functions at the Ministry of Interior and Coordination of National Government. He previously served in several committees including: Kenya Vision 2030; National Communication Dissemination Strategy; and Task force on Restructuring of Human Resource Requirement of the Permanent Presidential Music Commission.



**Ms. Yiapan Juliana Nashipae, MBS**  
**Alternate Director to the Principal Secretary,**  
**State Department of Broadcasting and Telecommunications**

Born in 1969, Ms. Yiapan was appointed to the Board on 3rd May 2019. She has a Master of Business Administration (Public Service) from University of Birmingham, Master of Arts in Political Science and Public Administration and a Bachelor of Arts Degree in Government, both from the University of Nairobi. She has over 20 years' experience in Public Service, having worked at MIIYA, Office of the President and Office of the Deputy President, in various senior positions.





**Dulacha Galgallo Barako, Ph.D**  
**Alternate Director to the Principal Secretary,**  
**The National Treasury**

Born in 1969, Prof. Barako, was appointed to the Board on 24<sup>th</sup> November 2021. He holds a PhD from University of Western Australia, a Master of Business Administration and a Bachelor of Commerce degree from the University of Nairobi. Prof. Barako is a Director, Financial and Sectoral Affairs Department at the National Treasury and worked at the Central Bank of Kenya as the Head of Academic Division at Kenya School of Monetary Studies. He has also taught at universities in Kenya and Australia, and is widely published in financial reporting, regulation and stability as well as interdisciplinary research. He has served as the Chairman of the Council of Dedan Kimathi University of Technology and Meru University of Science and Technology. He also served as the Treasurer of the Council of Moi University as well as a Board member of Agricultural Finance Corporation, Capital Markets Authority, National Social Security Fund, Kenya Ports Authority, and Safaricom PLC.



**Mr. Chris Guyo Huka**  
**Alternate Director to the Principal Secretary,**  
**The National Treasury**

Born in 1967, Mr. Guyo served on the Board between 17th July 2020 and 2nd February 2022. He holds an MBA in Human Resource Management from the University of Nairobi, a Bachelor of Education (Arts) degree from Moi University, Higher National Diploma in HRM, Practitioners Diploma in Executive Coaching from Academy of Executive Coaching and an Advanced Certificate in Strategic HR Management from Cornell University. Mr Guyo is a seasoned Human Resource professional with over 18 years' experience. He has previously worked at Barclays Bank of Kenya Ltd, Chevron Kenya Ltd, Kenya Petroleum Refineries and Post Bank. Mr. Guyo is a member of the Institute of Human Resource Management (IHRM) – Kenya, and HR Council member for the Kenya Institute of Management.

# MANAGEMENT TEAM



**Mr. Ezra Chiloba**  
Director General



**Mr. Juma Kandie**  
Director, Human Capital and Administration



**Mr. Matano Ndaro**  
Director, Licensing, Compliance and Standards



**Mr. Christopher Kemei**  
Director, Universal Service Fund



**Mrs. Mercy Wanjau, MBS**  
Director, Legal Services



**Mr. Michael Katundu**  
Director, Information Technology and Enterprise Resource Management



**CPA. Rosalind Murithi**  
Director, Risk Management and Internal Audit



**Eng. Leo K. Boruett**  
Director, Multimedia services



**CPA Joseph Kimanga**  
Director, Finance and Accounts



# MANAGEMENT TEAM



**CPA Maxwell M. Mosoti**  
Ag. Director, Competition  
Tariffs and Market Analysis  
(Retired on 28th August 2021)



**Dr. James Njeru**  
Ag. Director, Competition Tariffs  
and Market Analysis.



**Ms. Jane Rotich**  
Ag. Assistant Director, Procurement



**Mr. Tom Olwero**  
Director, Frequency Spectrum Management  
(Retired on 30th April 2022)



**Mr. Mohamed Haji**  
Ag. Director, Frequency Spectrum  
Management



**Dr. Vincent Ngundi**  
Assistant Director, Cyber Security  
and E-Commerce



**Mr. Christopher Wambua**  
Director, Communication and  
Public Affairs



Corporate Governance

The management of the Authority is vested on the Board, whose operations are guided by the principles of corporate governance such as transparency and disclosure, accountability, risk management, internal controls, ethical leadership and good corporate citizenship.

Board Meetings

Section 8(1a) of the State Corporations Act, Cap 446, requires that Boards of every State Corporation should meet at least four (4) times in every financial year. During the year, the Board held Eleven (11) full Board Meetings, Thirty-Seven (37) board committee meetings and Nine (9) Special Board meetings. This is shown in the table 1.

Table A1 : No. of meetings attended by Board Members

Sen. Kembi-Gitura	11					
Capt. Gilbert Kibe	1					
Prof. Levi Obonyo	13		8	5		
Juliana Yiapan	13				13	5
Peter Wanjohi	10	5		5		
Chris Huka	4				4	2
Patricia Kimama	13	9		4		
Kentice Tikolo	13			3		6
Laura Chite	13		6		7	
Paul Mureithi	13	8	4			
Jackson Kemboi	13	8			8	
Mahmoud Noor	13		7			3
Prof. Dulacha Barako	3				4	2

Compliance with Code of Governance for State Corporations (Mwongozo)

The Authority in adherence to the principles of good corporate governance carried out a Governance and Legal Audit and a Board Evaluation. A summary of the board evaluation for the FY 2020-21 is shown in table 2.

	Name	Position	Raw Score	% Score
1	Sen. Kembi Gitura	Chairperson	4.6481	92.96
2	Christopher Huka	Member	4.8206	96.41
3	Juliana Yiapan	Member	4.8639	97.28
4	Kentice Tikolo	Member	4.8569	97.14
5	Patricia Kimama	Member	4.8510	97.02
6	Peter Wanjohi	Member	4.5831	91.66
7	Prof. Levi Obonyo	Member	4.8542	97.08
8	Mercy Wanjau	CEO	4.2967	85.93
Corporate Board Performance			4.7471	94.94

Risk Management

The Authority has in place an Enterprise Risk Management (ERM) policy framework that is aligned to the ISO 31000 (International Risk Management Standard) and the *Mwongozo* code of governance for state corporations. The policy forms part of the Authority's internal control and governance arrangements and explains risk management process (risk assessment, documentation, treatment, review and monitoring) as well as reporting procedures.

The Board oversees risk management within the Authority by determining that risk management strategies and policies are in place, and that appropriate, adequate and effective controls are established. The Board reviews, monitors and evaluates the status of implementation the ERM framework and the effectiveness of risk control measures on a quarterly basis.

Key Corporate Risks

The Authority undertakes risk assessment on a continuous basis. In the course of the year, the following key corporate risks, associated risk levels as well as risk treatment options were identified. The Authority uses a 5 by 5 Risk Matrix to rate its risks. Our top 10 residual risks range between 16 and 20 as shown in table 3.



Table A3: Top 10 Residual Risks

No	Main Risk Event	Residual Risk level
1	Inability to effectively and efficiently manage contracts	20
2	Failure to attain the goal of bridging the digital divide (USF Objectives)	18
3	Inadequate content regulation leading to failure to detect non-compliance with content standards	16
4	Inadequate USF project models (project designing)	16
5	Delay in the implementation of the ICT Roadmap 2018 -2023	16
6	Inability to recover ICT systems and services following a disaster or major disruption at the Authority	16
7	Inadequate monitoring and analysis of cyber threats intelligence and cyber incidence	16
8	Inadequate digital forensic capacity to address rising cybercrime.	16
9	Inability to carry out effective research to inform regulatory decisions of the Authority	16
10	Failure to hold universal service (USAC) meetings	16

Internal Control Systems

Our internal control processes are designed to provide reasonable assurance that we achieve our objectives through proper stewardship of the Authority’s resources. The Authority reviewed QMS procedures under ISO 9001: 2015 and the ISO ISMS 27001:2015 to ensure relevance and compliance with the relevant requirements. The Authority continuously monitored adherence to the internal controls by undertaking audits in conformance with the Internal Audit Charter and International Standards for the Professional Practice of Internal Auditing.

Business Continuity Management

As outlined in our risk management strategy, we commenced the implementation of the business continuity management framework. This involved undertaking a business impact analysis to identify the business processes that are critical to our survival. The following processes were identified to be critical to our business.

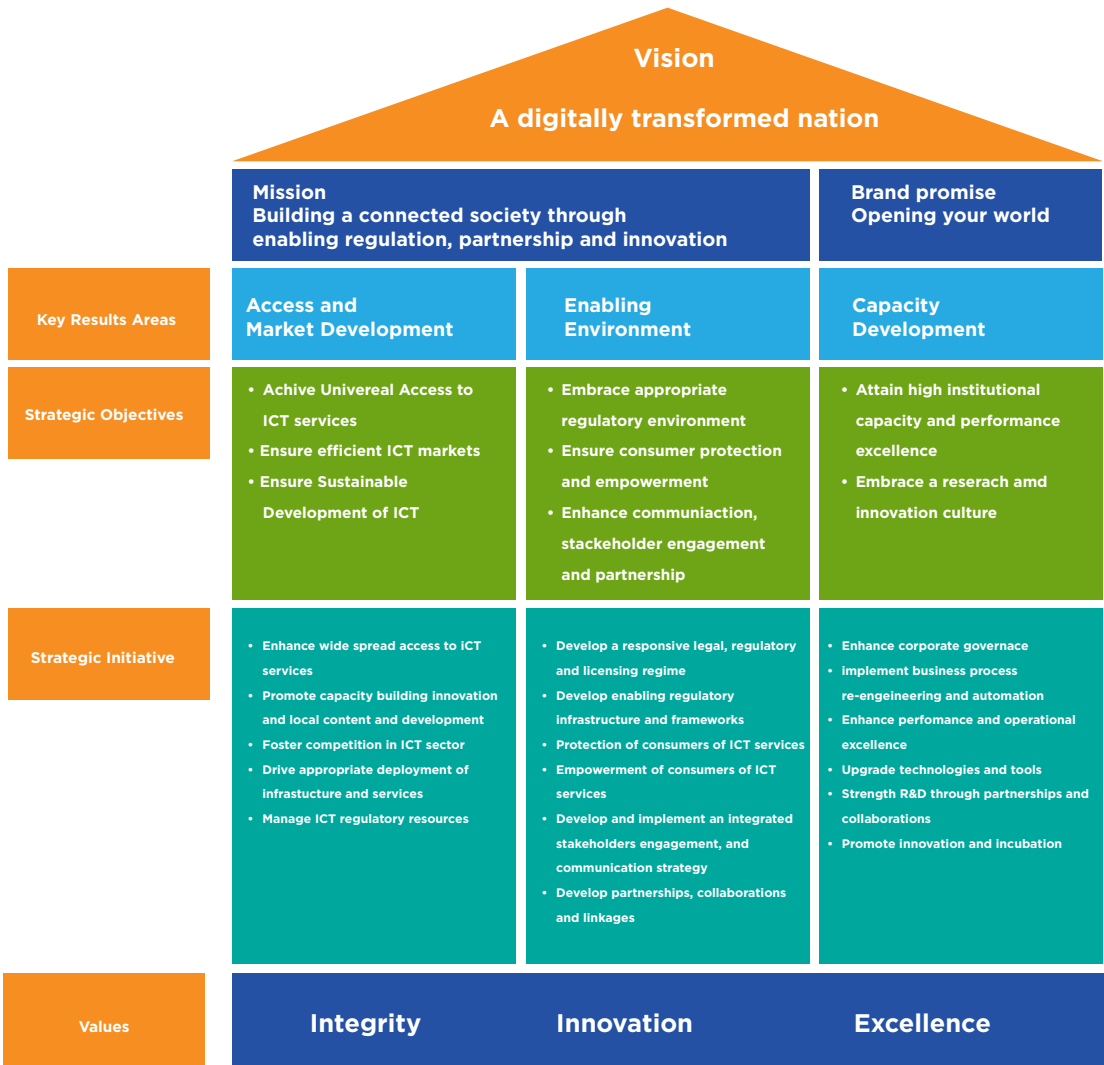
- IT Infrastructure, Networks, Database, Applications and Information Security;
- Accounts payables (staff payments, supplier payments and statutory payments);
- Broadcast Content Monitoring and Handling consumer complaints on Broadcast content
- Crisis communications;
- Frequency monitoring;
- Resolution of Frequency interference;

As part of BCM, the Authority put in place a crisis communications plan to guide its crisis preparedness. The plan provides an opportunity to lay the requisite foundation for issue identification, preparation and response. Additionally, the plan establishes an early warning system to proactively deal with issues before they escalate into a crisis.



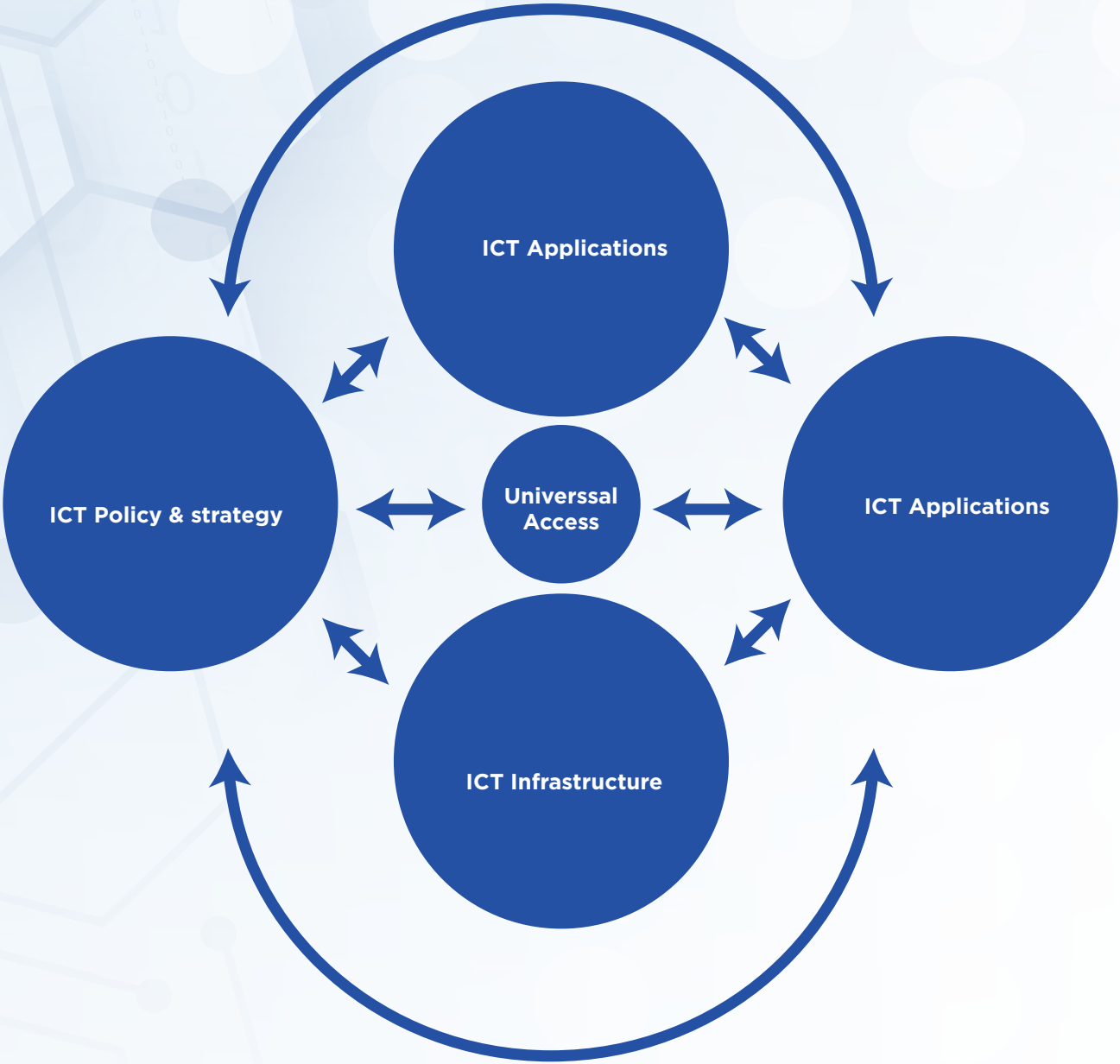
### Strategic Direction 2018-23

In order to facilitate the growth and development of the country’s ICT sector, our 4<sup>th</sup> Strategic Plan 2018-23 focuses on three Key Result Areas in order to achieve eight Strategic Objectives through implementation of 19 Strategic Initiatives. A high-level summary of the Authority’s Strategic Plan is outlined in the diagram below.



SECTION B: ACCESS AND MARKET DEVELOPMENT

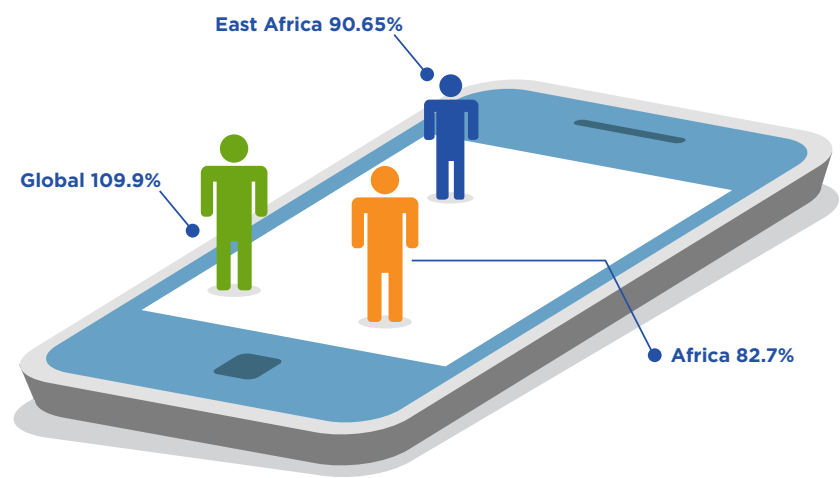
This section is aligned to the Authority's first Key Result Area whose aim is to achieve universal access to ICT services, ensure efficient ICT markets and ensure sustainable development of ICTs. To achieve this, we have implemented universal access programmes, fostered competition in the ICT sector, propelled appropriate deployment of infrastructure and services and managed ICT regulatory resources.





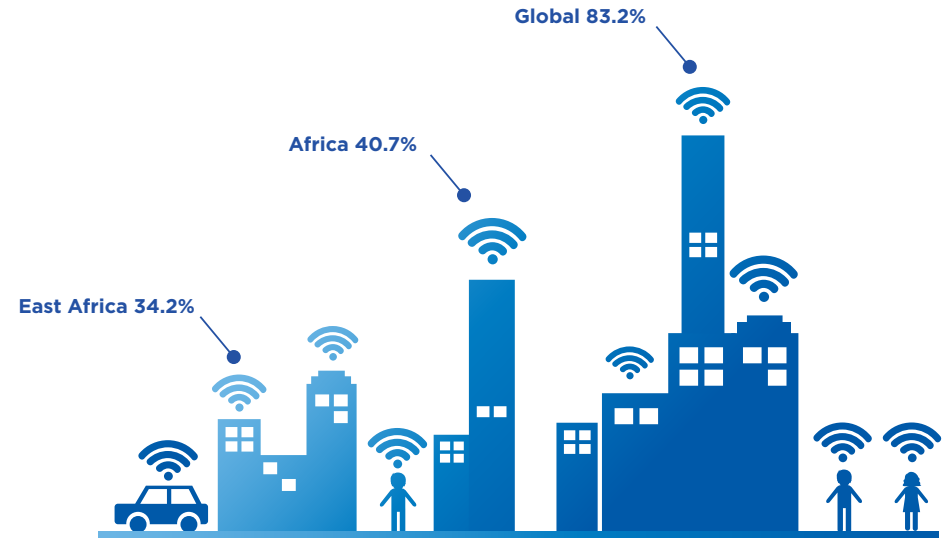
Overview of Global ICT Trends

Mobile Cellular Subscriptions 2021  
As at December 2021, Africa recorded much lower mobile cellular subscriptions as compared to the global penetration rates the as shown below.



Mobile Broadband Subscriptions 2021

The digital divide in broadband penetrations continued, with the recorded mobile broadband subscriptions in the East African region being lower than Africa and way below the global average as shown below.

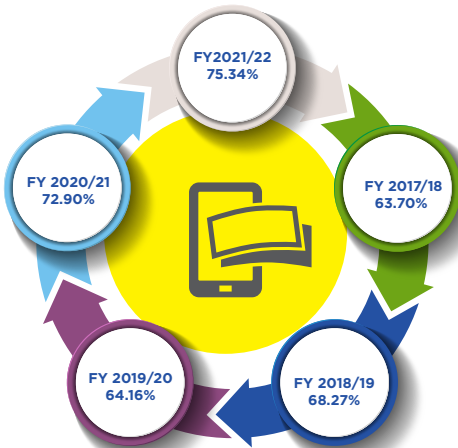




Kenya ICT Sector Statistics at a Glance

Mobile Money Penetration Rate

Mobile money penetration indicated an upward trend increasing from 63.7 % recorded five years ago to 75.3 %.



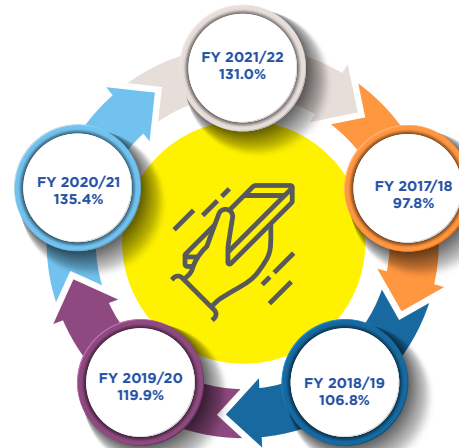
Postal and Courier Outlets

Over the last 5 years, the number of postal and courier outlets declined by 10.6% .



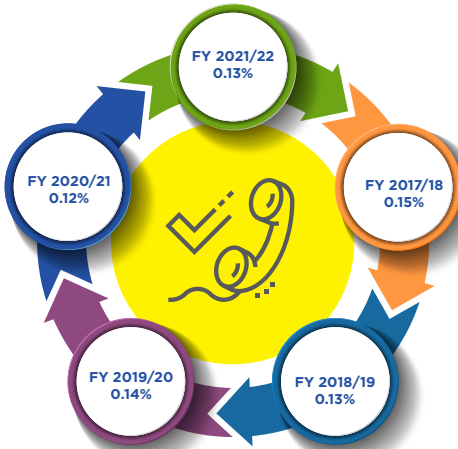
Mobile Telephone Subscriptions Penetration Rate

Mobile telephone subscription continued to record over 100% penetration

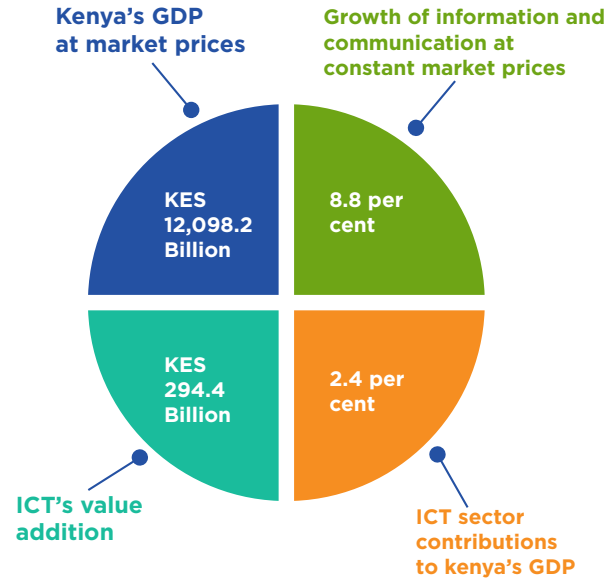


Fixed Telephony Penetration Rate

Over the years, the subscription to fixed telephone services has remained low as shown below.



Contribution of ICT sector to GDP



A woman with glasses is looking at a tablet. The background is dark with blue digital overlays, including a line graph and a bar chart. There are also some colorful bokeh lights. An orange triangle is on the left side of the image.

# CHAPTER 1

UNIVERSAL ACCESS TO  
ICT SERVICES

# 1. UNIVERSAL ACCESS TO ICT SERVICES

The Authority is committed to ensuring that ICT services are available, accessible and affordable to all in Kenya. To actualize this commitment, the Authority facilitates roll out of ICT services in un-served and underserved areas in the country. In this regard, we continued to rollout USF supported connectivity projects across the country.

## 1.1. Access to ICTs

### 1.1.1. Voice Infrastructure and Services Project

The Universal Service Fund incentivizes deployment of cellular mobile infrastructure and service in un-served and underserved parts of the country.

This is in line with the overarching policy objective of ensuring provision of communication services to all in Kenya with a view of extending the enormous benefits that come with digital connectivity.

In line with the USF Strategy, the Authority adopted a phased approach in the implementation of the cellular mobile infrastructure and service project. During the year, voice infrastructure services were rolled out in one additional sub-location bringing the total number of sub-locations covered with mobile network under Phase I to 76. Further, the Authority commenced the implementation of Phase II of the project which aims to roll out mobile network infrastructure and services in 101 unserved and underserved sub-locations spread across the country. Phase II is being implemented by five network facility providers (2 Tier I and 3 Tier II) through deployment of passive and active voice infrastructure components. So far, 15 of the targeted sub-locations have been covered with mobile networks. Table 1.1 shows the number sublocations covered in the two phases of the project.

Table 1.1 Number of Sub-Locations by County

County	Phase I	Phase II		
	No. of Sub-locations to be covered	No. of Sub-locations on air	No. of Sub-locations to be covered	No. of Sub-locations on air
Baringo	2	2	6	0
West Pokot	2	2	14	14
Bungoma	6	6	-	-
Garissa	2*	1	10	0
Isiolo	2	2	3	0
Kajiado	6	6	8	0
Kilifi	3	3	1	1
Kitui	5	5	5	0
Kwale	6	6	0	0
Mandera	5	5	3	0
Marsabit	10	10	13	0
Samburu	4	4	6	0
Narok	8	8	2	0
Turkana	10	10	18	0
Wajir	7	7	3	0
Elgeyo-Marakwet	-	-	1	0
Laikipia	-	-	3	0
Lamu	-	-	1	0
Tana River	-	-	4	0
Total	78	76	101	15
*The project was not rolled out in one sub-location in Garissa County due to force majeure.				

Source: Communications Authority of Kenya





THE BIG LAUNCH: ICT, Innovation and Youth Affairs Cabinet Secretary *Mr. Joe Mucheru* (fourth right) in a group photo with, from L-R: CA's *Mr. Edwin Ombega*, *Mr. Hussein Versi*, Networks Director, Airtel Kenya, *Mr. Allan Muhalia* of American Tower Corporation, West Pokot Governor *Prof. John Lonyangapuo*, Broadcasting and Telecommunications Principal Secretary *Ms. Esther Koimett*, CA Director General *Mr. Ezra Chiloba* and the Data Commissioner *Ms. Immaculate Kassait* after the launch of Phase II of the USF Voice Infrastructure Connectivity Project in Akiriamet, West Pokot being one of the 15 sub-locations on air .

#### 1.1.2. Education Broadband Connectivity

The broadband connectivity project for schools is essential in closing the digital access gap. The Authority continued to support the provision of Internet connectivity services to the selected 886 public secondary schools spread across 47 counties. The Authority in partnership with the Foreign Commonwealth Development office (FCDO) undertook an end term evaluation of the USF funded Education Broadband connectivity project. The purpose of the assessment was to gauge the effectiveness and sustainability of the project.

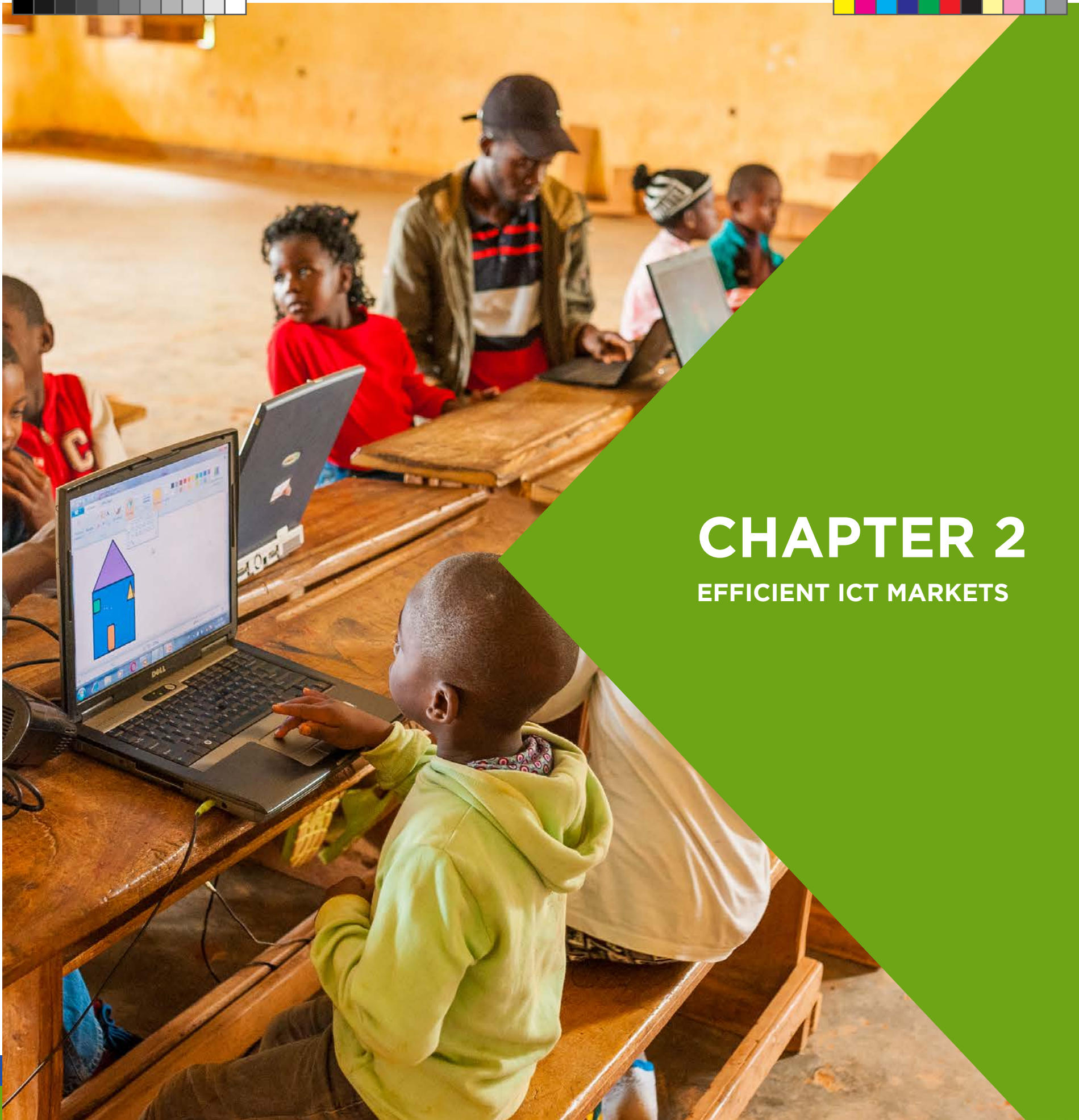
#### 1.1.3. Automation of Occurrence Book and Crime Management System

The Authority in collaboration with the National Police Service (NPS) continued to implement the digitization and automation project for the National Police Service (NPS) Information Management System. This project seeks to enhance service delivery including crime and criminal records management, Occurrence Book (OB) among other resource management systems of the NPS. During the year, the Authority procured and delivered 143 web cameras as well as additional 311 desktop computers.

#### 1.1.4. E-resource Centers – Software for visually impaired

In line with the USF objective of ensuring availability of communication services to Persons Living with Disabilities, women and other vulnerable groups, the Authority supported the installation of a software to help persons with visual impairments access learning materials in 56 National Libraries spread across the country. This was done in partnership with Kenya National Library Services.





# CHAPTER 2

## EFFICIENT ICT MARKETS

## 2. EFFICIENT ICT MARKETS

In line with the Strategic objective on ensuring an efficient ICT sector, the Authority promotes competition in order to expand consumer choices, spur innovation and reduce costs. In particular, the Authority licenses new entrants and regulates tariffs to ensure availability of quality and affordable products and services.

### 2.1. Telecommunications Services Licensing

The Authority issued 515 new licenses and renewed 128 out of 194 licenses that expired during the year. The total number of licensees was 3,617 as at the end of period. Notably, the Authority approved the upgrade of Jamii Telecommunications Limited Network Facility Provider Tier 2 license to Network Facility Provider Tier 1, bringing the total number of NFP tier 1 licensees to 4.

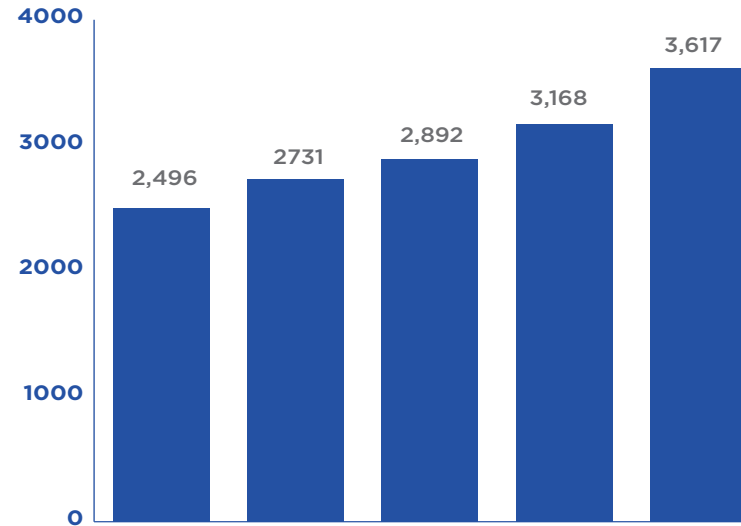
Table 2.1 presents the number of telecommunication licensees by category.

Licence Category	2017/18	2018/19	2019/20	2020/21	2021/22
Telecommunications Contractors	593	677	651	677	766
Technical Personnel	561	542	537	504	532
Submarine Cable Landing Rights	3	3	3	3	4
International Gateway Systems and Services	12	12	12	12	11
Application Service Providers	240	290	330	388	441
Content Service Providers	364	424	481	598	657
Network Facility Providers Tier 1	3	3	3	3	4
Network Facility Providers Tier 2	24	27	32	35	31
Network Facility Providers Tier 3	30	34	42	58	79
Business Process Outsourcing	28	30	34	37	44
Telecommunications Vendors	552	594	649	691	866
Public Communication Access Centers	15	15	14	14	14
Dot KE Subdomain Registrars	67	76	100	138	153
Global Mobile Personal Communications by Satellite	4	4	4	5	5
Electronic Certification Service Providers	-	-	-	5	10
<b>Total</b>	<b>2,496</b>	<b>2,731</b>	<b>2,892</b>	<b>3,168</b>	<b>3,617</b>

Source: Communications Authority of Kenya

Figure 2.1 shows the number of licensees over the past five financial years.

Number of Licences by financial year



### 2.2. Broadcasting Services Licensing

The Authority licensed an additional 146 broadcasting service providers. There was a significant rise in the number of licenses issued to commercial and community FM broadcasters due to enhanced enforcement by the Authority geared towards completion of transition to the licensing regime. Table 2.2 shows the number of broadcast licenses under the various categories over the past five years.



**Table 2.2 Cumulative Number of Broadcast Licenses by Category**

Category of License	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Commercial FTA TV	97	132	174	229	286
Commercial FM Radio	31	55	76	106	160
Community FTA TV	3	4	8	8	9
Community FM Radio	4	12	14	21	53
Subscription Broadcasting Services	11	14	16	17	18
Subscription Management Services	4	4	4	4	4
Self-Provision Broadcasting Signal Distributor	3	3	3	3	3
Common-carrier Broadcasting Signal Distributor	2	2	2	2	2
Landing Rights	4	4	4	4	5
<b>Total</b>	<b>159</b>	<b>230</b>	<b>301</b>	<b>394</b>	<b>540</b>

Source: Communications Authority of Kenya

## 2.3. Postal and Courier Services Licensing

Postal and courier services play an important role in connecting businesses to consumers. The enhanced uptake of these services can be attributed to, among others, the growth in e-commerce as consumers seek to access the global market. As a result, the Authority licensed 46 national and five international courier service providers. We also revoked 30 national and four international licenses due to non-compliance with the license conditions. This led to a total of 305 licensees at the end of the financial year 2021/22. This is illustrated on table 2.3.

**Table 2.3: Cumulative Number of Postal and Courier Operators by License Category**

License Category	2017/18	2018/19	2019/20	2020/21	2021/22
Public Postal Operator (PCK)	1	1	1	1	1
National	170	178	207	238	254
International	45	50	55	49	50
<b>Total</b>	<b>216</b>	<b>229</b>	<b>263</b>	<b>288*</b>	<b>305</b>
*Reviewed data					

Source: Communications Authority of Kenya

## 2.4. Uptake of ICT Services

As a result of a favorable and robust economic market, there was increased demand for ICT services by consumers.

### 2.4.1. Mobile Telephony Services

The number of mobile subscriptions (SIM cards) grew by 0.42 percent compared to 13.0 percent recorded in the previous year. The decline in growth was attributed to regulatory interventions that required validation of registered SIM cards in the country, resulting in a dip in the number of active SIM cards during the third and fourth quarters of the year. The number of subscriptions in mobile telephony services for the past five years is outlined in table 2.4.

**Table 2.4: Subscriptions in Mobile Telephony Services**

Operator/Period	June- 18	June-19	June-20	June-21	June -22
<b>Safaricom PLC</b>	29,780,048	33,118,553	36,587,136	41,373,138	42,534,682
<b>Airtel Networks Kenya Limited</b>	9,744,440	12,837,025	15,307,422	17,327,290	17,046,982
<b>Telkom Kenya Limited</b>	3,995,365	4,235,632	3,441,362	4,009,758	3,422,345
<b>Finserve Kenya Limited</b>	1,959,009	1,882,440	1,696,312	1,495,535	1,397,416
<b>Sema Mobile Services+</b>	112	-	-	-	-
<b>Mobile Pay Limited+</b>	90,062	94,416	-	-	-
<b>Jamii Telecommunications Ltd **</b>	-	-	-	196,301	272,392
<b>Total</b>	<b>45,568,924</b>	<b>52,168,066</b>	<b>57,032,232</b>	<b>64,402,022</b>	<b>64,673,817</b>
<b>+ Data Not Available</b>					
<b>**Jamii Telecommunications Ltd commenced provision of mobile services during the FY 2020/21 hence the data for previous years is not available</b>					

Source: Communications Authority of Kenya

Figure 2.2 shows the trend in market share by operator over the past five years.

Figure 2. 2 Mobile Subscriptions Market Shares by Operator

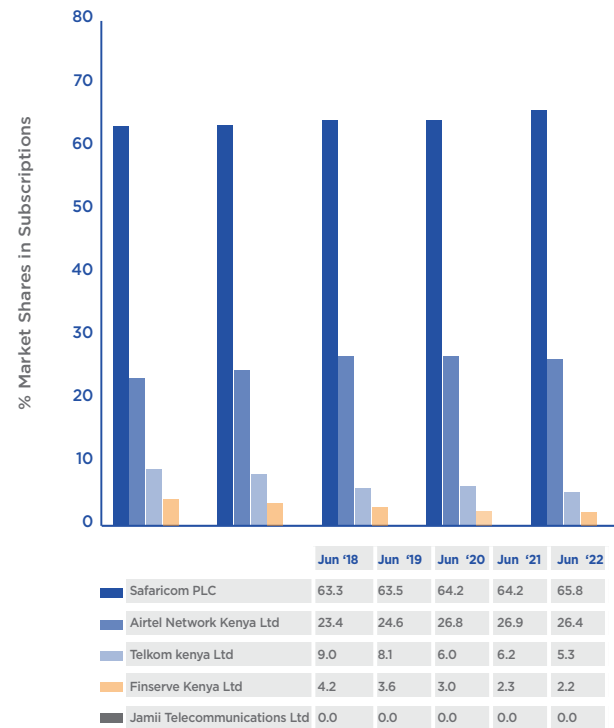
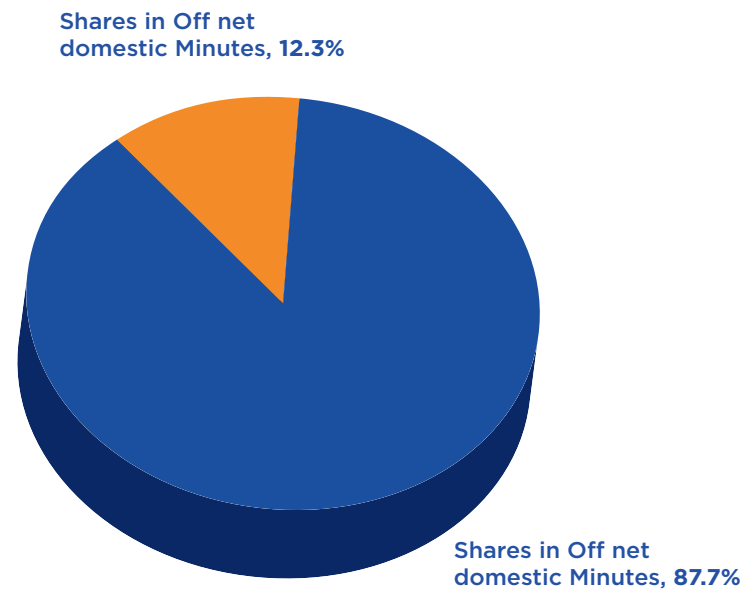


Figure 2.3 On-net traffic recorded the highest shares in domestic mobile voice traffic at 87.7 percent whereas off-net recorded a share of 12.3 percent.

Onnet Vs. Off net% shares as at June 2022



The volume of domestic mobile voice traffic rose to 79.4 billion minutes from 76.8 billion recorded during the FY 2020/21. On the contrary, short messages (SMS) sent declined to 44.3 billion messages from 54.5 billion recorded in the previous year. This decline can be attributed to increased customer preference for over-the-top services (OTTs) such as WhatsApp. Table 2.5 illustrates the trends in mobile traffic over the past 5 years.

Indicator/Period	2017/18	2018/19	2019/20	2020/21	2021/22
<b>On-net Calls in Minutes</b>	44,024,755,088	54,914,778,317	56,273,419,535	67,542,508,332	69,600,154,465
<b>Off-net Calls in Minutes</b>					
	4,895,887,311	6,767,792,350	7,051,429,229	9,208,734,031	9,749,654,524
<b>Domestic Mobile to Fixed Calls in Minutes</b>	74,500,816	56,486,171	61,462,861	65,885,730	64,728,975
<b>Total No. of Calls in Minutes</b>	49,630,829,559	61,739,056,838	63,386,311,625	76,817,128,094	79,414,537,964
<b>International Incoming Calls in Minutes</b>	606,044,544	552,658,092	567,337,791	471,588,569	454,524,150
<b>International Outgoing Calls in minutes</b>	434,294,824	423,804,532	455,908,029	507,456,055	617,736,898
<b>SMS Traffic (No. of Messages)</b>	66,838,027,325	66,103,922,628	69,698,701,144	54,510,222,940	44,306,303,570

Source: Communications Authority of Kenya



2.4.2. Mobile Money Services

Over the years, mobile money service providers have diversified their value proposition beyond just P2P transfers and cash-in/cash-out transactions, to play an important role in people’s daily lives as well as businesses. As at 30th June 2022, active mobile money subscriptions stood at 37.21 million, representing a growth of 6.8 percent from the previous year. Table 2.6 illustrates a five-year trend of mobile money subscriptions.

Table 2.6: Mobile Money Subscriptions

Brand Name (Operator)	2017/18	2018/19	2019/20	2020/21	2021/22
M-Pesa (Safaricom PLC)	23,946,174	26,900,772	30,193,831	34,270,393	36,112,757
T- Kash (Telkom Kenya Limited)	63,023	76,061	13,999	121,744	39,487
Airtel Money (Airtel Networks limited)	3,619,415	3,681,194	310,359	272,570	1,065,897
Total	29,678,063	32,634,883	30,518,189	34,664,707	37,218,141

Source: Communications Authority of Kenya

2.4.3. Internet Services

Infrastructure improvements underpinned by availability of affordable smartphones and digitization of government services has driven increased access to and use of Internet services in the country in the recent years. The number of Data/Internet subscriptions grew by 1.9 per cent to 47.6 million. The distribution of data/Internet subscriptions by technology is as outlined in table 2.7.

Table 2.7: Data/Internet Subscriptions

Sub-scriptions	2017/18	2018/19	2019/20	2020/21	2021/22
Mobile data/ Internet	40,743,570	49,532,380	40,922,499	46,002,220	46,729,002
Terrestrial wireless data/ Internet	122,037	66,989	88,159	114,348	153,511
Satellite	1,165	1,243	1,698	1,240	594
Fixed Digital Subscriber Line	1,254	1,014	997	449	812
Fixed fibre optic	135,964	213,199	351,332	439,002	547,851
Fixed cable modem (Dial Up)	101,508	132,072	176,589	178,645	212,129
*Other Fixed Data Sub-scriptions	7,352	7,408	804	645	777
Total	41,112,850	49,954,305	41,452,221	46,736,549	47,644,676
*Other Fixed Broadband Subscriptions refers to Internet subscriptions using other fixed broadband technologies as such as Ethernet LAN and internet-over-power line communications to access the Internet.					

Source: Communications Authority of Kenya

Data/Internet refers to connectivity that delivers interactive, secure, quality and affordable services regardless of data speeds Broadband refers to connectivity that delivers interactive, secure, quality and affordable services at a minimum speed of 2Mbps (The National Broadband Strategy 2018-2023)



#### 2.4.4. Broadband Services

Broadband subscriptions grew by 9.5 per cent to 30.1 million with mobile broadband accounting for 97.0 percent of the total broadband subscriptions. The distribution of broadband subscriptions by technology is as outlined in table 2.8.

**Table 2.8: Broadband Subscriptions**

Indicator/ Period	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Mobile</b>	20,170,696	21,780,859	22,084,104	26,757,648	29,211,628
<b>Fixed Broadband (DSL, Satellite, Cable, Fibre, Fixed Wireless and Other)</b>	368,366	417,751	609,611	724,179	893,569
<b>Total</b>	<b>20,539,062</b>	<b>22,198,610</b>	<b>22,693,715</b>	<b>27,481,827</b>	<b>30,105,197</b>

Source: Communications Authority of Kenya

The total available international Internet bandwidth capacity increased by 13.5 per cent to 11,605.99 Gbps as outlined in table 2.9.

**Table 2.9 Available/ Lit International Internet Bandwidth (Gbps).**

Financial Year		FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
<b>SEACOM Capacity</b>		2,220.0	2,840.0	2,940.0	3,920.0	3,920.0
<b>TEAMS Capacity</b>		702.0	702.0	1,618.0	1,618.0	1,618.0
<b>Telkom Kenya</b>	EASSY Capacity	161.3	912.8	2,520.0	4,120.0	4,750.0
	LION2 Capacity	188.7	247.0	308.5	554.13	553.0
	DARE 1*		-	-	-	760.0
<b>Total Undersea Bandwidth Capacity (Gbps)</b>		<b>3,272.0</b>	<b>4,701.9</b>	<b>7,386.5</b>	<b>10,212.13</b>	<b>11,601.0</b>
<b>Satellite Bandwidth Capacity (Gbps)</b>		5.67	5.58	5.48	5.33	4.99
<b>Total Available Bandwidth Capacity (Gbps)</b>		<b>3,277.67</b>	<b>4,707.5</b>	<b>7,392.0</b>	<b>10,217.46</b>	<b>11,605.99</b>

Source: Communications Authority of Kenya

The total utilized international Internet bandwidth grew by 31.2 per cent to 6,003.17 Gbps from 4,575.16 Gbps as shown in table 2.10.

**Table 2.10: Utilized International Internet Bandwidth (Gbps)**

Year	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
<b>International Undersea Bandwidth</b>	926.8	1,336.2	3,232.6	4,572.6	6,000.58
<b>International Satellite Bandwidth</b>	4.6	5.13	2.61	2.56	2.585
<b>Total International Bandwidth</b>	931.4	1,341.3	3,238.2	4,575.16	6,003.17

Source: Communications Authority of Kenya

#### 2.4.5. Fixed Network Voice Services

The fixed network voice subscriptions increased by 13.2 percent to 65,643 from 57,997 subscriptions recorded during the previous financial year. Table 2.11 gives a summary of fixed network subscriptions for the past five years.

**Table 2.11: Fixed Network Voice Subscriptions**

Operator/Period	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
<b>Wananchi Group Kenya Limited</b>	44,706	39,521	48,561	41,551	49,997
<b>Safaricom PLC</b>	751	1,067	998	1,144	1,253
<b>Telkom Kenya Limited</b>	23,099	21,693	19,100	14,691	12,529
<b>Mobile Telephony Network (MTN) Kenya Limited</b>	431	427	427	450	302
<b>Other Fixed Service Providers</b>	DNA	DNA	76	161	1,562
<b>Total Subscriptions</b>	<b>68,987</b>	<b>62,708</b>	<b>69,162</b>	<b>57,997</b>	<b>65,643</b>

Source: Communications Authority of Kenya

#### 2.4.6. Postal and Courier Services

Postal and courier outlets stood at 1,491 at the end of the financial year, up from 1,362 posted in the previous year. Table 2.12 provides the trends of postal and courier network indicators over the past five years.



Table 2.12: Postal and Courier Network Indicators

Indicator		FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Public Postal Operator		1	1	1	1	1
Total Post Offices		623	623	623	461	461
Departmental Offices		447	447	447	346	346
Sub-Post Offices		146	146	146	81	81
Private Letter Boxes	Installed	430,350	430,350	430,350	430,469	430,469
	Rented	382,901	382,901	382,901	354,954	354,954
Letter Posting Boxes	Un-let	76,580	67,571	67,571	90,977	90,977
		891	891	891	632	632
Public Counter Positions		480	532	480	720	720
Automated Public Counters		480	532	480	579	579
Non-Automated Public Counters		0	0	0	124	124
Stamp Vending Licensees		883	883	883	270	270
Stamp Vending Machines		38	38	38	75	75
Private Operator Outlets		1,027	666	788	901	1,030
Total Outlets (Post Offices + Private Operators Outlets)		1,650	1,289	1,411	1,362	1,491

Source: Communications Authority of Kenya

## 2.4.7. Broadcasting Services

### 2.4.8. Free to Air Broadcasting Services

The number of Free-to-Air (FTA) television stations increased from 137 to 182 representing 32.8 per cent growth while the number of radio stations increased from 186 to 228 representing an increase of 22.6 per cent. Table 2.13 shows the number of broadcasting stations over the past five years.

Table 2.13: Number of Broadcasting Stations

Number of Stations	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Commercial FTA TV stations	66	85	95	130	175
Community FTA TV stations	1	1	2	4	4
Public FTA TV stations	3	3	3	3	3
Total TV Stations	70	89	100	137	182
Commercial FM Radio stations	131	131	131	131	164
Community FM Radio stations	38	42	42	42	51
Public FM Radio stations	13	13	13	13	13
Total FM Radio Stations	182	186	186	186	228

Source: Communications Authority of Kenya

In addition, subscription broadcasting service providers consisted of two digital terrestrial television (DTT) providers, four satellite Direct-to-Home (DTH) service providers and six cable television providers.

### 2.4.7.5. Subscription Broadcasting Services

As outlined in table 2.14, subscriptions to broadcasting services increased by 5.5 per cent to 5.99 million from 5.68 million reported in the previous year. DTT accounted for 71.5 per cent of the total subscriptions.



**Table 2.14: Subscriptions to Broadcasting Services**

Categories	FY 2017/18	FY 2018/19	FY 2019/2020	FY 2020/21	FY 2021/22
Digital Terrestrial Television (DTT)	3,809,244	3,620,831	3,813,126	4,056,520	
Television (DTT)					4,283,070
Direct To Home (DTH)	995,012	1,209,799	1,266,989	1,533,745	1,627,498
Cable TV	153,462	171,936	73,417	85,232	78,063
<b>Total</b>	<b>4,957,718</b>	<b>5,002,566</b>	<b>5,153,532</b>	<b>5,675,497</b>	<b>5,988,631</b>

Source: Communications Authority of Kenya

## 2. 5. Tariffs and Competition

The Authority monitors tariffs as well as promotions and special offers to ensure that they conform to regulatory requirements in order to promote a robust ICT market.

### 2.5.1. Fixed and Mobile Tariffs

The average on-net and off-net mobile Pay-As-You-Go (PAYG) rates per minute went up whereas the average fixed network rates per minute dropped as shown in Table 2.15.

**Table 2.15: Average Pay-As-You-Go Rates per Minute**

Mobile Tariffs (in KES)	FY 2017/18	FY 2018/19	FY 2019/2020	FY 2020/21	FY 2021/22
<b>Retail Mobile Comm-unications</b>					
Average On-net PAYG Rate per minute	2.79	3.03	3.03	3.03	3.22
Average Off-net PAYG Rate per minute	3.04	3.23	3.23	3.23	3.82
Average Price per SMS	1.00	1.10	1.10	1.10	1.18
Average Mobile Data Price per MB	4.30	2.26	2.26	2.26	2.60
<b>Retail Fixed Comm-unications*</b>					
Average fixed-fixed	6.00	6.00	6.00	6.00	3.14
Average fixed-mobile	12.00	12.00	12.00	12.00	4.72

\*Based on TKL household non-bundle Rate  
Source: Communications Authority of Kenya

In the FY 2021/22, the Authority received and reviewed a total of 27 and 29 applications for new tariffs, and tariffs revisions respectively. In addition, the Authority processed two applications for tariff withdrawals. Moreover, the Authority received and processed a total of 61 applications for new promotions and special offers.

### 2.5.2. Broadcast Signal Distribution tariffs/Rates

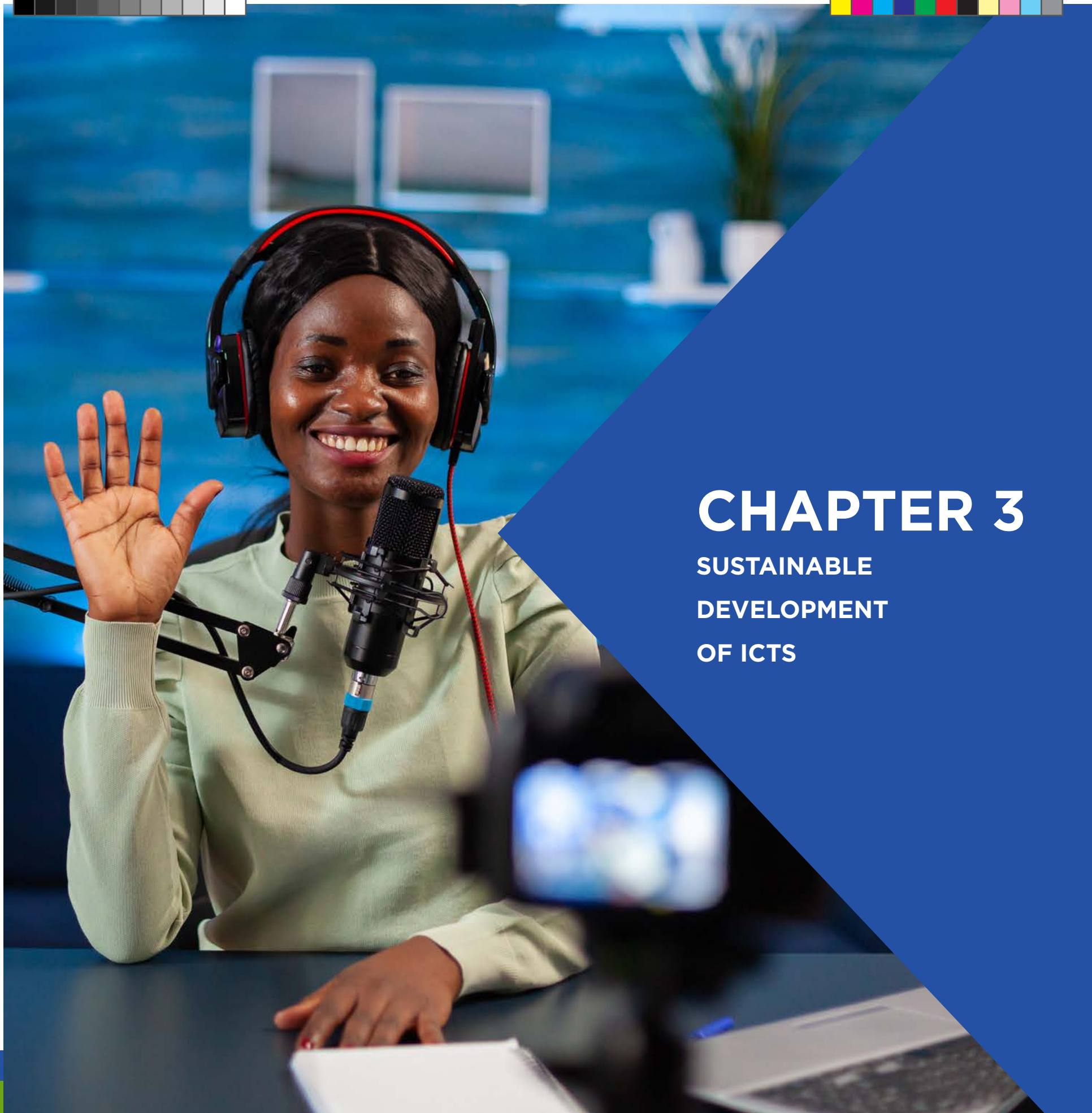
The Authority continued to monitor the implementation of Broadcast Signal Distribution (BSD) charges. Table 2.16 below shows applicable BSD rates during the period.

**Table 2.16: Broadcast Signal Distribution Charges in KES per Site per Mbit/s**

Service	Area	Rate in KES
<b>BSD</b>	Nairobi	93,411
	Other Cities/Towns	39,074
	Rural	34,352
<b>Satellite Up linking - National</b>	National	234,594
<b>Satellite Reception</b>	Nairobi	723
	Other Cities/Towns	904
	Rural	904
<b>Local Insertion (per channel not per Mbit/s)</b>		1,597

Source: Communications Authority of Kenya





# CHAPTER 3

SUSTAINABLE  
DEVELOPMENT  
OF ICTS

### 3. SUSTAINABLE DEVELOPMENT OF ICTS

The Authority regulates resources used to facilitate provision of ICT services. These resources include radio frequency spectrum as well as numbering resources.

#### 3.1. Radio Frequency Spectrum Management

Management of the radio frequency spectrum is a fundamental regulatory activity with the overall objectives of ensuring that electromagnetic spectrum is effectively and efficiently utilized, as well as safeguarding electromagnetic compatibility between different devices and services. This activity is achieved through planning, allocation and assignment of frequencies.

##### 3.1.1. Mobile Cellular Services

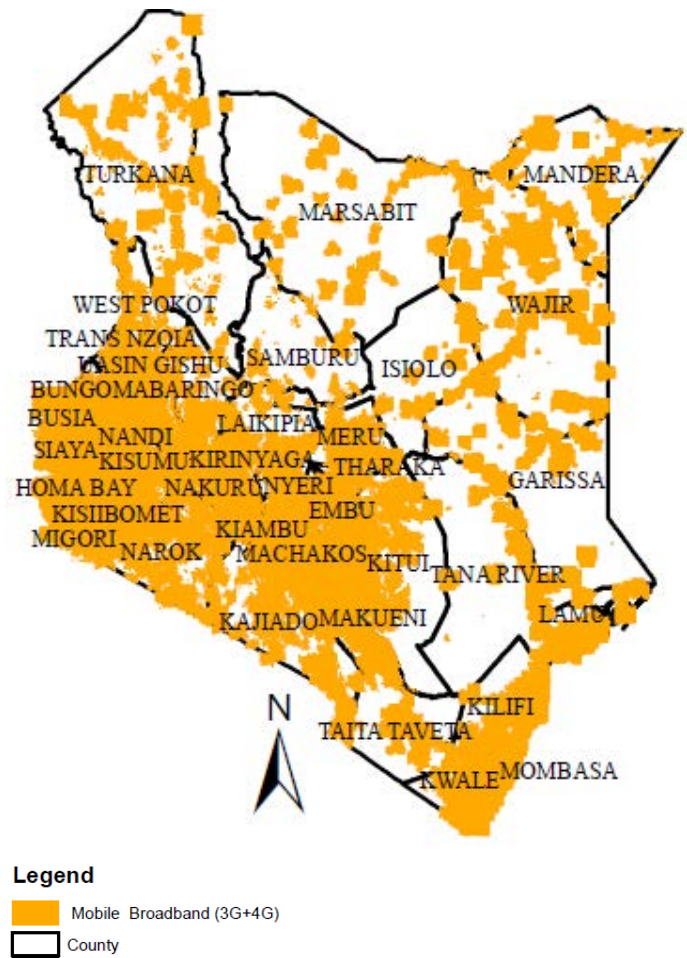
In the course of the year, mobile network operators broadened their networks through the deployment of additional 2G, 3G and 4G transceivers. Additionally, Safaricom PLC deployed 102 5G transceivers on selected sites. The deployment of mobile cellular transceivers for each operator is shown in Table 3.1.

**Table 3.1: Distribution of Mobile Cellular Transceivers by Technology and Operator**

Operator	Technology	FY	FY	FY	FY	FY
		2017/18	2018/19	2019/20	2020/21	2021/22
Total	2G	154,250	161,867	153,318	154,363	171,796
	3G	53,557	66,990	79,847	103,822	104,784
	4G	7,469	17,744	31,914	41,284	57,496
	5G	-	-	-	-	102
Airtel Networks Kenya Ltd	2G	23,060	25,744	27,393	38,008	46,859
	3G	7,752	12,118	13,937	19,564	25,848
	4G	1,260	2,844	3,145	8,134	16,497
Safaricom PLC	2G	115,028	122,422	112,491	105,425	114,648
	3G	37,787	46,642	57,441	76,407	71,132
	4G	6,209	13,263	20,300	31,249	37,680
	5G	-	-	-	-	102
Telkom Kenya Ltd	2G	16,162	13,701	13,434	10,930	10,289
	3G	8,018	8,230	8,469	7,851	7,804
	4G	-	1,637	8,469	1,901	2,329
Jamii Tele-commu-nication Ltd	4G	-	-	-	-	990

Source: Communications Authority of Kenya

The combined 3G and 4G network coverage across the country is as shown in the figure below.



Source: Communications Authority of Kenya

##### 3.1.2. Fixed Wireless Access Systems

The Authority issues frequency assignments within the 1.7, 3.3 and 3.5 GHz bands for operators to deploy network infrastructure and provide connectivity to consumers. There were fewer assignments in these bands due to ongoing efforts to re-farm 3.3GHz and 3.5 GHz bands from fixed wireless access to mobile wireless access for 5G technology. Table 3.2 shows the number of transceivers deployed by operators across the three frequency bands.



**Table 3.2: Number of FWA Deployments per Frequency Band**

Frequency Band	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
1.7 GHz	61	62	61	55	55
3.3 GHz	110	108	115	81	72
3.5 GHz	1,779	497	504	107	111
<b>Total</b>	<b>1,950</b>	<b>667</b>	<b>680</b>	<b>243</b>	<b>238</b>

Source: Communications Authority of Kenya

### 3.1.3. Fixed Terrestrial Links

Fixed links are an essential component of the wireless backhaul infrastructure for connecting the access network to the core network. These links are especially useful where deployment of Optic Fiber networks is neither feasible nor cost-efficient. The Authority assigned a total of 878 links and decommissioned 731, bringing the total number of fixed links installed in the country to 7,396. Table 3.3 shows status of deployment of fixed links in the country.

**Table 3.3: Fixed Links by Frequency Band**

Frequency Band	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5GHz	2,331	2,214	2,035	2,121	2124
6GHz	73	67	52	81	79
7/8GHz	1,469	1,610	1,585	1,604	1768
11 GHz	12	12	12	6	2
13GHz	461	421	385	325	322
15GHz	2,385	2,589	2,436	2,304	2252
18GHz	121	150	169	72	117
23GHz	436	407	317	299	318
38GHz	182	141	123	85	58
70/80GHz	3	9	115	352	356
<b>Total</b>	<b>7,473</b>	<b>7,620</b>	<b>7,229</b>	<b>7,249</b>	<b>7,396</b>

Source: Communications Authority of Kenya

### 3.1.4. Digital Terrestrial Television Broadcasting Frequencies

The number of Digital Terrestrial Television (DTT) frequency assignments to Signal Distributors increased to 358 from 342 the previous year. Table 3.4 below shows the number of DTT frequencies assigned to each of the signal distributors.

**Table 3.4: Cumulative Digital TV Frequency Assignments**

Signal Distributors	FY 2017/2018	FY 2018/2019	FY 2019/20	FY 2020/21	FY 2021/22
Africa Digital Network	38	38	38	38	38
Gotv Kenya	49	49	49	61	61
Lancia Digital Broadcasting	14	14	14	14	14
Pan Africa Network Group	121	125	125	125	125
Signet Signal Distributors	101	101	101	104	120
<b>Total</b>	<b>323</b>	<b>323</b>	<b>327</b>	<b>342</b>	<b>358</b>

Source: Communications Authority of Kenya

#### 3.1.4.1. Broadcasting Signal Network Coverage

Signet Signal Distributor Limited and GoTV Kenya Limited rolled out additional DTT transmitters in Kapenguria and Bomet respectively. This increased the percentage of the population covered by DTT to 92.0 per cent. Figure 3.1 shows the percentage of the population covered by DTT for the past five years.

**Figure 3.1: Cumulative DTT population coverage**

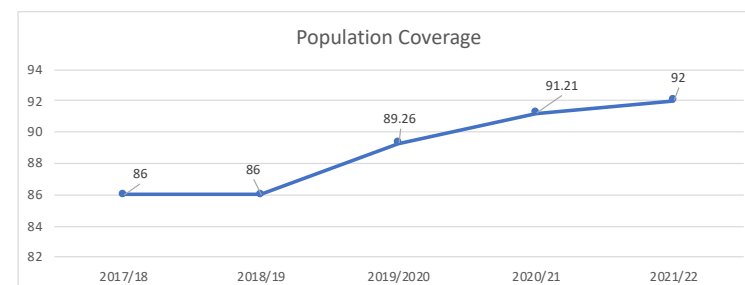






Table 3.5 shows the percentage of population coverage by each BSD for the past five years.

**Table 3.5: DTT Population Coverage by Each BSD**

BSD	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
PANG	55.85	58.37	63.1	63.5
SIGNET	61.21	63.98	76.36	76.79
ADNL	78.63	81.65	83.26	83.99
LANCIA	39.72	39.98	43.27	43.27
GOTV	75.36	78.31	80.39	81.15

Source: Communications Authority of Kenya

### 3.1.5. FM Sound Broadcasting Frequencies

The Authority assigned 79 FM broadcasting frequencies to 65 commercial and 14 community stations as outlined in Table 3.6. We also revoked 33 FM sound broadcasting frequencies assigned to 22 broadcasters following their failure to comply with the stipulated regulatory requirements.

**Table 3. 6: FM Sound Broadcasting Frequencies**

	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Commercial FM Stations	76	17	15	34	65
Community FM Stations	17	87	1	11	14
Total	93	104	16	45	79

Source: Communications Authority of Kenya

### 3.1.6. Private Radio Networks

The Authority licensed 548 VHF stations as outlined in table 3.7. The increasing availability of alternative means of communication such as mobile communication and OTT services has greatly contributed to the decrease in the number of these networks.

**Table 3.7: No. of Private Radio Networks by Frequency Band**

Frequency Band	Station Type	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
VHF	Fixed	10	35	102	59	56
	Mobile / Portable	52	244	671	678	492
HF	Fixed	2	0	8	1	0
	Mobile / Portable	0	3	41	1	0
Total		64	282	822	739	548

Source: Communications Authority of Kenya

### 3.1.7. Maritime Services

The Authority manage the radio communication component of the maritime sector in collaboration with the Kenya Maritime Authority. There were 12 new Maritime Mobile Service Identity assignments and six cancellations bringing the total number of assignments to 58. Further, four additional ship stations were licensed bringing the cumulative total to 41.

### 3.1.8. Other Frequency Spectrum Assignments

The Authority assign frequencies across various bands to facilitate Aeronautical Radio, Amateur Radio, Citizen Band, Radio, Radio Alarm Network and Satellite Systems. The assignments in these bands and their respective purposes are outlined in Table 3.8.



**Table 3.8 Other Frequency Spectrum Assignments**

License Category	Purpose	Authorization	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
<b>Satellite Systems</b>	Provision widespread voice, data and broadcast services	Private Very Small Aperture Terminals (VSAT)	-	5	9	5	-
<b>Aeronautical Radio</b>	Provide ground-to-ground and air-to-ground communication services to aviation operators	Aircraft station licenses	673	579	406	817	657
<b>Amateur Radio</b>	Used for non-commercial exchange of messages, wireless experimentation, private recreation and emergency communication.	Amateur radio operator licenses	19	30	32	24	37
<b>Radio Alarm Network</b>	Wireless system aimed at detecting unauthorized access into a premise.	Alarm units	37,632	11,231	32,203	29,295	30,803
<b>Citizen Band (CB) Radio</b>	Allows short-distance person-to-person bi-directional voice communication, using two-way radios.	Citizen Band authorizations	0	0	0	2	0

Source: Communications Authority of Kenya

### 3.2. Management of Numbering Resources

The Authority assigned a three-digit short code to Kenya Electricity Transmission Company Limited- KETRACO to facilitate the public to report on vandalism of electricity transmission infrastructure. Table 3.9 shows assignments of numbering resources by resource type with corresponding capacity and utilizations.

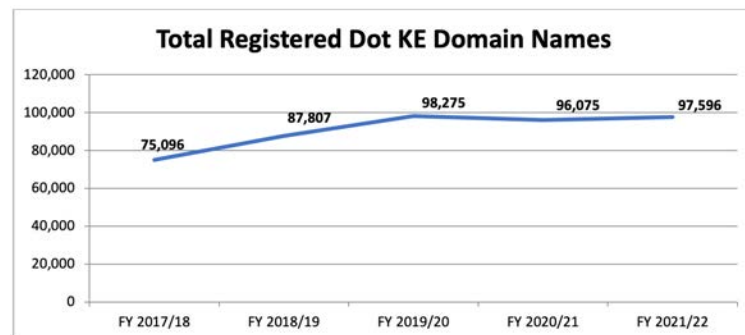
**Table 3.9 Assignments of Numbering Resources**

Resource Type	Available Capacity	30th June 2022	
		Assigned Resources	Per cent Assigned
<b>Mobile National Destination Codes (MNDC)</b>	200,000,000	118,000,000	59.0
<b>International Signaling Point Codes (ISPC)</b>	16	10	62.5
<b>5-Digit Short Codes (SC-5)</b>	80,000	52,404	65.5
<b>4-Digit Short Codes (SC-4)</b>	400	60	15.00
<b>3-Digit Short Codes (SC-3)</b>	20	13	65.0
<b>Fixed Numbers (FN)</b>	182,000,000	7,501,000	4.1
<b>Network Color Codes (NCC)</b>	8	3	37.5
<b>Premium Rate Numbers (PRN)</b>	1,000,000	139,000	13.9
<b>Toll Free Numbers (TFN)</b>	1,000,000	113,000	11.3
<b>National Signaling Point Codes (NSPC)</b>	16,384	532	3.2
<b>Number Portability Routing Codes (NPRC)</b>	100	9	9.0
<b>Machine to Machine</b>	100,000,000,000	10,000,000	0.0

Source: Communications Authority of Kenya

### 3.2.1. Management of Dot KE Domain Country Code Top Level Domain (ccTLD)

The Kenya Network Information Centre (KENIC) is the licensed registry for the Dot KE domain name space. Figure 3.2 illustrates the registered Dot KE domains.



**Figure 3. 2: Registered Dot KE Domains shows the growth in registered domains over the years.**

## 3. 3. Management of Cyber Security

### 3.3.1. Cyber Threat Monitoring

Cybercriminals continue to adopt sophisticated cyber-attack techniques and methodologies to counter existing cyber defence mechanisms resulting in an ever-increasing frequency of attacks. The Authority through the National KE-CIRT/CC detected 444,055,806 cyber threats compared to 158,404,552 in the previous year. This surge was attributed to the significant increase in targeted attacks at Information Technology/Operational Technology (IT/OP) enterprise and industrial operations; increased activity by organized cybercrime groups; adoption of more sophisticated tools by ransomware gangs; increased targeted attacks at critical systems and services; adoption of sophisticated phishing and malware kits by threat actors; increased targeted attacks at cloud-based supported services and unsecured infrastructure; and increased adoption of botnet and Distributed Denial of Service (DDoS) attack techniques by cybercriminals.

To enhance the national cyber readiness and resilience in the face of the increased cyber threats, the Authority enhanced the capabilities of the National KE-CIRT/CC with new technologies to detect and analyze cyber-attacks. In addition, the Authority enhanced the National KE-CIRT/CC Digital Forensics Laboratory (DFL) for purposes of research, as well as facilitating the investigations and prosecution of cybercrime. In addition to these efforts, the Authority continued to support Critical Information Infrastructure Providers (CIIPs) through issuing cyber threat advisories;

capacity building on emerging cyber threat trends; offering technical support to affected organizations; and creating cybersecurity awareness that is geared at enhancing the collective cyber hygiene posture.

Table 3.10 provides a summary of Cyber Threats Detected by the National KE-CIRT/CC.

**Table 3.10: Summary of Cyber Threats Detected by the National KE-CIRT/CC**

Cyber Threats Detected	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Malware	16,306,547	40,893,141	101,651,143	122,524,531	218,639,597
DDOS/Botnet	3,756,334	4,852,022	1,475,537	17,668,736	120,064,763
Web Application Attacks	3,743,638	6,109,184	7,662,793	16,236,587	1,231,271
System Vulnerabilities	6,158	47,913	108,596	1,974,698	104,120,175
<b>Total</b>	<b>23,812,677</b>	<b>51,902,260</b>	<b>110,898,069</b>	<b>158,404,552</b>	<b>444,055,806</b>

Source: Communications Authority of Kenya

### 3.3.2. Cyber Threats Advisories

In response to the detected cyber threat attempts, the Authority issues technical advisories to organizations to mitigate these cyber threats and enhance the collective cyber resilience. The Authority issued 7,973,129 cyber threat advisories as compared to 93,696 in the previous year. The increase in the number of advisories was as a result of the adoption of enhanced cyber threat analysis and response capabilities. Table 3.11 provides a summary of cyber threat advisories issued by the National KE-CIRT/CC.

**Table 3.11: Summary of Cyber Threat Advisories Issued by the National KE-CIRT/CC**

Cyber Threat Advisories	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
Malware	1,848	6,715	7,718	5,531	193,595
DDOS/Botnet	291	868	1,829	1,258	84,087
Web Application Attacks	149	1,735	687	1,420	80,035
System Vulnerabilities	1,881	38,320	60,593	85,487	7,615,412
<b>Total</b>	<b>4,169</b>	<b>47,638</b>	<b>70,827</b>	<b>93,696</b>	<b>7,973,129</b>

Source: Communications Authority of Kenya



SECTION C: ENABLING ENVIRONMENT

This section is aligned to the second Key Result Area of the Authority’s Strategic Plan. It comprises three chapters on ensuring compliance, consumer protection and empowerment as well as communication, stakeholder engagement and partnership.





# CHAPTER 4

## APPROPRIATE REGULATORY ENVIRONMENT



## 4. APPROPRIATE REGULATORY ENVIRONMENT

### 4.1. Ensuring Compliance

The Authority has a mandate to ensure that all licensees comply with relevant laws, regulations, guidelines as well as licence conditions. We do this to ensure that ICT goods and services are available, reliable, affordable, secure and of prescribed standards. In this regard, the Authority carried out the following: telecommunications inspections and certification of installations; monitored quality of service of mobile cellular services; radio communication inspections; postal and courier inspections; frequency monitoring; broadcast content monitoring; and enforcement activities.

#### 4.1.1. Telecommunications Inspections and Certification of Installations

The Authority inspected 166 licensees during the year, of which 43 were found to be compliant. This is shown in table 4.1.

**Table 4.1: Telecommunications Inspections and Certification of Installations**

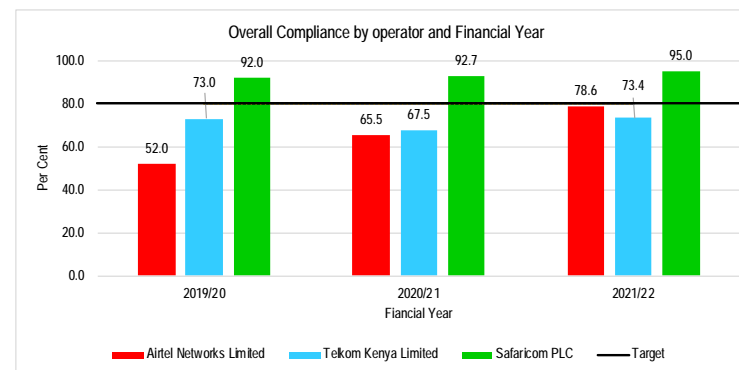
License Category	FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22	
	Inspected	Compliant	Inspected	Compliant	Inspected	Compliant	Inspected	Compliant	Inspected	Compliant
CSP	33	10	20	6	34	16	31	11	31	2
ASP	30	9	50	13	33	16	52	32	62	23
NFP	7	3	10	2	7	4	18	3	18	8
BPO	-	-	3	3	1	1	-	-	1	0
Inter-national System & Services	2	2	-	-	2	1	5	5	0	0
Tele-communications Contractor	7	3	70	19	23	14	20	15	51	10
Dot KE Sub-domain Registrars	1	2	1	1	0	0	3	3	3	0
Certification of Network Installations	7	7	4	4	12	12	0	0	0	0
<b>Total</b>	<b>87</b>	<b>36</b>	<b>158</b>	<b>48</b>	<b>112</b>	<b>64</b>	<b>129</b>	<b>69</b>	<b>166</b>	<b>43</b>

Source: Communications Authority of Kenya

Various regulatory actions were taken against the non-compliant licensees.

### 4.1.2. Quality of Service Monitoring for Mobile Cellular Services

The Authority carried out quality of service monitoring for three mobile network operators across 44 counties. The level of compliance for Airtel Networks Kenya Limited, Safaricom PLC and Telkom Kenya Limited was recorded as 78.6 per cent, 95.0 per cent and 71.4 per cent, respectively against a required threshold of 80.0 per cent. Figure 4.1 provides a comparison of each operator's compliance levels for the last three years.







#### 4.1.3. Postal and Courier Licensees Inspections

We inspected postal courier outlets to assess compliance with various regulatory requirements. A total of 657 postal and courier outlets across the country were inspected, of which 136 were compliant. The non-compliant outlets were formally directed to undertake corrective measures. Table 4.2 presents the number of inspected outlets.

**Table 4.2: Postal and Courier Licensees Inspections**

Category	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Inspected	341	581	358	470	650
Compliant	124	190	147	171	136
<b>Compliance level</b>	<b>36.4</b>	<b>32.7</b>	<b>41.1</b>	<b>36.4</b>	<b>20.9</b>

Source: Communications Authority of Kenya

#### 4.1.4. Inspection of Radio-Communications Installations

The Authority conducts on-site inspections of radio communications installations across the country. This includes: Land mobile services; broadcast transmitters, fixed networks and earth stations. During the year, we conducted 757 on-site inspections as summarized in table 4.3.

**Table 4.3: Number of Radio Communication Installations Inspected**

Service/Year	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/2021	FY 2021/2022
<b>Land Mobile Networks</b>	104	103	2	73	1
<b>Broadcast Transmitters (Radio)</b>	110	217	122	167	220
<b>Broadcast Transmitters (TV)</b>	38	84	37	40	70
<b>Fixed Networks</b>	300	405	421	0	466
<b>Earth Stations</b>	DNA	DNA	13	0	0
<b>Total</b>	<b>552</b>	<b>809</b>	<b>595</b>	<b>280</b>	<b>757</b>

Source: Communications Authority of Kenya

#### 4.1.5. Radio Frequency Monitoring and Interference Resolution

Radio Frequency monitoring is the measurement of the emitted spectrum of a transmitter and/or its antenna pattern, to obtain detailed information on the technical and/or operational characteristics of radio systems. It thus identifies those transmissions that do not conform to requirements, either because the transmission is unlicensed or because of some technical non-compliance of the transmission with license conditions and/or regulations.

The Authority resolved 40 cases out of 51 representing a resolution rate of 71.4 per cent compared to 78.4 per cent in the previous year. Table 4.4 summarizes the number of frequency interference cases.



**Table 4.4: Frequency Interference Cases Reported and Resolved**

Frequency Band/ Service	FY 2017/18		FY 2018/19		FY 2019/20*		FY 2020/21		FY 2021/22	
	Reported	Resolved	Reported	Resolved	Reported	Resolved	Reported	Resolved	Reported	Resolved
VHF, UHF and SHF	47	36	61	47	61	47	44	30	45	35
HF	5	3	0	0	0	0	0	0	0	0
Broadcasting	2	2	6	6	8	8	5	5	6	5
<b>Total</b>	<b>54</b>	<b>41</b>	<b>67</b>	<b>53</b>	<b>69</b>	<b>55</b>	<b>49</b>	<b>35</b>	<b>51</b>	<b>40</b>

Source: Communications Authority of Kenya

\*Revised figures

#### 4.1.6. Broadcast Content Monitoring

The Authority monitors broadcast content to ensure compliance with the broadcast content standards. This is aimed at promoting Kenyan programmes, ensuring broadcast accessibility mechanisms for persons living with audio-visual disability, promoting children's programmes and ensuring broadcasting of appropriate content during the watershed period (5.00 A.M – 10.00 P.M).

A higher level of compliance was noted in meeting the requirements on local content quota, Persons Living with Disabilities (PWDs) accessibility to broadcasting services and limitations on advertisements. This can be attributed to an increasing level of awareness as well as the Authority's enforcement on non-compliance. The level of compliance with various content standards among the 53 stations that were monitored during the year are shown in Table 4.5.

**Table 4. 5: Compliance Level with Broadcast Content Standards (% Compliant)**

Parameter	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Compliance with the minimum 40% local content quota	80	76	92	92	92
Compliance with provision of broadcast accessibility for PWDs - sign language inserts for current affairs, emergency announcements, and events of national importance	93	100	100	100	96
Compliance with limits on advertisement (i.e., airing no more than 10 minutes of advertisement in any 30 minutes programme segment)	96	100	100	100	100
Compliance with the requirement to air at least five (5) hours of children's local programming per week	13.5	11.3	13.4	18.1	19.1
Compliance with standards of good taste and decency by airing only appropriate content during the watershed period	96	100	98	98	96.7

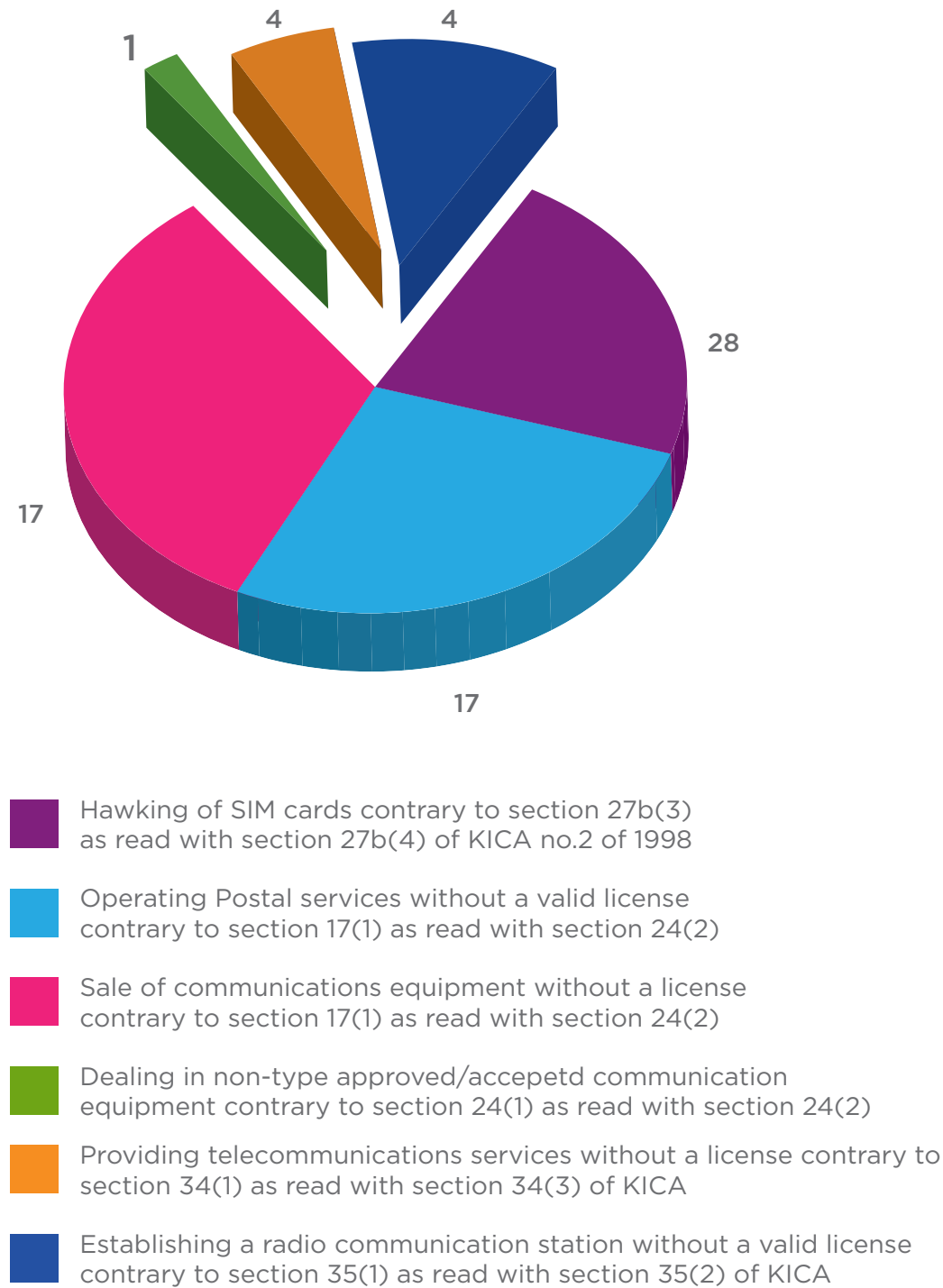
Source: Communications Authority of Kenya

#### 4.1.7. Enforcement

The Authority successfully processed 103 investigations and enforcement activities related to criminal prosecutions, whereby 71 court cases were concluded (8 of which were concluded through alternative prosecution mechanisms), 28 cases are pending before court, and 4 cases are still under investigations.



Figure 4.2 shows the number of concluded cases by offence.



A photograph of a woman wearing a red hijab and two young children, a boy and a girl, looking at a laptop screen. The woman is smiling and pointing at the screen. The boy is also smiling and looking at the screen. The girl is looking at the screen with a focused expression. The laptop is on a wooden surface. The background is a patterned curtain. A large green diagonal shape is overlaid on the right side of the image.

# CHAPTER 5

CONSUMER EMPOWERMENT  
AND PROTECTION



## 5. CONSUMER EMPOWERMENT AND PROTECTION

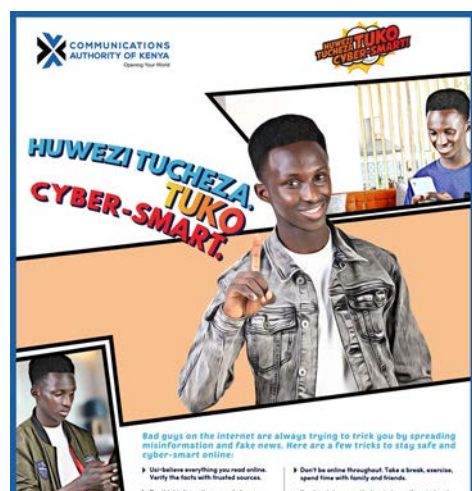
ICT consumers have a right to quality and affordable services as well as choice in the goods and services offered. To protect these rights, the Authority has put in place various mechanisms which include: Provision of information on ICT products and services, charges, terms and conditions; appropriate customer care and complaints handling; safe and secure communication services; child online protection and emergency communication services.

### 5.1. Consumer Empowerment

The Authority launched the second phase of the Child Online Protection (COP) programme and provided advisory information on various consumer issues. This was aimed at empowering consumers with information, knowledge and skills that enable them to make informed decisions on the use of ICTs in the market.

#### 5.1.1. Child Online Protection

The Authority launched the second phase of Child Online Protection Campaign dubbed “*Huwezi Tucheza, Tuko Cyber Smart*” on 30<sup>th</sup> September 2021, presided over by Her Excellency, the First Lady of the Republic of Kenya, Margaret Kenyatta. During the launch, the COP Phase II mascots – the *COP Smart Squad* and the media campaign were unveiled. In this regard, a three-month media campaign to engage and educate children and the youth on online safety issues and the Authority’s role in protecting their ICT consumer rights was undertaken.





**First Lady Margaret Kenyatta** (Seated Centre) flanked by (Seated from Left-Right): CA Chairman, *Sen. Kembi Gitura*, ICT Innovation and Youth Affairs Cabinet Secretary *Mr. Joe Mucheru*, Chief Justice, *Martha Koome*, CA Acting DG, *Ms. Mercy Wanjau*, Principal and students from *Kahuho Road Primary School*.

As part of awareness creation on child online safety, the Authority launched an online game dubbed 'Cyber Soljas' during the 2022 Safer Internet Day. The game was developed for the edutainment of children and youth based on the thematic areas of the COP campaign. The game won an award for the **Most Promising Innovation** during the 2022 Africa Public Service Day. The game can be accessed on the child online protection microsite at the Authority's website <https://www.ca.go.ke/play-cyber-soljas/>.



*Snapshot of the Cyber Soljas Game*

The Authority undertook various outreach activities to create awareness on the role of educators in child online protection and safety, their rights and responsibilities as users of communication services as well as the role of the Authority. This included engagement of teachers during the Kenya Primary Schools Head Teachers Association (KEPSHA) and Kenya Secondary Schools Heads Association (KESSHA) Annual General Conferences.

*This refers to varied complaints that do not fall within the pre-defined categories*

For the third year running, the Authority in partnership with Africa Advanced Level Telecommunications Institute (AFRALTI), continued with the child online protection capacity building training programme for key stakeholders. A total of 298 participants from diverse backgrounds including: Advocates of the High Court; officers from the Department of Children Services, Directorate of Criminal Investigations, Attorney General's Office; Cyber Security professionals; Media practitioners; Academia; Psychologists; Medical Practitioners among others were trained.

### 5.1.2. Consumer Advisory Information

In order to reach a wider audience and empower consumers, the Authority reviewed consumer advisory, information materials and publications. consumer advisory, information materials and publications. These were also disseminated through the website and social media platforms. Further, the Authority disseminated 22,938 consumer advisory information materials on child online safety and protection, online safety and security, postal and courier services, mobile and Internet services as well as various service options in the market. These were disseminated during consumer education outreach activities, corporate events, stakeholder fora, postal offices, *Huduma* Centers, Public Libraries and schools.



## 5.2. Consumer Protection

In order to safeguard the interests of consumers in the ICT Sector, the Authority promoted consumer rights in various fora and continued to handle consumer complaints and enquiries. The fora included celebrations to mark the Customer Service Week in October 2021 and the World Consumer Rights Day celebrations in March 2022. The Authority also worked towards the resolution of various complaints relating to services provided by licensees as well as attending to enquiries on various ICT issues.

### 5.2.1.1. World Consumer Rights Day

The Authority celebrated the World Consumer Rights Day in Mombasa County in March 2022 under the theme 'Fair Digital Finance'. This forum enabled engagement with consumers, licensees and key stakeholders from the region on how to achieve digital financial services that are inclusive, safe, data protected, private and sustainable, as well as interaction on other consumer issues.

As part of the activities to celebrate this day, the Authority hosted a 2-day consumer-centric exhibition and service delivery open day, which attracted over 300 consumers and other stakeholders from ICT industry.



*Panel Discussion during the Customer Service Open Day*

### 5.2.1.2. Customer Service Week

As part of its advocacy initiatives, the Authority hosted licensees and key stakeholders from Kisumu County at its Nyanza Regional Office for the commemoration of the Customer Service Week in October 2021. These celebrations are held annually and are geared towards appreciating and recognizing our customers while disseminating information on the

Authority's mandate as well as their rights and responsibilities as consumers. The event provided a forum for the Authority to engage ICT players and the consumers on industry matters and other consumer issues in line with the theme for the year; "Driving Customer Inclusion".



*CA staff serving customers during the Customer Service Week 2022*

### 5.2.2. Consumer Complaints

The Authority handled 621 complaints out of which 369 were resolved, representing a resolution rate of 59 percent. Table 5.1 shows the complaints received by category and the resolution rate.



Table 5. 1: Number of Consumer Complaints by Category

Category	Number	Resolved	In Progress
Quality of Service (Voice & Data)	90	29	61
Fraudulent/ Nuisance Calls/ SMS	34	13	21
Billing and Unfair Trading Practices	55	28	27
Confidentiality/ Privacy Breaches	24	16	8
Service Provisioning Delays/Failures/ Termination	15	14	1
Frequency Interference, Electromagnetic Radiation, and Defective Terminal Equipment	32	16	16
Misleading Advertisements and Inappropriate Media Content	15	8	7
Unauthorized Charges/ Subscriptions	43	26	17
Criminal use of services/facilities	13	5	8
Delivery Delays - Postal Courier	17	7	10
Service Interruptions	26	15	11
Others	125	97	28
Total	621	369	252

Source: Communications Authority of Kenya

### 5.2.3. Enquiries

The right to access of information is underpinned under the Constitution and Access to Information Act, 2016. The Authority continued to handle various enquiries from the public, receiving a total of 58 enquiries, 40 of which were handled as shown in table 5.2.

Table 5. 2: Number of Enquiries by Category

Category	Number	Resolved	In Progress
Broadcasting	9	3	6
Authority's Services	13	10	3
Safe use of facilities & services	1	0	1
Postal Services	1	1	0
Authority's discharge of its mandate	9	5	4
Others	25	21	4
Total	58	40	18

Source: Communications Authority of Kenya

### 5. 3. Type Approval of ICT Equipment

The Authority guarantees consumers safety as well as the interoperability and integrity of communication networks infrastructure by ensuring that ICT equipment intended for use in the country, meet the prescribed international and national standards. We received and processed, 658 applications for equipment type approval which represented a 27.0 per cent growth from 518 recorded in the previous year as shown in table 5.3.





**Table 5.3: Type Approval /Acceptance Applications Handled**

The Authority also facilitated the processing of 3,392 applications for importation of ICT equipment through the KenTrade's TradeNet platform.

Type of Equipment	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Data Routers	17	24	21	40	133
Gateway/Switches / PABX	26	28	382	133	86
PSTN/IP Server Equipment	17	9	0	45	2
Wireless Terminals / System	6	0	95	30	32
Transceiver-VHF / UHF / HF	6	27	16	6	4
Satellite Terminal	6	24	7	0	10
Alarm Transmitter	1	0	1	0	0
Broadcast Equipment	7	48	38	12	21
VSAT Equipment (Transceiver, BUC, HPA etc)	0	2	2	5	3
Global System for Mobile Communications (GSM) Interface and BTS	0	13	38	15	12
Voice over Internet Protocol Terminal	10	12	28	15	37
Telephone Set	3	0	16	2	2
GSM Mobile Phones	242	259	312	188	258
Fax Machine	8	11	4	9	7
Modem	12	0	3	5	0
DVB T2 receivers (Set-top boxes, IDTV and conditional access modules) *	4	11	-	-	-
DVB-C/IP/SAT receivers (Set-top boxes, IDTV and conditional access modules)	0	0	6	3	8
LTE Terminals	0	0	7	8	38
Microwave Equipment	6	17	15	2	5
<b>Total</b>	<b>371</b>	<b>485</b>	<b>991</b>	<b>518</b>	<b>658</b>
*Category is exempt from type approval/acceptance since the FY 2018/19					

Source: Communications Authority of Kenya



# CHAPTER 6

COMMUNICATION,  
STAKEHOLDER  
ENGAGEMENT AND  
PARTNERSHIP



## 6. COMMUNICATION, STAKEHOLDER ENGAGEMENT AND PARTNERSHIP

The Authority undertook activities geared towards raising its profile and contributing to the development of the ICT sector through communication, stakeholder engagement and partnerships. To this end, CA held public consultative fora, publicized its role as well as undertook corporate social responsibility activities. Further, to enhance Kenya's visibility and protect her interests in the global ICT arena, the Authority participated in international policy meetings, workshops and conferences.

### 6.1. Corporate Communication

The Authority implemented a number of initiatives under its Corporate Communications and Stakeholders Strategy, with the aim of increasing awareness, improving knowledge and building support for its brand and mandate among key stakeholders. In this regard, the Authority undertook the following activities: Establishment of a Crisis Management Team; re-design of Internal Newsletter; initiated the re-design of its website; implementation of USF communication strategy, and holding a media workshop aimed at enhancing the journalists understanding the Authority's mandate.

### 6.2. Stakeholder Engagement

The Authority engaged stakeholders in the ICT sector in the following areas: public consultations; universal access programmes; corporate social responsibility; benchmarking; and international liaison. The stakeholders include local communities, operators, government and international bodies.

#### 6.2.1. Public Consultations

In line with the constitutional requirement and the need to involve the public in decision making processes, the Authority undertook stakeholder consultations on the following: Roadmap for the 5<sup>th</sup> Generation (5G) Mobile Communications; Guidelines for addressing Counterfeit Stolen, and Illegal ICT Devices; Consumer Protection Guidelines and Customer Care Standards; Industry Guidelines on Child Online Protection and Safety; and Frequency Spectrum Transfer Guidelines. Others were: Phase II Voice Infrastructure Project; Guidelines on Type Approval of Mobile Signal Repeaters; Review of the Telecommunications Interconnection Rates; and Review of the Citizens Service Delivery Charter.

#### 6.2.2. Universal Access Programmes

The Authority engaged communities in Marsabit, Lamu, Turkana, Kilifi and Kwale Counties. This was done to create awareness on the objectives of the USF, promote community buy-in and ensure smooth implementation of USF projects. Consequently, a series of engagements were held with a broad range of stakeholders including the National Government Administration Officers (NGAO) and the communities in the beneficiary sub-locations.



*CA Staff at a radio interview on Tana FM, engaging residents of Tana River County on their experiences in the uptake of Universal Service Fund (USF) mobile network connectivity services in the area.*



*A stakeholder engagement exercise with National Government Administration Officers from Lamu County on enhancing community buy-in and security for deployed communications infrastructure in the area.*

#### 6.2.3. Building Capacity in the Industry

To enhance compliance with broadcast content regulatory requirements, the Authority trained 38 broadcasters on the regulatory requirements for broadcast content standards as specified in the Programming Code.

#### 6.2.4. Corporate Social Responsibility

As a responsible corporate citizen, the Authority rehabilitated a community borehole in West Pokot County where the Authority has deployed a Base Transceiver Station (BTS). Other activities supported included: Tree Planting; sponsorship of Kalasha Film Festival; FC Talanta; Annual Journalism Excellence Award; Mater Heart Run; Connected Kenya Summit; Little Sisters of the Poor; Nyumba ya Wazee and Kianda School Peperuka Programme.

### 6.2.5. Benchmarking

The Authority hosted several delegations on benchmarking missions aimed at sharing ICT regulatory information. These included: Ministry of Defence; National Police Service; and Kenya Coast National Polytechnic

### 6.2.6. International Liaison

The Authority is the designated representative of the Kenyan Government in various ICT international organizations. These organizations are: the International Telecommunication Union (ITU); Universal Postal Union (UPU); Commonwealth Telecommunications Organization (CTO); East African Communications Organization (EACO); Pan African Postal Union (PAPU); African Telecommunications Union (ATU); Association of Regulators of Information and Communication for Eastern and Southern Africa (ARICEA); and the African Advanced Level Telecommunications Institute (AFRALTI). As such, it continued to meet the associated financial obligations in the form of subscriptions to these organizations.

In line with its role as the government representative in ICT bodies, the Authority participated in several meetings and conferences organized by various international and regional organizations. The most notable included: the 27<sup>th</sup> UPU Congress, where Kenya was re-elected to the Postal Operations Council and Council of Administration; World Telecommunication Standardization Assembly (WTSA); ITU Council; and World Telecommunication Development Conference (WTDC).

Further, officials from the Authority were elected to serve in various leadership capacities including: Co-Chair of the UPU Committee 1 on Financial and Human Resource Management, Chair of the Pan African Postal Union (PAPU) Administration Council on Policy and Regulations, Vice Chair of the ITU Council Working Group on Strategic and Financial Plan as well as Vice Chair of the Telecommunication Advisory Group.



Kenya was re-elected to the Council of the International Telecommunications Union (ITU) the UN specialised agency for ICT. Kenya garnered 148 votes, the highest on the continent. The Principal Secretary for **Broadcasting and Telecommunications Ms. Esther Koimett (left)** and **CA Director General Ezra Chiloba (centre)** led Kenya's final campaigns at the event.



**CA Director General Ezra Chiloba (centre)**, joins winners of the 2022 Kuza Awards.





### 6. 3. Partnerships

The Authority collaborated with various stakeholders in the delivery of some of its strategic activities. Table 6.1 shows some of the partnerships entered into during the year.

Entity	Purpose of Collaboration	Type of agreement	Achievements
Kenya National Library Services	Cooperation and collaboration in creating a literate society to enhance a knowledge economy	MoU	Supported the installation of a software to help persons with visual impairments access learning materials in 56 National Libraries
International Telecommunications Union	Enhanced National KE-CIRT/CC Kenya (Upgrade of administrative systems)	Administrative Agreement	Enhanced technical capabilities of the National KE-CIRT/CC, including incident response tools.
Competition Authority of Kenya	To look into competition and consumer protection in communication sector	MoU	Exchange of information for purposes of resolving various ex-post competition issues.
Kenya Academy of Sports	Actualizing the potential of talent development to youth employment	Partnership	Sponsorship of FC Talanta. The sponsorship has provided the team of young men aged between 17 to 24 with a source of livelihood from their talent.
Strathmore University	Establish a framework of collaboration for spectrum management research on Dynamic Spectrum Access (DSA) techniques, TV white spaces, 5G, Software Defined Radio (SDR) implementations and cyber security	TCA	Researched and collaborated on the development of a Dynamic Spectrum Access Framework for Authorisation of the use of TV White Spaces
National Cohesion and Integration Commission.	Collaboration in responsible use of media in promotion of national cohesion and integration	MoU	Enhanced response to incidences that are contravention of the NCIC Act such as Hate Speech, incitement to violence, amongst others.
National Police Service (NPS)	Automation of the Administrative procedures, the occurrence book, and the crime management system of the national police service	MoU & TCA	Procured and delivered 143 web cameras and 311 desktop computers
Kenya National Bureau of Statistics	Collaboration in development, review and update of ICT sector data bases	MoU	Exchange of information.
Kenya Film Commission	Promotion and development of local content in Kenya	MoU	Participation in Kalasha Awards hosted by KFC and KUZA Awards by CA



Entity	Purpose of Collaboration	Type of agreement	Achievements
Kenya Film Classification Board	Monitoring and enforcing licensees' compliance with the set media standards on rating and classification. Sharing of Complaints received relating to content classification and rating broadcasters Collaborate in review of legal and regulatory frameworks to deal with new and emerging challenges of content regulation, including classification of online content. Stakeholder Engagement	MoU	Sharing of broadcast logger services Development of draft classification guidelines for FM Radio broadcast programming
Media Council of Kenya	Collaboration for efficient licensing, regulation and monitoring of broadcasters of broadcasters, to ensure adherence to the broadcast related content standards. Joint Stakeholder engagement	MoU	Government-to government agreement on translation and transcription services Sharing of broadcast logger resources Sharing and processing complaints on violation of media standards Review of the broadcasting regulatory instruments i.e. KICA and Broadcasting Regulations

## SECTION D: CAPACITY DEVELOPMENT

This section is aligned to the Authority's third Key Result Area that aims to enhance its capacity to manage challenges, improve and to adapt to changes arising from the rapid telecommunications ICT and industry developments. To strengthen its capacity the Authority aims to implement a Business Process Re-engineering and Automation Programme, develop Human Capacity, enhance performance management and operational excellence, upgrade technologies and tools and establish Research and Development capacity and Programmes.



The background of the page features a close-up of a hand with the index finger pointing upwards. A bright, glowing yellow arrow originates from the bottom left and points towards the tip of the finger. In the background, there is a semi-transparent bar chart with several bars of varying heights in shades of blue and purple. The entire scene is set against a blurred background of what appears to be a person in a white lab coat. A large orange triangle is positioned on the right side of the page, containing the chapter title. At the top left, there is a color calibration bar with various shades of gray. At the top right, there is a color calibration bar with various colors including yellow, cyan, magenta, and black.

# CHAPTER 7

HIGH INSTITUTIONAL  
CAPACITY AND  
PERFORMANCE  
EXCELLENCE



## 7. HIGH INSTITUTIONAL CAPACITY AND PERFORMANCE EXCELLENCE

The Authority recognizes the need to strengthen its institutional capacity as well as attract, maintain and retain a highly skilled and motivated workforce. In view of this, we continued to develop our human capital, provide a conducive work environment, upgrade our systems and internal processes whilst ensuring optimum utilization of our capacity and resources. The Authority also continued with the implementation of the revised human resource management instruments for harmonization of functional areas for greater efficiency.

### 7.1. Human Resource Establishment

The Authority's staff complement stood at 250 with the female to male staff ratio being 47:53 in compliance with the two-thirds constitutional gender requirement. During this period, nine employees exited the service of the Authority.

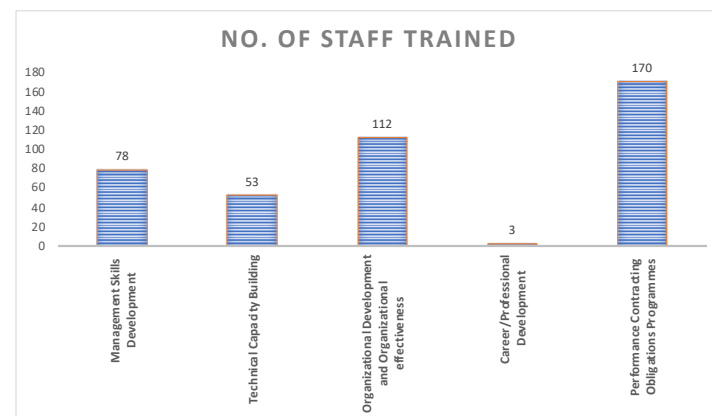
### 7.2. Organizational Learning

The Authority facilitated training programs in five broad areas: Management skills development; Technical capacity building; Organizational development and effectiveness; Career/professional development; and Performance contracting obligations programmes. The main aim of these training programmes was to enhance staff competency for improved service delivery, effective management, prepare staff for career progression and to ensure that they remain in good standing with their respective professional bodies. Table 7.1 outlines the training programmes carried out while figure 7.1 shows the number of staff trained.

Table 7.1: Training Programmes Carried Out During Financial Year 2021-22

Management Skills Development	Technical Capacity Building	Organizational Development and Effectiveness	Career/ Professional Development	Performance Contracting Obligations Programmes
Senior Management Courses	New/ emerging Technologies	Preparation & evaluation of tenders	Continuous professional development programs	Committee Training
Supervisory Management Courses	Postal & E-Commerce Policy Development	Budgeting & budget planning	Post Graduate Diplomas	Committee Training
Mental Health & Stress Management for Managers	Data Management	Project management	Masters Degrees	Alcohol & Drug Abuse Prevention Committee
	5G Mobile Technologies	Contract management		Road Safety Committee
		Stress & financial management		Aids Control Unit
		Defensive driving		Integrity Assurance Committee
		Defensive driving		Gender Mainstreaming
				Disability Mainstreaming
				Environment Sustainability
				Health, Safety and Environment Committee

Source: Communications Authority of Kenya





### 7.3. Knowledge Transfer

To promote knowledge transfer between the industry and academia, we provided internship and industrial attachment opportunities to 109 students (56 female and 53 male) from tertiary institutions.

### 7.4. Research, Innovation and Knowledge Management

#### 7.4.1. Research

The Authority's regulatory decision making takes into consideration new and emerging technologies. Towards this end, we carried out research that informed the development of regulatory frameworks on licensing of trunked radio networks and digital sound broadcasting as well as a 5G strategy.

#### 7.4.2. Innovation

The Authority enhanced the mechanisms for promoting innovation in the ICT sector through the development of regulatory sandboxing framework for new and emerging technologies. The framework provides for a tailored regulatory environment for conducting live tests of innovative products, solutions and services with the potential to deepen and develop ICT markets while ensuring sufficient safeguards are provided for privacy and consumer protection in the deployment of new technologies and services.

#### 7.4.3. Knowledge Management

The Authority has in place a Knowledge Management Framework that seeks to harness and disseminate knowledge resident within the Authority. Towards this, we harvested tacit knowledge from three staff who retired from the Authority. The tacit knowledge informed the importance of soft skills like negotiation and empathy in the work place. The Authority also acquired additional eight books and 12 journal titles to improve accessibility to updated information about developments in the ICTs.

### 7.5. Work Environment

The Authority is committed to ensuring an enabling and conducive work environment. In this regard, we implemented various programs geared towards health and safety, employee wellness, gender and disability mainstreaming, campaign against HIV/AIDS and non-communicable diseases, prevention of alcohol, drug and substance abuse, mitigation against COVID-19, as well as environmental sustainability.

#### 7.5.1. Occupational Health and Safety

In compliance with the Occupational Safety and Health Administration 2007, we implemented the following: Annual dry riser testing; Emergency fire drill; and Installation of fire suppression systems in two remote monitoring stations. The Authority was audited by the Directorate of Occupational Safety and Health Services and found compliant with the HSE, Fire and Other Places of Work Rules.

The Authority continued to undertake various initiatives to mitigate the spread of the virus despite the easing of the Ministry of Health guidelines on COVID-19 pandemic. Some of these initiatives were: facilitating vaccination and testing; temperature testing at the main gate for all visitors and staff, provision of handwashing points and bins for disposal of used masks at various places within the Authority, regular fumigation of the offices, addition of glass partitions to the workstations and use of different ICT platforms to conduct meetings.

#### 7.5.2. Employee Wellness

The Authority recognizes that an employee's health has a direct impact on performance, comfort, concentration, job satisfaction, and morale. Consequently, mental and physical wellbeing of staff is one of the Authority's priorities. During the year, the Authority undertook a survey on screening of non-communicable diseases (ie. Cancer, Blood pressure, Blood sugar & BMI) and HIV for staff and family members with a view to formulating actionable strategies on improving employees wellbeing.

#### 7.5.3. Environmental Sustainability

The National Environmental Management Authority carried out an Environmental Sustainability Audit at the four regional offices to assess compliance with Environmental Management and Coordination Act (EMCA). The Authority was found to be compliant. In line with Government initiative to enhance national forest cover to 10 percent, we planted tree seedlings at the Kitale RSMS Station, Maji Moto Secondary School in Narok, and Meguarra Primary School in Kitale. The Authority also adhered to the environment sustainability policy on use of segregated bins for waste disposal as well as use of energy saving bulbs and maintained e-Waste bins within its premises to facilitate safe disposal of discarded waste electrical and electronics equipment. Section 60 of the Environment Management and Coordination Act, 1999, requires NEMA to seek written comments from lead agencies on Environmental Impact Assessment (EIA) reports submitted to it. In this regard, the Authority reviewed and provided comments on four EIA reports submitted by NEMA. The Authority also continued to promote environmental sustainability amongst licensees by assessing their adoption of various environmental practices such as water harvesting, use of LED lights amongst others.



#### 7.5.4. Gender Mainstreaming

The Authority revised the Gender Mainstreaming Policy to ensure it remains relevant and up to date. Further, we formulated the Work Place Gender Based Violence Policy aimed at providing a safe and productive work environment free from any form of gender-based violence.

We also continued to fulfill the requirements of the two-thirds constitutional gender rule affirmative action aimed at ensuring gender equality and equity. The female to male staff ratio stood at 47:53 which is above the constitutional threshold of two-third gender rule.

#### 7.5.5. Disability Mainstreaming

The Authority as an equal opportunity employer, endeavors to promote inclusivity in all its activities. To this end, we recruited three staff living with disability/ies and contracted 19 Persons living with Disabilities as panelists in our Automated Mail Quality of Service Monitoring System project. The National Council for Persons with Disability carried out a usability and accessibility audit for the Nyanza regional office where the Authority was found to be compliant.

#### 7.5.6. HIV/AIDS and Non-communicable Diseases (NCDs)

The Authority continued to sensitize staff on HIV testing, prevention and stigma as well as create awareness on non-communicable diseases. The Authority placed condoms at strategic points within its premises for ease of access.

#### 7.4.7. Prevention of Alcohol, Drug and Substance Abuse

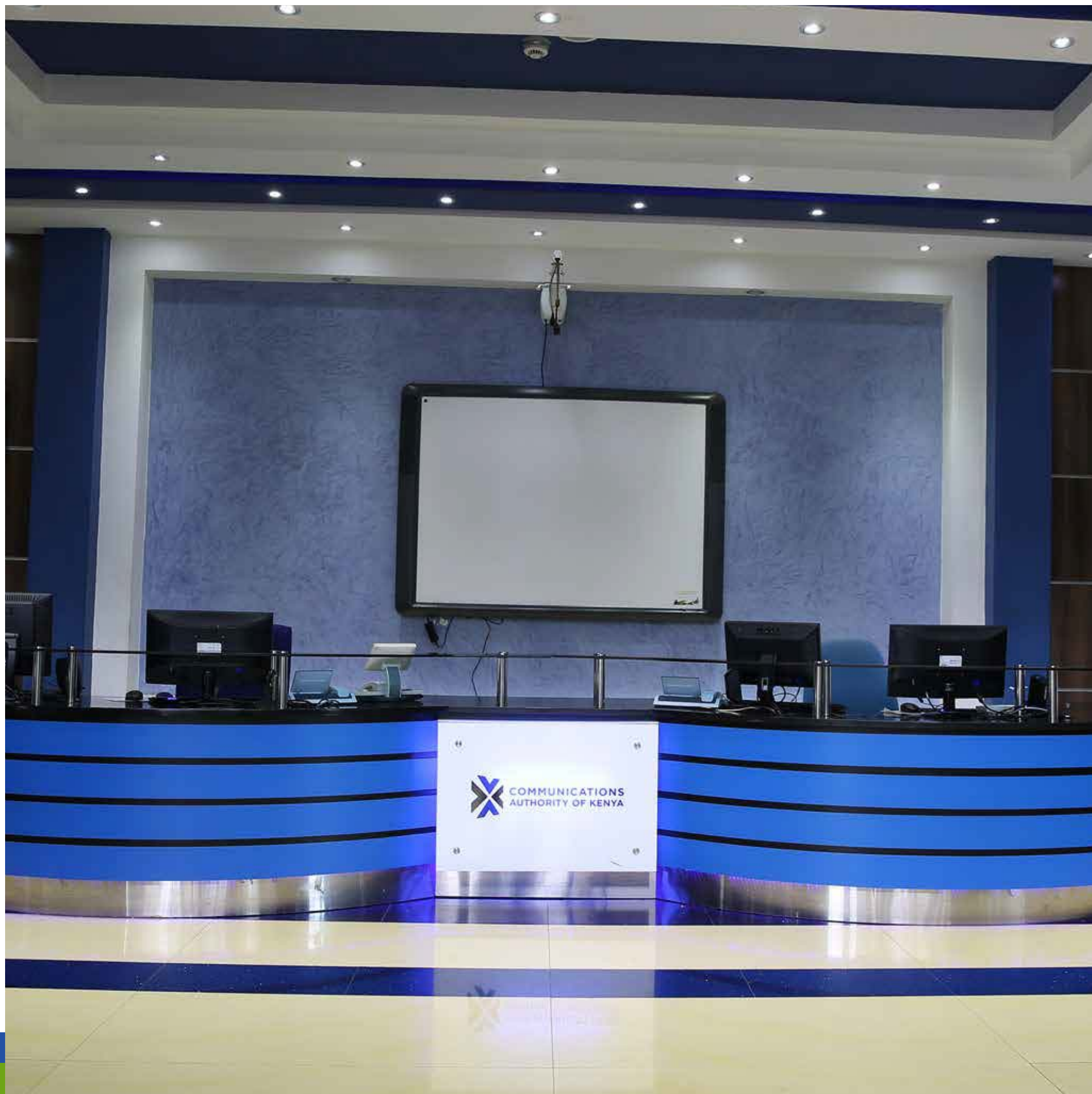
The Authority continued to implement the Employee Assistance Programmes in partnership with various medical facilities that offer psychological, counselling and rehabilitative services. The services are available for staff and their eligible dependents. In addition, staff were provided with educational materials to enhance their parental skills with regard to identification and coping with alcohol and drug abuse within the family unit.

### 7. 6. National Cohesion, Values and Ethics

The Authority holds its “National Patriotic Day” celebrations on quarterly basis, during which staff are sensitized on national values and principles of governance. Further, we continued to implement our Corruption Risk Mitigation Plan that includes amongst others, the requirements for staff to declare conflict of interest during meetings and comply with the Corporate Gifts Policy. All members of staff submitted their wealth declaration to the Public Service Commission in November 2021.

### 7. 7. Automation of Internal Processes

The Authority commenced the process of automating of its licensing management processes and completed requirements gathering and business analysis. This is geared towards enhancing the efficiency of licensing and compliance management processes. Further, we reengineered our customer relationship management processes with a view of automating: Handling of complaints; Handling of enquiries; Events management; Stakeholder consultations and citizen outreach; Visitor management; and ICT helpdesk.







# CHAPTER 8

PROCUREMENT AND  
FINANCIAL STATEMENTS

## 8. PROCUREMENT AND FINANCIAL STATEMENTS

In our procurement and financial management, we adhere to the principles of economy, prudence, accountability, effectiveness, efficiency, equal opportunity, and transparency. This is in line with the; Public Procurement and Asset Disposal Act (PPADA) 2015, Public Finance Management (PFM) Act 2012, as well as the Public Audit Act 2015.

### 8.1. Procurement

We had a total procurement budget of KES 2,871,650,689.00 of which KES 2,598,400,000.00 was procured. The top ten awarded tenders by value are as provided in table 8.1.

Table 8. 1: Top Ten Awarded Tenders by Value

Description	Contract No	Supplier Name	Contract Price (KES)
Contract for supply, delivery Installation and maintenance of Broadcast logger	CA/PROC /070 /140/07/2022	Copy Cat Ltd	1,208,474,344.00
Contract for Provision of Telecommunication Cellular Mobile Network Infrastructure and Services in the Un-served and Underserved areas of Kenya – Phase 3	CA/PROC /070/ 139/07/2022	ATC Kenya Operations Ltd	883,257,235.24
Supply, Delivery, Implementation and Maintenance of a Licensing Management System and Associated Hardware	CA/PROC /070 /055/03/2022	Copy Cat Ltd	649,609,922.00
Contract for Provision of Internet Connectivity and Related Services at CA Centre and Four Regional Offices	CA/LS/ 071 /021/2021	Lauser Tech	137,177,426.00
Supply, Delivery, Configuration, Testing, Commissioning, Implementation and Support of a Root Certificate Authority (RCA) for the National Public Key Infrastructure (NPKI)	CA/LS/ 071 /020/2021	COM 21	89,400,000.00
Supply, delivery, installation, configuration and maintenance of specialized ICT equipment and associated hardware	CA/PROC/ 070/025 /01/2022	Cyber Security Africa Ltd	74,836,996.00
Contract for Supply, Delivery, Installation and Maintenance of broadcast loggers at CA Centre and Mazeras	CA/LS/ 071/028 /2021	COM21 Ltd	77,450,000.00
Contract for The Provision of Consultancy Service for National Roaming, Telecommunications Tower Sharing and Termination Rates Network Cost Study	CA/PROC/ 070/056 /03/2022	Tilil Technologies Ltd	68,882,262.00
Contract for Supply, Delivery, Implementation and Maintenance of a Number Management System (NMS) and The Associated Hardware	CA/PROC/ 070/052/ 03/2022	BSK Global	49,849,000.00
Contract for Provision of Telecommunication Cellular Mobile Network Infrastructure and Services in the Un-served and Underserved areas of Kenya – Phase 3	CA/PROC/ 070/138/ 07/2022	Atlas Towers Kenya Ltd	44,740,831.40

Source: Communications Authority of Kenya



## 8.2. Financial Statements

The Authority's financial statements for the period ended 30th June 2021 were submitted to the Office of the Auditor General within the statutory timeline of 30th September 2021. The summary of the Authority's audited financial statement for the period ended 30th June 2021 is provided below.

### 8.2.1. Statement of Directors' Responsibilities

Public Finance Management Act 212 Section 84 (O) of the Kenya Information and Communications Act of 1998 (CAP 411A, and the Public Audit Act 2015, require the Directors to prepare financial statements in respect of the Authority, which give a true and fair view of the state of affairs of the Authority at the end of the financial year/period. The Directors are also required to ensure that the Authority keeps proper accounting records which disclose with reasonable accuracy the operations of the Authority. The Directors are also responsible for safeguarding the assets and funds of the Authority.

The Directors are responsible for the preparation and presentation of the Authority's financial statements, which give a true and fair view of the state of affairs of the Authority as the end of the financial year (period) ended on June 30, 2021. This responsibility includes (i) maintaining adequate financial management arrangements and ensuring that these continue to be effective throughout the reporting period; ii) maintaining proper accounting records, which disclose with reasonable accuracy at any time the financial position of the Authority; iii) designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of the financial statements, and ensuring that they are free from material misstatements, whether due to error or fraud; iv) safeguarding the assets of the Authority; v) selecting and applying appropriate accounting policies; and vi) making accounting estimates that are reasonable in the circumstances.

The Directors accept responsibility for the Authority's financial statements, which have been prepared using appropriate accounting policies supported and prudent judgements and estimates, in conformity with International Public Sector Accounting Standards (IPSAS), and in the manner required by the KICA Act, PFM Act, and the Public Audit Act. The Directors are of the opinion that the Authority financial statements give a true and fair view of the state of Authority's transactions during the financial year ended June 30, 2021, and of the Authority's financial position as at the date. The Directors further confirm the completeness of the accounting records maintained for the Authority, which have been relied upon in the preparation of the Authority's financial statements as well as the adequacy of the systems of internal financial control.

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

#### Approval of the financial statements

The Authority's financial statements were approved by the Board on 29th September 2021 and signed on its behalf by:

Mercy Wanjau, MBS  
**Ag. Director General**

Sen. Kembi Gitura, MGH  
**Chairman**



## 8.2.2. Statement of Financial Performance for the Year Ended 30th June 2021

		2021	2020
	Note	Kshs'000	Kshs'000
<b>Revenue from non-exchange transactions</b>			
License Fees	6	9,386,040	9,080,424
<b>Revenue from exchange transactions</b>			
Finance income	7	461,445	506,286
Rental Revenue from facilities	8	3,868	3,883
Other Income	9	2,041	13,269
		<b>467,353</b>	<b>523,438</b>
<b>Total Revenue</b>		<b>9,853,393</b>	<b>9,603,861</b>
<b>Expenses</b>			
Employee costs	10	1,327,342	1,295,482
Remuneration of Directors	11	20,244	28,646
Depreciation and Amortization Expense	12	509,011	439,930
Repairs and maintenance	13	356,399	149,026
General Expenses	14	3,243,540	1,519,145
<b>Total Expenses</b>		<b>5,456,537</b>	<b>3,432,230</b>
<b>Other gains /(losses)</b>			
Gain on sale of assets	16	3,744	0
Gain (Loss) of foreign exchange transactions	17	(10,861)	(2,110)
Additional Impairment General Provision Allowance	15	(245,599)	(619,373)
Additional Impairment Specific Provision Allowance	15	(779,365)	(780,308)
<b>Surplus for the year</b>		<b>3,364,815</b>	<b>4,769,841</b>
<b>Remission to National Treasury</b>	<b>26</b>	<b>3,028,334</b>	<b>4,292, 857</b>
<b>Net Surplus of the year</b>		<b>336,482</b>	<b>476,984</b>

The notes set out on pages 1 to 31 form an integral part of these Financial Statements.

## 8.2.3. Sources of Revenue

In FY 2020/2021, the Authority earned revenue of KES 9.853 billion which was an increase from KES 9.603 billion earned the previous year. This was earned from; License fees KES 9.386 billion, finance income KES 461.445 million and rental from facilities KES 3.868 million and other income 2.041 million.

## 8.2.4. Expenditure

During FY 2020/2021 the total operating expenditure of the Authority was KES 5.456 billion.

## 8.2.5. Surplus Funds

The Authority made a provision of 90.0 per cent of the surplus for remittance to the National Treasury in the FY 2020/2021 of KES.3.028 billion.



## 8.2.6. Statements of Financial Position as at 30th June 2021

		2021	2020
	Note	Kshs'000	Kshs'000
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and cash equivalents	18	7,866,780	7,641,600
Receivables from non-exchange transactions	19	300,520	310,284
Receivables from exchange transactions	20	612,658	585,883
<b>Total Current Assets</b>		<b>8,779,958</b>	<b>8,547,767</b>
<b>Non-Current Assets</b>			
Property, plant and equipment	21	18,924,432	19,113,011
Intangible Assets	22	554,793	695,367
<b>Total Non-Current Assets</b>		<b>19,479,225</b>	<b>19,808,379</b>
<b>TOTAL ASSETS</b>		<b>28,259,183</b>	<b>28,356,146</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Provisional Dividend/ Remittance Surplus	23	3,028,334	2,679,702
Trade and other Payable from exchange transactions	24	1,336,993	2,677,986
Payments received in advance	25	1,272,152	600,655
<b>Total Current Liabilities</b>		<b>5,637,479</b>	<b>5,958,343</b>
<b>TOTAL LIABILITIES</b>		<b>5,637,479</b>	<b>5,958,343</b>
<b>Net Assets</b>		<b>22,621,704</b>	<b>22,397,803</b>
Owners Equity	26	741,965	741,965
Accumulated Surplus	26	5,863,418	5,639,516
Revaluation Reserve	27	16,016,322	16,016,322
<b>Total Net assets and Liabilities</b>		<b>22,621,704</b>	<b>22,397,803</b>

### 8.2.6.1. Assets

The Authority's assets as at 30th June 2021 were KES 28.259 billion which comprised of property plant & equipment of KES 18.924 billion, cash and cash equivalents of KES 7.866 billion, receivables from non-exchange transactions KES 300.520 million, receivables from exchange transactions KES 612.658 million, property, and intangible assets KES 554.793 million.

### 8.2.6.2. Liabilities

As at 30th June 2021 the Authority's liabilities were KES 5.637 billion. This comprised provisional remittance to The National Treasury of KES 3.028 billion; Trade and other payables from exchange transactions of KES 1.336 billion; and payments received in advance of KES 1.272 billion.

The Financial Statements set on pages 1 to 31 were signed on behalf of the Board of Directors by:

#### Ag. Director General

Mercy Wanjau, MBS

Date: 29th September 2021



#### Head of Finance

Joseph M Kimanga

ICPAK Member No. 4341

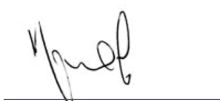
Date: 29th September 2021



#### Chairman of the Board

Sen. Kembi Gitura, MGH

Date: 29th September 2021



### 8.2.7. Statement of Changes in Net Assets for the Year Ended 30th June 2021

		Owners Equity	Revaluation Reserve	Accumulated Surplus	Total Reserves
	Note	Kshs'000	Kshs'000	Kshs'000	Kshs'000
<b>At July 1, 2019</b>		741,965	16,016,322	5,177,816	21,936,103
Surplus for the year		-	-	4,769,841	4,769,841
Remittance to Treasury- Provision	23	-	-	(4,292,857)	(4,292,857)
Prior year adjustments	26			(15,284)	(15,284)
Additional Remittance to Treasury- Paid		-	-	-	-
Revaluation Surplus	27	-	-	-	-
<b>At 30 June 2020</b>		<b>741,965</b>	<b>16,016,322</b>	<b>5,639,516</b>	<b>22,39,83</b>
<b>At July 1, 2020</b>		<b>741,965</b>	<b>16,016,322</b>	<b>5,639,516</b>	<b>22,397,803</b>
Surplus for the year		-	-	3,363,815	3,364,815
Reversal of impairment General Provision Allowance	15			-	-
Remittance to Treasury- Provision	23	-	-	(3,028,334)	(3,028,334)
Prior year adjustments	26			9112,580)	(112.580)
Additional Remittance to Treasury - Paid		-	-	-	-
Revaluation Surplus	27	-	-	-	-
<b>At 30 June 2021</b>		<b>741,965</b>	<b>16,016,322</b>	<b>5,863,418</b>	<b>22,621,704</b>

### 8.2.8. Statement of Cash Flows for the Year Ended 30th June 2021

		2021	2020
	Note	Kshs'000	Kshs'000
<b>OPERATING ACTIVITIES</b>			
<b>Cash generated from (used in) Operations</b>	<b>28</b>	<b>4,229,922</b>	<b>7,674,722</b>
Remittance to the National Treasury		(4,294,200)	(10,200,000)
Directors fees		0	0
<b>Net Cash generated from (used in) Operations</b>		<b>(64,278)</b>	<b>(2,525,278)</b>
<b>INVESTING ACTIVITIES</b>			
Purchase of property, plant and equipment and Intangible Assets	21&22	(175,732)	(297,242)
Proceeds from disposal of assets	16	4,744	0
Interest received	7	461,445	463,439
<b>Net cash generated from (used in) Investing activities</b>		<b>289,457</b>	<b>166,197</b>
<b>INCREASED/(DECREASE) IN CASH AND CASH EQUIVALENTS</b>		<b>225,179</b>	<b>(2,359,081)</b>
<b>CASH AND CASH EQUIPMENTS AT BEGINNING OF YEAR</b>		<b>7,641,600</b>	<b>10,000,681</b>
<b>CASH AND CASH EQUIVALENT AT END OF YEAR</b>	<b>18</b>	<b>7,866,780</b>	<b>7,641,600</b>

The cash flow statement is to be read in conjunction with the financial statements as set out on pages 6 to 31.



ANNEX 1: KEY STAKEHOLDERS		
Stakeholder	Nature Of Engagement	Output
Ministries, Government Departments and Agencies	<ul style="list-style-type: none"><li>Policy making and implementation</li><li>Statutory approvals</li><li>Collaboration on cross-cutting issues</li></ul>	Enactment of regulations
		Policies and guidelines on the 5th Generation (5G) Mobile Communications;
		Guidelines for addressing Counterfeit Stolen, and Illegal ICT Devices;
		Consumer Protection Guidelines and Customer Care Standards;
		Industry Guidelines on Child Online Protection and Safety;
		Frequency Spectrum Transfer Guidelines.
		Statutory approvals for Phase II Voice Infrastructure Project;
		Guidelines on Type Approval of Mobile Signal Repeaters;
		Reviewed Telecommunications Interconnection Rates;
		Reviewed the Authority's Citizens Service Delivery Charter.
		Reviewed Telecommunications Interconnection Rates;
		Reviewed the Authority's Citizens Service Delivery Charter.
National administration and County governments	<ul style="list-style-type: none"><li>Implementation and sustainability of USF projects - Community buy-in</li><li>Implementation of CSR.</li><li>Consumer empowerment - community mobilization</li><li>Provision of security during field inspections/exercises.</li></ul>	Collaborated with National Government Administration Officers during the USF community sensitization in Coast Region (Kwale, Kilifi, Tana River and Lamu), North Rift Region (Turkana, Samburu and West Pokot) and Eastern Region (Isiolo, Marsabit and Kitui)
		Collaborated with National Government Administration Officers in West Pokot County on the launch of Phase II Voice Infrastructure Project;
		Collaborated with National Government Administration Officers in Mombasa County during the celebration of World Consumer Rights day.
		Undertook enforcement activities with the support of the national government administration officers
Licensees	<ul style="list-style-type: none"><li>Provision of end user services</li><li>Consultation in the development of regulatory instruments</li><li>Consumer empowerment</li><li>Implementation and sustainability of USF projects</li></ul>	Comments on the proposed 5th Generation (5G) mobile communications roadmap;
		Comments on the proposed guidelines for addressing Counterfeit Stolen, and Illegal ICT Devices;
		Comments on the proposed Guidelines and standards on Consumer Protection and Customer Care;
		Comments on the proposed Industry Guidelines on Child Online Protection and Safety;
		Comments on the proposed Frequency Spectrum Transfer Guidelines.
		Comments on the proposed USF strategic plan 2022-26
		Deployment of USF projects
		Collaborated with licensees during the celebration of World Consumer Rights day.



Academia, research institutions and think tanks	<ul style="list-style-type: none"><li>• Research collaboration in areas of common interest</li><li>• Collaborated with the media during the celebration of World Consumer Rights day</li><li>• Capacity Building and Transfer of Knowledge</li></ul>	Renewed and operationalized a Technical Collaboration Agreement (TCA) with Strathmore University. Based on this TCA, the Authority carried out research on dynamic spectrum access (DSA) and developed a TV whitespaces licensing framework, a trunked radio licensing framework as well as participated in the ITU research initiative on connect to recover to address last mile connectivity challenges.
		Collaborated with Stockholm University on the SPIDER Program to develop a Regulatory Sandbox for emerging technologies.
Media	<ul style="list-style-type: none"><li>• Public awareness</li><li>• Consumer empowerment</li><li>• Publicity of the Authority's mandate</li></ul>	Collaborated with the media during the celebration of World Consumer Rights day
		Engaged media for publicity during various activities held by the Authority, including, USF community sensitization exercise, SIM card validation, World Consumer Rights Day and Safer Internet Day among others
Community Based Organizations	<ul style="list-style-type: none"><li>• Dissemination of Information to ICT consumers</li><li>• Consumer empowerment</li></ul>	Engaged the Community Based Organizations during the development of guidelines and regulations on Consumer Protection Guidelines and Customer Care Standards, Industry Guidelines on Child Online Protection and Safety and Review of the Citizens Service Delivery Charter.
		Engaged Consumer Downtown Association during the World Consumer Rights Day to sensitize the consumers on their rights

Source: Communications Authority of Kenya





Reporting Cybercrime and Child Online Protection Incidents in Kenya

Cybercrime and Child Online Protection Incidents can be reported to the National KE-CIRT/CC through any of the following means:

- The Authority's website, <http://www.ca.go.ke> under the "Information Security" section.
- The National KE-CIRT/CC website, <http://www.ke-cirt.go.ke> under the "Report an Incident" section;

Send an email to: [incidents@ke-cirt.go.ke](mailto:incidents@ke-cirt.go.ke);

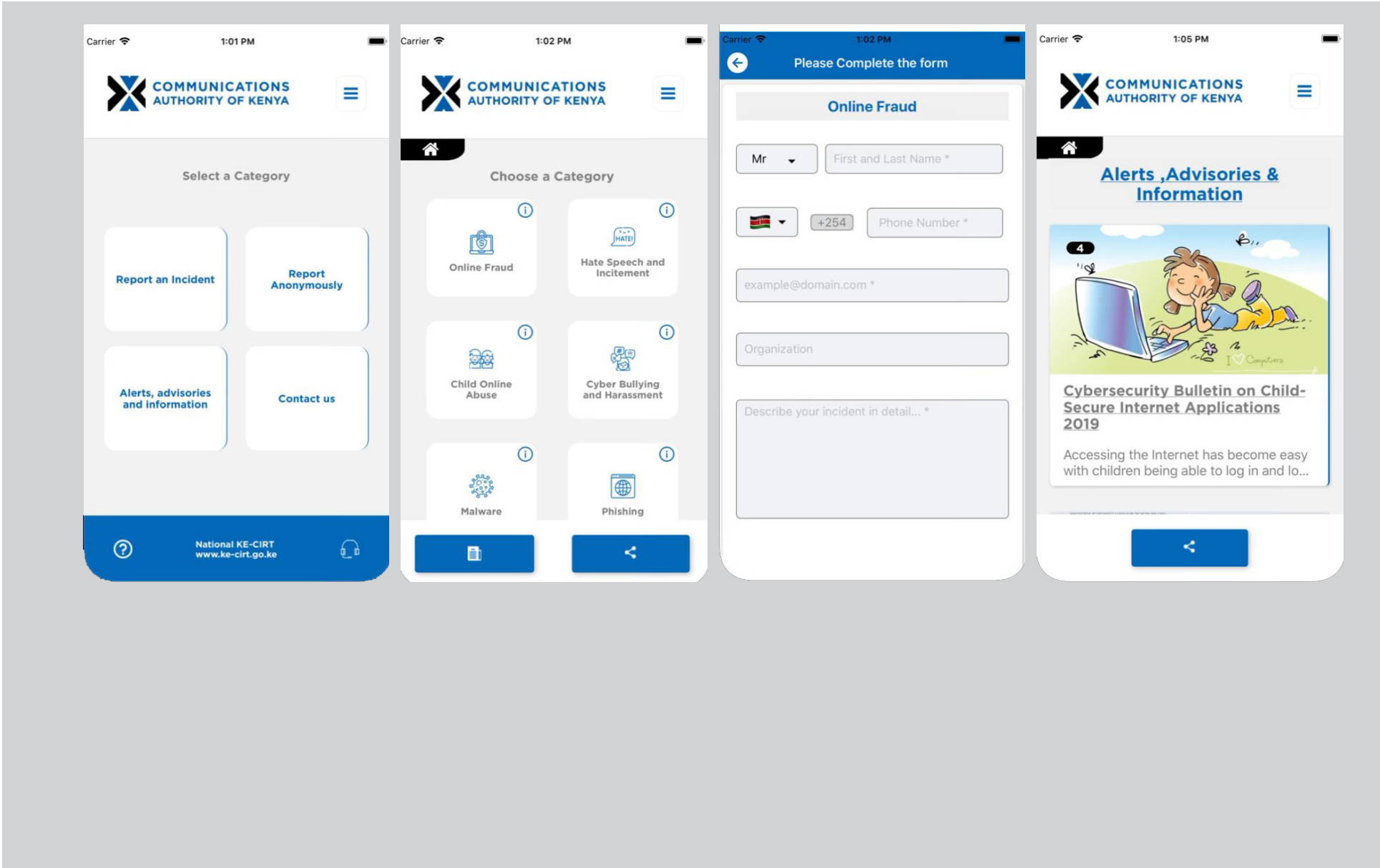
Via a letter addressed to:  
The Director-General

Communications Authority of Kenya (CA) CA Centre, Waiyaki Way

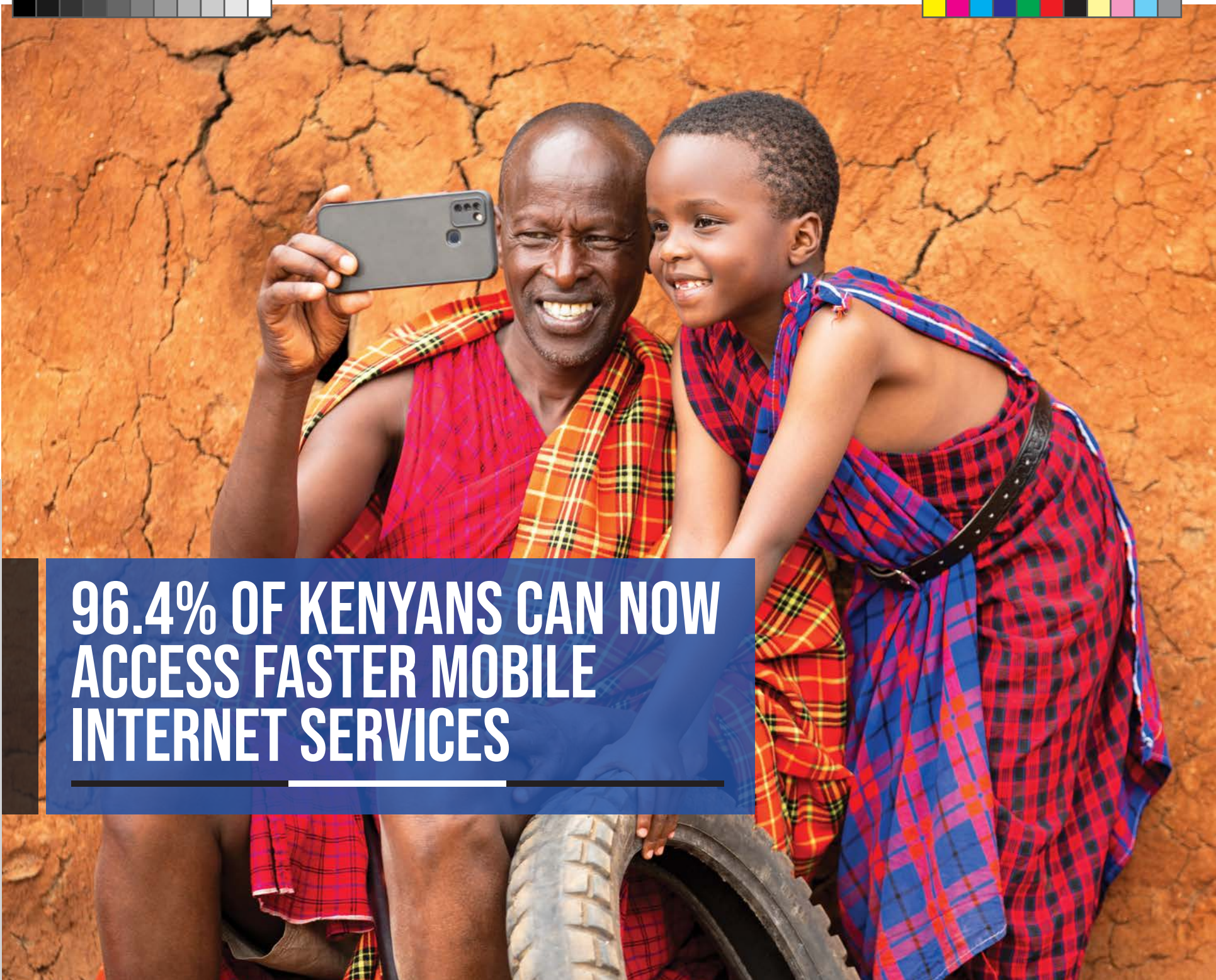
P.O. Box 14448 NAIROBI 00800

Visit the Authority's National KE-CIRT/CC located at the CA Centre along Waiyaki Way.

Download the KE-CIRT App on Google Playstore and Apple App Store for reporting cyber-incidences







# 96.4% OF KENYANS CAN NOW ACCESS FASTER MOBILE INTERNET SERVICES

Through the Universal Service Fund, the Communications Authority of Kenya (CA) facilitates access to diverse communication services in every part of the country, so that no one is left behind.

For more information visit [www.ca.go.ke](http://www.ca.go.ke)



