

VISION

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

PURPOSE

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

BRAND PROMISE

Opening your world

CORPORATE VALUES

Integrity

Transparency

Diligence

Results-focus

Accountability and

Teamwork

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ABBREVIATIONS AND ACRONYMS

ABBREVIATIONS AND ACKONYMS				
BP0	Business Process Outsourcing			
DG	Director General			
KRA	Key Result Area			
RBM	Results Based Management			
MDA	Ministries, Department and Agencies			
KICA	Kenya Information and Communications Act			
KE-CIRT/CC	Kenya Computer Incidence Response Coordination Centre			
PwD	Persons with Disabilities			
QMS	Quality of Service Monitoring			
PDA	Personal Digital Assistant			
USF	Universal Access Fund			
CSR	Corporate Social Responsibility			
GDP	Gross Domestic Product			
SWOT	Strengths, Weaknesses, Opportunities and Threats			
ICT	Information, Communication and Technology			
QOS	Quality of Service			
US0	Universal Service Obligation			
DNSSEC	Domain Name System Security Extension			
PKI	Public Key Infrastructure			
GIS	Geographical Information System			
RSMS	Radio Spectrum Monitoring System			
R&D	Research and Design			
MSR	Mission Status Review			

Definition of Terms

DEFINITION OF TERMS

TERMS	DEFINITION
Access	Availability of reliable, affordable, quality and secure ICT Services
Facilitation	The act of making (an action or process) easier
Mission Statement	An internalized understanding of what an organisation stands for
Dashboard	The dashboard is a real time web-enabled tool that helps the organization track its performance against previously set and agreed intentions.
ICT Services	Information and Communication Technology including postal and courier services
Mission Analysis	Cascade workshops to operationalize the annual strategic plan in view of the corporate strategy and turn it into executable actions and extra-ordinary performance.
Mission Status Review	Meetings that are held on a periodic basis (most basic being monthly) to keep abreast with the drivers of performance and drive insights to course correct deviation from target.
Situational Analysis	Critical assessment of the environment in which CCK operates. It contains four elements: external influences and trends; strengths and weaknesses and challenges
Vision	Organisation's statement of intent
Purpose	Mission of Organisation
Brand Promise	Unique value proposition to customers

Chairman's Foreword





CHAIRMAN'S FOREWORD

On behalf of the Board and Management of the Communications Commission of Kenya (CCK), I am happy to present CCK's 3rd Strategic Plan for the period 2013-18.

This Strategic Plan is as a result of critical synthesis and integration of the mandate of CCK as envisaged in the Constitution 2010, the Kenya Information and Communications Act (KICA), Cap 411A, Vision 2030, the National ICT Policy ICT Master Plan and National Government agenda.

In the spirit of the Vision 2030 whose core objective is to transform Kenya into a leading information and knowledge economic hub in the region, CCK has incorporated this in its new vision, "Facilitating access to and use of Information and Communication services by all in Kenya by 2018".

The Plan identifies the measures of success that will support the delivery of our mission. Further, the Plan identifies strategic objectives, assesses CCK's strengths, weaknesses, threats and opportunities, culminating into a series of strategic activities and numerous detailed tasks that we believe will help us in realizing our vision and achieving our strategic goals.

The four key pillars that will transform CCK from a sector regulator into a facilitator include: Providing an enabling environment for ICT development, enhancing and modernizing CCK's institutional capacity, facilitating sector infrastructure and service development and promoting sector market development.

For any strategic plan to be successfully implemented, senior management and other cadre of staff need to fully embrace it and commit themselves to its attainment. I therefore call on all senior managers and other members of staff to work together to effectively manage the constantly evolving ICT national landscape so that this Plan can be realized.

As with any plan, we are fully alive to the fact that challenges will arise. However, I am confident that with this solid plan, we shall effectively tackle any issues that may arise and thus make a visible contribution to the broader MTP II of Vision 2030.

As a Board, we are fully committed to implementing the clearly articulated goals in this Plan. We undertake to work with all stakeholders including the Ministry of ICT to continuously develop appropriate policies and review of the regulatory regime to meet the needs of all Kenyans. It is this commitment that underpins our new Purpose:- "facilitate the transformation of lives through progressive regulation of the Information and Communication Technology sector".

I wish to take this opportunity to commend all those who gave their invaluable input and more specifically members of staff of CCK who worked tirelessly to produce this Strategic Plan.

Ngene B. Gituku

Chairman, Board of Directors

Director General's Preamble



DIRECTOR GENERAL'S PREAMBLE

I am pleased to present the 3rd Strategic Plan of CCK for the period 2013–2018.

This Strategic Plan is the culmination of an all-inclusive consultative process that involved our staff and other stakeholders. The Plan honours the past, challenges the present and creates the future for CCK. Involvement of stakeholders in its development has helped refine and bring into a sharper focus CCK's role in providing a clear vision, purpose and brand promise that will be the basis of developing a road map to achieve its Key Result Areas and strategic goals.

The Plan articulates a comprehensive roadmap for the next five years, and outlines the short and medium strategies for CCK. I urge staff to study and internalize the Plan so that we can deliver on the targets set out therein. Going forward, our corporate and individual Performance Contracts as well as resource allocation shall be based on this Plan. To our licensees and other stakeholders, this Plan will serve as a yardstick for evaluating our performance as the ICT Sector regulator.

Implementation of this strategic plan is expected to stimulate further development of the ICT sector and spur uptake of communications services in the country. This is important in the attainment of our vision– 'Access to and use of information and communications services by all in Kenya by 2018'.

In developing this Plan, CCK considered a number of important documents to ensure that the plan is anchored on the prevailing government policies, national development plans and the law. The most notable were the country's development blueprint - Vision 2030, the National ICT Sector Guidelines and the Constitution of Kenya. We shall endeavour to ensure that this Strategic Plan is aligned with any policy and legislative changes that may occur within the planning period.

This Plan takes cognisance of both the internal and external environment that CCK operates in. It also incorporated contributions from relevant stakeholders and took into consideration the lessons learnt from the 2nd Strategic Plan to develop four articulate pillars. The pillars have been translated into a matrix that links our strategic objectives with day-to-day activities. The Plan also identifies a sample of measures that will be tracked from time to time to ensure that CCK delivers on its Vision. These measures were developed based on CCK's statutory mandate.

I am happy that given the consultative process we went through in developing this strategic plan, there is common understanding, common ownership and common commitment to its implementation. As the CEO, I commit to remain the primary custodian and driver of the implementation process. I shall also keep my staff focused on the intended results and provide an enabling environment for success.

On behalf of CCK, I wish to express my gratitude to all those who participated or supported us as we prepared this Strategic Plan. It was an exacting but nevertheless a fruitful process. I have no doubt that those who played a part have gained a better understanding of strategic planning process which knowledge we will bank on for similar initiatives in the future.

Francis W. Wangusi

Director General



Executive Summary

EXECUTIVE SUMMARY

PREAMBLE

Since its inception in 1999, CCK has seen the development and actualization of two strategic plans. The 1st Strategic Plan was implemented between 2005 and 2008 while the second was implemented between 2008 and 2013. The two strategies were developed in line with the Government Development Plans, the Economic Recovery Strategy (ERS) and Vision 2030.

Through this 3rd Strategic Plan, CCK seeks to align itself with Kenya's Vision 2030, the Constitution of Kenya, the National ICT Policy and ICT Master Plan, each of which places major responsibilities and expectations on CCK. CCK procured the services of a consultancy firm to facilitate the development of the Strategy and put in place a framework for its implementation. The 3rd Strategic Plan honours the past and addresses the present to develop the road map into the future.

Purpose, Vision, Brand Promise and Core Values

This Strategic Plan was developed through a consultative process with CCK's Board, Management team and stakeholders in the ICT sector. It was a unanimous decision that CCK needs to expand its horizons from being just a regulator to a facilitator, hence its new Purpose: "Facilitate the transformation of lives through progressive regulation of the Information and Communication Technology Sector".

Based on CCK's mandate as outlined in the Kenya Information and Communications Act, Cap 411A, a thorough scan and situational analysis of CCK's internal and external environment, this Strategic Plan is built on a fresh vision of facilitating "Access to and use of Information and Communication services by all in Kenya by 2018". The Brand Promise of CCK remains "Opening your world" while CCK's core values are: Integrity, transparency, diligence, results focus, accountability and teamwork.

Pillars, Strategic Objectives and Activities

To realise its vision and achieve its purpose, this Strategy hinges on four (4) Pillars, 17 Strategic Objectives, 54 Strategic Activities and numerous detailed tasks. The four Pillars that will enable achievement of the 2018 Vision are:

1. Pillar 1: Enabling Environment

This Pillar is aimed at creating a conducive environment for existing and potential licensees and investors, consumers of ICT services, public, civil society and Government Ministries, Departments and Agencies (MDAs). The Pillar will be implemented through the following eight strategic objectives:

- Facilitate the development of a conducive policy, legal and regulatory frameworks
- Support implementation of the National Broadband Strategy.
- Nurture strategic partnerships.
- Promote environmental sustainability.
- Foster research, development and innovation.
- Promote public engagement, awareness and communication.
- Promote consumer and public awareness and empowerment.
- Foster regional and international cooperation in the ict sector.

2. Pillar 2: Institutional Capacity

This Pillar is aimed at enhancing and modernizing CCK's internal systems, processes and capacities to deliver on the strategy and ensure efficient service delivery; and ensure optimal utilization of the financial, human and physical resources. The Pillar will be implemented through the following four strategic objectives:

- a. Re-engineer human capacity to deliver the strategy.
- b. Ensure efficient utilization of institutional resources.
- c. Modernize internal systems and processes.
- d. Promote corporate and environmental social responsibilities.



Executive Summary (continued)

3. Pillar 3: Infrastructure and Service Development

This Pillar is aimed at ensuring development and deployment of efficient, reliable, secure and quality ICT infrastructure and services that are accessible; and ensure optimal management of the frequency spectrum, numbering and addressing resources. The Pillar is also consistent with CCK's mandate of ensuring operators' compliance with the KICA and, the development and formulation of adequate standards for the ICT sector. This Pillar is built on the following three strategic objectives:

- a. Facilitate widespread infrastructure and services deployment.
- b. Facilitate secure ICT systems and services.
- c. Ensure quality ICT systems and services.

4. Pillar 4: Market Development

CCK is mandated by the law to foster growth, competition and investment in the ICT sector; promote ICT systems and services in accordance with recognized international standards, practices and public demands; and contribute to overall Government objectives towards human, social and economic development through facilitating universal access and use of ICT services. In order to achieve these mandates, this Pillar will be realized through implementation of the following three strategic objectives.

- a. Facilitate competition.
- b. Develop mechanisms for addressing disadvantaged groups.
- c. Facilitate investment in the ICT sector.

Measures of success

CCK developed 10 measures of success that cover telecommunications (mobile, internet and broadband), postal and courier, broadcasting, electronic commerce industries and overall ICT contribution to Gross Domestic Product (GDP). These measures will be used to track progress of the vision to assess whether it has been achieved or not by June 2018.

Resource Requirements

The implementation of the Strategic Plan 2013-18 requires financial, physical and human resources. The total cost estimate for implementing

the strategy will be based on the annual budget estimates approved by the Board. The cost will be met through CCK's revenue sources including frequency spectrum fees, licensing fees, application fees, rental income and interest income.

Regulatory tools and equipment will be modernized and CCK's assets maintained and repaired where necessary. An effective organization structure that is in line with the Strategy; and optimal staffing levels in terms of numbers, skills and motivation will be put in place to ensure successful implementation of this strategy.

Monitoring and Evaluation

In this Strategic Plan, much thought has been given to how day-to-day activities will deliver the high level strategic goals. The Director General will oversee the implementation of the strategy and the monitoring and evaluation of performance. Effective implementation will be achieved by cascading the detailed operational plan for each successive year, ensuring clarity, alignment and focus by the Management Team. Performance will be tracked through an automated Dashboard that links the agreed annual accountabilities across functions and roles hence enabling a seamless execution of CCK's Strategic Plan. The actual results that are feeding into the Dashboard will be reviewed monthly by the Management team against the original objectives, thus enabling dynamic execution, course correction and the development of a performance - driven culture.

In summary, this 3rd Strategic Plan has sought to honour the past, challenge the present and create the future for CCK. It provides a comprehensive road map for the next five years clearly identifying the short and medium term strategies for CCK that will facilitate access to and use of ICT services in the country.



Introduction

1. INTRODUCTION

Background Information

The Communications Commission of Kenya (CCK) is the regulatory authority for the Information and Communication Technology (ICT) sector in Kenya and is a non-commercial state-owned corporation. Established in 1999 by the Kenya Communications Act, No. 2 of 1998, CCK's initial mandate was the licensing and regulation of the telecommunications and postal/ courier sub-sectors, and the management of the country's radio-frequency spectrum.

In recognition of the rapid changes and development in technology which have blurred the traditional distinctions between telecommunications, Information Technology (IT) and broadcasting, the Government in January 2009 enacted the Kenya Infomation and Communications Act, CAP 411A. This statute enhanced the regulatory scope and jurisdiction of CCK and effectively transformed it to an independent and converged regulator. CCK is now responsible for facilitating the development of the ICT sector (including radio-communications, broadcasting, multimedia, telecommunications and postal services) and electronic commerce and transactions through licensing and regulation. CCK is also responsible for the management and administration of the Universal Service Fund (USF). CCK's existence, purpose and mandate is therefore founded on the Kenya Information and Communications Act, CAP 411A.

The Constitution promulgated on 27th August 2010 also provides a broader framework for governance, licensing and regulation of ICTs. CCK's mandate as outlined by the Constitution of Kenya is to "enable the Government of Kenya to uphold Part 2 of the Constitution of Kenya, namely Rights and Fundamental Freedoms by facilitating the development of the Information and Communication sector specifically to foster the Freedom of Expression (33), Freedom of Media (34) and ensure Citizen Access to Information (35) and Privacy (31)".

Chapter Two of the Constitution establishes two levels of government-National and County- and embraces devolution and access to services

including ICT services. CCK is envisaged as a national entity. The Constitution recognizes in Article 6 that any treaty or convention ratified by Kenya is part of the supreme law of the land. In this regard CCK is alive to the fact that treaties and conventions regarding ICT are part and parcel of the Constitution and thus have to be observed. Chapter 4 of the Constitution on the Bill of Rights touches on the fundamental rights and freedoms with focus on access and use of infrastructure, content, information and more generally ICT services.

The Constitution envisages an independent entity to regulate the ICT sector with reviewed systems and processes to conform to the Constitution. In this regard, the Ministry of ICT is driving the process of creating an entity to regulate the ICT sector, which is independent of control by the Government, and political and commercial interests. Consequently, CCK will review its regulatory and licensing frameworks, systems and processes to conform to the Constitution. As a public institution and in exercise of its mandate, CCK continues to ensure leadership and integrity requirements while adhering to principles of public service as enshrined in Chapter 6 and 13 of the Constitution.

1.2 The Objectives and Mandate of CCK

CCK's objectives and mandate are spelt out in the Kenya Information and Communications Act, Cap 411A and Policy Guidelines as:

- a. Ensure optimal utilization of financial, human and physical resources:
- b. Ensure optimal management of frequency spectrum and numbering and addressing resources;
- c. Foster growth, competition and investment in the sector;
- d. Ensure operators' compliance with the Act, Regulations and Licensing Conditions;
- e. Ensure the achievement of universal access to ICT services:
- f. Ensure the development and formulation of adequate standards for the ICT sector in the country:



- g. Protect the rights of users of ICT services;
- h. Promote development of ICT systems and services in accordance with recognized international standards, practices and public demands:
- Further the advancement of technology relating to the ICT sector;
 and
- To contribute to overall Government objectives towards human, social and economic development through facilitating universal access and use of ICTs.

In order to achieve the above objectives, CCK's mandate entails:

- a. Licensing and regulating all systems and services in the ICT sector, including radio-communications, telecommunications, postal/ courier, broadcasting, multimedia, electronic commerce and transactions services;
- b. Managing the country's frequency spectrum (airwaves), numbering and addressing resources(Article 34 of the Constitution);
- c. Facilitating the development of electronic commerce and transactions;
- d. Type approving/accepting ICT equipment meant for use in the country;
- e. Protecting consumer rights within the ICT environment (Article 46);
- f. Managing competition in the sector to ensure a level playing ground for all players (Competition Act);
- g. Regulating retail and wholesale tariffs for ICT services;
- h. Management and administration of the USF; and
- i. Monitoring the activities of licensees to enforce compliance with the licence terms and conditions as well as the law.

1.3 Services offered by CCK

The services offered by CCK to its stakeholders are covered under the objectives and mandates of CCK (refer to Section 1.2 above). CCK's stakeholders include: existing and potential licensees in the telecommunications, radio-communications, postal and courier, broadcasting and multimedia, electronic commerce; consumers of ICT services who include members of the public, individuals, businesses and Government Ministries, Departments and Agencies (MDAs); policy makers; Non-Governmental Organizations (NGOs); civil society; regional and international organizations.

The stakeholders' needs and interests are captured in this as provided under the KICA, Constitution, ICT Policies and Master Plan, Vision 2030 and Sector Performance Standards. To ensure the achievement of its objectives and mandate, CCK relies on the Kenya Information and Communications Regulations (KICR) 2010; Guidelines and Determinations.

1.4 Relationship of CCK with National Development Goals

As Kenya's future development is brought into focus, several key documents have spelt out specific roles for CCK in building the nation. Such documents include Vision 2030, ICT Policy and Master Plan and Sector Performance Standards.

A core objective of Vision 2030 is 'transforming Kenya into a leading information and knowledge economic hub in the region'. The specific task given to the enablers of ICT in Kenya is described as "creating an interconnected, technologically-advanced society with modern information and communication systems driving innovation, growth and social progress". This will be delivered by enhanced ICT infrastructure, greater use of local content, and flagship ICT projects.

Vision 2030 is implemented in five-year phases referred to as Medium Term Plan (MTP). This Strategic Plan is in line with the 2nd MTP 2013-17 as well as the national aspirations of the Jubilee Government.

The expectations from Vision 2030, Kenya's economic blueprint, are high;



ICT underpins crucial social and economic development with which Kenya can leapfrog global developments and enhance all areas of our lives.

The Jubilee Government that came into power on 9th April 2013 recognizes the importance of ICT and aspires to lead the digital take-off that will make Kenya become the ICT hub for East Africa and beyond, building on the progress of recent years to connect every Kenyan to the new infrastructure and promote E-Commerce and protect consumers. This will be achieved by increasing the human resource capacity in ICT through improved ICT education in schools and training for teachers. The Government also plans to establish a universal single registration system activated at birth which will streamline registration, national identification (ID) registration, voter registration, National Health Insurance Fund (NHIF), National Social Security Fund (NSSF), and any other tax or commercial related registration. The government also plans to streamline its operations by creating a single electronic records system across all departments and deploying the Integrated Financial Management System (IFMS), to track public spending in local and County governments.

The administration is committed to expand the fibre optic network to cover hospitals, schools, police stations and all counties; progressively roll out free WI-FI in major towns within the next five years; instigate a 'buy local' policy for public sector enabling local ICT companies to become suppliers; and create incubation hubs for ICT start-ups in each county through the new Biashara Kenya Agency with the plan to extend these to constituency levels to empower our youth with the necessary training and work experience to develop market ready ICT services and products. Other initiatives include: investing and facilitating a digital economy by empowering our youth to develop software that is market-ready and which the National and County governments will be primary consumers of these software/products; embark on a digital Government programme by cleaning up and managing databases that will be stored in a secure and centralized location and which can be accessed and used by all Government Ministries, Departments and Agencies (MDAs) in order to make Government more efficient.

The ICT Policy Mission is "to develop Kenya as a globally competitive and prosperous nation by creating an enabling environment that encourages and enhances the development, expansion and use of ICTs". The ICT Master Plan has a Vision that "Kenya becomes Africa's most globally respected knowledge economy by 2017". With ICT being one of the fastest growing sectors in the country and with the rapid changes in technologies, CCK has taken into consideration the objectives set by the ICT Policy and Master Plan which define the right direction for the development of the sector to benefit the economy and is in tandem with the Vision 2030 objectives highlighted above.

With regard to ICTs, the expectations by the Sector Performance Standards (SPS) of CCK are contained under Chapter Five 5, which clearly calls out research, innovation and technology. Goals that specifically call out for the support of CCK include to "facilitate widespread connectivity to ensure universal access to ICT throughout the country" and also to facilitate provision of equitable and affordable quality information and communication services countrywide.

In summary, Vision 2030, ICT Policy and Master Plan and SPS agree that: CCK's role will be nothing less than to facilitate, oversee and enable a transformation of lives through enabling access to and use of ICTs, thereby catalysing change. The balance required is between regulating and facilitating the ICT sector so as to stimulate growth, development, innovation and energy. The risk is that a traditional regulator could be seen as an interrupter to progress, a handbrake against change or an organ of government control.

1.5 Performance of the Economy and ICT Sector

A synopsis of the status of the National Economy is given in Section 2.2.1 below. Following two years of relatively flat growth in 2011 and 2012, and a slow start to 2013, the economic situation has benefited from political stability and is predicted to grow at 5.5 percent in 2013; bringing it closer into line with the sub-Saharan average of 5.8 percent based on the Economic Survey of June 2013.

The ICT sector is one of the fastest growing sectors in Kenya. Of significance is the growth in the mobile telephony sector with one operator in 2002 and four in 2012. Mobile subscribers have grown from 900,000 in 2002 to 29.7 million in 2012, fuelling a penetration increase from just 4.2 percent to 75.4 percent respectively. The land coverage of the mobile telephony services also rose from 11 percent in 2004 to 35 percent in 2012.

In the Internet market, the number of Internet Service Providers (ISPs) rose from 72 in 2002 to 105 in 2012. The number of Internet users increased from 200,000 to 14, 032, 366 during the same period. This led to increase in penetration from 0.65 percent to 35.5 percent. Broadband, though still in its infancy, has started to show similar trends since 2011 when broadband penetration was recorded as 0.31 percent and had reached 1.84 percent in 2012. In addition to satellite, the country is also served by four fibre optic cable networks namely TEAMS, SEACOM, EASSy and LION2. Diversity in optic cable connectivity has led to an increase in the international available bandwidth from 223.38 Mbps in 2005 to 574,704 Mbps in 2012.

The postal and courier market also experienced growth with the number of operators rising from 56 in 2002 to 190 in 2012, while the number of private operator outlets more than doubled from 320 in 2002 to 683 in 2012. The broadcasting sector also witnessed tremendous growth with the number of licensed/authorized radio stations increasing from 225 in 2005 to 461 in 2012 while the number of television stations rose from 77 to 226 during the same period. While the nascent electronic commerce industry is growing mainly propelled by mobile money transfer services, the fixed telephony market segment continues to decline as the number of fixed lines dropped from 331,718 in 2002 to 262,761 in 2012.

The rest of this Plan will look in detail at emerging and likely trends. However, what is clear and mirrored in newly developed economies, is that the expansion of voice as a medium will start to slow down as penetration gets saturated. Massive growth is, however, expected from data, a medium that is largely untapped in sub-Saharan Africa and only just beginning to be used in Kenya.

1.6 Rationale for the Development of the Third Strategic Plan

Since its establishment, CCK has developed and implemented two Strategic Plans: the 1st Strategic Plan 2005-08 and the 2nd Strategic Plan 2008-13. The latter identified eight Key Result Areas (KRAs) which were changed to five strategic goals during the mid-term review in 2011.

The strategic plans were in conformity with the Government's commitment to provide efficient service delivery to the public through the Result Based Management (RBM) tool which all MDAs are expected to implement. The RBM has been achieved through Performance Contracting as a tool to measure performance of an institution against set targets that are primarily drawn from a Strategic Plan. Thus, Strategic Planning has become a critical tool for CCK.

The 3rd Strategic Plan builds on and learns from past gains, challenges the present and seeks to create a future for CCK. It provides the vision, purpose, brand promise and value charters that will form the basis of developing a road map to achieve its set goals. In addition, the Strategic Plan clearly stipulates the future performance targets and forms the basis of developing targets for Performance Contracting for the next five years from the Financial Year (FY) 2013/14 to the FY 2017/18 in line with the Performance Contracting Guidelines as may be reviewed from time to time and the 2nd MTP 2013-17.

The 3rd Strategic Plan therefore lays CCK's comprehensive road map for the next five years clearly identifying the short and medium term strategies. The Strategic Plan clearly outlines the pillars, strategic objectives and strategic activities and tasks to be implemented. It sets out the output, time frame, responsible teams and requisite resources for execution. The Strategic Plan also has a monitoring and evaluation framework called a Dashboard which contains quarterly performance reviews and measures of success to ensure efficient and full execution of the Plan.



1.7 Approach and Methodology

For the purpose of deriving a forward looking Strategic Plan, the following steps were followed:

- i. A concise mapping of CCK's past performance and lessons learnt, current situation; strengths, weaknesses, opportunities and threats (SWOT) analysis (micro environment), operating (macro) environment and stakeholder environment:
- ii. Review of CCK's intent related to its mandate, recent developments in the ICT sector, constitutional and policy requirements and the Vision 2030;
- iii. Development of a clearly articulated, inspiring and communicable purpose, measurable vision, shared brand promise and core values;
- Development of clearly defined SMART pillars, strategic objectives, strategic activities and tasks to deliver the vision and measures of success for the next five years;
- v. An outcome-focused mission statement and specified tasks for the FY 2013/14, the Director-General's operating plan and measures of success for FY 2013/14; and
- vi. Monitoring and Evaluation Framework the Dashboard and quarterly Performance Reviews.

The approach was extended to include:

- i. Interviews with Heads of Departments which validated CCK's functions and strategic direction;
- ii. Interviews with key stakeholders to gather insights on their operating environment and intents and expectations from CCK;
- iii. A participatory and consultative approach was undertaken to identify CCK's key strengths and weaknesses in the delivery of its mandate; bring out actions required to transform CCK to a better level of performance in line with the mandate; and ensure ownership of the developed Strategy.

iv. A workshop to deliberate and validate the macro and stakeholder environments, SWOT analysis, purpose, vision with pillars, strategic objectives and activities was held.

A Board/Management Retreat was then held to further interrogate and enhance the Strategic Plan.

1.8 Scope of the Work in the Development of the Strategic Plan

This Strategic Plan has been developed through a consultative approach and methodology that ensured ownership, commitment and leadership by CCK's Management Team. The scope of the work undertaken involved:

- A Situational Analysis: Review of secondary data in order to analyze the present status of CCK with the ICT Industry. This included stakeholder analysis where interviews with industry stakeholders were conducted.
- **Setting the Direction:** A two-day workshop was held during which the Leadership Team was tasked with setting CCK's vision and a five-year trajectory.
- **Board Retreat:** CCK's top Management Team presented to the Board of Directors their Strategic Plan for buy-in, inputs and feedback.
- **Strategy Execution:** A two-day workshop that aligned the CCK's strategy throughout the leadership of the organisation was held. The cascade sessions drove clarity, focus and alignment so that every individual fully understood his/her part and contribution in the execution of the strategy.
- Dashboard: The Dashboard provides clear and measurable performance indicators of the set milestones and the required actions by Departments/Divisions responsible. The milestones have a time frame and resources allocated and all this is done in line with the RBM and Rapid Response Initiative (RRI) implemented by the MDAs.
- **Performance Reviews:** Periodic meetings driven by the Dashboard aimed at driving accountability across the organization will be



carried out on a quarterly basis. The sessions enable the teams to drive strategic business insights by incorporating the Root Cause Analysis (RCA) method.

1.9 Organization of the Strategic Plan

Chapter Two of the Strategic Plan 2013-18 gives a situational analysis, exploring not only the current status but likely trends, opportunities and developments within the ICT sector. Crucially, for the first time it examines in detail the likely needs of CCK's stakeholders, ensuring that this is an outward-facing Plan. It also provides a SWOT analysis of the current state of the organization.

Chapter Three focuses on the actual strategy itself, staring with the high-level purpose, moving through the vision with its clear deliverables through four key Pillars broken down into Strategic Objectives, Strategic Activities and Tasks.

Finally, Chapter Four covers in detail how CCK intends to operationalize the strategy year by year and monitor and evaluate its execution.

Situational Analysis

2. SITUATIONAL ANALYSIS

Situational analysis is a diagnosis of needs through a systematic collection and evaluation of past and present economic, political, social, and technological data, aimed at:

- i. Identification of internal and external forces that may influence the organization's performance and choice of strategies, and
- ii. Assessment of the organization's current and future strengths, weaknesses, opportunities, and strengths.

Thus, a deep understanding of CCK's operating environment, historical performance, governing policies, and key stakeholders' interests was important in the development of this Strategic Plan. The objectives of the situational analysis are to:

- Understand the platform upon which the next Strategic Plan will be built:
- Extract learning to drive the development of the next Strategic Plan;
- Assess the risks and opportunities that may arise from the local, regional and international macro and stakeholder environments; and
- Benchmark with global and local best practice.

The situational analysis is broken down into four components:

- Current Performance Levels CCK's current performance in implementation of the Revised 2nd Strategic Plan 2008-13;
- 2. **Macro Environment** Gain insights into the current environment in which CCK operates; key facts, observations and related opportunities;
- 3. **Stakeholder Environment** Gain insights into the projections, needs and expectations of CCK's stakeholders; and
- 4. **Micro Environment** Develop an understanding of CCK's internal environment (SWOT analysis) that will facilitate the building of key Pillars, developing SMART Strategic Objectives, Strategic Activities and Tasks in the Strategic Plan.

2.1 Current Performance Levels in Implementation of the 2nd Strategic Plan 2008-13

The Revised 2nd Strategic Plan 2008-13 identified five (5) strategic goals that were implemented through 18 strategic objectives, 50 strategies and several activities. A preliminary review of the implementation of the final phase of the Strategic Plan revealed that its implementation status was rated Very Good at the end of FY 2012/13.

The key achievements, challenges and lessons learnt from the implementation of the Revised Strategic Plan 2008-13 under each of the five (5) Strategic Goals are summarized in Table 1.1 below.

Table 1.1: Key Achievements, Challenges and Lessons Learnt in Implementation of 2nd Strategic Plan

STRATEGIC GOALS	KEY ACHIEVEMENTS	CHALLENGES AND LESSONS LEARNT
1. Facilitation of the Digital Economy in a Converged Regulatory Environment	 Created an enabling policy, legal and regulatory environment through: ✓ Participation in the drafting of the KIC (Amendment) Bill, 2012; Sim Card Registration. ✓ Contribution to the review of the ICT Sector Policy; Policy on Devolution and Management of State and County Corporations; Draft National Infrastructure Sharing and Co-location Policy and ICT and Cyber-security Master Plan. ✓ Development of guidelines on Bulk and Political Messages. Prepared new licences for broadcasting and E-Commerce; developed complaints handling procedure and Programming Code, Guidelines on Short Codes and counterfeit phones. Installed and operationalized the KE-CIRT which ensures effective coordination of cyber-security management. 	 CHALLENGES A framework for content development and support thereof was not done due to non-operationalization of the USF. Frameworks for applications development and support thereof not done due to non-operationalization of USF. Court cases challenging regulation of broadcasting services. LESSONS LEARNT Building collaborative frameworks and strategic partnerships is required.
2. Optimize Resource Allocation and Utilization	 Ensured efficient management of scarce frequency spectrum, numbering resources, codes, national addressing and domain names resources through: ✓ Licensing of two signal distributors and facilitating migration from analogue to digital broadcasting; ✓ Preparations of a plan for the release of frequencies in the 2.5-2.7GHz Band; ✓ Review of frequency pricing mechanism and numbering plan, monitoring utilization of the scarce resources to ensure compliance; development of initiatives towards efficient utilization of numbering resources, national addressing system and domain names. Ensured efficiency and prudence in financial management and investments and got value for money for all procured goods, services and works. Ensured compliance, enforcement, quality, standards and security for ICT infrastructure and services- frequency interference cases, Q-Voice. 	 CHALLENGES Delay in release of frequencies. CCK resources such as land are not fully utilized. LESSONS LEARNT A framework to ensure efficient utilization of resources is required.

STRATEGIC GOALS	KEY ACHIEVEMENTS	CHALLENGES AND LESSONS LEARNT
3. Facilitate Market Development, Competition and Innovation in a Converged ICT Environment	 Promoted investment in ICTs through licensing of new service providers and facilitation of development of infrastructure and services; Carried research and development in new and emerging technologies and various intervention areas – Access Gaps, ICT National Survey, Competition; Supported capacity building and infusion of ICTs- e-resource centres, PwDs; Undertook various interventions such as implementation of cost-based termination rates, review of postal tariffs to support growth and development of ICT Sector. Ensured fair and effective competition; equality of treatment among licensees in various market segments; 	 CHALLENGES Support of development of incubation centres not commenced due to non-operationalization of the USF. LESSONS LEARNT Infusion of ICTs in other sectors of the economy is required in order to promote access and use of ICTs and transform lives.
4. Facilitate Universal Access to ICT Services	 Developed a National Broadband Strategy. Developed draft USF Implementation Strategy and administrative mechanisms, systems and structures. Facilitated access to ICT services in un-served and under-served areas and for PwDs through support to Rural/Community ICT Sites and Centres – Community Libraries, E-Resource Centres, Tele-centres and supported programs for PwDs – Web-Portal, equipment, hardware and connectivity. 	 CHALLENGES USF not operationalized. ICT Disaster Recovery and Management Strategy not developed. LESSONS LEARNT Operationalization of USF; development of a framework for deployment of national broadband infrastructure, connectivity and services; declaration of ICT as a critical infrastructure, are key priorities.
5. Promote Institutional Capacity in ICT Enabled Services	 Organization structure was reviewed, aligned with revised Strategy and implemented. Capacity building of CCK staff and the industry was conducted. Performance based management was institutionalised - implemented through linkage of staff appraisal system with the performance contract. Carried an assessment of capabilities of monitoring and enforcement hardware and software (regulatory tools). CCK is ISO certified and implements QMS and is in the process of modernizing and automating its internal processes. Stakeholder engagement and involvement in regulatory decisions was implemented, consumers of ICT services and products are empowered and protected. CCK effectively represented the country in regional and international policy development in ICTs; met its obligations; consolidated various positions. 	 CHALLENGES Regional offices were not set up. Modernisation of systems, equipment and regulatory tools. LESSONS LEARNT Communication of CCK brand and image; and enhancement of regulatory tools, equipment and modernization of internal processes and procedures is a continuous exercise.

Based on the challenges and lessons learnt from the implementation of the 2nd Strategic Plan 2008-13, the key prerequisites that have been documented for posterity and ensure successful implementation of the 3rd Strategic Plan 2013-18 are:

- Good governance and leadership.
- Ownership and communication of the strategy to key stakeholders including staff.
- Well-articulated, inspiring and communicable purpose; measurable vision and shared brand promise and core values; and a clear strategic direction to be understood by all.
- Cohesiveness, commitment and galvanisation of efforts towards implementation of the Strategy is required.
- Support from the Government and other key stakeholders such as licensees, consumers, the public, civil society, other MDAs and regional and international organizations is also required for successful implementation of the Strategy.

CCK also needs to prioritize the enactment of the Kenya Information and Communications (Amendment) Bill, 2012 in line with the Constitution; declaration of ICT as a critical infrastructure; and full implementation of the organization structure that is aligned with the Strategy.

2.2 Macro Environment

The performance of CCK depends on its internal and external environments. This section analyses the external environment that informed the development of the 3rd Strategic Plan. The factors that affect CCK's performance are political, economic, social and technological. Thus, this macro environment section examines Kenya's economic, political and social environment; opportunities and threats in the ICT sector; global technological trends; the ICT market in Kenya; and green ICTs.

2.2.1 Kenya's Economic, Political and Social Environment

Kenya experienced a macro-economic shock at the end of 2011 when inflation hit a high of about 20 per cent and the Kenya Shilling (KES) to United States Dollar (USD) depreciated to a record KES 107.00. At the end of 2012, inflation had declined sharply to 3.2 percent and the exchange rates stabilized at about KES 85.00 to the USD. Real Gross Domestic Product (GDP) growth rate dropped from 5.8 percent in 2010 to 4.4 percent in 2011. Despite a myriad of challenges that included a turbulent global economy, delayed long rains and a weakened KES at the beginning of the year, in 2012, GDP growth rate improved to 4.6 percent. This performance was supported by a stable macroeconomic environment, increased domestic demand, modest growth in credit and notable growth in various sectors including agriculture (3.8 percent), wholesale and retail trade (6.4 percent), financial intermediation (6.5 percent) and transport and communications (4.0 percent).

Kenya economy's is forecasted to experience sustained and rising growth starting from 5.5 percent in 2013. The fundamentals to drive this growth include increased investor and business confidence due to the peaceful March 2013 General Elections; stable macroeconomic environment; a projected easing and stability of international oil prices; stability of the KES; reforms in the security, governance and justice sectors; and sufficient rainfall. Other drivers are the expected global economic growth projected to grow by 2.4 percent, 3.1 percent and 3.3 percent in 2013, 2014 and 2015, respectively; sustained Sub-Saharan Africa (SSA) growth of 5.8 percent in 2013 compared to 4.8 per cent in 2012; as well as deepening economic relations within the East Africa Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA).

On the political scene, the new Government ushered in on 9th April 2013 is expected to implement the Constitution as the country transitions into a devolved Government structure. The new administration will also implement the 2nd MTP which aims at successful project implementation based on high levels of Public Private Partnership (PPP) and Foreign Direct Investment (FDI); raise GDP growth rate to double digit; and continued



implementation of Kenya Vision 2030. The nine-point action plan for the administration aims at modernizing agriculture, improving the business environment, creating more jobs and availing affordable credit for the youth and women, distributing resources equitably through devolution, providing water for irrigation and human use, strengthening small and medium enterprises (SMEs), deepening regional integration and above all promoting heavy investment in the ICT sector.

The social scene is expected to experience growth as Government expenditure in the provision of social services such as education, health, security, environment services and major governance reforms is projected to grow by 41.1 percent. The country continues to experience rapid urbanization. Twenty years ago, two thirds of working Kenyans were in family farms. Today it is less than half. Wage earners and the non-farm self-employed are growing, and at the same time the country is undergoing a demographic transition, a scaling-up of education and urbanization and an emerging Kenyan middle class that already constitutes 44.49 percent of the total population (Economic Intelligence Unit Report of January 2013). Kenya also continues to experience an estimated population growth rate of 2.6 percent (KNBS, 2009). Of the 40.7 million estimated population in Kenya in 2012; approximately 36 percent are youth (aged 18-35 years), majority of who are unemployed or underemployed.

2.2.1.1 Opportunities in the Economic, Political and Social **Environment**

Below are some key opportunities for CCK in the country's macro environment:

- County governments communities manage and further their own development.
- Demographic change by 2050 Kenya's workforce projected to exceed the number of dependents by two to one, providing an enormous opportunity for wealth creation.
- Education dividend by 2030 the number of adults to have completed secondary school is expected to triple from 6 million today to almost

18 million. This drives significant economic opportunities as the returns on secondary education are substantially higher.

- Rapid urbanization communities will be easier to access, closer together.
- Infrastructure development across the region movement of goods, services and communications will be enhanced.
- Social and economic development and provision of accessible services- a focus on access.
- Excellent internet/broadband connectivity to major world-wide hubs - speed, reliability and content are positively affected.
- Discovery and development of oil and gas in global quantities a steady driver of GDP.
- Result Based Management (RBM) and performance contracting by all Government Ministries and Departments - a performance based culture driving accountability, change and progress.

2.2.1.2 Threats in Kenya's Economic, Political and Social **Environment**

Despite the expected stable economic, political and social environment in Kenya, CCK is likely to experience the following:

- Increased cost of ICT systems and services associated with high cost of infrastructure rollout by operators, population expansion and increased demand of ICT services in un-served and underserved areas.
- Competition issues in the ICT markets resulting from expected consolidations, mergers and acquisitions.
- Determining the cost-based tariffs for systems and services as technologies continue to evolve.
- High unemployment rates, poverty and ICT illiteracy levels is a challenge in ensuring access to affordable, reliable and quality services.



2.2.2 The ICT World and Technological Trends

The role of ICT and industry regulation must also be seen in terms of its impact in the political, social, economic and environmental dynamics. The world's top ten challenges in the 21st Century are: financial and economic crisis; escalating debt burden and inflation; sustainability and viability of economic blocs; corruption, organized crime and hooliganism; extremism, terrorism and war; epidemics such as Severe Acute Respiratory Syndrome (SARS) and H1N1; security and cyber-attack risks; migration and integration; and climate change. In the above challenges facing the world (and Kenya), there is either an ICT solution or an ICT enabled solution. This underscores the importance of ICT as an enabler of all the economic, social, and environmental and governance sectors in Kenya as rightly pointed out in Kenya's Vision 2030. A few examples of sectors in the economy where ICT can be of huge benefit include:

- i. Science and Education: innovation accelerator and personalized education.
- ii. Public Sector: smart-sustainable cities, healthcare, crisis observatories and risk management.
- iii. Business and Industry: financial sector, managing complexity, transport, traffic, logistics and electrical micro-generation.
- iv. Administration and Governance: E-Governance and institutional design.
- v. Consultancy: customized information services.

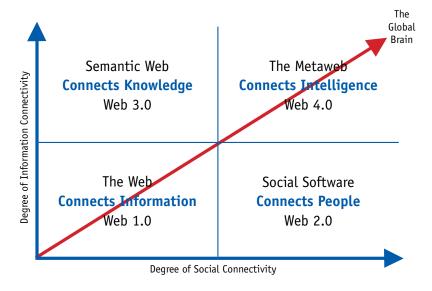
In order to unleash the power of information for a sustainable future, two issues need to be addressed: rapid knowledge transfer; and making sense of and efficient use of large amounts of data generated in different sectors. This calls for the creation of a techno-socio-economic-ecological knowledge accelerator - a kind of multi-disciplinary project that uses current and future ICT developments to address the challenges of humanity, involving natural scientists and engineers. Thus, an opportunity presents for the ICT industry and the regulators to develop and/or facilitate such solutions.

Regarding technological trends in ICT, communication has transformed from "human-to-human" interactions to an increasing proportion of "human-to-machine" or "machine-to-human" communication. There is a third fast growing frontier of machine-to-machine (M2M) communication that is set to alter the ICT world. M2M communication includes sensors, smart cards, medical equipment and traffic planners. This category can be used to solve many ICT challenges since they do not require the human interface, a fact that makes them equally dangerous. As the sender, receiver, technology and medium of communication change a new regulatory challenge and opportunity arises.

The World Wide Web will continue to play an ever-increasing role in ICT. The interaction between social connectivity and information connectivity through the Web could have far reaching effects on how information and knowledge is transferred and utilized. It is important therefore for CCK to understand its evolution and prepare for its own evolving role as a regulator and facilitator of ICT services. The degree of information and social connectivity and growing role of the World Wide Web is shown in Figure 1.



Figure 1: The Growing Role of Web Communication



From Figure 1, Web 1.0 – "The Web" is the basic original web whose main function was to connect information through: search engines, databases, file servers, enterprise portals and push services. The Web 1.0 evolved to Web 2.0 - "The Social Web" that incorporates connecting people through social networks, community portals, electronic mails (e-mails), conferencing, marketplace auctions and Wikis. The third stage has been the emergence of Web 3.0 - "The Knowledge Web", which is the web-enabled by a convergence of technologies. The knowledge web has accelerated convergence of ICT services including artificial intelligence, knowledge bases and knowledge management; and therefore connects knowledge. Finally, the fourth stage, Web 4.0 - "The Internet of Things", which many believe to be the final stage, connects intelligence. This web includes the concepts of group minds, decentralised communities, life logs, smart market places and enterprise minds.

Whilst some developed economies are experiencing Web 4.0, majority of the population in Kenya are still experiencing Web 1.0 with a few urban middle income populations being at stage two of Web 2.0. Kenyans have a long way to go into Web 3.0 and Web 4.0. However, given the tech-sayvy youthful population and the increasingly overlapping dynamics of all as different sectors of society embrace ICT, the journey towards "The Internet of Things" could be much shorter than anticipated. The main question is "What role would CCK play facilitating the speed at which Kenya will evolve towards Web 4.0?"

With the evolution of the Web, focus on new innovations that would propel the growth of Electronic Commerce (E-Commerce) across the sectors would enhance Kenya's opportunity to quickly embrace Web 4.0. Today, consumers are more sophisticated, knowledgeable and demanding than before and thus industry players need to be highly innovative when addressing consumer concerns.

2.2.2.1 Opportunities in Technological Trends

The opportunities that CCK may harness include:

- Increased demand for innovation, research and development leading to new services.
- Efficient monitoring and usage of scarce frequency spectrum, numbering and addressing resources for rollout of new services.
- Increased investment as a result of new and emerging technologies.
- Increased business opportunities for the postal and courier operators which include clearing and forwarding, hybrid mail, strategic alliances, remittance services, agency banking, and government front office services.
- Implementation of the national addressing system aimed at promoting postal and courier and E-Commerce services.
- Interconnected framework for postal and courier networks countrywide aimed at facilitating growth of the sub-sector.



2.2.2.2 Threats in the Technological Trends

The potential threats to be mitigated are:

- Rapid changes in technologies require dynamic policy, legal and regulatory frameworks
- Increased use of E-Commerce and Electronic Transactions (E-Transactions) may lead to increased cyber-crimes and attacks that require robust legal frameworks and enhanced internal capacity to address the cyber-crimes and network security.
- Rapid technological advancement leads to frequent obsolescence and replacement of ICT equipment which increases the cost of development of ICT infrastructure and services, and hinders accessibility to ICT services.
- Technological advancement also requires regular upgrade of skills through regular trainings and generally human capital development.

2.2.3 The ICT Market in Kenya

Kenya has made significant gains in recent years towards its objective of becoming a prosperous country with a high quality of life for all its citizens (World Bank, 2011). It is emerging as an Africa ICT icon. As demonstrated by the milestones achieved in the past decade. These milestones include; innovations such as mobile money transfer service and crowd sourcing applications such as ushahidi.com. The successful adoption of these innovations has put Kenya on the world map.

Based on the econometric analysis of 120 countries, the World Bank estimates that for every 10 percentage-point increase in the penetration of broadband services, there is an increase in economic growth of 1.3 percentage points. The growth effect of broadband is significant and stronger in emerging than in developed economies and also higher than the growth impact of telephony and internet. Whereas voice services are still the main source of income for most telecom operators, data revenues (including SMS) are gaining ground in Nigeria, South Africa and Kenya, where they currently account for 26 percent of total revenues, following a 67 percent growth over the last four years. The emerging market regions

(Central and Eastern Europe, Latin America, and Middle East and Africa) will have the highest growth and will represent an increasing share of total mobile data traffic, from 12 percent at the end of 2010 to 20 percent by 2015 (Moving the Debate Forward, The Policy Paper Series No. 2 of May 2011).

Some of the highlights from the *Second Julisha Kenya ICT Board Survey* (ICT Monitoring and Evaluation Indicators launched on 5th August 2011) conducted by International Data Centre (IDC) include:

- ICT market spending is expected to grow at Compound Annual Growth Rate (CAGR) of 9.1 percent between 2011 and 2016; that is from USD 1 Billion in 2011 to reach a value of USD 1.596 Billion in 2016.
- The volume of international Internet traffic grew by an impressive 162 percent, from 20,209 Mbps in 2010 to 52,938 Mbps in 2011, riding on increased internet subscriptions that were mainly comprised of mobile data connections. The international Internet bandwidth per 10,000 people was 7.7 Mbps up from 4.2 Mbps in 2010. Internet subscriptions stood at 6,152,687 up by 30 percent from 4,716,977. The estimated number of Internet users was recorded as 17.38 million in 2010 from 10.99 million recorded during the previous year.
- The total number of households with a personal computer (PC) grew from 6.0 percent in 2010 to 8.0 percent. Thus computers per 100 inhabitants grew from 2.4 in 2010 to 2.7 in 2011, representing 14 percent growth.
- The total number of fixed lines declined to 283,546 in 2011 from 380,748 in 2010, representing a drop of 25.5 percent during that period.
- The number of .co.ke domain names went up by 35 percent from 18.000 in 2010 to 24,322 in 2011.
- In the education sector, in 2011, 65 institutions were connected to the Kenya Education Network (KENET) broadband network up from 60 in 2010. The total number of students connected to broadband



- rose from 176,000 in 2010 to 250,000 in 2011 representing an increase of 42 percent; though the number of PCs per 100 students dropped to five in 2011 from six in 2010.
- The number of registered government domain names reduced in 2011 largely due to lack of renewal mainly by local government entities (municipal and county councils). Most previously registered domains have been allowed to lapse.

As growth in the telecom sub-sector stabilizes and matures, there is a clear shift in the ICT growth epicentre from infrastructure-centric growth powered by the telecom sub-sector to a service-centric growth shared by the ICT ecosystem. Three critical areas of growth are:

- 1. Data phase of telecom Mobile internet, Mobile TV and Social commerce.
- 2. Enterprise Services increase in scale and scope data centre and cloud services, merged services, Business Process Outsourcing (BPO's), and contact centres.
- Next wave of consumer services e-commerce, m-commerce, pay TV and traffic broadcast.

Successful roll out of services under these critical areas has been made possible by the adoption of the Unified Licensing Framework (ULF) which is technology and service neutral, implemented by CCK since 2008. The growth of the telecom sector is expected to catalyse the development of E-Commerce and applications and software development. However, it will largely depend on the expansion and interconnection of the postal and courier networks that complete the value chain of commodity/physical service delivery. In the broadcasting industry, development of content and multimedia services will drive plurality and diversity in information services.

2.2.3.1 Opportunities to enhance development of ICT market in Kenya

The following are opportunities for CCK to enhance the development of an efficient ICT market in Kenya.

- Deployment of the digital broadcast network.
- Integration of all government systems using ICT e.g. roll-out of e-government services.
- Development of multimedia technology parks.
- Promotion of BPO, call and service centres.
- Incubation and content development centres.
- Universal Service Fund (USF).
- Two-tier system of government (devolution of government) and the development of infrastructure at County level.
- Leverage on Vision 2030 to drive sector growth.
- Industry self-regulation.
- Strategic partnerships with other similar organizations.

As CCK exploits the above opportunities, it shall bear in mind that technology should remain an accelerator and enabler, never an end in itself. While operating in one of the fastest changing regions of the world and in one of the most dynamic industries, CCK can be the central repository of core bodies of knowledge including research, innovation and business development. Strategic partnerships with other similar organizations are invaluable as is the facilitation of industry self-regulation.

2.2.3.2 Threats in the Development of ICT Market in Kenya

The threats in development of the ICT market in Kenya include:

- Likely abuse of dominance and market consolidations that are not warranted and/or create market imbalance in the ICT sector.
- Limited or lack of access to services in un-served and under-served areas and disadvantaged groups in the society.
- Declining return on investment of certain operators in various market segments hinders the development certain market segments.
- Participation of unlicensed operators in the ICT sector.
- Some market segments such e-commerce taking a much longer time to emerge and evolve.



2.2.4 Green ICT

According to the 7th International Telecommunication Union (ITU) Symposium on ICTs, the Environment and Climate Change held in Montreal, Canada, from 29th to 31st May 2012, the increasing use and application of ICTs in economic and social life is rapidly increasing throughout the world. With the increased usage of ICT, the ICT industry currently emits about 2 percent to 2.5 percent of Global Greenhouse Gas (GHG) that include emissions from ICT companies directly as well as energy consumption by ICT equipment. PCs and monitors excluding embodied energy account for 40 percent of the total followed by servers including cooling (23 percent), fixed line telecommunications (15 percent), mobile telecommunications (9 percent), Local Area Network (LAN) office telecommunications (7 percent) and printers (6 percent). Given that rollout of ICT infrastructure and ICT usage is expected to expand rapidly over the coming decade especially in developing countries, if nothing is done, the ICT contribution to GHG emissions is projected to nearly double – to about 4 percent – by 2020.

The ICT industry, therefore, has a major challenge to minimize its own emissions. This calls for adoption and implementation of additional standards for increased energy efficiency of networks, systems and services.

Whereas in the past, CCK has identified and implemented various Green ICT initiatives, the following are additional initiatives that contribute to the Green ICT agenda:

- 1. Energy-efficient use of the equipment and use of energy efficient equipment such as PCs and monitors, servers, telecommunications equipment, LAN and office telecommunications.
- 2. Boosting the efficiency of business processes by intelligent use of ICT.
- 3. Connected life work and promote electronic commuting (e-commuting) where a large percentage of CCK meetings should be either by video or teleconferencing.
- 4. CCK should lead in the field of digital licensing and free resources to be deployed elsewhere while at the same time reducing its carbon

footprint.

- 5. Develop criteria for consumer education: the balance of power has shifted to the consumer service delivery standards will now come into sharp focus as will special interest groups.
- 6. Embrace new and emerging techniques and technologies that reduce energy consumption; type approve energy efficient ICT equipment; and encourage widespread use of the state-of-the-art efficient technologies and solutions by licensees and consumers.
- 7. Review standards for increased energy efficiency of networks, systems and services provided by operators.

2.3 Stakeholder Environment

In the stakeholder analysis, perceptions and expectations of CCK's stakeholders were reviewed and analysed in order to derive meaningful insights that drive the development of CCK's Strategic Plan. The aim is to evaluate the needs, opportunities, challenges, and likely future activities of each stakeholder. The analysis attempts to answer the following questions - "Who are they and where are they operating? What are they doing now? What are they likely to do in the future? What do they require of CCK?"

The review looked at various stakeholders from the following broad sectors: policy makers, licensees, consumer and civil society (consumer organizations); and regional and international organizations and partners. Informal interviews were conducted with top-ranking officers in the former Ministry of Information and Communications (MOIC), the Kenya ICT Board; a section of licensees, consumers and benchmarking conducted on regional and international organizations and CCK's partners.

2.3.1 Policy Makers

The national policies are geared towards the achievement of Vision 2030, which is the country's development blueprint covering the period 2008 – 2030. It aims at transforming Kenya into a newly industrialized, middle-income country providing a high quality of life to all citizens in a clean and secure environment. Vision 2030 is divided into three fundamental pillars:





Economic, Social and Political. ICT-enabled services have been identified as an enabler to realizing the Economic pillar. However, the impact of ICT also cuts across the other two pillars. Table 2.2 gives an analysis of the needs, opportunities, challenges and intentions of relevant policy makers, including Kenya Vision 2030 secretariat, MOIC, KICTB, National Communication Secretariat (NCS) and Brand Kenya.



MAIN NEED

Ensure access to ICT services by all

OPPORTUNITIES

- 1. New government
- 2. Existing sea and inland cables
- 3. Vibrant ICT operating environment
- 4. Existing ICT regulator
- 5. Rich local content
- 6. Technology city underway
- 7. Development of National Cyber-security Master Plan
- 8. Development of National Broadband Strategy
- 9. Promote effective Private Public Partnerships

CHALLENGES

- 1. Realignment of legislation to the constitution
- 2. Dynamic nature of ICT services
- 3. Competition from other ICT investment destinations
- 4. New political system
- 5. Harmonization of different policies and framework
- 6. Rural population with low literacy levels
- 7. Low purchasing power parity
- 8. Inadequate resources
- 9. Mismanagement of resources

KEY INTENTIONS

- 1. Develop policies that facilitate rapid broadband deployment
- 2. Propose legislation that facilitates conducive regulatory and operational environment for ICT services
- 3. Adopt licensing framework that facilitates faster licensing
- 4. Market Kenya as an ICT Hub
- 5. Institute circular focusing on technology/ICT services
- 6. Adoption of ICT in provision of Government services and other sectors of the economy

2.3.2 Licensees

CCK is responsible for facilitating the development of the ICT sector, and managing a range of existing and potential licensees who generate and deliver ICT services in Kenya. Table 2.2 provides an analysis of the needs, opportunities, challenges and intentions of all licensees who range from Mobile and Fixed Network operators, Internet Service Providers, Postal/Courier operators, e-commerce industry players and broadcasters.



Table 2.2: Needs, Opportunities, Challenges and Intentions of Existing and Potential Licensees

MAIN NEED

- 1. Investment capital
- 2. Resources (Frequencies, numbers, manpower)
- 3. Conducive environment (certainty, predictability, security)
- 4. Level playing field
- 5. Facilitative legal and regulatory environment
- 6. Appropriate management of public policy issues
- 7. Promote Social Corporate Responsibility

OPPORTUNITIES

- 1. Ready market (unmet demand)
- 2. Availability of credit facilities
- 3. Rapid technology evolutions giving rise to platforms for providing new services
- 4. Competitive equipment manufacturing giving rise to better equipment at lower prices

CHALLENGES

- 1. Lack of competitive and conducive environment
- 2. High cost of capital or credit
- 3. Multiple levels of authorization
- 4. High cost and unreliable electricity
- 5. High operation and maintenance cost
- 6. Disperse population distribution
- 7. Rapid changes in technology need to overhaul systems
- 8. Multiple taxation regimes

KEY INTENTIONS

- 1. Expand and retain market share
- 2. Improve and maintain high quality of service
- 3. Increase efficiency and reduce 0&M costs
- 4. Expand the business to the EAC region
- 5. Lobby with relevant government agencies to participate in policy development
- 6. Promote professionalism and brand value

2.3.3 Consumer and Civil Society (Consumer Organizations)

The consumers in the ICT industry include: individual, institutions, businesses, Government Ministries Departments and Agencies. One of CCK's mandates is to ensure consumer protection in the ICT sector. To inform the development of this Strategic Plan, Table 2.3 gives an analysis of the needs, opportunities, challenges and intentions of all consumers in this industry.



Table 2.3: Needs, Opportunities, Challenges and Intentions of Consumers and Civil Society

MAIN NEED

- 1. Affordable, accessible, quality services
- 2. Improve efficiencies and standards of living
- 3. Get value for money
- 4. Freedom of information
- 5. Freedom of choice
- 6. Right to privacy

OPPORTUNITIES

- 1. Wide range of available products and services
- 2. Availability of information on products and services

CHALLENGES

- 1. Underserved areas
- 2. Low purchasing power
- 3. Low literacy levels
- 4. Lack of information
- 5. Unscrupulous markets and counterfeit services
- 6. Rapid change in technology
- 7. Ignorance on consumer rights
- 8. Diverse nature of consumers hinders development of a strong consumer organizations to lobby for their rights
- 9. Building confidence and security of ICT products and services
- 10. Formats and language of available content

KEY INTENTIONS

- 1. Seek information of best buys
- 2. Use of ICT goods and services
- 3. May create forums for consumer awareness

2.3.4 International and Regional Organizations and Partners

As the Government's designated liaison organization, CCK subscribes and meets its financial obligations to regional and international organizations dealing with ICT matters. Some of these organizations include:

- East Africa Communications Organization (EACO),
- Pan African Postal Union (PAPU),
- African Telecommunications Union (ATU),
- Association of Regulators of Information and Communications for Eastern and Southern Africa (ARICEA),
- International Telecommunication Union (ITU),
- Commonwealth Telecommunications Organization (CTO) and
- Universal Postal Union (UPU).

Table 2.4 gives an overall analysis of the needs, opportunities, challenges and intentions of these organizations.





Table 2.4: Needs, Opportunities, Challenges and Intentions of Regional and International Organizations and Partners

MAIN NEED

- 1. Harmonization of policy, legal and regulatory environment
- 2. Make EAC region an attractive investment destination
- 3. Capacity building in ICTs
- 4. Seamless regional interconnectivity
- 5. Articulate regional issues at the global level
- 6. Promote access to ICT services

OPPORTUNITIES

- 1. Develop strong skills base in ICT sector
- 2. Existence of protocol
- 3. Political goodwill
- 4. Diverse/ Credible membership
- 5. International/ Regional connectivity

CHALLENGES

- 1. Creating value for members
- 2. Conflict resulting from multiple regional and international partners and bodies
- 3. Funding challenges
- 4. Members running own agenda within regional and international partners & bodies
- 5. Political instability in member states
- 6. Language barriers
- 7. Relevance of some regulatory bodies e.g. ITU/ UPU as other bodies performing similar functions
- 8. Getting consensus from the global community
- 9. Jurisdiction overlap of regulatory bodies
- 10. Slow pace of adoption of international standards
- 11. Keeping up with the changing pace of ICT Industry

KEY INTENTIONS

- 1. Facilitate policy development working groups
- 2. Carry out studies on status of ICT development
- 3. Lobby for ICT support by governments
- 4. Sourcing for operational funding
- 5. Coordination of regional projects
- 6. Creating visibility for regional ICT industry and manufactures
- 7. Organization of workshops benchmarks
- 8. Harmonize standards development
- 9. Development linkage between sector and industry experts and academia



2.3.5 Summary of Stakeholder Expectations

In examining each stakeholder group it was clear that they are each extremely broad and expectations are manifold. The policy makers have a clear agenda for access to ICT services by all the country's citizens. Licensees by contrast are generally in the sector for profit, so they expect a level playing field, the right resources and an enabling environment. Consumers of ICT services are increasingly aware of their own rights and are demanding of quality, affordable and accessible services that improves efficiencies and their standards of living. Consumers also expect free access to information. Finally, regional and international organizations and partners seek opportunities to harmonize policy and regulatory frameworks; an attractive investment destination and connectivity to the rest of the world.

To ground the Plan in reality, informal interviews were conducted with topranking officers in Ministry of ICT, KICTB, a section of the ICT industry and consumers. The key expectations of the stakeholders included:

- A call for broad approaches to ICT regulation that go beyond today's sector-specific regulation to take a more inclusive approach that considers applications and services, electronic content and consumer rights and responsibilities.
- A need to separate entirely from Government in every sense, in order to be (and be seen as) an impartial stakeholder, referee and enabler.
- A desire for accelerated public understanding and usage of the USF which has been slow in implementation. However, providing services to under-populated areas needs to be commercially viable.
- A call for a more entrepreneurial, innovative and risk-taking approach by CCK, more in line with the speed of change: such a body cannot afford to be considered in any way conservative, uninformed or backward looking.
- A concern that despite liberalization of the ICT sector, the market is still not effectively competitive.

Overall, the stakeholders believe that CCK was doing a good job when measured against its current mandate. However, CCK needs to open up, speed up, conduct itself less as regulator and more as enabler, and as it does so, become more prominent in the public's perception as an innovator. CCK also needs to effectively empower and protect consumers and ensure that they access ICT services that are secure, reliable and within reach. CCK also should continue to take strategic leadership in regional and international organizations; participate effectively in development of international policy and regulatory frameworks and identify collaborations to efficiently implement its mandate and achieve its objectives.

2.4 Micro Environment – SWOT ANALYSIS

This evaluation identifies the internal and external factors that are favourable and unfavourable to CCK. Through a consultative process, CCK identified the strengths, weaknesses, opportunities and threats (SWOT); these were later used to inform the development of the 3rd Strategic Plan, ensuring that CCK remains focused on its strengths and opportunities and exploit these to the full rather than focus on bottlenecks. Strategic objectives, activities and tasks were also developed to mitigate the weaknesses and threats under the four Pillars in the Strategic Plan 2013-18. A summary of the SWOT analysis is shown in Table 2.5.





Table 2.5: Outputs of the Micro Environment (SWOT Analysis)

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- 1. Utilization of a skilled workforce
- 2. Sufficient independent resources
- 3. Good perception of the CCK brand
- 4. Working environment
- 5. Staff loyalty
- 6. Statutory mandate
- 7. Capacity to train staff
- 8. Well established systems
- 9. Strong relationship with government

WEAKNESSES

- 1. Insufficient capacity (staff numbers)
- 2. Poor information dissemination and communication Public engagement/ misreporting by the media
- 3. Lack of enterprise risk management
- 4. Deterioration of institutional culture/ professionalism
- 5. Incomplete implementation of critical decisions and delayed turnaround time in decision making
- 6. Internal lack of trust and confidence working in silos
- 7. Lack of prioritization of core functions weak planning of activities and time management
- 8. Fear of withstanding external pressure
- 9. No solid security of tenure
- 10. Short contract terms for CEO/Board
- 11. Lack of internal systems integration

OPPORTUNITIES

- 1. Implementation of the USF
- 2. Full Government support
- 3. Potentially vibrant ICT market High Demand (Youthful Population, un-served areas)
- 4. Leverage on synergies with other regulators, regional and international organizations
- 5. Highly skilled workforce
- 6. Wider access to internet Content development and E-Commerce
- 7. Grow consultancy services (to other regulators, licensees, other stakeholders)
- 8. Grow the low ICT services by Government
- 9. Digital Migration
- 10. Convergence of technologies
- 11. Brand Building Transition from traditional regulator to facilitative regulator
- 12. Consumer awareness and protection
- 13. International recognition
- 14. Capacity Building

THREATS

- 1. Regulatory capture
- 2. Political Interference/ Pressure/Executive Directives
- 3. Increased Consumer rights and awareness
- 4. Implementation of devolved government
- 5. Rapid technological evolution
- 6. Constitution interpretation
- 7. Multiple authorization
- 8. Misuse of the judicial process in delaying implementation of Commission's mandate
- 9. Changes in international regulation
- 10. Numerous compliance requirements



The 2013-18 Strategic Direction

3. THE 2013-18 STRATEGIC DIRECTION

CCK reviewed the past performance of the Revised 2nd Strategic Plan, identified the successes, challenges and lessons learnt and priority areas that informed the development of the 3rd Strategic Plan. The findings of the scan of the macro and micro environments and stakeholder analysis and CCK's mandate and objectives as per the KICA Cap 411A informed the development of future thoughts and identified the need to evolve from a regulator to a facilitator.

A fundamental tenet of this Strategic Plan 2013-18 was to build on past gains, learn from the challenges of the present, and create a future for CCK. This Plan provides for that in the new vision, purpose, brand promise and core values. The Strategic Plan creates a road map in the outlined pillars, strategic objectives, activities and tasks that are geared towards facilitating the development of a robust ICT sector in line with country's development strategy and policies. In addition, it clearly stipulates the future performance targets and forms the basis of developing targets for Performance Contracting. The fundamental statements that inform this Strategic Plan are.

Purpose: Facilitate the transformation of lives through progressive

regulation of the Information and Communication

Technology sector

Vision: Access to and use of Information and Communication

services by all in Kenya by 2018

Brand Promise: Opening your world

Core Values: Integrity, Transparency, Diligence, Results-focus,

Accountability and Teamwork

CCK identified ten-point key performance indicators as measures of success that will be tracked from time to time to ensure that CCK delivers on its vision. These measures were developed based on CCK's mandate. These measures of success are shown in Table 3.1.

Table 3.1: CCK Measures of Success for the 3rd Strategic Plan 2013-18

MEASURES OF SUCCESS	CURRENT	2017/18
1. ICT Contribution to GDP	2.2%	5%
2. Mobile Telephony Penetration	75.8%	90%
3. Wireless Broadband Penetration	2.4%	10%
4. Fixed Broadband Penetration	0.00011%	0.5%
5. Internet Penetration	41.6%	70%
6. Postal and Courier Penetration (Population Per Post Office and/or Courier Outlets)	29,992	20,000
7. TV Broadcast Coverage (Population)	55%	80%
8. Local Content to Total Content Ratio	40%	60%
9. Electronic Commerce (Mobile Money Services) Penetration	58.9%	70%
10. Customer Satisfaction Index	71.0%	80%

Figure 3.1 gives CCK 3rd Strategic Plan 2013-18 in one page.



Figure 3.1: Summary of the 2013-18 Strategic Plan

VISION

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

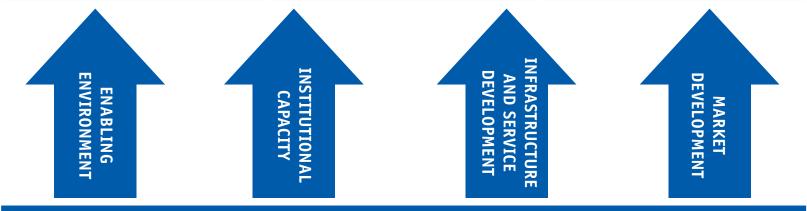
PURPOSE

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

- 5% ICT Contribution to GDP
- 90% Mobile Telephony Penetration
- 10% Wireless Broadband Penetration
- 0.5% Fixed Broadband Penetration
- 70% Internet Penetration

Measures of Success

- 60% Local/Total Content
- 20,000 Postal and Courier Penetration
- 70% Electronic Commerce Penetration
- 80% Customer Satisfaction Index
- 80% TV Broadcast Coverage



Director General's Mission Statement for 2013/14

Reorient CCK to provide for accelerated uptake of ICT in order to Deliver access to and use of Information and Communication Services by all in Kenya by 2018



The 2013-18 Strategic Direction (continued)

In the next five years, CCK will focus more on facilitation of access to and use of information and communication services as it continues with its primary role of regulating the industry. This is the thrust of the Strategic Plan as encapsulated in the purpose and vision. To deliver the vision and live up to the purpose, CCK has identified fundamental changes planned for implementation in the Strategic Plan.

Based on a situational analysis and scan of CCK's internal and external environment, coupled with the realization of the important role CCK is expected to play in the ICT sector towards the achievement of Vision 2030, this Strategic Plan is built on four (4) pillars, 18 strategic objectives, 54 strategic activities and several tasks. The pillars are:

- 1. Enabling Environment
- 2. Institutional Capacity
- 3. Infrastructure and Service Development
- 4. Market Development

Each of these Pillars is broken down into strategic objectives, strategic activities and tasks that will be implemented during the current planning cycle. The Plan spells out the time frames, responsibilities and resource requirements based on annual budgets approved to allow the delivery of each task. A brief description of the pillars and strategic objectives is provided below.

3.1 Enabling Environment Pillar

CCK recognizes that a conducive and enabling legal and regulatory framework is key to ensuring that users/customers derive maximum benefit from ICT services in terms of price, choice and quality; while promoting investment in infrastructure and innovation, increasing competition and encouraging efficient use of the radio spectrum, numbering and code resources.

The aim of this pillar shall be to foster an enabling environment in which ICT businesses can operate without barriers that are related to policy, legal and regulatory frameworks. CCK shall implement strategies aimed at ensuring that as operators/service providers embrace new and emerging

technologies, they operate within specified and developed policy guidelines that promote competition, investment, growth and innovation. Such guidelines will be reviewed periodically to reflect market conditions and technological changes and in accordance with international best practices.

An enabling legal and regulatory environment plays a crucial role in facilitating the regulation of information and communication services to ensure access to and use of such services by the consumers. The legal and regulatory frameworks, which set an enabling environment, anchor the basis for regulation.

In order to achieve an enabling environment, CCK has identified eight (8) strategic objectives and 26 strategic activities. A brief description of each objective is provided below:

3.1.1 Facilitate development of a conducive Policy, Legal and Regulatory Framework

In recognition of the importance of the policy, legal and other regulatory instruments in execution of its functions, CCK is committed to facilitating the development of policy, legal and regulatory frameworks to promote access to and use of information and communications services. CCK will develop and propose legislation aligning the ICT sector with constitutional requirements; review existing sets of Kenya Information and Communications Regulations; develop and implement frameworks that ensure effective competition and utilization of scarce resources in the ICT sector. CCK will also seek to have the ICT sector declared as a critical national infrastructure; and undertake sensitization programmes for justice-related institutions on the ICT related policy, legal and regulatory issues.

3.1.2 Support the Implementation of the National Broadband Strategy

In recognition of the importance of development of broadband networks as the country moves towards a digital economy, CCK facilitated the development of a National Broadband Strategy (NBS). CCK will spearhead its implementation by carrying out the facilitative regulatory measures envisaged in the strategy.



3.1.3 Nurturing Strategic Partnerships

CCK commits to continuously identify, nurture and strengthen partnerships with its strategic partners including the Government, industry, consumers and academic and research institutions, among others, through the development of facilitative mutual collaboration frameworks.

3.1.4 Promote Environmental Sustainability

CCK recognizes the critical importance of environmental sustainability programmes in the promotion of access and use of information and communication services and technologies. In this respect, CCK, working in liaison with environmental agencies and other relevant partners, will implement measures aimed at green IT.

3.1.5 Foster Research, Development and Innovation

CCK commits to invest in and promote research, development and innovation in ICTs. To this end, CCK undertakes to facilitate the development of ICT incubation centres; local content; and research and development in ICTs. CCK will also periodically assess existing human resource capacity in the sector and carry out capacity building in the sector.

3.1.6 Promote Public Engagement, Awareness and Communication

CCK is committed to ensuring the fostering of a robust consumer and public awareness and feedback framework; effective and efficient stakeholder engagements and public consultations which are institutionalized; and undertake effective communication and branding strategies. All stakeholders will be involved in making decisions that affect them. Stakeholders in the ICT industry include policy makers, licensees, consumers, civil society, the public, academia and other interest groups. In executing its mandate, CCK will continue to ensure that consumers of ICT services and products and the public are not only educated, informed, empowered and protected but also resolve their complaints and disputes escalated to CCK by the service providers or relevant persons. CCK will also carry out regular surveys to evaluate customer satisfaction and consumer behaviour in the ICT market.

Stakeholder perception of CCK is a source of significant goodwill both internally and externally. CCK's corporate image and reputation needs to be safeguarded and defended at all times so that it remains a credible, independent and fair regulator to oversee the development of a vibrant ICT sector in Kenva. CCK commits to expand its brand presence locally and internationally by taking advantage of opportunities that positively promote CCK's brand. CCK will strive to remain visible on the global scene through contributing and shaping the development of the ICT policy, environmental, legal and regulatory frameworks in the region and internationally; and participating actively in local, regional and international meetings, conferences, workshops and forums.

3.1.7 Foster Regional and International Co-operation in the ICT Sector

International liaison forms the link between the organization and the rest of the world in terms of information, communication and networking; exchange of knowledge and technological developments particularly in an information and knowledge-based society and interconnected world. As a designated liaison organization for the Government on ICT matters, CCK will continue to foster regional and international engagements and co-operation on ICT policy and regulatory issues. CCK is committed to fulfilling its obligations and effectively represent the Government in regional and international inter-governmental forums/organizations through active engagement in bilateral and multilateral global discussions on ICT policies. CCK will also undertake this obligation by engaging in meetings and conferences with other regulators in the region and globally to foster sound ICT policy.

CCK will strive to remain visible on the global scene through contributing and shaping development of the ICT policy, legal and regulatory frameworks in the region and internationally; and participating actively in local, regional and international meetings, conferences, workshops and forums.



3.2 Institutional Capacity Pillar

This pillar aims at creating a strong, vibrant and efficient organization driven by innovative and motivated professionals. CCK will achieve this through implementation of four (4) strategic objectives and 15 strategic activities. The four strategic objectives include:

3.2.1 Re-engineer the Human Capacity to Deliver the Strategy

CCK recognizes that delivery of the new Strategy requires good governance and leadership; culture change; human capacity development and alignment of the organization structure to the Strategy. CCK will implement activities aimed at re-engineering its human capital and promote good leadership and governance.

3.2.2 Efficient Utilization of Institutional Resources

CCK will undertake measures aimed at enhancing efficient utilization of the existing land and other physical assets; diversify the current revenue streams; and enhance utilization of CCK's finances and movable assets.

3.2.3 Modernize Internal Systems and Processes

CCK will achieve this through automation, upgrading of its communications systems and regulatory tools/ equipment; and reviewing its internal policies and procedures. These initiatives are aimed at ensuring accountability, performance improvement, efficient service delivery, adherence to a sound quality management system and compliance with all statutory requirements. CCK will also implement an enterprise risk management system that provides assurance on the adequacy of the control environment; and electronic tendering system for speed and efficient procurement of goods, services and works.

3.2.4 Corporate and Environmental Social Responsibility

Programmes aimed at implementing environmental and corporate social responsibility are vital in enhancing the visibility of CCK as a corporate citizen and promoting sustainability of the environment. CCK will pursue

mechanisms aimed at promoting environmental sustainability such as electronic waste management and green ICTs; and undertake Corporate Social Responsibility (CSR) initiatives. The aims of CSR initiatives include helping the less fortunate in the society, and talent development.

3.3 Infrastructure and Service Development Pillar

ICTs have been identified as a key enabler and driver in the realization of Vision 2030. It is expected that by the year 2018 and 2030, ICTs will be contributing 5% and 10% respectively to the Gross Domestic Product (GDP).

In order to achieve infrastructure and service development, CCK has identified three (3) Strategic Objectives and six (6) strategic activities for implementation. A brief description of each objective is provided below:

3.3.1 Widespread Infrastructure and Service Deployment

Increase in the access and utilization of ICT services will have a significant positive impact on the socio-economic well-being of the people of Kenya. In view of this, every effort is to be made to ensure widespread deployment of ICT infrastructure and services to reach every citizen wherever they may be in order to facilitate the transformation of their socio-economic status and lives.

The envisioned efforts towards this end include deepening penetration and coverage of ICT services such as mobile and Internet, fixed and wireless broadband, postal and courier, electronic commerce, TV broadcast coverage; facilitating local content development; and facilitating home delivery of postal and courier items. This will be achieved through implementation of strategies such as the universal service, national broadband, national postal addressing, digital broadcasting, efficient frequency spectrum, numbering and addressing systems management and facilitate the rollout of efficient and robust new and emerging technologies.



3.3.2 Facilitate Secure ICT Systems and Services

A safe and secure e-environment is paramount in extracting maximum benefits in the use of ICTs. Secure ICT systems and services facilitate the uptake of ICT services. They deepen e-commerce and other e-services including e-government which in turn increases efficiency and good governance.

This strategic objective will be implemented through development of a national public key infrastructure; developing and implementing a framework that ensures resilience, diversity and redundancy of the ICT networks; and a review and revamping of the postal and courier security management framework.

3.3.3 Ensure Quality ICT Systems and Services

The enormous potential benefits of ICTs cannot be drawn without addressing the question of network, system and service quality. Besides the fact that users will not get value for money in the usage of poor quality ICT services, efficient utilization of services under such an environment would not be possible.

This strategic objective therefore seeks to ensure deployment and provision of ICT services that meet and surpass certain minimum acceptable quality of service standards. This will be achieved through formulation and implementation of a service quality management framework that covers all aspects of service provisioning ranging from network and user device standards, network deployment configuration standards, customer service provisioning, consumer protection mechanism, etc.

To supplement these initiatives, efforts will also be made towards ensuring that ICT networks are pronounced, at the policy and legislative level, as critical national infrastructure and therefore elevate their security focus and attention as appropriate.

3.4 Market Development Pillar

The Market Development pillar focuses on issues such as affordability, licensing, market facilitation, regulatory incentives, interconnection and price regulation, management of competition, research and development, universal service obligations, administration and funding, and regulatory impact assessment. This pillar also recognizes the critical role played by the private sector/investors/licensees in the provision of ICT services in Kenya.

To foster market development in the ICT sector, enhance innovation and promote competition that would lead to affordable ICT services for all in Kenya, CCK will implement three (3) strategic objectives and nine (9) strategic activities. The three strategic objectives that CCK will focus on are:

3.4.1 Facilitate Competition

The main objective is to facilitate provision of quality information and communication services competitively, efficiently and effectively to guarantee widespread access and use by consumers. To achieve this, CCK will ensure the fostering of competitive ICT markets; a market-based spectrum allocation mechanism, the availability of ICT numbering and addressing resources; licensing of new service providers and ensuring that licensed service providers provide a wide range of services to widen consumer choice in terms of the number of service providers and products or services offered.

CCK recognizes that an environment that promotes productivity, growth, innovation, competitiveness and wealth creation is required for the ICT sector to drive Vision 2030. It is acknowledged that research and development plays an important role in supporting innovation and contributing to technological progress which spurs productivity, economic growth and improves living standards. CCK will support efforts and new ways in which ICTs could contribute in areas such as environmental sustainability, improved access to health and education, digital accessibility and poverty alleviation.

3.4.2 Develop Mechanisms for Addressing Disadvantaged Groups

The main objective is to promote the widespread availability and accessibility of quality ICTs through the operationalization of the Universal Service Fund, identification of universal access programs for implementation and fostering of diverse and cost-effective funding mechanisms. This will be: through design and implementation of universal service initiatives; ensuring the availability of diverse, affordable, quality and secure ICT services throughout the country to all persons, enabling provision of lifeline support and developing mechanisms to facilitate access to and use of ICT services by Persons with Disabilities (PwDs) and other disadvantaged groups in the society.

3.4.3 Facilitate Investment in the ICT Sector

CCK will continue to improve Kenya's ICT sector global competitiveness in order to provide confidence to local and foreign investors and promote investment in the sector. CCK will also facilitate investment in the ICT sector through identification of new and emerging licensable areas for investment; review licensing requirements with a view to eliminating barriers to entry and reducing the cost of doing business; creating awareness among financial institutions on the lending opportunities in the ICT sector; and facilitating access to information on the existing investment opportunities in the ICT sector. CCK will create an enabling environment that spurs innovations and new product and service offerings by service providers.

In order to implement the Strategic Plan, CCK will execute an action plan consisting of pillars, strategic objectives, strategic activities and tasks. CCK will also provide the resource requirements, responsibilities, units of measure and timelines for the implementation of each task.



A Matrix showing the Pillars, Strategic Objectives and Strategic Activities are shown in Table 3.2.

Table 3.2: Pillars, Strategic Objectives and Strategic Activities

PILLARS	STRATEGIC OBJECTIVES	STRATEGIC ACTIVITIES	
1. ENABLING ENVIRONMENT	1.1 Facilitate the Development of a Conducive Policy, Legal and Regulatory Framework	1.1.1 Review the Spectrum Assignment Policy and Procedures	
		1.1.2 Develop Competition Guidelines	
		1.1.3 Develop Guidelines for Open Access to Way Leaves/ Ducts	
		1.1.4 Develop a Framework for Cost Accounting and Regulatory Auditing	
		1.1.5 Review Exclusivity Provisions in Relation to Postal Services	
		1.1.6 Develop and Propose Legislation Aligning ICT Sector with Constitutional Requirements	
		1.1.7 Develop and Review Broadcasting Programming Code and Content Related Complaints Handling Procedures	
		1.1.8 Seek to have ICT declared as a Critical National Infrastructure	
		1.1.9 Develop Guidelines to Provide for Network Resilience, Diversity and Redundancy	
		1.1.10 Develop QoS Measurement Guidelines	
		1.1.11 Review existing sets of the Kenya Information and Communications Regulations	
		1.1.12 Develop Consumer Protection Guidelines	

	1.2 Support Implementation of the National Broadband Strategy	1.2.1	Administrative Support for the Implementation of the National Broadband Strategy
		1.2.2	Adopt and Implement National Broadband Strategy
	1.3 Nurture Strategic Partnerships	1.3.1	Review the Existing Collaborative Frameworks
		1.3.2	Identify New and Emerging Areas for Partnership
	1.4 Promote Environmental Sustainability	1.4.1	Develop Guidelines for Infrastructure Sharing, Colocation and Green ICT
		1.4.2	Mainstream Environmental Sustainability within the ICT Sector
	1.5 Foster Research, Development and Innovation	1.5.1	Encourage Research and Development (R&D) in the ICT Sector
		1.5.2	Support Development of Local Incubation Centres
		1.5.3	Assess Human Resource Capacity (HR) in ICT Industry
	1.6 Promote Public Engagement, Awareness and Communication	1.6.1	Institutionalize Stakeholders and Public Consultation
		1.6.2	Promote the Commission's Visibility
	1.7 Promote Consumer and Public Awareness and Empowerment	1.7.1	Conduct Consumer and Public Awareness Initiatives
		1.7.2	Consumer and Public Empowerment
	1.8 Foster Regional and International Cooperation in the ICT Sector	1.8.1	Implement Regional and International Treaties; Country's Obligations and Agreed Decisions in ICTs
		1.8.2	Enhance the Commission's Strategic Leadership and Participation in Regional and International Meetings and Conferences



2. INSTITUTIONAL CAPACITY	2.1 Re-engineer the Human Capacity to Deliver the	2.1.1 Culture Change
	Strategy	2.1.2 Human Capacity Development
		2.1.3 Alignment of the Organization Structure to the New Strategy
		2.1.4 Promote Good Leadership and Governance
	2.2 Efficient Utilization of Institutional Resources	2.2.1 Develop a Master Plan for Efficient Utilization of the Commission's Land
		2.2.2 Diversify the Commission's Revenue Streams
	2.3 Modernize Internal Systems and Processes	2.3.1 Upgrade Regulatory Tools and Equipment
		2.3.2 Review Internal Policies and Procedures
		2.3.3 Automate Internal Processes
		2.3.4 Upgrade the Communication Systems
		2.3.5 Implement Enterprise Risk Management Framework
	2.4 Corporate and Environmental Social Responsibility	2.4.1 Develop and Implement an Internal Environmental Sustainability Policy
		2.4.2 Develop and Implement a Corporate Social Responsibility Policy
3. INFRASTRUCTURE AND	3.1 Facilitate Widespread Infrastructure and Services Deployment	3.1.1 Plan and Efficiently Allocate Available Spectrum
SERVICE DEVELOPMENT		3.1.2 Plan, Allocate and Monitor the Utilization of ICT Numbering and Addressing Resources
		3.1.3 Promote the Rollout of New and Emerging Technologies
	3.2 Facilitate Secure ICT Systems and Services	3.2.1 Develop a National Public Key Infrastructure (PKI) Management Framework
		3.2.2 Review the Framework for Postal and Courier Security
	3.3 Ensure Quality ICT Systems and Services	3.3.1 Develop a Comprehensive Quality of Service Standards for All ICT Systems and Services

4. MARKET DEVELOPMENT	4.1 Facilitate Competition	4.1.1	Undertake Periodic Studies in ICT Sector
		4.1.2	Undertake a Network Cost Study and Implement the Findings
		4.1.3	Review of Spectrum Pricing
	4.2 Develop Mechanisms for Addressing Disadvantaged Groups	4.2.1	Design and Implement Universal Service Initiatives
		4.2.2	Lifeline Support (Emergency Services, Destitute Groups)
		4.2.3	Develop Mechanisms to Facilitate Access to ICT Services by Persons with Disabilities (PwDs) and Other Disadvantaged Groups
	4.3 Facilitate Investment in the ICT Sector	4.3.1	Identification of New Licensable Areas for Investment
		4.3.2	Review Licensing Requirements with a view to Eliminating Barriers to Entry into the Market
		4.3.3	Promote Access to Information on the Investment Opportunities in the ICT Sector

Implementation Plan for the Strategy

4. IMPLEMENTATION PLAN FOR THE STRATEGY

In this stage of strategy management, CCK will drive the operationalization of the Strategic Plan and review performance in a timely and effective manner.

CCK has chosen to adopt the Mission Leadership philosophy to implement the Strategic Plan. This philosophy will involve a process to drive alignment (Mission Analysis), a performance tool to monitor individual and team progress (the Dashboard) and gradual Behavioural Change (High Performing Teams).

The following steps will be followed to drive an operational five-year Plan.

- The CEO will communicate and cascade the 3rd Strategic Plan to the entire workforce.
- 2. Workshops for the CEO and his direct reports to operationalize annual work plan at the beginning of each financial year.
- 3. Management will activate, populate and then start to use the Mission Leadership Dashboard®; a real time web enabled tool that helps the organisation track its performance against previously set and agreed intentions.
- 4. Quarterly Mission Status Review meetings will be institutionalized to keep abreast of the drivers of performance and derive insights to course correct any deviation from targets.

The objectives of the Strategy implementation are:

- Rapid clarity and alignment to CCK's purpose, vision, brand promise, core values, pillars and strategic objectives and strategic activities.
- Increased prioritization and focus, as well as a drive towards simplicity.
- A cascaded planning process (Mission Alignment) that drives rigor into planning at a team level, cascading throughout the organisation
- Common Behaviours The Mission Leadership Behaviours within CCK are critical enablers for success. Role modelled from the top and reinforced throughout the organisation, these behaviours drive

performance at every level.

- Accountability and discipline throughout the organization through a performance driven culture.
- Responsive Management Team that embraces and manages stakeholders' expectations through insight-driven activity.

4.1 Risks and success factors to successful implementation of the Strategic Plan 2013-18

CCK has identified the following risks in the implementation of the 3rd Strategic Plan:

- 1. Growing demand and awareness of the Consumer.
- 2. Fast changing pace of technology.
- 3. Interference by Government in mandated regulatory affairs
- 4. The will of the staff of CCK to adopt, adapt, internalize and deliver this Plan
- 5. The capacity of the organisation to truly foster a performance driven culture

The following success factors will, therefore, go a long way in predicating success for CCK and all stakeholders:

- 1. An unequivocal support from Government.
- 2. An innovative spirit across CCK that mirrors that of the Nation.
- 3. A committed focus on performance to ensure tasks gets done, on time in full every time.
- 4. A close and constant two-way dialogue with stakeholders that ensures CCK is outward facing, not inward-looking.
- 5. A constant communication to stakeholders of progress, steps and successes that puts CCK at the heart of ICT.



Implementation Plan for the Strategy (continued)

4.2 Institutional Structure

In recognition of the important role the organizational structure plays in the delivery of the strategic intent of an institution, CCK revised its organization structure during the mid-term review of the 2nd Strategic Plan. The current organization structure is team-based and aims at: breaking the silo effect; enhancing servant leadership; and creating team work based on strategic goals. The structure is focused on the core mandate of CCK and is capable of delivering its goals and strategic objectives.

The current structure has 11 departments organized within four teams: the Communications Infrastructure, Regulation and Access, Operations and Legal, Risk and Enforcement.

4.3 Resource Requirements

4.3.1 Financial Resources

CCK relies on internally generated funds with the major source of revenue being frequency spectrum and licence fees, rental and interest income. CCK has managed its resources with prudence as provided under the Constitution; all the activities to be implemented in the 3rd Strategic Plan will be covered by the budget approved by the Board.

4.3.2 Physical Resources

To effectively discharge its mandate, CCK has invested in upgrading the monitoring equipment and other facilities. A Committee was set up to oversee operationalization of regional offices as part of devolution and in enhancing ICT access in the country in line with requirements of the Constitution. CCK also embarked on increased investment in physical facilities, equipment and office space, to take care of the envisaged expansion. Some of the initiatives carried out include: refurbishment of the main reception area, redesign of the main Board Room, and partitioning of one wing of the 3rd Floor to create office space.

4.4 Monitoring and Evaluation Framework

To ensure successful implementation of the 3rd Strategic Plan, CCK, with the support of the consultants from M/S McKinney Rogers, will automate the monitoring and evaluation framework. This framework is divided into two: Technology (Mission Leadership Dashboard) and Quarterly Review Meetings (Mission Status Reviews).

The Mission Leadership Dashboard (dubbed as "Dashboard) is a web-based performance management system that translates the organization's annual operating plan into objectives, metrics, initiatives, and tasks customized to each group and individual in the organization to the level to which it is licensed. It communicates strategic objectives and enables the executives to measure, monitor, and manage the key activities and processes needed to achieve their goals.

The Dashboard will be designed in two levels: the Corporate Dashboard that belongs to the Director General and individual Dashboards for each Head of Department (who report to the DG). Each of these dashboards will contain annual targets or deliverables. The corporate Dashboard will show, at any given time, the level of implementation of the Strategic Plan.

All the Dashboard owners will work with McKinney Rogers to identify their commitments to deliver the Strategic Plan 2013-18. It is intended that this identification process will be conducted at the beginning of every financial year for the next five years.

CCK will monitor and evaluate the status of implementation on quarterly basis. The Quarterly Review Meetings will be facilitated by the Consultant where Mission Status Review reports will be generated. The key functionalities of the dashboard that are paramount to the successful annual monitoring of the CCK's Strategic Plan 2013-18 include:

• Senior executives gain sufficient visibility and transparency of what is happening in the business enabling focus on the performance levers that will make all the difference and have the greatest impact.



Implementation Plan for the Strategy (continued)

- Clear, consistent and easy means to track and view how the organization is progressing in achieving its objectives.
- Decision making tool that triggers and invokes good leadership behaviours.
- It maintains focus on the annual strategic plan throughout the year, helping remove the distractions of the day-to-day job.

5. CONCLUSION

In conclusion, the 2013-18 Strategic Plan provides a clear roadmap that will transform CCK from a regulator to a facilitator.

Overall, the five-year Plan took into consideration the needs, hopes, expectations and dreams of a myriad of stakeholders and ensures that the targets set therein are measureable and deliverable.

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