

STRATEGIC PLAN

2019/2020 – 2021/2022





OUR VISION

The Board has a vision for “A safe, efficient and effective engineering infrastructure, systems and processes for Kenya”



OUR MISSION

The Board’s mission is “To ensure production of competent engineers and quality engineering services through regulation, capacity building and enforcing compliance with set engineering standards for improved socio-economic development”.



OUR VALUES

- Professionalism
- Integrity
- Team Work
- Inclusiveness & Diversity
- Public Interest
- Respect & Courtesy
- Fairness

FOREWORD

The development of Engineers Board Strategic Plan (2019-2022) was necessitated by the need for the Board to plan for the next strategic cycle following the expiry of the Strategic Plan for the period (2014 -2019). This is the second Strategic Plan since the enactment of Engineers Act, 2011 and thus provides the Board a momentous opportunity to re-examine and re-adjust capacity, structures, resources and processes to align with its mandate.

I acknowledge the Board and the management for the milestones achieved in the first strategic plan cycle. During the period, 9,999 applications were evaluated, 9,039 persons were registered, universities accreditation framework together with its relevant tools were developed and a total of 22 local engineering programmes were accredited from a committed target of 12 engineering programmes. The Board developed a robust organization structure, Human Resource Strategy together with the Human Resource Instruments that sets out the right staff establishment and skill set required to deliver on the Board's mandate. The Board's finance policy was also formulated, reviewed and institutionalized, ICT systems and infrastructure institutionalized during the period has contributed to improved customer service and better response times. Several partnerships with various organizations and institutions were also realized and others strengthened during the period which enabled the Board to better deliver on its mandate.

This second Strategic Plan (2019-2022) has incorporated lessons learnt during implementation of the first Strategic Plan (2014-2019). It has sought to increase productivity and improve service delivery to various stakeholders. It provides avenues to cascaded performance targets and output to lower levels through annual work plans, performance contracts and Staff Performance Appraisal System.

This Strategic Plan further demonstrate the Board's clear linkages with national, regional and global development agenda. Nationally, it is linked with the Constitution of Kenya, the Kenya Vision 2030, the Big Four Agenda, Third Medium Term Plan (2018-2022) and the Medium-Term Expenditure Framework (MTEF) budget process. Regionally, it is linked with Africa's Agenda 2063 and Mutual Recognition Agreement for engineers. Globally, this Strategic Plan is linked to the Sustainable Development Goals (SDGs) and the Washington Accord, a multi-lateral agreement between bodies responsible for accreditation of engineering qualifications to assist in the mobility of professional engineers globally.

I therefore welcome all our stakeholders and partners to be part of our implementation journey as each and every one will play a critical role in the achievement of set targets. On behalf of the Board of Directors, I pledge to support the implementation process and provide the required policy direction.

Eng. Erastus K. Mwongera, CBS
CHAIRMAN
ENGINEERS BOARD OF KENYA

PREFACE

This Strategic Plan forms the second cycle of Strategic Plan Development for the Board having implemented the 1st Strategic Plan 2014 – 2019. The development of this plan has been informed by the lessons learnt during the implementation of the 1st Strategic Plan as well as by the Guidelines for Preparation of the Fourth Generation Strategic Plans (2018 – 2022). The Strategic Plan 2019- 2022 is aligned to the Third Cycle of Medium Term Planning (MTP III) which ends in 2022.

The Strategic Plan has therefore considered extensive review of the implementation of the 1st Strategic Plan. The development of this plan has been carried out thorough review of the Board's operating environment and critically assessed the strengths, weaknesses, opportunities and threats facing the Board.

This Strategic Plan is therefore a well-informed ambitious plan to transform the Board into a strong, effective, self-reliant organization that will implement its mandate under the Engineers Act 2011.

The Key Results Areas remain focused on the implementation of the Engineers Act 2011 and relate to the registration of engineers and engineering consulting firms, regulation of engineering professional services, development and implementation of engineering standards, development of the general practice of engineering and development and sustenance of the Board.

Under this Strategic Plan, the Board has re-evaluated its strategies taking to have an emphasis for an efficient, responsive, dynamic, versatile Institution and the creation of strong strategic partnerships whilst adhering to the rule of the law.

The Management will be at the front of delivering the strategies and will be guided the Board's values. The attainment of the objectives of this Strategic Plan will have a great impetus on Kenya's development agenda through the strengthening of provision of engineering services which are vital to the growth of the Country's economy.

Eng. Nicholas M. Musuni, PE

REGISTRAR/CHIEF EXECUTIVE OFFICER
ENGINEERS BOARD OF KENYA

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ACRONYMS AND ABBREVIATIONS

CPD	Continuing Professional Development
DCI	Director of Criminal Investigations
DPP	Director of Public Prosecutions
EACC	Ethics and Anti-Corruption Commission
EBK	Engineers Board of Kenya
ERB	Engineers Registration Board
ERP	Enterprise Resource Plan
GDP	Gross Domestic Product
GEIP	Graduate Engineers Internship Program
ICT	Information and Communication Technology
KAET	Kenya Academy and Engineering Technology
KRAs	Key Results Areas
M & E	Monitoring and Evaluation
MDAs	Ministries, Departments and Agencies
MOTIHUDPW	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
NCA	National Construction Authority
P-PESTEL	Policy, Political, Economic, Social, Technological, Environmental and Legal
PPPs	Public Private Partnerships
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering and Mathematics
STI	Science Technology and Innovation
SWOT	Strengths, Weaknesses, Opportunities and Threats
UHC	Universal Health Coverage

EXECUTIVE SUMMARY

The Engineers Board of Kenya Strategic Plan 2018-2022 is expected to guide the implementation of projects and programmes for the period between the 2018/2019 and 2021/2022 Financial Years. The Plan is a successor to the EBK Strategic Plan 2014-2019. It has been developed in cognizance of the Big Four Agenda, Kenya Vision 2030, Sustainable Development Goals (SDG's), the Constitution of Kenya, Africa Agenda 2063 and other legal and policy documents.

Chapter one provides information about the Board, its mandate, functions, Global, Regional and National Development Challenges affecting the Board. The chapter also proves role of EBK in the attainment of the Kenya Vision 2030, the Third Medium Term Plan (2018 – 2022), the “Big Four” Agenda, SDGs, Africa’s Agenda 2063, Mutual Recognition Agreement and the Washington Accord.

The second chapter prove assessment of the Board’s operational environment, the milestones, gaps, challenges, emerging issues and key lessons learnt during the implementation process of Strategic Plan 2014-2019. Additionally the chapter maps out the Board’s stakeholders to inform how they will be engaged during the Strategic Plan implementation process. Chapter three sets the strategic intent of the Board which includes the Vision, Mission, Core Values, Key Result Areas, Strategic Objectives and Strategies. The Core Values have been reviewed to align them to the prevailing operational environment and focus organizational synergies on long term goals. Five Key Result Areas (KRAs) have been identified form the pillars upon which results will be pursued and measured.

Chapter four provides implementation and coordination framework. It outlines key strategies which will be utilized by the Board to ensure effective implementation of the Strategic Plan. In addition, the responsibilities for implementation have been outlined to enhance accountability. The Chapter further presents the Board’s organizational structure and functions of the various Directorates and Departments. The Key Success Factors and Risk Analysis are also outlined.

The last chapter, chapter five, outlines the Board’s Monitoring, Evaluation and Reporting Framework. The framework will allow for tracking of programmes and activities outlined in the Strategic Framework, assessment of the impact of key programs and in both processes, the reporting of results to stakeholders.

CHAPTER 1



INTRODUCTION



1.0 Background Information

The Engineers Board of Kenya (EBK) is a statutory body established under Section 3(1) of the Engineers Act 2011. The Board is the successor to the Engineers Registration Board (ERB) established by the Engineers Registration Act, Cap 530 (1969).

The Board has the overall mandate of developing and regulating engineering practice in Kenya. The development and regulation of engineering practice is considered a key component to the achievement of infrastructure foundation under the country's Vision 2030 development blueprint.

1.1 Mandate of the Board

The Board's mandate is provided for under Section 6 of the Engineers Act 2011. The Board is responsible for the registration of engineers and firms, regulation of engineering professional services, setting of standards, development and general practice of engineering.

Accordingly, the powers and functions of the Engineers Board of Kenya as per Section 7(1)(a)-(x) of the Engineers Act 2011 include: -

- a) Receive, consider, make decisions on applications for registration and register approved applications;
- b) Keep and maintain the Register;
- c) Publish the names of registered and licensed persons under the Act;
- d) Issue licences to qualified persons under the provisions of the Act;
- e) Publish and disseminate materials relating to its work and activities;
- f) Carry out inquiries on matters pertaining to registration of engineers and practice of engineering;
- g) Enter and inspect sites where construction, installation, erection, alteration, renovation, maintenance, processing or manufacturing works are in progress for the purpose of verifying that –
 - i. professional engineering services and works are undertaken by registered persons under the Act;
 - ii. standards and professional ethics and relevant health and safety aspects are observed;
- h) Assess, approve or reject engineering qualifications of foreign persons intending to offer professional engineering services or works;
- i) Evaluate other engineering programmes both local and foreign for recognition by the Board;

- j) Enter and inspect business premises for verification purposes or for monitoring professional engineering works services and goods rendered by professional engineers;
- k) Instruct, direct or order the suspension of any professional engineering services works, projects, installation process or any other engineering works, which are done without meeting the set out standards
- l) Approve and accredit engineering programs in public and private universities and other tertiary level educational institutions offering education in engineering;
- m) Set standards for engineers in management, marketing, professional ethics, environmental issues, safety, legal matters or any other relevant field;
- n) Prepare detailed curriculum for registration of engineers and conduct professional examinations for the purposes of registration;
- o) Establish a school of engineering and provide facilities and opportunities for learning, professional exposure and skills acquisition, and cause continuing professional development programmes for engineers to be held;
- p) Establish the Kenya Academy of Engineering and Technology whose purpose shall be to advise the National and the County Governments on policy matters relating to engineering and technology;
- q) Plan, arrange, co-ordinate and oversee continuing professional training and development and facilitate internship of graduate engineers;
- r) Collaborate with engineering training institutions, professional associations, engineering organizations and other relevant bodies in matters relating to training and professional development of engineers;
- s) Determine the fees to be charged by professional engineers and firms for professional engineering services rendered from time to time;
- t) Hear and determine disputes relating to professional conduct or ethics of engineers;
- u) Develop, maintain and enforce the code of ethics for engineers and regulate the conduct and ethics of the engineering profession in general
- v) Determine and define disciplines of engineering recognised under the Act;

- w) Conduct recruitment of staff of the Board through a competitive process; and
- x) Carry out such other functions related to the implementation of the Act.

Arising from the mandate, the key areas of focus in the strategic plan is as presented in **Figure 1 below**:-



Figure 1: Key Areas of Focus

1.2 Overview of the Engineering Sector in Kenya

This section provides a highlight of the engineering sector in terms of the legal and institutional framework, the Sustainable Development Goals (SDGs), Vision 2030, Medium Term Plan (MTP) III, the Big Four National Government agenda and Africa Agenda 2063. The Board has several legislations, policies and guidelines that anchor its functions as outlined below:-

The following are some of the legislations relevant to the functions of the Engineers Board of Kenya:-

- a) The Constitution of Kenya 2010
- b) Engineers Act, 2011
- c) Engineers Rules, 2019
- d) The Public Finance Management Act, 2012
- e) The Public Audit Act, 2015
- f) The State Corporations Act, 2012
- g) County Government Act, 2012
- h) The Public Values and Principles Act, 2015
- i) Fair Public Administration Act, 2015
- j) Leadership and Integrity Act, 2012
- k) Public Officers Ethics Act, 2003
- l) Public Procurement and Disposal Act, 2015

1.3 The Organization's Development Role

The following policy documents are relevant to the functions of the Engineers Board of Kenya: -

- a) The Kenya Vision 2030
- b) Medium Term Plan (MTP) III 2018 -2022 and the 28 Sector Plans
- c) Mwongozo – Code of Governance for State Corporations
- d) National Spatial Plan
- e) National Disaster Risk Management Policy
- f) EBK Corporate Policies
- g) The Medium Term Expenditure Framework (MTEF) Budget
- h) The Executive Order(s) on Organization of the National Government

Some of the International Policies that inform the Board's strategic vision include:

- a) Sustainable Development Goals (SDGs);
- b) Africa Agenda 2063;
- c) Common Market Protocols such as East Africa Community Common Market Protocol.
- d) Washington Accord

1.4 National Development Agenda

1.4.1 Statement on the Constitution of Kenya, 2010

In 2010, Kenya promulgated a constitution (CoK 2010). Fundamental to the new constitution was the promotion of national values, upholding of human rights and creation of two levels of Governments, the National Government and Devolved Governments (County Governments). Regulation of professional services is a function of the National Government and guidance is to be given to the County Governments on the nature of engineering professional services and the kind of qualifications a person must have to offer engineering professional services at the County level.

Further, being a state organ, the Constitution requires the Engineers Board of Kenya to ensure reasonable access to its services as well as efficiency in service delivery. The enactment of the Engineers Act, 2011 was geared towards the promotion of good practice in engineering education, engineering training and engineering practice. The Engineers Rules 2019 were further developed to help in the operationalization of various sections of the Act.

At the National Government level, the Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works (MOTIHUPW) is the Board's parent Ministry.

The Board will align its mandate to the Constitution of Kenya as highlighted below:

Chapter/ Article of COK	Issues	How the Board will align its mandate and function
Article 1	All sovereign power belong to the people of Kenya and shall only be exercised in accordance with the Constitution	The Board will uphold and respect the constitution in conducting its operations.
Article 2 and 2 (5) (6)	Supremacy of the Constitution and ratification of the general rules of international law, treaties and conventions being part of the Kenyan constitution.	The Board will uphold this article by protecting public interest and implement mutual recognition agreements on matters engineering while protecting the interest of the nation.
Article 6	Devolution and access to services	The Board will carry out its mandate/functions by collaborating with the county governments and enhance engineering standards at both national and county levels
Article 10	National Values and Principles of governance	The Board will uphold national values and governance while carrying out its mandate
Article 11 (2) (a) and (b)	Requires the state to promote science and recognize the role of science and indigenous technologies in the development of the nation.	The Board will align its mandate and functions to promote science and promote its role in the development of the nation through playing mentorships and promotion of Science Technology, Engineering and Mathematics (STEM) in driving the development agenda of the nation.
Chapter 4	Bill of Rights	The Board will uphold and protect the rights of the public by ensuring engineering practice are done in the best interest of the public. The Board will uphold rights and fundamental freedoms enshrined in the Constitution.

Chapter/ Article of COK	Issues	How the Board will align its mandate and function
Articles 42 and article 43 (b) and (d)	Every citizen has a right to a clean and healthy environment and right to accessible and adequate housing, and reasonable standards of sanitation and clean and safe water in adequate quantities respectively	The Board has aligned its mandate to these articles by enhancing the capacity of engineers to support the affordable housing plan development agenda and ensure dams and other related water resources are built in such standards that will ensure safe and clean water supply and in support of food security.
Article 69 (2)	Conservation of the environment and ensure ecologically sustainable development and use of natural resources	The board will uphold this article by embracing Kenyan engineers adhere to engineering standards and practices that are ecologically sustainable.
Chapter 6	Leadership and Integrity	The Board will uphold the highest level of integrity in carrying out its mandate.
Article 201 (d)	Principles of Public Finance	The Board will use its financial resources in a prudent and responsible and sustainable manner in carrying out its mandate.
Article 227	Procurement of public goods and services	The Board will procure services and goods in accordance to article 227 and subsequent legislations.
Article 232	Values and Principles of public service	The Board will uphold high standards of professional ethics and other values and principles of public service.

Table 1: Alignment of Board's Mandate to Constitution of Kenya, 2010

1.4.2 Vision 2030 and Medium-Term Plan (MTP) III

Kenya's current long-term national planning strategy is enunciated in Kenya Vision 2030 which covers the period 2008-2030. Under Vision 2030, the economy is expected to grow steadily and propel the transformation of Kenya into a newly industrializing, "middle-income country providing a high-quality life to all its citizens by the year 2030".

The Vision is based on three "pillars" which consist of the economic, the social and the political dimensions. The summary of the three pillars is as provided below:

- (i) The economic pillar aims to improve the prosperity of all Kenyans through an economic development programme, covering all the regions of Kenya, and aiming to achieve an average Gross Domestic Product (GDP) growth rate of 10% per annum beginning in 2012;
- (ii) The social pillar seeks to build a just and cohesive society with social equity in a clean and secure environment; and
- (iii) The political pillar aims to realize a democratic political system founded on issue-based politics that respects the rule of law, and protects the rights and freedoms of every individual in Kenyan society.

Kenya Vision 2030 is being implemented through a series of five-year Medium - Term Plans (MTPs). Currently, MTP III, covering the period 2018-2022, that prioritizes the implementation of the "Big Four Agenda" initiatives, which are expected to contribute to broad based inclusive sustainable economic growth, faster job creation and reduction of poverty and inequality.

The Third Medium Term Plan (MTP III) of the Kenya Vision 2030 outlines the main policies, legal and institutional reforms as well as programmes and projects that the Government plans to implement during the period 2018-2022. It builds on the achievements of the first and second MTPs and prioritizes implementation of the "Big Four" initiatives. The MTP III targets to increase real GDP annual growth from an average of 5.5 per cent achieved over the 2013-2017 period to 5.9 per cent in FY 2018/19 and 7 per cent by end of the Plan period. Savings and Investments as a percentage of GDP are targeted to increase from 18.8 per cent to 23.2 per cent and 24.4 per cent to 27.2 per cent respectively in order to support higher economic growth and development and create over 6.5 million jobs. The Plan aims at effecting structural changes in the economy towards increasing the shares of manufacturing, industrial and exporting sectors. The Plan also prioritizes development of the Oil and Mineral Resources Sector and the Blue Economy which are expected to play a key role in contributing to higher economic growth in the next five years and beyond.

The Board commits to undertake the following to ensure the attainment of MTP III:

SNO.	Enabling Programme	Role of Engineers Board of Kenya
1	Infrastructure	Application of engineering standards in the design of the proposed infrastructure projects
2	Information and communication technology	Embrace ICT to facilitate efficient and effective service delivery
3	Science Technology and Innovation (STI)	Establishment Kenya Academy of Engineering and Technology to advise the National and County Government on policy matters relating to Engineering and Technology and Establish School of Engineering to spur innovation and research in Engineering matters.
4	Labour and employment	Expand the existing Graduate Internship Programme to increase the number of Graduate Interns attached to Engineering Consulting Firms and Agencies Promote ease of doing business by enhancing efficiency in the registration of persons and firms.

Table 2: Alignment to MTP III

Sector Plans provide detail policies, programmes and projects necessary for the effective implementation of the ‘Big Four’ initiative. The sector plans also provide for the implementation of flagship projects and other priority programmes carried forward from previous medium term plans. The relevant sector plans used are infrastructure, health sector, environment water and sanitation, labour and employment sector plans. Under the policy, legal and institutional framework in the infrastructure sector report, EBK will provide continuing capacity building to engineers and opportunities for graduate to develop up-to-date skills in engineering matters.

1.4.3 Big Four Agenda

Over the last five years, the Government has implemented various policies and structural reforms under the Economic Transformation Agenda to foster a rapid social-economic transformation which has translated into a solid foundation for the roadmap to Vision 2030.

Building on the progress made thus far, the Government has identified four key strategic areas of focus that will accelerate broad based economic growth that will help transform the lives of all Kenyans. Each of the identified Big Four strategic areas contributes to at least one of the SDGs.

The strategic areas under “The Big Four” Plan include:

- 1) **Enhancing Manufacturing – from 9.2% to 20% of GDP by 2022**
- SDG 9: Industry, Innovation and Infrastructure - Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation
- 2) **Food Security & Nutrition – 100% Food and Nutrition Security Commitment** - SDG 2: Zero hunger - End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture
- 3) **Universal Health Coverage (UHC) – Achieve 100% Universal Health Coverage by scaling up NHIF uptake** - SDG 3: Good Health and Well Being – Ensure Healthy Lives and Promote Well-Being for All at All Ages
- 4) **Affordable Housing – New 500,000 Affordable Homes** - SDG 11: Sustainable Cities and Communities - Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable

Investments in the above four areas is expected to transform lives by creating the much needed jobs enabling Kenyans meet their basic needs, improve living conditions, lower cost of living, and reduce poverty and inequality.

The United Nation’s 2030 Agenda for Sustainable Development provides an immense opportunity for all stakeholders to work collaboratively across sectors and thematic areas, forging genuine partnerships for supporting implementation of the SDGs. *SDG 17: Partnerships for the Goals - Strengthen the Means of Implementation and Revitalize the Global Partnership for Sustainable Development* advocates for the creation of opportunities for all stakeholders to work collaboratively across sectors, forging genuine partnerships. In order to effectively play their role in the delivery of engineering services for the Big Four, the engineers need to create multi-stakeholder partnerships at various levels.

Achieving the level and quality of partnerships required to deliver the Big Four Agenda requires a significant and targeted effort to build the enabling environment for engineers and other key stakeholders - technical capacities, supporting infrastructure, policy environment.

In this strategic plan the EBK, seeks to bring together collaborations by creating environments that will: -

- 1) Showcase the critical role of engineers in helping the Presidency implement the Big Four Agenda.
- 2) Establish the linkages and synergies required between engineers and other key players critical in the delivery of the Big Four.

The Board hopes to bring together the national government, the county governments, the international community, the private sector and other actors in sectors ranging from finance, technology, capacity building, trade and systemic issues.

The collaborative environment will require partners from different sectors to work together in an integrated manner to bring resources, knowledge and expertise to achieve the main targets of the Big 4 Agenda which are: -

- (i) Support value addition and raise the manufacturing sector's share of GDP from 9.2% to 20% by 2022. This will accelerate economic growth, create jobs and reduce poverty;
- (ii) Focus on initiatives that guarantee food security and nutrition to all Kenyans by 2022 through expansion of food production and supply, reduction of food prices to ensure affordability and support value addition in the food processing value chain;
- (iii) Provide Universal Health Coverage thereby guaranteeing quality and affordable healthcare to all Kenyans; and,
- (iv) Provide at least five hundred thousand (500,000) affordable new houses to Kenyans by 2022, and thereby improve the living conditions for Kenyans

Multi-stakeholder (local and global) partnerships (public and public-private) will be the vehicles for mobilizing and sharing knowledge, expertise, technologies and financial resources required for sustainable industrial growth.

1.5 Sustainable Development Goals

1.5.1 Sustainable Development Goals

The Sustainable Development Goals (SDGs) comprises a set of 17 global goals and 169 targets set by the United Nations aiming at ‘transforming the world’ (United Nations, ‘Transforming Our World: The 2030 Agenda for Sustainable Development’, 2015). The SDGs provide a universal framework to tackle the biggest problems facing Kenya and the planet as a whole. From ending hunger to improving healthcare, improving infrastructure for transportation and the build environment, Engineers play a crucial role in delivering all the SDGs. The Board is committed to ensuring Kenyan Engineers think beyond the traditional engineering solutions but increasingly give modern, practical but sustainable solutions. Engineers from various disciplines, and in partnership with professionals from other fields, are required in the delivery of sustainable solutions in the following SDGs: -

SDG 1: No Poverty - Ending poverty in all its forms everywhere

Kenyan engineers have a critical role to play in helping Kenya achieve an acceptable standard of living for all, addressing multidimensional forms of poverty that are inherent throughout the 17 interdependent SDGs. Access to affordable, reliable, clean forms of energy, food, education, healthcare and infrastructure is vital to increasing the standards of living for Kenyans.

SDG 2: Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Food production is key in ensuring that hunger in Kenya comes to an end. Engineers need to come up with sustainable engineering solutions that will increase food production to assure food sufficiency.

SDG 3: Good Health and Well Being – Ensure healthy lives and promote well-being for all at all ages

The Engineers Board of Kenya needs to ensure that capacity is built for maintaining the critical healthcare infrastructure.

SDG 4: Quality Education – Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Engineering skills are vital to the creation of a workforce that will develop the infrastructure required to enable Kenya achieve its Vision 2030. Improving engineering education is key on the Board’s agenda and this will be done by ensuring that the Board’s accreditation framework for engineering programs is robust and is aligned to global best practices.

SDG 5: Gender Equality – Achieve gender equality and empower all women and girls

The Board aims at putting in initiatives in its Strategic Plan that will ensure full and effective participation of women in both engineering projects as well as in leadership roles. This will be done through aggressive campaigns for women engineers to register as professional and consulting engineers so that they will in turn become mentors to those in schools who would like to pursue engineering as a career. Through its Graduate Engineers Internship Program (GEIP), the Board has ensured the recruitment criteria is favourable towards recruiting female graduate engineers.

SDG 6: Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all

Through its continuous professional development programs, the Board will aim at having programs geared towards engineers developing sustainable water and sanitation systems that can reach the remote areas. This will be done through partnerships with other ministries and Ministries, Departments and Agencies (MDAs) in the water and sanitation sector.

SDG 7: Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable and modern energy for all

Energy, electricity and petroleum, is one of the key enablers of economic growth and has productive interlinkages with other socio-economic activities such as industrial, services, agricultural, commercial, social institutions and households.

Engineers are central to offering solutions to the challenges that need to be overcome in the generation, transmission and distribution of energy and the interventions that need to be put in place to ensure there is enough energy to drive Manufacturing with regards to the Big Four Agenda.

SDG 8: Decent Work and Economic Growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Engineering entrepreneurship is part of the factors that contribute to creation of employment and to economic growth. The Board aims to ensure that there is an increase in the number of engineering consulting firms, that are aligned with the requirements of the Engineers Act 2011 and the Engineers Rules 2019, are registered.

SDG 9: Industry, Innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Specific sectors have various infrastructural needs. Engineers will be required to build infrastructure for the 21st century that is resilient, sustainable and innovative.

The Board through its partnerships and through capacity building efforts will seek to support scientific research, domestic innovations and promote technological capabilities of engineering industry. .

SDG10: Reduced Inequalities – Reduce inequality within and among countries

Engineers and entrepreneurs are the ones who hold the keys to reducing inequality in much of the world. Engineers are required to build sustainable infrastructure and ensure sustainable energy solutions are provided. Entrepreneurs are required to create decent, well paying jobs in industries and the manufacturing sectors.

The Board will leverage on its involvement in global and national platforms to get engineers and entrepreneurs to find ways of building inclusive, productive economies through Public Private Partnership initiatives (PPPs).

SDG 11: Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable

In order to make cities and human settlements inclusive, safe, resilient and sustainable, there is need for engineers to design infrastructure based on the growth of demand of services for transport, power, water, sanitation and pollution control leading to healthy and efficient cities. Engineers and professionals from across various sectors will be able to collaborate through the Board's Kenya Academy of Engineering and Technology (KAET).

The Board will therefore formulate policies and programs that adopt and implement integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change and resilience to disasters.

SDG 12: Responsible Consumption and Production – Ensure sustainable consumption and production patterns

Implementing new engineering measures in design to drive eco-efficiency across the manufacturing sector will ensure sustainable production. Engineering designs must be felt across the entire value chain and this can be achieved through partnerships with various government agencies and companies. Engineering systems need to promote efficient use of natural resources, reduce wastage..

The Board will play a key role in development of technological capacity to move towards more sustainable patterns of consumption and production

SDG 13: Climate Action – Take urgent action to combat climate change and its impact

The UN Climate Change Conference (COP21) negotiations held in Paris in December 2015 culminated in a global commitment to drastically cut carbon emissions with the aim of limiting global temperature rises to two degrees above pre-industrial levels. Kenyan engineers need to start factoring in elimination of carbon emissions in their infrastructural designs as part of the effort to address climate change. This conversation is a must have and will be part of the Board's agenda in this strategic plan.

The Board will improve education, raise awareness and create capacity within the engineering community in the Country on climate change mitigation, adaptation, impact reduction and advocate for the development of early warning systems.

SDG 14: Life Below Water - Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Africa is surrounded by a large mass of ocean from which the continent can benefit from harvesting the resources therein. Kenyan engineers are expected to play a very significant role in harnessing, sustaining and protecting these vast resources. The Blue Ocean economy covers the following areas that will need critical engineering infrastructure designed and maintained: - Marine fishery and Aquaculture; Off-Shore oil and gas; Marine Tourism; Desalination; Marine Construction and equipment; Protection of water catchment areas; Ports and Shipping; Renewal energy in the blue economy; Marine Administration & business services; Pollution control; Inland waterways; Protection of water catchment areas; and Ocean Surveillance.

The Board will ensure that engineers provide solutions that can safely harness, sustain and protect the blue ocean resources.

SDG 15: Life On Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Engineers are required to explore modern and innovative technologies in their designs and specifications of materials for use to ensure that Kenya's forest cover is being sustainably managed.

SDG 16: Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

The engineering sector needs to have a strong focus in solving social and environmental challenges. This will be done through integrating engineering for sustainable development topics within engineering education which will ensure that the engineers entering the job market are more conscious of societal requirements.

SDG 17: Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development

By combining complementary resources, partnerships have the potential to deliver far more than the sum of their parts. From supportive policy environments to the skills required for organizations to partner effectively; from the need for platforms that can more systematically catalyse collaborations and operate in ways that can support partnering, there is need for opportunities for multi-sectoral partnerships with engineers to enable the Government realize the Big Four Agenda and drive Kenya to Vision 2030.

The Board will create the opportunities for partnerships through organizing relevant fora and lobbying in various circles for the inclusion of engineers in critical partnerships.

1.5.2 Agenda 2063

Agenda 2063 is a shared framework for inclusive growth and sustainable development for Africa to be realized in the next fifty years. It is a continuation of the pan-African drive over centuries, for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. It builds on, and seeks to accelerate the implementation of past and existing continental initiatives for growth and sustainable development.

The Agenda's guiding vision is to build an integrated, prosperous and peaceful Africa, driven and managed by its own citizens and representing a dynamic force in the international arena and identified eight ideals to serve as pillars for the continent in the foreseeable future. Agenda 2063 translate the ideals into concrete objectives, milestones, goals, targets and actions. From the ideals seven aspirations were identified. The policy organs also identified some flagship projects to be given priority in the execution Agenda 2063

The Engineers Board of Kenya commits to undertake the following to ensure the attainment of Agenda 2063:

SNO.	Agenda 2063 Aspirations	Role of EBK
1	Aspiration 1: A prosperous Africa based on inclusive growth and sustainable development	Continuously train Engineers and Regulate Engineering framework to build capacity that will manage continental own growth and transformation for shared prosperity.
2	Aspiration 2: An integrated continent, politically united based on the ideals of Pan Africanism and the vision of Africa's Renaissance	Create framework that will empowered Engineers and Engineering Firms to work and practice in the entire continent to attain an independent and self-reliant Africa that will realizes full economic integration
3	Aspiration 3: An Africa of good governance, democracy, respect for human rights, justice and the rule of law	Facilitate a working environment that will ensure deepening of the culture of good governance, democratic values, gender equality, respect for human rights, justice and the rule of law.
4	Aspiration 4: A peaceful and secure Africa	Build Partnership within continental engineering framework for a conflict-free continent with harmony and understanding among communities at the grassroots level
5	Aspiration 5: An Africa with a strong cultural identity, common heritage, values and ethics	Provide framework that will safeguard Africa as cradle of human civilization, a custodian of a cultural diversity and human progress.
6	Aspiration 6: An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children	Promote citizen involvement in decision-making in developmental, economic environmental and empower women in all aspects of the Board.
7	Aspiration 7: Africa as a strong, united, resilient and influential global player and partner	Build high quality engineering personnel and firms within Africa that will emerge as strong, united, resilient and influential global players and partners with bigger roles in world innovative revolutions.

Table 3: Alignment to Agenda 2063

1.5.3 Mutual Recognition Agreement

The Mutual Recognition Agreement for engineers was signed on 7th December 2012 after the competent authorities of Uganda, Kenya and Tanzania carried out a conformity assessment in the engineering profession and were satisfied that the adequate levels of equivalence had been met. Rwanda joined the Mutual Recognition Agreement on 1st March 2016. South Sudan has recently shown interest in joining.

The main purpose of the agreement was to set the conditions under which engineers in a partner state may have their qualifications recognised and be eligible to practise in another partner state that is a party to the MRA.

The agreement provided for a Coordinating Committee comprising of the Registrars of the regulatory agencies in each country. The role of the coordinating Committee is mainly to spearhead and monitor the implementation of the MRA.

The Board will align its mandate to cover the cross cutting issues that are captured in the MRA such as mechanisms of addressing cross-border disciplinary matters, establishing a harmonized accreditation process, realization of the full benefits of MRA through mobility, leveraging on flagship projects in the region, the road-map of assisting South-Sudan and Burundi, legal impediments, capacity building and promotion of gender equality in the profession, recognition of other categories in the engineering profession and engagement at all government levels.

1.5.4 Washington Accord

Originally signed in 1989, the Washington Accord, is a multi-lateral agreement between bodies responsible for accreditation or recognition of tertiary-level engineering qualifications within their jurisdictions who have chosen to work collectively to assist the mobility of professional engineers.

As with the other accords the signatories are committed to development and recognition of good practice in engineering education. The activities of the Accord signatories (for example in developing exemplars of the graduates' profiles from certain types of qualification) are intended to assist growing globalization of mutual recognition of engineering qualifications. The Washington Accord is specifically focused on academic programmes which deal with the practice of engineering at the professional level.

The Accord acknowledges that accreditation of engineering academic programmes is a key foundation for the practice of engineering at the professional level in each of the countries or territories covered by the Accord.

The Accord outlines the mutual recognition, between the participating bodies, of accredited engineering degree programmes. It also establishes and benchmarks the standard for professional engineering education across those bodies.

The Board will align its accreditation functions to the requirements of the Washington Accord in order to ensure that Kenyan engineers go through engineering education that is globally recognized, thus, enhancing their international mobility.

1.6 Rationale for the Development of the Strategic Plan 2019/20 - 2021/22

The development of this Strategic Plan was necessitated by the following broad factors: -

- a) Enable the Board to plan for the next period following the expiry of the Strategic Plan for the period 2014 -2019;
- b) Enable the Board to align its strategic direction with the relevant National Development Blueprint in order to ensure effective coordination with the wider government policy agenda. The Strategic Plan is therefore aligned to end with the end of the Third Cycle of Medium Term Planning (MTP III);
- c) Enable the Board to re-examine and re-adjust capacity, structures, resources and processes to align with its mandate.

CHAPTER 2



SITUATION ANALYSIS

2.0 Overview

This chapter involves an assessment of the Board's operational environment which is determined by internal and external dynamics which have had an impact on its previous achievements and on the current and future programmes. An assessment of this environment is therefore critical in first understanding the Board's strategic positioning and secondly in charting its medium-term strategies for improved organizational performance.

The milestones, gaps, challenges, emerging issues and key lessons learnt during the implementation process of the previous Strategic Plan are discussed in this chapter.

An analysis of the Board's Strengths, Weaknesses, Opportunities and Threats (SWOT) has been carried out to assess its immediate operational environment. The Policy, Political, Economic, Social, Technological, Environmental and Legal (P-PESTEL) factors have also been analysed to develop a view of the external environment in which it operates.

Lastly, a mapping of the Board's stakeholders has been carried out in order to inform how they will be engaged during the Strategic Plan implementation process.

In the 2014-2019 Strategic Plan, the Board had identified five Key Result Areas (KRAs) within the strategic period as follows: -

- i. Engineers and engineering firms registered.
- ii. Engineering professional services regulated.
- iii. Engineering standards developed and enforced.
- iv. Capacity for general practice of engineering developed.
- v. Engineers Board of Kenya developed and sustained.

From the Key Result Areas (KRAs), five strategic goals were formulated together with the various objectives as priority areas for implementation during the Plan period. These goals were;

- a) Goal 1: Register all engineers and engineering consulting firms
- b) Goal 2: Regulate engineering professional services
- c) Goal 3: Develop and implement engineering standards
- d) Goal 4: Develop the general practice of engineering.
- e) Goal 5: Develop and Sustain EBK

2.1 Milestones in Implementation of the Engineers Board of Kenya Strategic Plan 2014 -2019

In the 2014-2019 Strategic Plan, the Board had identified five Key Result Areas (KRAs) within the strategic period as follows: -

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- d) Goal 4: Develop the general practice of engineering.
- e) Goal 5: Develop and Sustain EBK

2.1.1 Goal 1: Register All Engineers and Engineering Consulting Firms

The objective of this goal was to license qualified and competent engineers and engineering consulting firms to practise engineering in Kenya by reviewing and evaluating all applications for licensing and developing and implementing an effective licensing renewal process.

The targeted application was 14,535 in the strategic period. the Board received and evaluated 9,999 applications in the strategic period which represented 69% of the target.

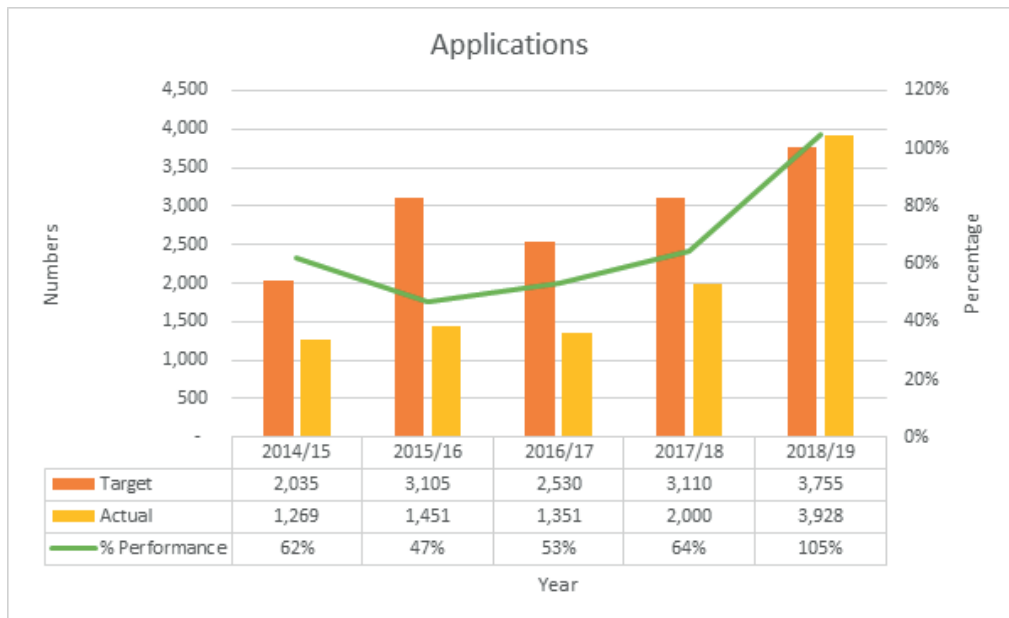


Figure 2: Reviewed and Evaluated Applications

During the strategic period, a total of 9,039 members were registered from the targeted 14,424 representing at performance target of 63%. The breakdown over the years were as shown in the table below

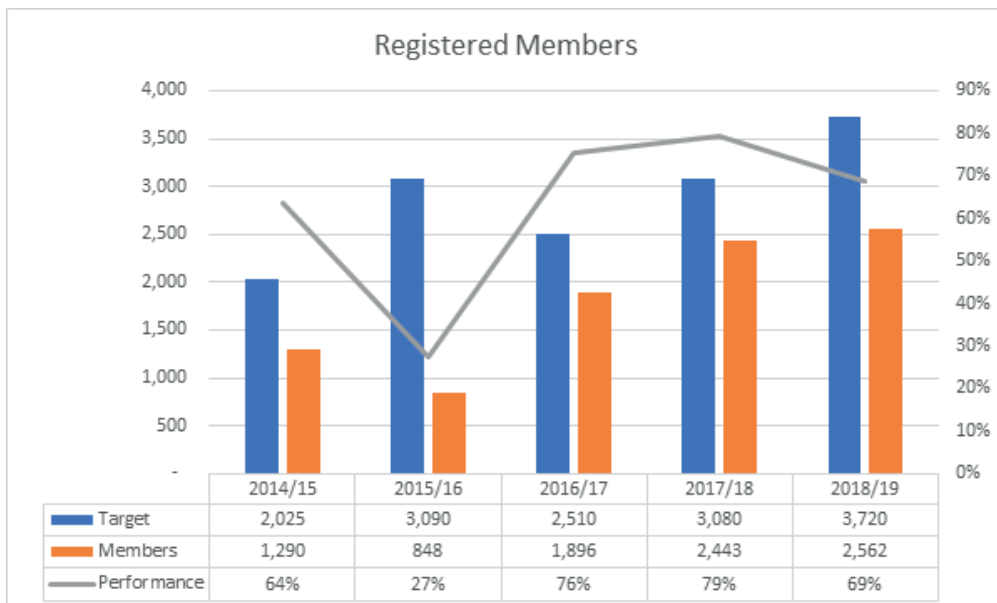


Figure 3: Registered Members Per Year

The Board applications received and processed under various categories were as follows:

CATEGORY	BASELINE (30TH JUNE 2014)	NUMBER AT THE END OF PLAN PERIOD (30TH JUNE 2019)	GROWTH	TARGETED GROWTH
Graduate Engineers	5,988	14,323	8,335	9,900
Professional Engineers	1,697	1,935	238	2,413
Consulting Engineers	327	408	81	88
Consulting Firms	30	101	71	80

Table 4: Registration Growth Per Category

The target for the growth of professional engineers was set with the expectation that Graduate Internship Programme (GEIP) would be implemented from the first year of the strategic plan with an estimate that 85% of interns will be ready for admission as professional engineers after the second year of the programme i.e. end of 2015/16. However, the program was not implemented during the plan period due to various challenges as discussed under Section 2.2.

2.1.2 Regulate Engineering Professional Services

The objective of this goal was to ensure effective enforcement and compliance to the Engineers Act 2011 by sensitizing, educating and promoting ethical and professional behaviour of licensed engineers and firms; and by investigating violations to the Engineers Act 2011 and its regulations.

The Board was to conduct seventeen (17) forums to educate stakeholders on various aspects ranging from the Role of Engineers In Law Making, Project Management, Enterprise Risk Management, Occupation Safety and Health, Code of Ethics and Conduct for engineers and many others to the Engineers Act 2011 and the Engineers Manual. In all, the Board undertook nineteen (19) workshops across the country in Nyanza, Nakuru, Embu, Eldoret, Mombasa and Kisumu.

In terms of investigating and disciplining violations to the Engineers Act 2011 and conducting inspections, the Board has collaborated with various agencies such as the EACC, DPP, NCA and DCI to ensure it met its target for this goal. The Board has conducted over 30 inquiries into misconduct by engineers and disciplinary action has been taken and/or recommended.

2.1.3 Develop and Implement Engineering Standards

The objective of this goal was to ensure compliance with set standards in engineering practice developing and implementing an Engineers Manual that has operational procedures.

The Board developed the procedure operation manual, shared it with stakeholders for comments, incorporated the comments and is now awaiting the launch.

2.1.4 Develop General Practice of Engineering

The objective of this goal was to build capacity through training and assessment to individual engineers and engineering firms by developing and implementing a continuing professional development (CPD) programme; evaluating, approving and accrediting engineering programmes for public and private universities and other tertiary institutions; and administering engineering examinations required for licensure.

The Board carried out a desktop benchmark with several jurisdictions and produced a CPD policy that was shared with stakeholders for comments, carried a national sensitization workshop on the same and conducted several conferences, workshops and meetings on the same.

An accreditation framework was developed together with relevant tools for the accreditation of engineering programmes. Using this framework, the Board had committed to accredit a total of 12 engineering programmes but assessed and accredited 22 engineering programmes during the strategic period.

During the strategic period, the Board committed to conducting a total of 20 examinations. The Board conducted 30 examinations for professional and consulting engineer categories.

2.1.5 Develop and Sustain EBK

During the SP period, the Board managed to put in place a robust organization structure with the guidance of State Corporations Advisory Committee (SCAC). They also assisted the Board in the development of all Human Resource Strategy together with all the Human Resource Instrument to ensure that EBK has the right staff establishment and skill set required to deliver on its mandate. These have since been institutionalized.

The Board's Finance Policy was also formulated, reviewed and institutionalized within the past SP Period. This has ensured prudent use of available resources.

To enhance effectiveness and efficiency of its services, the Board embraced ICT systems and infrastructure and this contributed to improved customer service and better response times.

Several partnerships with various organizations and institutions were realized and others strengthened during the SP period which enabled the Board to better deliver on its mandate.

2.2 Challenges in Implementation of the EBK Strategic Plan 2014 -2019

2.2.1 Litigation Challenges

The Board has faced numerous litigation hurdles that have impacted negatively on some of the programmes it had planned for delivery within the past strategic period. These have affected the Board in the following ways: -

- Delays in implementation of the Graduate Engineers Internship Programme as a result of court injunctions on the program.

- Reduced transitioning rates from graduate to professional engineers.
- Disruption of the accreditation processes of engineering programs at the Universities.

2.2.2 Inadequate Financial Resources

The Board revenues are derived from internally generated revenues (Appropriation in Aid) and Government funding through exchequer allocations. The exchequer allocations was grossly insufficient and erratic and payable fees to the Board (subscriptions and application fees) were too low. The Board was therefore limited in its ability to deliver on all the programmed activities.

The lack of financial resources also limited the Board in its endeavour to recruit and set up a robust human resource capacity to enable it deliver on its targets set such as enforcement of the legal and regulatory framework governing the provision of engineering professional services.

2.2.3 Technological Challenges

Delays in the deployment of an ERP system meant that the Board's services could not be fully automated. This has caused the Board's operations to be slow and time consuming for the already lean staff complement.

2.3 Emerging Issues

2.3.1 Kenya's Development Challenges

There are several activities, projects and programs in the Board's operational environment which will be affected by Kenya's development challenges. Matters such as weak governance systems, corruption, poor collaboration between the national and county governments, resource deficiency levels and poor infrastructure will affect delivery of targets in the next strategic period.

2.3.2 Changing legal frameworks

The Board is a creature of legislation and derives its mandate and functions under the law. Enactment of various Acts over the plan period had an effect on the implementation of the Strategic Plan and have also informed the formulation of the new Strategic Plan. Some of the laws enacted that have ramifications on the practice of engineering include:

- The Kenya Technology Act 2016 ; Providing for registration of technologists and technicians under a separate legal framework
- The Universities (Amendment) Act 2016 : Limiting accreditation of professional programs by professional bodies,

- The Companies Act 2015 ; Redefining the framework for incorporation and conduct of companies in Kenya
- Public Procurement and Assets Disposal Act 2015 : Providing legal framework for procurement of professional services
- Competition (Amendment) Act 2016; Impacting on Scale of fees for professional services

2.3.3 Increased Fees Payable to the Board

The increase in fees for the various services the Board offers as per the Engineers Rules 2019 may result in increased revenue for the Board and thus enhance sustainability of the Board. However, the increased fees may cause delayed applications for the various categories of registration which will require the Board to put more effort in creating an environment that provides benefits for registration.

2.3.4 Technological and System Changes

The fast pace of changing technology will compel the Board to adopt new technologies faster if it is to offer its services efficiently and effectively. The introduction of ISO 9001:2015 will also enhance the quality Board's of services to its customers.

2.4 Lessons Learnt

2.4.1 Sustainability of the Board

Over reliance on the Government for financial support may cause the Board challenges in mobilizing adequate resources for implementation of programmes. In view of this, there is a need for diversification of revenue sources and reducing wastages.

2.4.2 Stakeholder Engagement

The Board needs to continuously understand and engage the various stakeholders for effective formulation and delivery of its strategies. There is need to ensure that all stakeholders have a proper understanding of the role of the Board engineering professional practice.

2.4.3 Customer Service

The Board needs to continuously innovate and be flexible in meeting the needs of clients. With leveraging on technology, the Board can address challenges especially with respect to delivery of services.

2.4.4 Strategic Collaborations

The Board needs to strengthen collaborations and linkages with similar organizations and institutions while exploring new ones in furtherance of its mandate. During the implementation of the Strategic Plan, the Board had engagements with Institutions such as Kenya Medical and Dental Practitioners Board (KMDPB), the Council for Legal Education (CLE) and the Institute of Certified Public Accountants of Kenya (ICPAK) in formulating enabling strategies towards delivery of mandate.

There is need to formalise collaborations for structured engagements in future.

2.4.5 Need for Review of Policies and Legal Framework

During the implementation of the Plan, the Board realised a need to constantly review existing policies as well enabling statute to address emerging challenges. The need to provide for alternative dispute resolution mechanisms was also realised and has informed the strategic direction taken in handling disputes between the Board and other parties.

2.5 Environmental Scan

2.5.1 SWOT Analysis

An analysis of the Board's Strengths, Weaknesses, Opportunities and Threats (SWOT) is critical in understanding its immediate operational environment. The analysis has been carried out by assessing areas of excellence or good performance in EBK and which can provide a growth (Strengths), controllable internal disadvantages (Weaknesses), external possibilities for success (Opportunities) and uncontrollable external negatives (Threats). The SWOT Analysis is presented in the table below:

Strengths	Opportunities
• Competent, diverse and supportive Board of Directors • A highly Committed Workforce • Diverse, competent and committed staff • Adoption of technology in service delivery • Conducive work environment • Well established and clear policies and systems • Legal backing by an Act of Parliament and regulations	• Strategically positioned with a unique mandate as the regulator of engineering professional services • Strong linkages between the Board's mandate and the Constitution of Kenya, Kenya Vision 2030, Big Four Agenda and MTP III (2018-2022) • Good will from the Government • Devolution which provides opportunities for collaboration with County Governments in capacity building
	• Ready pipeline of graduate engineers to be transitioned to professional engineers • Emerging global trends that provide opportunities for partnerships • Regional Integration • Emerging Issues like the SDGs and Green Economy that call for new engineering technologies • Government's development agenda • Documentation of standards for evaluation of foreign engineering degrees
Weaknesses	Threats
• Inadequate Financial Resources • Lack of full exploitation of the new technological trends • Inadequate ICT infrastructure • Inadequate human resource capacity • Weak external communication mechanisms	• Non-compliance to the Engineers Act 2011 and Engineers Rules 2019 • Limitation of available funds • Inadequate number of professional engineers and lecturers • Cross cutting issues such as HIV and AIDS, corruption, alcohol, drug and substance abuse, gender inequalities • Insecurity in some parts of the country affecting movement of engineers • Changes in legal frameworks on engineering matters • Low public awareness of the mandate of the Board

Table 5: SWOT Analysis

The SWOT Analysis has been used in this Strategic Plan to select strategies that will ensure the Board effectively implements programmes and achieves its Strategic Objectives. The Board will seek to build on the Strengths and thus improve on its operations for better implementation for better implementation of programmes. The Weaknesses on the other hand will be minimized or addressed to become areas of positive performance. Opportunities will be exploited to strengthen the Board's regulatory reach, build on internal positives and gain support from stakeholders. Threats are external and thus cannot be directly managed by the Board, however, strategies will be put in place to manage the effects of these threats if and when they arise.

2.5.2 P-PESTEL Analysis

The Board's external environment plays a big role in defining its operations. There are factors that exist in this external environment that may influence the activities and programs of the Board. These can be grouped as Policy, Political, Economic, Social, Technological, Environmental and Legal (P-PESTEL). An analysis of these P_PESTEL factors is represented in the table below: -

Category	Issue(s)	Description
Policy	Other policies, government directives and guidelines	● Presence of other policy guidelines to guide the Board's activities and programmes ● Change in Government policy that can affect the implementation of the Board's programmes.
Political	Political stability	● Allows the Board to deliver its services to all Kenyans without interruptions
	Regional integration	● Bilateral and multilateral agreements within the region that makes it possible for engineers to practice beyond the borders
	Devolution	● Devolution presents opportunities for the Board to expand its regulatory reach and build capacity ● Weak linkages between the National and County governments gives lee way for compromised engineering standards and practise.
	Change in political regimes	● Changes in political regimes at the national level often lead to restructuring of ministries and departments with the risk of having a regime that may not be very keen on engagement of engineering professional services
	Goodwill of Government	● Goodwill of Government empowers the Board to adequately regulate engineering professional services
	High level of political awareness	● The relatively high level of political awareness amongst Kenyans is likely to lead to a demand for high quality services and transparency and accountability in the Board's operations
Economic	Government's development agenda	● Gives clear guidelines for the Board to align its Strategic Objectives to.
	Rationalization of Public Expenditure	● Rationalization of public expenditure may affect funding of some of the Board's activities such as capacity building
	Self-sustainability	● With increased sources of revenue, the Board seeks to become more self-sustainable

Category	Issue(s)	Description
	Increased collaborations with development partners	Increased collaborations with development partners supporting the Government and the Board's development goals and programs.
Social	Corruption	Partnering with other agencies to sensitize engineers on the adverse effects of corruption
	Equal opportunities	Few number of women engineers and other marginalized groups provides an opportunity for the Board to come up with affirmative programs to address the gaps.
	HIV and AIDS	The impact of HIV and AIDS on staff and stakeholders can also impact on the Board's programmes
Technological	Rapid technological changes	- Huge investments required to cope with the technological changes. - There is need to keep pace with the ever changing technological advancements.
	Automation	The Board has set up ICT infrastructure that has automated the delivery of its services
Environmental/ Ecological	Climate change and over exploitation of the natural resources	Provides an opportunity for the board to come up with engineering standards that will guide engineers towards coming up with designs that will ensure sustainability of the environment
Legal	Relevant legislations that affect the operations of the Board	- The Board is established by an Act of Parliament (Engineers Act, 2011) - The Constitution of Kenya offers numerous areas for the Board to anchor its mandate and programmes

Table 6: P-PESTEL Analysis

2.5.3 Stakeholder Analysis

Stakeholders in the context of this Strategic Plan are individuals or organizations who are influenced by the operations of the Board or those whose activities have the potential to influence its own operations. Analysis of the Board's stakeholders is important mainly to develop a common understanding of the mutual expectations. This Stakeholder Analysis allows the Board to gain insights into what stakeholders expect from it and the roles it needs to play in meeting these expectations. In effect, the Board is outlining its commitments to its stakeholders. The Stakeholder Analysis is presented in the Table below:

Name of Stakeholder	Stakeholder's Expectation from the Board	Board's Expectation from the Stakeholder
Board of Directors	• Effective and efficient delivery of the Board's mandate	• Provide strategic direction • Resource mobilization • Play an oversight role in the management of the Board • Project a positive image of the Board
Employees of the Board	• Availability of Adequate Resources • Conducive Work Environment • Competitive Remuneration • Strategic Leadership • Capacity Building	• Commitment to serving the Board's clients • Adhere to the Board's Policies and regulations • Exhibit highest level of Professionalism • Efficiency and effectiveness in service delivery
Registered Members / Applicants	• Effective and efficient service delivery • Fair decision on applications • Guidance on registration requirements and processes	• Compliance to the Engineers Act, 2011 and Engineers Rules 2019 • Full disclosures and complete submissions to the Board
National Government	• Prudent utilisation of resources • Full discharge of the regulatory mandate • Prioritize and support the government's agenda of the day	• Provision of adequate resources • Provision of stable and enabling environment • Capacity development of staff • Provision of policy and legal frameworks that enables the Board deliver on its mandate
County Governments	• Provision of Policy Direction and Framework on matters engineering and regulation • Capacity Building for County Governments	• Engage registered engineers and firms • Adhere to the Engineering Standards and Regulations
Universities offering engineering programs/ Research Institutions	• Timely accreditation of engineering degree programs	• To offer only accredited engineering degree programs and adherence to the accreditation standards
The Public	• Safe and efficient and effective engineering infrastructure, systems and processes	• To engage professional engineering services • To report on violations to the Engineers Act and Regulations • To give appropriate feedback to the Board.

Name of Stakeholder	Stakeholder's Expectation from the Board	Board's Expectation from the Stakeholder
Development Partners	Timely and efficient implementation of projects & programmes	Timely approval and disbursement of funds
Suppliers	- Competitive and Transparent Procurement Processes - Timely and Prudent Payment after provision of services/goods	Timely and Quality provision of goods and services
Foreign Engineering Regulatory Bodies	- Partnerships and Collaborations in ensuring there is uniform engineering practise and standards across the globe - Mutual Recognition of qualifications	- Partnerships and Collaborations in ensuring there is uniform engineering practise and standards across the globe. - Mutual Recognition of qualifications
Media	Dissemination of accurate and timely information	Timely provision of accurate information on the Board's programmes and activities
Government Ministries, Departments and Agencies/DCI/OPP/EACC/SCAC	- Provision of quality engineering practise and standards - Continuous development of engineers - Uphold and support high standards of integrity amongst the engineers	- Timely information sharing - Quality service delivery from them - Support the Board in dealing with cases of engineering malpractice and violations of the Act and Rules
Private Sector	- Competent Engineers - Quality engineering services	- To engage the Board on matters of engineering - Collaborate/Partner with the Board in building capacity and development of engineers
Judiciary	- Adherence to the rule of law - Correct submission of documents	Prompt hearing of cases
Members of Parliament	Implementation of the enacted law	Prompt enactment or amendment of laws
Professional Bodies	Collaborations and sharing of best practises in regulations	Collaborations and sharing of best practises in regulations
Manufacturers	Engagement in continuing professional development for capacity building of engineers	Partnership in provision of internship and attachment opportunities for young engineers

Table 7: Stakeholder Analysis

CHAPTER 3



STRATEGIC MODEL



3.0 Introduction

This Chapter sets in place the strategic intent of the Board which includes the Vision, Mission, Core Values, Key Result Areas, Strategic Objectives and Strategies.

The Board's Vision will guide its long term aspiration and the Mission statement details the path which the Board will take in actualizing the long term strategy. The Core Values have been reviewed to align them to the prevailing operational environment and focus organizational synergies on long term goals.

Five Key Result Areas (KRAs) have been identified form the pillars upon which results will be pursued and measured.

3.1 Vision

The Board has a vision for “A safe, efficient and effective engineering infrastructure, systems and processes for Kenya”

3.2 Mission

The Board's mission is “To ensure production of competent engineers and quality engineering services through regulation, capacity building and enforcing compliance with set engineering standards for improved socio-economic development”

3.3 Core Values

- Professionalism
- Integrity
- Teamwork
- Public Interest
- Inclusiveness and Diversity

3.4 Key Result Areas

The Board has identified five (5) Key Result Areas in which implementation will be carried out, performance measured and results communicated or reported. These areas are: -

- (i) Engineers and engineering firms registered
- (ii) Engineering professional services regulated
- (iii) Engineering standards developed and enforced
- (iv) Capacity for general practice of engineering developed
- (v) Engineers Board of Kenya developed and sustained

3.5 Strategic Objectives and Strategies

The section gives an elaboration of the Board's Key Result Areas by describing the Strategic Objective commitments that the Board has put in place to accomplish in the long term. The Strategies describe the means, the ways, the how's and the methods by which the Board will accomplish the objectives.

Key Result Area 1: Engineers and engineering firms registered	
Strategic Objective	To license qualified and competent engineers and engineering consulting firms to practise engineering
Strategies	a) Review and evaluate all applications for licensing b) Implement an effective licensing renewal process
Key Result Area 2: Engineering professional services regulated	
Strategic Objective	To ensure effective and efficient enforcement and compliance to the Engineers Act 2011 and Engineers Rules 2019.
Strategies	a) Promote and enforce the Code of Conduct and Ethics for Engineers b) Investigate and discipline violations to the Engineers Act 2011 and its Rules c) Develop and implement an engineers' identification system
Key Result Area 3: Engineering standards developed and enforced	
Strategic Objective	To ensure compliance with set standards in engineering practise
Strategies	a) Enhance standards of professional competence b) Identify, set and adopt technical standards
Key Result Area 4: Capacity for general practice of engineering developed	
Strategic Objective	To build capacity through training and assessment of individual engineers and engineering firms
Strategies	a) Implement continuing professional development programs for engineers b) Implement an internship program for graduate engineers c) Evaluate, approve and accredit engineering programs for public/private universities and other tertiary institutions d) Administer engineering examinations required for licensure e) Establish the Kenya Academy of Engineering & Technology for purposes of advising the National and County Governments on policy matters pertaining to engineering and technology. f) Establish the Kenya School of Engineering towards provision of opportunities and facilities for learning, professional exposure and skills acquisition. g) Establish the Engineering Resource Centre for the knowledge management in the engineering practice.

Key Result Area 5: Engineers Board of Kenya developed and sustained	
Strategic Objective	To ensure that EBK delivers on its mandate in a sustainable manner
Strategies	a) Strengthen the Board's governance, risk management and internal control processes b) Enhance systems for resource allocation and utilization c) Enhance automation, utilization and maintenance of implemented ICT infrastructures and systems d) Enhance ICT Security e) Branding and visibility of the Board and its services f) Ensure adequate, competent and motivated workforce g) Enhance resource mobilization and prudent financial management h) Develop effective policy research and strategy i) Strategic partnerships and collaborations j) Monitor and evaluate legal frameworks

Table 8: KRAs, Strategic Objectives and Strategies

CHAPTER 4



IMPLEMENTATION AND COORDINATION FRAMEWORK

4.0 Overview

Implementation of this Strategic Plan will be carried out through the structures within the Board. This Chapter stipulates the Accountability Framework and outlines key strategies which will be utilized by the Board to ensure effective implementation of the Strategic Plan. In addition, the responsibilities for implementation have been outlined to enhance accountability. The Chapter further presents the Board's organizational structure and functions of the various Directorates and Departments. The Key Success Factors and Risk Analysis are also outlined.

4.1 Accountability Framework

The overall role of implementing this Strategic Plan rests with the office of the CEO/Registrar. The holder of the office will be charged with overseeing actual implementation of the Plan to meet the Strategic Objectives set and in particular, the targets as outlined in the Implementation Matrix which is captured in Annex I. He/She will be in charge of providing overall policy direction in the implementation of all activities outlined in the Strategic Framework, including allocation and re-allocation of resources. Directors and managers will prepare quarterly progress reports outlining achievements and gaps in implementation where applicable. Continuous monitoring of performance will be cascaded to individual levels of relevant officers. Annual Progress Reports will also be prepared and discussed by management.

4.2 Structure of the Organization

The Board has reviewed its organizational structure and expanded the staff establishment in line with the expanded mandate and functions after the enactment of the Engineers Act, 2011. The Board has a diverse Board of Directors who are responsible for policy and strategic direction of the Board. The management is led by the Registrar/CEO who is responsible for the day to day operations of the Board and for the implementation of the Engineers Board of Kenya (EBK) strategic goals and the management of its resources.

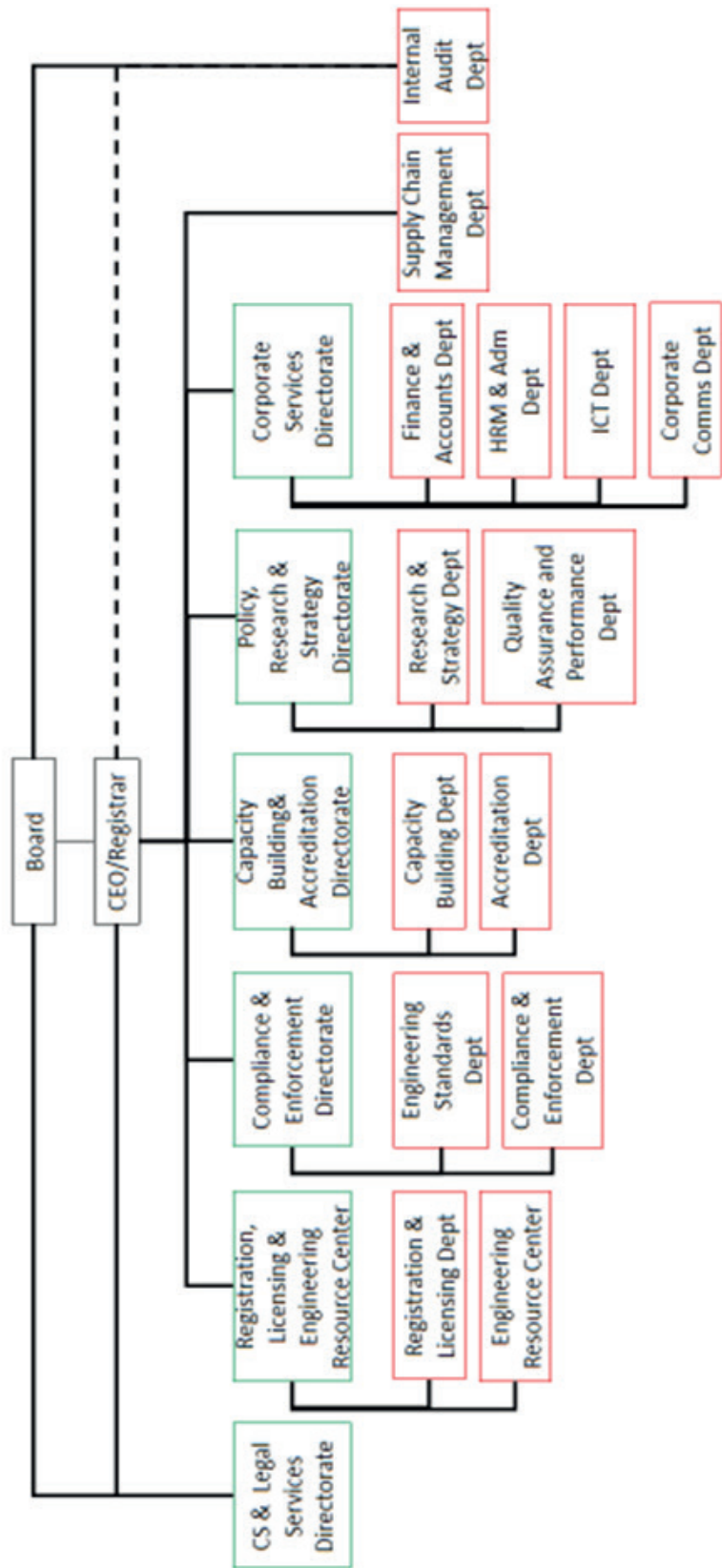


Figure 4: EBK Organization Structure

The Management of Engineers Board of Kenya (EBK) is vested in the Board of Directors who provides policy and oversight while the day to day operations are delegated to the CEO/Registrar. EBK is organized in six (6) Directorates as indicated below;

- (i) Registration, Licensing and Engineering Resource Centre
- (ii) Compliance and Enforcement
- (iii) Capacity Building & Accreditation
- (iv) Policy, Research & Strategy
- (v) Corporate Services
- (vi) Corporation Secretary and Legal Services

There are two (2) stand-alone Departments namely:-

- (i) Supply Chain Management.
- (ii) Internal Audit.

The following is a brief description of each:

4.2.1 Registration, Licensing & Resource Centre Directorate

The office is responsible for carrying out the registration of engineers and engineering firms and is the repository of information with regard to engineering registration and qualifications. The Directorate has the following departments:

- (i) Department of Registration and Licensing
- (ii) Department of Engineering Resources Centre

4.2.2 Capacity Building & Accreditation Directorate

The mandate of the Capacity Building and Accreditation Directorate is derived from Section 7 (h), (i), (l), (n), (o), (q) and (r) of the Engineers Act 2011 which requires the Board to develop capacity in the engineering profession and provide accreditation for engineering education, training and practice. The Directorate has the following departments:

- (i) Continuing Professional Development Department
- (ii) Accreditation Department
- (iii) Internship

4.2.3 Compliance & Engineering Standards Directorate

The mandate of compliance and enforcement Directorate is derived from Section 7(1) (f), (g), (j), (k) and (u) which requires the Directorate to ensure there is compliance and enforcement of the Engineers Act 2011. The Directorate has the following two departments:

- (i) Engineering Resources Centre
- (ii) Compliance & Enforcement Department

4.2.4 Policy, Research & Strategy Directorate

The Directorate will ensure that the Board adopts and implements effective strategies for policy formulation, Research, Quality Assurance, Coordination of Risks Management and Performance Management. The directorate has the following departments:

- (i) Research and Strategy Department
- (ii) Quality Assurance & Performance Management Department

4.2.5 Corporate Services Directorate

The mandate of the Corporate Services Directorate is to provide leadership and coordination of Finance and Accounts, Human Resource Management and Administration, Information and Communications Technology and Corporate Communications Departments. The directorate has the following four (4) departments:

- (i) Human Resources and Administration Department
- (ii) Finance and Accounts Department
- (iii) Information and Communication Technology (ICT) Department
- (iv) Corporate Communications Department

4.2.6 Corporation Secretary & Legal Services Directorate

The directorate is responsible for the provision of the Secretariat and Legal Services to the Board.

4.2.7 Supply Chain Management Department

The Department is created pursuant to the provisions of the Public Procurement and Asset Disposal Act 2015 and is responsible for procurement of goods, works and services, inventory management and Disposal.

4.2.8 Internal Audit Department

The department is responsible for providing assurance on the Board's internal control systems, risk management framework and the governance structure.

4.3 Staff Establishment & Human Resource Development Strategies

4.3.1 Staff Establishment

The Board has a total staff establishment of 121 and currently has in-post of 24 staff members.

S/No	Designation	Authorized Establishment (A)	In- Post (B)	Variance (A-B)
1	Registrar / Chief Executive Officer	1	1	0
2	Director, Capacity Building and Accreditation, EBK 2	1	1	0
3	Director, Compliance and Engineering Standards	1	1	0
4	Director, Registration , Licensing and Engineering Resource Centre	1	0	1
5	Director, Policy, Research and Strategy	1	0	1
6	Director, Corporate Services	1	0	1
7	Director, Corporation Secretary and Legal Services	1	0	1
8	Human Resources and Administration Manager	1	1	0
9	Manager Legal Services	1	1	0
10	Finance Manager	1	0	1
11	ICT Manager	1	1	0
12	Manager, Supply Chain Management	1	0	1
13	Manager, Internal Audit	1	0	1
14	Manager, Corporate Communications	1	0	1
15	Manager, Capacity Building (CPD)	1	0	1
16	Manager, Capacity Building (Accreditation)	1	0	1
17	Manager, Capacity Building (Internship)	1	0	0
18	Manager, Compliance and Enforcement	1	0	1
19	Manager, Research and Strategy	1	0	1
20	Manager, Quality Assurance	1	0	1
21	Manager, Registration Services	1	0	1
22	Principal Registration Officer,	1	1	0
23	Principal Licensing Officer	1	0	1
24	Principal Capacity Building Officer (CPD)	1	0	1
25	Principal Officer Capacity Building (Accreditation)	1	0	1

S/No	Designation	Authorized Establishment (A)	In- Post (B)	Variance (A-B)
26	Principal Officer Capacity Building (Internship)	1	1	0
27	Principal Compliance & Enforcement Officer	1	0	1
28	Principal Planning Officer	1	0	1
29	Principal Accountant	1	0	1
30	Principal Human Resources Management/Development Officer	1	0	1
31	Principal Administrative Officer	1	1	0
32	Principal ICT Officer	1	0	1
33	Principal Communications Officer	1	1	0
34	Principal /Senior Legal Officer	2	0	2
35	Principal Supply Chain Officer	1	1	0
36	Principal Auditor	1	0	1
37	Supply Management Officer/Senior	1	0	1
38	Office Administrator/Senior	4	2	2
39	Registration Officer/Senior	4	0	4
40	Capacity Building Officer/Senior (CPD)	6	0	6
41	Capacity Building Officer/Senior (Internship)	6	0	6
42	Capacity Building Officer/Senior (Accreditation)	6	0	6
43	Compliance and Enforcement Officer/ Senior	10	0	10
44	Planning Officer/Senior	2	0	2
45	Principal/Senior Accountant	1	0	1
46	Administrative Officer/Senior	1	0	1
47	Records Management Officer/Senior	1	0	1
48	Communications Officer/Senior	1	0	1
49	Records Management Officer/Senior	1	0	1
50	Human Resources Management and Development Officer	1	0	1
51	ICT Officer/Senior	1	0	1
52	Auditor/Senior	1	0	1
53	Accountant	2	2	0
54	Records Management Assistant	2	1	1
55	Driver/Senior Driver	6	4	2
56	Legal Clerk	1	0	1

S/No	Designation	Authorized Establishment (A)	In- Post (B)	Variance (A-B)
57	Office Assistant	4	3	1
58	Receptionist	3	0	3
TOTAL		121	23	98

Table 9: EBK Staff Establishment

4.3.2 Human Resource Development Strategies

In order to have adequate, competent and motivated staff which is critical for the achievement of this strategic plan, priority will be given to the following areas:

- (i) Developing a robust recruitment Projection plan for the next three (3) years;
- (ii) Robust Staff Capacity Building Programs;
- (iii) Develop and implement coaching and mentorship programs for the staff;
- (iv) Improved employee relations;
- (v) Developing and implementing a succession plan; and
- (vi) Development and Implementation of Talent Management Policy

4.4 Financial Resources

Implementation of this Strategic Plan will require resources which will be mobilized by the Board from various sources. This section assessed the amount of resources to be spent in implementing programmes and compares them with the resources expected to be mobilized by the Board over the Strategic Plan period. While recognizing that resources are never adequate for full implementation of activities and programmes, the section has gone ahead to outline some of the resource mobilization strategies which will be implemented to raise additional funds for implementation.

4.4.1 Financial Resources Requirements

Implementation of this Strategic Plan will be based on the Key Result Areas identified in the Strategic Framework and the resources required for this are presented in the table below: -

4.4.1 Financial Resources Requirements

Implementation of this Strategic Plan will be based on the Key Result Areas identified in the Strategic Framework and the resources required for this are presented in the table below: -

Key Result Area	Resource Requirements				
	Baseline estimates (Ksh.Mn)	Projected Estimates (Ksh. Mn)			
		2019/2020	2020/2021	2021/2022	TOTAL
Engineers and Engineering Consulting Firms Registered	12.520	15.512	17.373	25.191	58.076
Engineering Professional Services Regulated	8.487	12.532	18.798	31.016	62.346
Engineering Standards Developed And Implemented	9.545	14.579	21.868	38.269	74.716
Capacity For General Practice of Engineering Developed	42.543	63.578	111.261	139.076	313.915
Engineers Board of Kenya Developed And Sustained	92.547	132.978	199.467	229.387	561.832
TOTAL	165.642	239.179	368.767	462.939	1,070.885

Table 10: Financial Resources Requirements

As given in Table 9, the total amount of resources required for full implementation of the Strategic Plan over the 2019/20-2022/23 period is **Kshs. 1,070,885, 000.00.**

4.4.2 Resource Gaps

The following table captures the variance from the estimates allocated under MTP III:

Expenditure	Requirement Estimates (Ksh. Mn) (As per current 3-year MTEF period)			Allocation (Ksh.Mn)	Variance (Ksh.Mn)
	2019/2020	2020/2021	2021/2022		
Recurrent	184.00	144.00	144.00	472.00	(253)
Development	73.00	76.65	80.48	73.00	(198.42)
Total	257.00	220.65	224.48	545.00	(451.40)

Table 11: Resource Gaps

4.5 Resource Mobilization Strategies

The Board will require additional resources if it is to fully actualize this Strategic Plan. Several strategies will be deployed to mobilize additional funds for implementation of the activities and programs outlined in this Strategic Plan.

These will include: -

- (i) Negotiate for increased government funding
- (ii) Increased innovations to improve payment by registered members and increased payment options for members with global presence
- (iii) Increasing linkages with Ministries, Departments, Agencies and County Governments, for purposes of cost sharing on Graduate Interns expenditures
- (iv) Generation of additional revenues from selling branded board merchandise items
- (v) Strengthening of linkages, partnerships and collaborations with key development partners
- (vi) Strategic partnerships and collaborations with established regulatory bodies globally for technical and financial support.

4.6 Risk Analysis and Mitigation Measures

A risk is the probability or chance of a loss or negative effect on the operations or performance of an organization. Risks are, in the context of this Strategic Plan, factors which have a likelihood of negatively influencing the implementation of projects and programs. The Board has little influence over these risks. However, there is need to identify them and develop mitigation strategies for managing negative effects that may result from the occurrence of the risks.

The analysis has been grouped the risks into five categories namely: Strategic Risks; Organizational Risks; Operational Risks; Financial Risks; and Technological Risks.

Strategic Risks are the prospective adverse impacts on the business arising from poor strategic decisions, improper implementation of decisions; or lack of responsiveness to changes in the operational environment;

Organizational Risks are those that threaten the implementation of the Strategic Plan due to internal capacity or structural issues;

Operational Risks are those that arise from capacity inadequacies in the course of implementation of planned programmes and activities;

Financial Risks emanate from failure to either mobilize adequate funds or lack of prudence in financial resource utilization; and

Technological Risks are those associated with deficiencies in Information and Communication Technology, or related thereto.

The Risk Analysis of the Board is outlined in Table 11 below:

Type of Risk	Description of Risk	Category	Mitigation Measures
Strategic Risks	Weak internal and external communication structures	H	- Develop and implement a Communications Strategy - Regular staff meetings; and Regular updates on activities and programmes
	Failure to communicate the Strategic Plan effectively to lower levels	H	Dissemination of the Strategic Plan to all staff
Organizational Risks	Inadequate awareness on the Strategic Plan	M	Disseminate and sensitize all staff, key clients and stakeholders on the Strategic Plan
	Weak follow up of Board decisions	H	Strengthen the follow up on Board decisions and recommendations by management
	Resistance to change	H	- Effective communication of change initiatives; - Rewards and sanctions
	Inadequate staff and loss of highly qualified staff	H	- Recruitment of staff - Improved terms and conditions of service for staff
Operational Risks	Poor implementation of the Strategic Plan	H	Strengthen monitoring of the implementation process

	High turnover of skilled staff	H	● Develop and implement a Succession Management Plan
	Inadequate staff to effectively implement the Strategic Plan	H	● Recruitment of additional staff ● Improvement of staff motivation
	Weak Monitoring and Evaluation (M&E) framework	M	● Develop and implement a robust M&E Framework ● Build capacity on M&E
Financial Risks	Poor budgeting	H	● Ensure management participates in budgeting processes
	Inadequate resources and overreliance on the Government for funding	H	● Preparation and implementation of Resource Mobilization Strategies ● Strengthening linkages with partners
	Wasteful expenditure	H	● Develop and implement budget controls ● Improve workplace practices
Technological Risks	Rapid changes in technology	M	● Regular upgrading of technology and ICT infrastructure
	Inadequate systems and information security	H	● Improve information security ● Regular updates of systems' firewalls

Table 12: Risk Analysis and Mitigation Measures

CHAPTER 5



MONITORING, EVALUATION AND REPORTING



5.0 Overview

Regular assessment of the progress made in implementing a Strategic Plan is critical if the desired results are to be achieved. This is carried out through Monitoring, Evaluation and Reporting. In this Chapter, the Board's Monitoring, Evaluation and Reporting Framework is broadly outlined. The framework will allow for tracking of programmes and activities outlined in the Strategic Framework, assessment of the impact of key programs and in both processes, the reporting of results to stakeholders.

5.1 Monitoring the Strategic Plan

Monitoring is instrumental in tracking implementation of programs, assessing the extent of achievements and providing critical information regarding the implementation of activities and programs. It is the basis of an evidence-based system for initiating corrective actions where variances between what is planned and what is implemented are noted. It also provides the feedback necessary to arrest any deviations from the plan. This enables management to make informed decisions based on evidence. The overarching objective of monitoring the implementation of this Strategic Plan will be to obtain and provide information for purposes of decision making. The monitoring process will be based on the Implementation Matrix, which provides sufficient details, especially indicators and targets, to enable the monitoring of progress of implementing the strategies and activities for each Key Result Area. Regular meetings will be conducted to ascertain implementation of programs and interact with actual implementers for information. Reports will thereafter be prepared for deliberation and decision making.

5.2 Evaluation of Implementation

Evaluation is the assessment of the effects or impacts of a program based on the initial objectives. It is also the systematic and objective assessment concerning the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives. The process seeks to examine the extent to which the objectives of a program or objective have been met. Evaluation of this Strategic Plan will be carried out for selected activities programs annually. However, ad hoc evaluation may be conducted to inform decisions on intervention where significant unexplained variation in performance occurs, especially on critical programs.

5.3 Review of the Strategic Plan

A mid-term review of the Strategic Plan will be carried out mid-2021 to determine the level of necessity for reviewing the Strategic Plan. The report of this review will guide implementation of programs during the remaining duration of the Plan. At the end of the implementation process, a terminal or end-term review will be carried out to assess overall implementation rate and provide critical learning points for the next Strategic Plan.

5.4 Reporting on Performance

Reporting provides a useful way of communicating with all stakeholders regarding the implementation of programs and thus gaining valuable feedback and support. Reports of monitoring activities carried out by the Board will be prepared on a quarterly basis for discussion by the management. A brief of these reports containing key issues will be submitted to the Board of Directors on an annual basis for discussion and policy guidance.

Annex I: Implementation Matrix

Key Result Area	Strategic Objective	Strategy	Expected Outcome	Expected Output	Output Indicators	Target for 3 Years	Target			Budget (Mn)			Responsibility
							Y1	Y2	Y3	Y1	Y2	Y3	
Engineers and engineering firms registered	To license and qualified competent engineers and engineering consulting firms to practise engineering	Review and evaluate all applications for licensing	Qualified and competent engineers and engineering consulting firms	Licensed engineers and engineering consulting firms	Number of applications reviewed and evaluated	5,4001	1,650	1,800	1,950	9.773	10.945	15.870	Director, RL&ERC
		Implement an effective licensing renewal process	Faster licensing renewal processes	Engineers and engineering consulting firms getting licenses renewed on time	Average time taken to process a license	From 90 days to 30 days	90 days	45 days	30 days	5.739	6.428	9.321	
Engineering professional services regulated	To ensure effective and efficient enforcement and compliance to the Engineers Act 2011 and Engineers Rules 2019.	Promote and enforce the Code of Conduct and Ethics for Engineers	Adherence to the Code of Conduct and Ethics by Engineers	Increase in compliance to the Engineers Act 2011 and Engineers Rules 2019	Number of sensitization forums on the Code of Conduct and Ethics	2	1	1	-	5.639	8.459	4.652	Director, CSE

		Investigate and discipline violations to the Engineers Act 2011 and its rules	Disciplinary actions against violations to the Engineers Act 2011 and Engineers Rules 2019	Reduction in number of violations to Engineers Act 2011 and Engineers Rules 2019	Number of reported and investigated violations	100%	100%	100%	3.760	5.639	13.957
		Develop and implement an engineers' identification system	Established engineers' identification system	Engineers having identification cards	Number of identification cards issued	2,800	800	1,000	3.133	4.700	12.406
Engineering standards developed and enforced	To ensure compliance with set standards in engineering practise	Enhance standards of professional competence	Compliance with set standards in engineering practise	Increased engineering professional competence	Percentage of compliance of inspected engineering works	100%	-	50%	10.205	13.121	15.308
		Identify, set and adopt technical standards	Quality engineering services offered	Set of adopted technical standards	Data-bases of adopted technical standards	3	1	1	4.374	8.747	22.961

Capacity for general practice of engineering developed	To build capacity through training and assessment of individual engineers and engineering firms	Implement continuing professional development programs for engineers	Better networked and skilled engineering fraternity	Engineers with up to date skills and knowledge	Number of CPD programs run	30	8	10	12	3.179	2.225	2.782	Director, CBA
		Implement an internship program for graduate engineers	More competent and professional engineers produced; higher transition rate from GE to PE	Structured training for graduate engineers	Number of recruited Graduate Engineers into the internship programme	340	40	100	200	47.048	71.207	89.009	
		Evaluate, approve and accredit engineering programs for public/private universities and other tertiary institutions	Quality engineering programmes taught	Accredited engineering programmes	Number of engineering programmes accredited	10	2	3	5	5.086	4.450	5.563	

		Adminis- ter engi- neering examina- tions re- quired for licensure	Larger pool of profes- sional and consulting engineers	Profession- al exam- inations conducted	Number of exam- inations adminis- tered	11	3	4	4	2.543	3.338	4.172
		Establish the Kenya Academy of Engi- neering & Technol- ogy	Better decision making on engineer- ing and technology matters at National and Coun- ty Govern- ments	Well co- ordinated institution- al frame- work for advisory on engineer- ing and technology	Estab- lished Kenya Academy of Engi- neering & Technology	1	-	-	1	2.543	13.351	16.689
		Establish the Kenya School of Engineer- ing	More opportu- nities to engineers for learn- ing and upskilling ; Build on the capacity of engineers.	Facilities and oppor- tunities for learning, profession- al exposure and skill acquisition	Estab- lished Kenya School of Engineer- ing	1	-	-	1	1.907	11.126	13.908

Engineers Board of Kenya developed and sustained	To ensure that EBK delivers on its mandate in a sustainable manner	Strengthen the Board's governance, risk management and internal control processes	Enhanced sharing of engineering knowledge and information; Promotion of research, development and innovation	Create a repository for engineering knowledge, data and information	Established Engineering Resource Centre	1	-	-	100%	100%	100%	1	1.272	5.563	6.954	Director, Corporate Services
		Optimized utilization of Board resources	Prudent utilization of Board resources	Institutionalized Supply Chain Manual; compiled organizational procurement plans aligned to budgetary allocations	Percent- age compliance to the annual budgetary and procurement plans	100%	100%	100%	100%	100%	100%	100%	1.995	2.992	3.441	

	Enhance automation, utilization and maintenance of implemented ICT infrastructures and systems	Efficient and faster delivery of services to customers	Automation of Board services	Percentage of engineers utilizing the automated services	100%	30%	60%	100%	10.638	15.957	18.351	
	Enhance ICT Security	Board's data and information well protected	ICT security systems in place	Number of successful attacks on the Board's ICT systems	0	0	0	0	3.989	5.984	6.882	
	Branding and visibility of the Board and its services	Enhanced visibility and reputation of the Board	Clear communications strategy	Percentage implementation of activities under the communication strategy	100%	100%	100%	100%	6.649	9.973	11.469	
	Ensure adequate, competent and motivated workforce	High productivity from a motivated workforce; low staff turnover	Number of staff recruited	Percentage extent of inpost filled	65.30 %	25.60 %	49.60 %	65.30 %	95.345	143.018	164.470	

	Enhance resource mobilization and prudent financial management	Self sustainability	Increased revenues	Percentage of revenue collection	90%	65%	75%	90%	2.394	3.590	4.129	Direc-tor, PRS
	Develop effective policy research and strategy	Research based decision making and operational frame-works	Policy devel-oped and research undertak-en	Number of policies developed and research undertaken	4	2	1	1	5.319	7.979	9.175	
	Strategic partnerships and collaborations	Widening resource base; creation of opportunities for engineers; lobby-ing for engineers interests	Creation of strategic part-nerships	Number of signed MOUs	3	1	1	1	3.969	5.984	6.882	

Table 13: Implementation Matrix

Annex II: Monitoring and Evaluation Framework

Key Result Area	Outcome	Key Performance Indicator	Baseline	Target	
				Mid-term Period Target	End of Plan Period Target
Engineers and engineering firms registered	Qualified and competent engineers and engineering consulting firms	Number of applications reviewed and evaluated	3,755	2,450	5,400
	Faster licensing renewal processes	Average time taken to process a license	90 days	45 days	30 days
Engineering professional services regulated	Adherence to the Code of Conduct and Ethics by Engineers	Number of sensitization forums on the Code of Conduct and Ethics	2	4	2
	Disciplinary actions against violations to the Engineers Act 2011 and Engineers Rules 2019	Number of reported and investigated violations	0	50%	100%
	Established engineers identification system	Number of identification cards issued	0	1,300	2,800
Engineering standards developed and enforced	Compliance with set standards in engineering practise	Percentage of compliance of inspected engineering works	-	50%	100%
	Quality engineering services offered	Databases of adopted technical standards	0	1	3
Capacity for general practice of engineering developed	Better networked and skilled engineering fraternity	Number of CPD programs run	12	13	30
	More competent and professional engineers produced; higher transition rate from GE to PE	Number of recruited Graduate Engineers into the internship programme	40	100	240
	Quality engineering programmes taught	Number of engineering programmes accredited	3	5	10

Key Result Area	Outcome	Key Performance Indicator	Baseline	Target	
				Mid-term Period Target	End of Plan Period Target
	Larger pool of professional and consulting engineers	Number of examinations administered	4	5	11
	Better decision making on engineering and technology matters at National and County Governments	Established Kenya Academy of Engineering & Technology	0	1	1
	More opportunities to engineers for learning and upskilling ; Build on the capacity of engineers.	Established Kenya School of Engineering	0	0	1
	Enhanced sharing of engineering knowledge and information; Promotion of research, development and innovation	Established Engineering Resource Centre	0	1	1
Engineers Board of Kenya developed and sustained	Prudent utilization of Board resources	Percentage of internal audit issues resolved	100%	100%	100%
	Optimized utilization of Board resources	Percentage compliance to the annual budgetary and procurement plans	70%	85%	100%
	Efficient and faster delivery of services to customers	Percentage of engineers utilizing the automated services	0%	60%	100%
	Board's data and information well protected	Number of successful attacks on the Board's ICT systems	0	0	0

Key Result Area	Outcome	Key Performance Indicator	Baseline	Target	
				Mid-term Period Target	End of Plan Period Target
	Enhanced visibility and reputation of the Board	Percentage implementation of activities under the communication strategy	50%	70%	100%
	High productivity from a motivated workforce; low staff turnover	Percentage extent of in post filled	19.80%	50.40%	65.30%
	Self-sustainability	Percentage of revenue collection	62%	65%	90%
	Research based decision making and operational frameworks	Number of policies developed and research undertaken	2	2	4
	Widening resource base; creation of opportunities for engineers; lobbying for engineers interests	Number of signed MOUs	1	1	3

Table 14: Monitoring and Evaluation Framework

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