MINISTRY OF TRANSPORT, INFRASTRUCTURE, HOUSING,
URBAN DEVELOPMENT AND PUBLIC WORKS

REGULATORY IMPACT STATEMENT
FOR THE NATIONAL BUILDING CODE, 2022

MARCH 2022

This Regulatory Impact Assessment (RIA) has been prepared by the Ministry of Infrastructure and Housing pursuant to Section 6 and 7 of the Statutory Instruments Act (No. 23 of 2013)

Contents

Chapter 1: **INTRODUCTION**

1.1 : **Regulatory-Making Authority and the Legal Mandate**

Section 42 of the National Construction Act empowers the Cabinet Secretary responsible for public works in Consultation with the Board of the Authority, to make regulations generally to give effect to the Act and in particular for the Building Code in the construction industry. The Board of the Construction Authority and the Cabinet Secretary (Ministry) therefore have the required legislative powers to propose the National Building Code.

In exercise of the above powers therefore, the Ministry has drafted the Building Code, 2022. This is a statutory instrument which seeks to significantly change the practice in the construction industry. It is likely to impose significant cost in the construction industry which plays a key role in Kenya's economic development. The Ministry now undertakes public consultations and prepares this RIA in partial fulfilment of the requirements of the Statutory Instruments Act.

1.2 : **Requirements of the Statutory Instruments Act**

The Statutory Instruments Act, No. 23 of 2013 is the legal framework governing the conduct of RIA in Kenya. Sections 6 and 7 require that if a proposed statutory instrument is likely to impose significant costs on the community or a part of the community, the regulation-making authority shall, prior to making the statutory instrument, prepare a regulatory impact statement about the instrument. The Act further sets out certain key elements that must be contained in the RIA namely:

(a) a statement of the objectives of the proposed legislation and the reasons;

(b) a statement explaining the effect of the proposed legislation;

(c) a statement of other practicable means of achieving those objectives, including other regulatory as well as non-regulatory options;

(d) an assessment of the costs and benefits of the proposed statutory rule and of any other practicable means of achieving the same objectives; and

(e) the reasons why the other means are not appropriate.

Section 5 of the Act requires that a regulation-making authority to conduct public consultations drawing on the knowledge of persons having expertise in fields relevant to the proposed statutory instrument and ensuring that persons likely to be affected by the proposed statutory instrument are given an adequate opportunity to comment on its proposed content.

1.3 : **What is a Regulatory Impact Statement?**

RIA is a systematic policy tool used to examine and measure the likely benefits, costs and effects of new or existing regulation. A RIA is an analytical report to assist decision makers. As an aid to decision making RIA

includes an evaluation of possible alternative regulatory and non-regulatory approaches with the overall aim of ensuring that the final selected regulatory approach provides the greatest net public benefit. Typically, the structure of a RIA should contain the following elements: title of the proposal, the objective and intended effect of the regulatory policy, an evaluation of the policy problem, consideration of alternative options, assessment of all their impacts distribution, results of public consultation, compliance strategies, and processes for monitoring and evaluation[1].

RIA is usually conducted before a new government regulation is introduced to provide a detailed and systematic appraisal of the potential impact of a new regulation in order to assess whether the regulation is likely to achieve the desired objectives. RIA promotes evidence-based policy-making as new regulations typically lead to numerous impacts that are often difficult to foresee.

From a societal viewpoint, RIA should confirm whether or not a proposed regulation is welfare-enhancing from, in that, the benefits will surpass costs. RIA therefore has objectives of improving understanding of the real-world impact of regulatory action, including both the benefits and the costs of action, integrating multiple policy objectives, improving transparency and consultation; and enhancing governmental accountability.

1 Regulatory Policy Division Directorate for Public Governance and Territorial Development: Building an Institutional Framework for Regulatory Impact Analysis (RIA): Guidance for Policy Makers. OECD, 2008

Chapter 2: **PURPOSE AND OBJECTS OF PROPOSED CODE**

2.1 : **Scope**

The scope of the National Building Code is to provide-

(a) for the design, construction, operation, inspection and maintenance of buildings;
(b) standards for building materials, products, elements, systems and services;
(c) standards for infrastructure services;
(d) standards for the operations and works at construction sites;
(e) for disaster management at construction sites; and
(f) for the safety and security of the users and occupants of a building.

2.2 : **Objective**

The National Building Code aims to promote order, safety and health of persons in or about construction works. It seeks to improve control of and encourage better practices in building design and construction to provide greater assurance to the users.

2.3 : **Specific objectives**

Specifically, the implementation of the Code will result in:

(a) more clarity on the standards that buildings must meet;
(b) certainty that qualified professionals are undertaking building design, construction and inspection of construction works;
(c) assurance that people can use buildings safely without endangering their health;
(d) better protection for building owners through the introduction of defect liability and mandatory warranties;
(e) facilitating rescue operation or firefighting in a building and ensuring reasonable level of protection from injury or illness while doing so;
(f) ensuring buildings have attributes that contribute appropriately to the health, physical independence and wellbeing;
(g) ensuring durability of buildings that are designed, constructed and are able to be used in ways that promote sustainable development;
(h) harmful effects on human health resulting from the use of building methods, products, design or building work need to be prevented or minimized
(i) promoting innovation and flexibility in design, building materials and construction;
(j) limiting the extent and effects of the spread of fire;
(k) protecting other property from physical damage resulting from the construction, use and demolition of a building;
(l) providing access to all types of buildings to people with disabilities;
(m) preserving buildings of significant cultural, historical or heritage value;
(n) ensuring energy use in buildings is efficient and promoting renewable sources of energy;
(o) efficient and sustainable use of building material;
(p) ensuring water use in buildings needs to be efficient and promote water conservation;
(q) reduction of waste generated during the construction process;

Chapter 3: **BACKGROUND AND CONTEXT**

3.1 : **Policy and Legal Background**

Construction industry in Kenya is a key driver to the growth of the economy and contributes greatly to the country's Gross Domestic Product, employment creation as well as linkages to other sectors requiring infrastructure services[2]. Kenya's vision 2030 identifies construction as being a key enabler for driving the country to a globally competitive and prosperous country with a high quality of life by the year 2030. Construction is thus a critical component to the country's development and its impact is felt nationally and regionally. Further, Article 42 of the Constitution of Kenya provides that all the citizens are entitled to clean and healthy environment while Article 43 (1) (b) declares that every person has the right to accessible and adequate housing and reasonable standards of sanitation.

A building code is a key component in the construction industry. It sets out the rules that govern and specify the minimum agreed levels of safety for the structures and buildings. For an effective model, a building code should have legal status and should be capable of enforcement so that all the stakeholders in the building industry adopt it.

Building codes provide minimum standards that should be followed to ensure building standards, safety, health and security of the property from all hazards that may occur to the structure. This applies also on how the buildings are to be planned, designed and constructed. Further, a building code provides general information as well as specific information such as siting and space about building and building materials among others.

3.2 : **Domestic Context**

The existing building Code in Kenya is the Local Government (Adoptive By-Laws) (Building) Order 1968. The code was set up as a development control tool to comprehensively address among others, matters revolving around safety, public health, lifespan and performance of the built environment and their inhabitants.

By the way of an overview, the Code provides for the process of application for development permission and erection of buildings. It defines the extent of approval including basis of conditions or period within which development must be commenced or terminated and even grounds for disapproval. For purposes of ensuring safety of both occupants and buildings during and after construction, the code provides for mandatory inspections, that a person who has erected a building has to give notice in writing of its completion to enable a final inspection to be made and a certificate of completion to be issued. The regulations further prescribe mandatory existing of services of registered architects and d engineers for purposes of design and supervision of certain category of buildings to ensure compliance with the set standards.

3.3 : **International context**

Internationally, the need for a modern up to date Building Code has been addressing design and installation of building systems has been felt for long. The International Building Code (IBC) is a model code that safeguards public health and safety for all types of structures and buildings. It is founded on broad principles that make possible the use of new materials and designs. The model code is compatible with all International Codes (I-Codes)

2 Sessional Paper No. 3 of 2016 on National Housing Policy

issued by the International Code Council including the International Residential Code (IRC) which applies to new town houses not more than 3 stories and one- and two-family structures and International Existing Building Code (IEBC) which applies to the addition, change in occupancy of existing structures, repair and alteration.

Also at international level, Eurocodes, a common set of technical rules for the design of building and civil engineering works for EU Member States has been adopted in many countries including Singapore, Malaysia, Australia,New Zealand,South Africa, Angola and Mozambique.

It is notable that these international standards have not been incorporated in Kenya's building code since it has not been revised since 1968.

Currently, the manufactured materials, which dominate market, are either made from China or from the local industries that imports the raw materials from China. The large construction contracts that have been tendered has shown a lot of Asian companies allocated the tenders and some of these tenders comes with strings attached with most of the materials required for construction being imported from Asian countries. This has opened up more gaps for substandard materials in the market that do not conform to our needs as a country. Kenya requires its own specifications for the quality of materials to be imported or manufactured since the trade patterns may change with time with our own regulations.

Chapter 4: **EVALUATION OF THE PROBLEM**

This part attempts to precisely state the problem to be solved, giving evidence of its nature and magnitude, and explaining why it has arisen.

4.1 : **Local Government (Adoptive By-Laws) (Building) Order 1968**

The current Building Code was formulated in 1968 under the now repealed Local Government Act (Cap 265) as adoptive building by-laws which were intended to be adopted by any municipal or county council. The parent Act was repealed by the County Governments Act, No. 17 of 2012 which did not make any mention to the Code. However, the Building Code continues to apply by virtue of section 24 of the Interpretation and General Provisions Act, Chapter 2 of the Laws of Kenya which provides as follows:

> "*Where an Act or part of an Act is repealed, subsidiary legislation issued under or made in virtue thereof shall, unless a contrary intention appears, remain in force, so far as it is not inconsistent with the repealing Act, until it has been revoked or repealed by subsidiary legislation issued or made under the provisions of the repealing Act, and shall be deemed for all purposes to have been made thereunder."*

Further section 27(2) of the Statutory Instruments Act, 2013 provides"

> *"Despite the provisions of subsection (1), any regulations, order or notice issued immediately before the commencement of this Act shall continue in force as if it were made under this Act unless it is expressly revoked by an Act of Parliament under which it is made."*

4.2 : **Shortcomings of the Building Code (1968)**

The1968 Building Code has been applied in Kenya for over 50 years. Given the dynamic nature of the construction industry, some of its provisions have become obsolete and need to be replaced with market oriented and research based technical provisions. While the Building Code contains some good provisions the following shortcomings are noticeable—

(a) Failure to adopt international standards: The Code does not adopt any known international building standards. This therefore means that the only standards applicable are those specified under the Standards Act, yet these standards do not cover some of the key areas like structural design.
(b) System of measurement: The Code employs the Imperial units (feet and inches) while Kenya uses the modern form metric system, International System of Units) (metre). This is the only system of measurement with an official status in nearly every country in the world and is therefore convenient for international transactions.
(c) The Code is material based and recognizes only conventional building materials like stones, bricks, and mortar in its application. This orientation fails to take into account modern building technologies and international building standards. Consequently, Kenya has not had a well-developed building material industry to substitute the current imports. This is despite the fact that the country is endowed with natural resources such as deposits of limestone, gypsum, clay, coral, forests as well as agricultural, industrial and domestic wastes that can increase the supply of building materials. The Code does not recognize new building materials and technologies that could drastically reduce the cost of construction without compromising the quality of the finished building.

(d) Enforcement and compliance: The Code was designed for implementation and enforcement by local governments (now county governments) as opposed to an independent and well capacitated oversight authority. This has led to lack of proper implementation of Code and therefore compromised the quality of many buildings.
(e) The Code also contains the following gaps:
    i. It has no provisions on access to buildings by persons with disabilities and the aged. To provide for this Omission, the Persons with Disabilities Act, 2003 was amended in 2010 to require proprietors of a public buildings adapt them to suit persons with disabilities within five years. However, no more detailed legislative or regulatory guidance exists as to the specific steps that must be taken to ensure compliance with this general requirement in relation to access to premises.
    ii. The Code does not contain measures to deal with climate change concerns as they relate to the construction industry. Green building concept advocates for buildings which in design, construction and operation, reduce or eliminate negative impacts, and can create positive impacts, on our climate and natural environment.
    iii. Role of building professionals. The basic technical team a building project comprises architects, civil/structural engineers, electrical/mechanical engineers and quantity surveyors. These constitute the building professionals who should play a central role in the Construction sector.
    iv. The Code does not provide protection to a building owner against professional negligence. There is need for better protection for building owners through the introduction of defect liability and mandatory warranties.
    v. It lacks provisions relating to disaster risk management on construction sites and the built environment.
    vi. It does not make provision for certain key aspects including parking spaces, glazing and cladding, refuse disposal and landscaping.

The continued implementation of the obsolete building code has resulted to the following:

(a) low technological uptake and exposure levels of stakeholders to international best practices;
(b) lack of a standard monitoring and evaluation framework;
(c) inadequate capacity for enforcement of standards and regulations;
(d) poor quality of works as a result of poor workmanship and use of substandard materials;
(e) use of inappropriate construction materials;
(f) lack of sustainable construction/green building design skills and construction practices to combat the negative effects of climate change
(g) low completion rates of construction projects;
(h) poor practices in safety and health management
(i) inadequate access to affordable project financing;
(j) lack of harmony in policies, laws and regulations;
(k) unethical conduct and unfair business practices;
(l) inadequate skilled and competent workforce;[3]
(m) lengthy procurement procedures;

It is on the basis of these shortcomings that the outdated 1968 Building Code is intended to be replaced with a new National Building Code which adopts the standards set out under the Standards Act and international standards including the Eurocodes and the Planning and Building Regulations 2009 which allows use of local materials that pass the safety test.

3 Draft Construction Industry Policy, 2019

Chapter 5: **LEGAL AND POLICY FRAMEWORK FOR THE PROPOSED KENYA'S BUILDING CODE**

An evaluation of the legal and policy frameworks related to the construction industry and built environment is intended to answer the question whether there a legal basis for developing the proposed regulation. It is also intended to bring out the context and legal environment within which the proposed National Building Code is being developed. Regulatory processes should be structured so that all regulatory decisions rigorously respect the principles of 'rule of law' that is, responsibility should be explicit for ensuring that all regulations are authorised by higher-level regulations and are consistent with the supreme law and treaty obligations. In addition, they should complement other legal requirements and ensure statutory harmony of the entire statute book.

5.1 : **Constitutional Basis**

5.1.1 : Distribution of Housing Function

The Fourth Schedule to the Constitution declares that the Housing Policy, National Public Works, Health Policy, Disaster Management and the general principles of land planning and coordination of planning by counties shall be functions of the national government. Article 191 of the Constitution further provides that national legislation prevails over county legislation if the national legislation applies uniformly throughout Kenya and provides for a matter that cannot be regulated effectively regulated by the counties or requires uniformity across the nation and provides for national standards or policies.

The Fourth Schedule also provides that County Planning and Development including housing, electricity and gas reticulation and energy regulation and county public works shall be functions of the county governments.

The National Housing Policy for Kenya, 2016, the draft Construction Industry Policy, 2019, the Physical and Land Use Planning Act, 2019, the National Construction Authority Act, 2011 and the draft National Building Code, 2022 are all premised on the above constitutional division of functions.

5.2 : **National Construction Authority Act, 2011**

5.2.1 : Power to issue and enforce the Building Code

This is the legal basis upon which the National Building Code, 2020 is premised. Vide the Business Laws (Amendment) Act, 2020, section 42 of the Act was amended to provide that the Cabinet Secretary may, in consultation with the Board, make regulations to provide for the Building Code in the construction industry. The Authority also has the power to enforce the Building Code in the construction industry as it undertakes mandatory inspections on sites under construction.

5.3 : **Physical and Land Use Planning Act, 2019**

This Act provides for planning, use, regulation and development of land.

5.3.1 : Development control and development permission

The Act seeks:

(a) to ensure orderly physical and land use development;
(b) to ensure optimal land use;
(c) to ensure the proper execution and implementation of approved physical and land use development plans;
(d) to protect and conserve the environment;
(e) to promote public safety and health;
(f) to promote public participation in physical and land use development decision-making;
(g) to ensure orderly and planned building development, planning, design, construction, operation and maintenance; and
(h) to promote the safeguarding of national security.

5.3.2 : Development involving erection of Buildings

The Act provides that where the development involves the erection of a building, the county government will consider the following—

(a) the use of the building;

(b) the sitting of the building within the plot;

(c) the elevations of the building, plinth area, canopies and height of buildings;

(d) the design, shape, civic design and facade and appearance of the building;

(e) the set back and the building line;

(f) access to and parking on land which the building is to be erected;

(g) loading bay;

(h) density;

(i) plot coverage;

(j) provision for rainwater harvesting facilities and water storage tanks in every building;

(k) landscaping;

(l) ventilation and lighting;

(m) infrastructure adequacy;

(n) environmental, health and cultural considerations; and

(o) any other matter that a county government considers necessary for purposes of planning.

The Act further provides that where building plans submitted to a county government do not meet the required standard, a county government shall communicate the areas of improvement to the applicant who shall amend the buildings plans or drawings accordingly and resubmit to the county government.

The building plans or drawings to be submitted include:

(a) development plan and drawings;

(b) architectural drawings and specifications;

(c) civil and structural engineer's drawings and specifications;

(d) electrical engineer's drawings and specifications; and

(e) mechanical and plumbing drawings and specifications.

5.3.3 : Powers of county governments in development control

The Act vests the power to undertake development control and grant development permission to the county governments which have the power within their areas of jurisdiction to—

(a) prohibit or control the use and development of land and buildings in the interests of proper and orderly development of its area;

(b) control or prohibit the subdivision of land;

(c) consider and approve all development applications and grant all development permissions;

(d) ensure the proper execution and implementation of approved physical and land use development plans;

(e) formulate by-laws to regulate zoning in respect of use and density of development;

(f) reserve and maintain all the land planned for open spaces, parks, urban forests and green belts in accordance with the approved physical and land use development plans; and

(g) consider and determine development planning applications made in respect of land adjoining or within reasonable vicinity of safeguarding areas.

Other key features of the Act include the following:

(a) It is illegal for a person to carry out development within a county without a development permission granted by the respective county executive committee member.
(b) A development permission may be revoked if the applicant contravenes any provision of the Act or conditions imposed on it.
(c) A person applying for development permission shall also notify the public of the development project being proposed and invite the members of the public to submit any objections on the proposed development project to the relevant county executive committee member for consideration.
(d) A person applying for development permission shall ensure that any documents, plans and particulars that are provided to the respective county executive committee member while applying for development permission have been prepared by the relevant qualified, registered and licensed professionals.
(e) Before issuance of the development permission, the county executive committee member shall give a copy of the application to the relevant authorities or agencies to review and comment on all relevant matters including land survey, roads and transport, agriculture and livestock, health, public works and utilities, environment and natural resources, urban development, national security in respect of land adjoining or within reasonable vicinity of safeguarding areas and any other relevant authority.
(f) When considering an application for development permission, a county executive committee member—
    i. shall be bound by the relevant approved national, county, local, city, urban, town and special areas plans;
    ii. shall take into consideration the provision of community facilities, environmental, and other

social amenities in the area where development permission is being sought;

iii. shall take into consideration the comments made on the application for development permission by other relevant authorities in the area where development permission is being sought;

iv. shall take into consideration the comments made by the members of the public on the application for development permission made by the person seeking to undertake development in a certain area; and

v. in the case of a leasehold property, shall take into consideration any special conditions stipulated in the lease.

(a) An applicant or an interested party that is aggrieved by the decision of a county executive committee member regarding an application for development permission may appeal against that decision to the County Physical and Land Use Planning Liaison Committee with a further appeal to the Environment and Land Court.

(b) Each county executive committee member shall maintain a register, open for public scrutiny, of documents submitted by applicants for development permission and the details of the proposed project for which development permission has been applied for.

(c) It is an offence for a public officer to grant development permission or comments on an application for development permission contrary to the Act or any other law.

(d) Development control provisions do not apply to development by or on behalf of the Kenya Defence Forces and other national security installations, preservation of heritage sites

5.4 : **Standards Act Cap 496**

This Act provides for standardization and specification of commodities and codes of practice. The Act establishes the Kenya Bureau of Standards managed by the National Standards Council which is responsible for governing and maintaining the standards and practices of metrology in Kenya. KEBS is a member of the International Organization for Standardization (ISO). The main functions of KEBS are as follows:

(a) Promote standardization in industry and commerce

(b) Provide facilities for examination and testing commodities manufactured in Kenya

(c) Test goods destined for exports for purposes of certification

(d) Prepare, frame or amend specification and codes of practice

It has developed standards for numerous products in the market including building materials, piping and electric wiring.

5.5 : **Occupational Safety and Health Act, 2007**

This Act provides for the safety, health and welfare of workers and all persons lawfully present at workplaces and establishes the National Council for Occupational Safety and Health. It requires that buildings used as work places must be well ventilated with sufficient natural or artificial lighting. The Act also makes provisions for explosions, fire or electric short circuiting in the work place.

5.6 : Urban Areas and Cities Act, 2011

This Act provides for the classification, governance and management of urban areas and cities and creates linkages integrated planning and development control.

5.7 : Occupiers' Liability Act, Cap 34

This Act provides that an occupier of premises owes the common duty of care to all the visitors which requires him to take such care as in all the circumstances of the case is reasonable to see that the visitor will be reasonably safe in using the premises for the purposes for which he is invited or permitted by the occupier to be there. This includes circumstances where damage is caused to a visitor by a danger due to the faulty execution of any work of construction, maintenance or repair by an independent contractor employed by the occupier.

Chapter 6: **PUBLIC CONSULTATIONS**

An evaluation of the public consultation process is necessary to ascertain whether all interested parties had the opportunity to present their views. Regulations should be developed in an open and transparent fashion, with appropriate procedures for effective and timely input from interested parties such as affected businesses, interest groups and other government ministries, departments and agencies.

6.1 : **Legal requirements relating to public participation and consultation**

Participation of the people, inclusivity, transparency and accountability are a constitutional requirements whenever the State or public officer applies the Constitution, enacts any law or makes or implements a public policy4. This requirement is premised on the sovereignty principle5 which vests all sovereign power to the people of Kenya. This power entitles the people to unfettered access to the process of making public decisions through their involvement.

Further, the objects of devolution6 give powers of self-governance to the people and enhance their participation in the exercise of the powers of the State and in making decisions affecting them and recognize the rights of communities to manage their own affairs and to further their development. Finally, the values and principles of public service7 requires the involvement of the people in the process of policymaking and part, transparency and provision to the public of timely and accurate information.

With regard to the subsidiary legislation making process, the Statutory Instruments Act requires that the regulatory making authority shall make consultations before making statutory instruments (Regulations), in particular where the proposed regulations are likely to have a direct, or a substantial indirect effect on business or restrict competition. The Act provides that in determining whether any consultation that was undertaken is appropriate, the regulation making authority shall have regard to all relevant matters, including the extent to which the consultation:

(a) drew on the knowledge of persons having expertise in fields relevant to the proposed statutory instrument; and

(b) ensured that persons likely to be affected by the proposed statutory instrument had an adequate opportunity to comment on its proposed content.

The Statutory Instruments Act further requires that the persons to be consulted should either directly or by advertisement through representative organizations be invited to make submissions by a specified date, which should not be lesser than 14 days or be invited to participate in public hearings concerning the proposed instrument.

6.2 : **Industry Stakeholders**

The following stakeholders were identified for purposes of developing the National Building Code:

1. Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works

4 Article 10 of the Constitution
5 Article 1 of the Constitution
6 Article 174(c) of the Constitution
7 Article 232 (1) of the Constitution

2. National Construction Authority
3. County Governments
4. Ministry of Lands and Physical Planning
5. National Lands Commission
6. Construction Industry Players
7. Construction Industry Professionals
8. Universities/Research Institutions
9. Kenya Private Sector Alliance
10. Housing and Building Research Institute
11. Kenya Green Building Society
12. Kenya Association of Manufacturers
13. Kenya Institute of Public Policy and Research
14. Kenya National Bureau of Statistics
15. Kenya Bureau of Standards
16. Ministries, Departments and Agencies
17. Micro and Small Enterprise Authority
18. Micro, Small and Medium Enterprises
19. National Commission for Science, Technology and Innovation
20. National Building Inspectorate
21. National Construction Corporation
22. National Environmental Management Authority
23. Non-Governmental Organizations
24. National Industrial Training Authority
25. Technical and Vocational Education and Training Authority

6.3 : **The Process of public consultation**

The need to review Kenya's 1968 Building Code arose out of the construction collapses that were witnessed in Kenya in the 1990s. In 1996, following the collapse of the Sunbeam Building, a Commission led by Dr. R. G.M Mutiso was commissioned to examine the existing building laws, by-laws and regulations. They were to made recommendations with a view to prevent incidences similar to that collapse.

Since then, several attempts made to revise the Building Code have been piece-meal and have not met the desired results nor have they been fully embraced by various stakeholders

On 20th April 2009, the then Coalition Government launched a task force committee to review and harmonize laws and regulations governing the building and construction industry. The task force came up with the comprehensive and integrated Draft Building Regulations 2009. The regulations were never adopted nor implemented.

In October 2019, the Cabinet gave direction to finalize and adopt the building code of Kenya. Connected to this, the National Construction Authority Act No. 41 of 2011 was amended to anchor the Building Code and enforce it, removing the ambit from the local Government Act that had been repealed. This was done through the Business Laws (Amendment) Act on 20th March 2020. Due to the global Covid-19 pandemic, public participation could not commence immediately.

The Principal Secretary, State Department for Public Works on 25th November 2019 appointed a Committee to guide the review and finalization of the draft building code. Further, the National Construction Authority was tasked to steer and coordinate the review process. Since the launch, the committee has consulted key stakeholders including professional associations, Government agencies, the Council of Governors, the private sector, and other interested groups. This resulted in the endorsement of the draft Building Code 2020.

Chapter 7: **AN OVERVIEW OF THE PROPOSED BUILDING CODE: SALIENT FEATURES**

This overview is intended to assess whether the proposed regulation is clear, consistent, comprehensible and comprehensive enough to address the identified problem. The rules should be understood by likely users, and to that end the Regulator should take steps to ensure that the text and structure of rules are as clear as possible.

The structure of the proposed National Building is as follows:

Part I - Siting and Space about Buildings

To ensure the health and safety of users, the Code prescribes the siting and space about buildings by stipulating compliance to planning requirement including the sitting, size, height, shape and appearance of a building to safeguard the dignity, preserve the amenity and complement the general appearance of every street, square, public place. It provides for the size of frontage of a building and prohibits obstruction to access of other buildings or reducing the quantity of natural light and air.

Part II - Site Preparation

It requires that before the erection, alteration, scaffolding or demolition of a building, the owner of the plot on which the building is located shall erect a fence, hoarding or barricade, to prevent the public from entering the plot and to protect the public from the activities at the plot including limitation of dust, noise nuisance emanating from disposal of waste from the site. It requires the contactor to provide for facilities like kitchen and sanitary facilities for those working on the site. Site safety also includes an assessment by a civil engineer of the soil stability

Part III - Building Materials

The building materials to be used shall comply with the Standards Act (Cap 496) (KEBS). Considerations for the circular economy are not locked out as long as the material to be used in construction complies with the relevant standard

Part IV - Structural Design

Structural design of buildings shall comply with Eurocode 0 to Eurocode 9[8]. A civil engineer is required to carry

8 European Standards (EN) related to construction, Eurocode: Basis of structural design (informally Eurocode 0; abbreviated EN 1990 establishes the basis that sets out the way to use Eurocodes for structural design. Eurocode 0 establishes Principles and requirements for the safety, serviceability and durability of structures, describes the basis for their design and verification and gives guidelines for related aspects of structural reliability. The following other European Standards have been published:

EN 1991 Eurocode 1 : Actions on structures
EN 1992 Eurocode 2 : Design of concrete structures
EN 1993 Eurocode 3 : Design of steel structures
EN 1994 Eurocode 4 : Design of composite steel and concrete structures
EN 1995 Eurocode 5 : Design of timber structures
EN 1996 Eurocode 6 : Design of masonry structures

out inspections at intervals deemed necessary in accordance with accepted professional practice, and satisfy that the structure has been erected in accordance with the approved design. The civil engineer shall then furnish to the approving authority with a certificate to that effect. An exaction that is more than 3 m deep shall be designed by a civil engineer and every foundation for a building more than 4 storeys in height shall be preceded by a geotechnical investigations report.

The purpose of the Eurocodes is:

- to harmonize the market for construction products and engineering services
- to prove compliance of construction works with the specified requirements for mechanical resistance, stability and safety in case of fire
- to provide a basis for specifying contracts for construction works and related services

Part V - Space within Buildings

The Code requires that the height of room space up to the ceiling shall at least be 2.4m 97 and the minimum dimension of a landing, lobby or passage shall not be less than the width of the staircase to which it leads. It provides for the minimum space requirements for rooms. Where there is a swimming pool, there shall be a wall or fence to ensure that a person cannot access the pool from a street, or public place, or an adjoining site, other than through a self-closing and self-latching gate with a provision for locking the gate.

Part VI - Floors

The Code requires that a floor of any building to be strong enough to support the weight of the building and any load which may be subjected to it. Where a building is to be erected on black cotton soil, the Code requires its entire removal or part removal in case of an entirely suspended floor. The Code also contains requirements for floors in relation to fire are set out ❑ Floors are also supposed to be non-slippery 102 (6) A floor finishing detail shall be of non-slippery material and shall be approved by the architect and the civil engineer supervising the project.

Where timber is used in structural parts of the floor, it shall conform to KS EN 1995-1-1-2004 (2006) (Design of Timber Structures, General Common Rules and Rules for Buildings) and shall be protected against termites in accordance with KS 1002 (Anti-Termite Measures in Buildings - Pre-Constructional Chemical Treatment Measures).

Part VII - Walls

The Code provides specifications for foundation walls, retaining walls and load bearing as well as rain penetration test for the walls to ensure the health of the occupants and durability of the building. Hollow blocks shall not be used to construct a substructure foundation wall.

Part VIII - Lighting and Ventilation

A room shall have a means of lighting and ventilation which shall enable the room to be used, without detriment to the health or safety, or causing nuisance, for the purpose for which the room is designed. Sufficient natural

EN 1997 Eurocode 7 : Geotechnical design
EN 1998 Eurocode 8 : Design of structures for earthquake resistance
EN 1999 Eurocode 9 : Design of aluminum structures

lighting shall be provided in a building. Artificial lighting is also provided for to supplement. Natural ventilation is recommended and artificial ventilation as may be required. Energy efficiency, environmental design considerations and renewable energy based on the Energy Act, 2019 are provided for. Specifications for rooms for different uses are described in terms of lighting, heating and ventilation.

Part IX - Glazing and Cladding

The Code provides for safety and safe installation of glazing or cladding. The responsible architect or civil engineer shall receive from the specialist manufacturers, a warranty that a full thermal movement safety check has been carried out related to unbroken areas of glazing. Specification for sizes and thermal check requirements are provided. The glazing thickness for curtain walling is limited to 6mm.

Part X - Staircases, Lifts and Escalators

A building which exceeds one storey in height shall have at least one staircase to access the upper floors. A building shall have a means of escape in case of an emergency as may be required by the intended use of the building. Dimensions for staircase in domestic and public buildings are provided (width and height of headroom space). Limits for risers and treads Special staircase firefighting are also provided. A staircase shall have a handrail.

It gives specifications for escalators and firefighting lifts, lift wells and safety measures including warning signs with regard to lift pits and access to machine or pulley rooms.

Part XI - Roofs

The Code provides for the design of roofs and requires that a timber roof truss, rafter, beam or wall plate shall be fastened down and connected to its means of support by built-in, or cast-in, galvanized steel strap or steel wire, bolts or other approved means. Waterproofing standards are provided and there is a requirement that where a nominally flat roof of boarded or concrete construction is used, it shall have an impervious surface and laid to a fall of not less than 1 in 50.

Part XII - Water services, Drainage, Waste Disposal and Storm Water

Rain water harvesting is provided for as well as plumbing that separates grey water from black water. There are guidelines for the discharge of contents like sewage. Wash closets and appurtenances are required to meet specified standards. Conservancy tanks, septic tanks and soak pits specifications are set out. The hydraulic loads for drainage pipes and pipe sizing are provided. The owner of a plot shall provide suitable means for the control and disposal of storm-water which may run off from the construction works. Guidelines on design of sewers, appurtenances and all effluent shall be in accordance with the Environmental Management and Coordination Act, 1999.

Part XIII - Electrical installations

Standards for electrical installations are provided with a requirement that an electrical circuit and sub-circuit shall be protected against excess current by a fuse, circuit-breaker or another similar device which shall be designed by a qualified electrical engineer. Protection against lightning is provided for. A switch socket, an isolator, a consumer unit, distribution board, an electric bell, a television outlet and data outlet, in a building shall be installed in accordance with KS ISO 21542: (Standard on Building Construction – Accessibility and Usability of the Built Environment).

Part XIV - Landscaping

An owner shall provide for a soft landscaping area at least 20% of the plot area, which shall have trees, vegetation or permeable paving surfaces. Construction on an environmental reserve is subject to special approval. Setbacks for trees and shrubs, furniture and fixtures shall be incorporated to the landscape design to enhance livability, safety and convenience.

Part XV - Inspection and Maintenance of the Built Environment

A building shall be inspected at least once after every five years. The Code provides for different types of including visual, full structural or civil inspection, full building condition survey, full building services inspection and specialized building investigation. An inspection, except a full building services (electrical and mechanical) inspection, shall be carried out in the first instance and subsequent inspections after the issuance of a certificate of occupation for a building.

Part XVI - Non Water-borne Waste Disposal

Siting, construction of pit latrines is provided in detail as well as the practice manual for sewerage and sanitation services. A latrine and an ablution, shall be provided as separate compartments, in which case each compartment shall have minimum dimensions of 1350mm by 750mm, or as a combined compartment having a minimum area of 1.350m2. (5) A family or group, which does not exceed twelve persons, shall have one latrine and one ablution, or a combined compartment

Part XVII - Refuse disposal

Every building shall have approved means of refuse storage and disposal. Details of storage chambers and containers are provided including specifications on chutes, hoppers and incinerators. A service room containing an incinerator shall be separated from the remainder of the building by a fire separation that has a fire resistance rating of at least two hours. The design, construction, installation and alteration of each indoor incinerator shall be in accordance with the Environmental Management and Co-ordination Act, 1999. Every incinerator shall be connected to a chimney flue that serves no other appliance.

Part XVIII - Requirements for Persons Living with Disabilities

All buildings shall be planned for use by PWDs and this includes an access with no stairs, steps, kerbs, steep ramp, door or a doorway that would impede a passage of a wheelchair or access by a person living with disability. A building shall be designed in a manner that facilitates access to the building, and to the use of its facilities, by a person living with a disability in accordance with KS ISO 21542:2011 (Building Construction—Accessibility and Usability of the Built Environment). At least one parking or 1% of parking space whichever is greater shall be reserved as a parking space for differently abled. A lift shall be provided for every floor to facilitate access by people living with disability. Other provisions include handrails, water closet, doors corridor and ramps all to improve access for the PWDs.

Part XIX - Fire Safety and Fire installations

A building shall be designed and constructed to ensure that in case of fire, safe evacuation is possible, there is limit to spread of fire, it remains stable not to endanger other buildings. Equipment for detecting, fighting, controlling and extinguishing fire are available when required. A mechanical engineer should design and certify the firefighting system. A firefighting lift is provided for as well as a firefighting and rescue stair case. Provisions are made for separating non-combustible walls as well as fire division walls. Firefighting equipment are provided

for a building higher than 6m. They include hydrants, hose reel, dry riser, sprinkler, drencher and water storage tank.

Part XX - Fire safety and Fire installations

A building shall be divided into separate but interconnected divisions comprising an area that does not exceed the specifications set out in the Code. A provision is made for a fire escape route which shall not at any time be obstructed in any way. Exit doors are provided for depending on the occupancy of the building. A building that has emergency routes shall be clearly marked and signposted to indicate the direction to be travelled in the case of an emergency in the approved size and position. If a building exceeds 18 m, it shall have a fire fighting lift serving all floors. A seating arrangement in an auditorium, hall or a grandstand shall be done to provide an unobstructed access to escape routes. A building shall not be erected on a plot unless the plot has an access for the purposes of firefighting and rescue from the building. A building shall have emergency evacuation coordination procedures posted along all floor exits including in the form of diagrams displayed in a form that would be easily understood by a person.

Part XXI - Demolition of Buildings

Demolition of a building shall be done in a way that prevents danger from fire or explosion. All demolition works shall be carried out by persons who understand the structure of the building and under the supervision of an experienced person.

Part XXII - Disaster Risk Management

A person undertaking a design, planning, preparation, or construction phase, in the use or demolition of a project shall take account of general principles of disaster prevention in the performance of those duties during all the stages of the project. The persons involved in a construction shall coordinate well for safety and health of everyone involved. The owner has a duty to the designer of a contractor to provide all the pre-construction information. Provisions for health and safety during construction, records of health and safety, safe place of work, site good order and security are provided for. A side of a working platform or working place which is at a height that exceeds 2m shall have guardrails as designed by a civil engineer. Ladders shall be safe to use, guardrails and other means of preventing fall are recommended. Every construction site shall be organized such that pedestrians and vehicles are able to move safely and without risks to health.

A contract to undertake construction works shall prescribe a defects liability period during which a contractor shall rectify a major defect that becomes apparent. The defects liability period shall be between 24 to 60 months. The contractor and a qualified person shall provide performance security to the owner. The contractor and qualified person shall provide warranties to the owner that the construction shall comply with the building code. Non-fulfilment of the warranty constitutes a breach of contract and remedy can be sought.

Part XXIII - Access roads, cul-de-sacs and other private roads

Width of a road or a street shall be guided by the street Design Manual for Urban areas in Kenya. A private street or a cul-de-sac shall have a footpath at least 2m wide. Width of an access road shall be at least 6m and the footpath thereon shall be at least 2m wide. The specification for horizontal and vertical curves are provided. Provision for the vehicle turning curve are provided. Guidelines for manholes, drainage and channels for private street are also provided.

Part XXIV - Parking Spaces

The Code stipulates the requirements for the parking and external circulation and specifies barriers to be erected on a pathway for use by people where vehicles can access. If a vehicle has access to a floor, roof or ramp which forms part of a building, a barrier shall be provided on an edge which is level with, or above the floor or ground, or another route for vehicles to a height of between 375mm and 610mm above the ground. It also specifies the minimum requirements for ramps

Chapter 8: **COST-BENEFIT ANALYSIS**

8.1 : **Costs and Benefits Generally**

The analysis of the expected costs and benefits of the proposed Building Code contained in this Part seeks to answer the question whether the benefits justify the costs. This would enable the Regulator to estimate the total expected cost and benefit of every aspect of the Code. This will in turn inform the decision makers since the cost of government action should be justified by its benefits before action is taken.

However, given the nature of the industry and the available information, the costing will to a substantial degree, be qualitative rather than quantitative. This is an inevitable result of the specific nature of the matters included in the Code and the substantial difficulties involved in estimating the value of the gains expected from its implementation.

As has been made apparent elsewhere in this report, the task of comparing the benefits and costs associated with the proposed Building Code and determining whether, and to what extent, there would be a net benefit associated with its adoption is, in many respects, a difficult one. These difficulties arise from:

(a) The fact that a number of important benefits cannot readily be quantified, much less expressed in monetary terms;
(b) The fact that there are substantial uncertainties in relation to the quantification of a number of the major cost items;
(c) The legislative context, which poses conceptual questions as to the extent to which the requirements of the Building Code create new regulatory burdens, rather than simply constituting a codification of existing legislative obligations contained in best practices
(d) The need to give appropriate weighting to distributional considerations and the associated intangible benefits associated with the Code

In light of these difficulties, the approach taken in this section is to draw together the discussion of benefits and costs, indicate the relative magnitude of these where possible and draw conclusions as to the likely overall impact of the proposed Code where possible.

Further, attention should be drawn to the indirect benefits in relation the various new components of the Building Code including the following:

(a) Application for and issuance of development permission. The legal requirements in regard to an application for building permit provide for a streamlined regulatory process with time limits and accompanying documentation. Failure to provide these requirements means the application will be returned for relaunch. By increasing the clarity with which the requirements of the building permit are conveyed to the owner and building practitioner there will savings on the part of the applicants in terms of time and money.
(b) Increased access to buildings by persons with disabilities would lead to increased workforce participation and reduced living costs by persons with disabilities. Quantitative material on the costs of disability, and, by implication, the benefits available by reducing those costs and disadvantages is included as part of the benefits under this section. The purpose of this material is to provide an indication of the potential benefits in this area and provide the policy maker with a basis for “scaling” the benefits likely to be obtained from the Building Code.
(c) Environmentally friendly and energy-efficient buildings. The Code provides that buildings must be

constructed to achieve an adequate degree of energy efficiency when that energy is used for modifying temperature or humidity, providing ventilation, providing hot water to sanitary fixtures or sanitary appliances or providing artificial lighting. The Code advocates for sustainable construction/green building design skills and construction practices to combat the negative effects of climate change.

Table1: Benefits and Costs arising from the new features of the National Building Code

Problem	**Proposed Reform**	**Benefits**	**Cost**
Failure to adhere to international building standards	Structural design of buildings shall comply Eurocode 0 to Eurocode 9	• lead to a uniform level of constructions safety and performance • provide a common understanding between owners, operators and users, designers, contractors and manufacturers • lead to a uniform level of safety in construction • facilitate the exchange of construction services • facilitate the marketing and use of structural components, kits, materials and products • allow the preparation of common design aids and software • increase the competitiveness of the civil engineering firms, contractors, designers and product manufacturers	Application of Eurocodes will occasion additional costs in terms of purchase of building material. The identified benefits also have an element of cost in terms of the conveniences, time saving, efficiency and ease of doing business at international level. However, the quantification of these costs can only be ascertained after an empirical research

Problem	Proposed Reform	Benefits	Cost
Limited access to buildings by persons with disabilities and the aged		Provides for special requirements in buildings to facilitate use by a person living These include provision of wayfinding system with warning cues and auditory signals in public buildings, provision of ramps, hand rail, wheelchair space,dropped kerb, lift, and water closets for a person living with a disability.	
Preparation of building plans and drawings by unqualified persons.	The Code requires that building plans, drawings and supervision of building works must be done by building professionals including civil engineers, architects, electrical engineers etc		
Ensure that defects are efficiently and effectively identified, reported and repaired as quickly as possible. Ensure that build contractors can efficiently be held to account in practice	The Code provides that a contract to undertake construction works shall prescribe a defects liability period of between 24 and 60 months during which a contractor shall rectify a major defect that becomes apparent. In addition, a contractor and a qualified person under a contract to undertake construction works shall provide warranties including that all materials supplied are good and suitable for the purpose, the works shall be done with due care and skill and abide by the Code.	A contractor remains liable under the building contract for dealing with any defects which become apparent	These costs are borne by the contractor in accordance with the construction contact.

Problem	Proposed Reform	Benefits	Cost
Disaster management	The Code provides that a person undertaking a design, planning, preparation, or construction phase, in the use or demolition of a project shall take account of general principles of disaster including safeguarding the health and safety of persons working in the building and those affected by the building works and emergency procedures.	Disaster recovery plans have multiple benefits. The most important include: • Preventative measures that reduce the risk of a man-made disaster taking place • Detective measures aimed at identifying unwanted events quickly • Corrective measures that restore lost data and allow for business processes to resume in the aftermath of a disaster	
(a) Parking spaces			
(b) Glazing and cladding			
(c) Refuse disposal			
. (d) landscapping			
Enforcement			

8.2 : **Consideration of Alternatives to the Building Code**

This Part considers the question whether the proposed regulation is the best form of government action. The Statutory Instruments Act requires a regulator to carry out, early in the regulatory process, an informed comparison of a variety of regulatory and non-regulatory policy measures, considering relevant issues such as costs, benefits, distributional effects and administrative requirements.

Regulation should be the last resort in realizing policy objectives. There are alternatives, which could come in handy in dealing with certain aspects of the construction industry.

The options considered under this part are the following:

8.2.1 : **Option one**: Maintenance of the Status Quo

Maintaining the status quo means retaining the current Building Code order of 1968 with all its attendant

inadequacies. These include the fact that the Code is solely material based and recognizes only conventional building materials like stones, bricks, and mortar in its application and does not take into account modern building technologies. It does not provide for green building concept in the construction industry, it does not provide for access to buildings by persons with disabilities and the aged, it does not also provide for role of building professionals and defect liability.

These inadequacies have occasioned the following macro challenges:

(a) low technological uptake and exposure levels of stakeholders to international best practices;
(b) lack of a standard monitoring and evaluation framework;
(c) inadequate capacity for enforcement of standards and regulations;
(d) poor quality of works as a result of poor workmanship and use of substandard materials;
(e) use of inappropriate construction materials;
(f) lack of sustainable construction/green building design skills and construction practices to combat the negative effects of climate change
(g) low completion rates of construction projects;
(h) poor practices in safety and health management
(i) inadequate access to affordable project financing;
(j) lack of harmony in policies, laws and regulations;
(k) unethical conduct and unfair business practices;
(l) inadequate skilled and competent workforce;
(m) lengthy procurement procedures;

8.2.2 : **Option two**: Self-regulation

This is a regulatory process where the industry regulates itself with minimal role of government. The private sector relies on self-regulation to address a range of issues, from establishing industry standards, to developing and applying codes of professional ethics, to ensuring consumer confidence. It involves setting standards for various actors and the need for prescriptive legislation is lessened. In some sectors, self -regulation benefits the economy by creating a more flexible regulatory environment than is typically found with state regulation which can be rigid and disruptive. The problem with self-regulation is that it requires a body that would set standards for the association and its members. Depending on the nature of the industry, policymakers are skeptical of the efficacy of self-regulation when it comes to protecting consumer. However while some policymakers promote regulation as a way to reduce risk to consumers, the potential for overregulation also poses a risk to consumers. With regard to construction industry which is a major economic driver entailing health, safety concerns and posing a potential for major catastrophic accidents, self-regulation may easily turn out to be putting the fox in charge of the hen house.

8.2.3 : **Option three:** Promulgating a National Building Code

Given the shortcomings of the Local Government (Adoptive By-Laws) (Building) Order 1968 which continues to be applied as the Building Code, there is need to issue a new National Building Code to address the challenges posed by the current one.

As noted throughout this RIS report the current Building Code has many gaps and weaknesses which the proposed National Building Code seeks to address. Among the salient features of the new Code are the following:

(a) Adoption of the 10 Eurocodes. These are structural design codes covering all common construction materials. Eurocodes have been adopted in many jurisdictions across the world and therefore introduction of uniform international standards places Kenya in good standing in terms of attracting international investors.
(b) Adoption of Kenya Standards set out under the Kenya Bureau of Standards Act.
(c) Provides for the green building concept with renewable energy efficiency and use solar.

(d) Provides for access to buildings by persons with disabilities and the aged.
(e) Requires plans drawings, details, diagrams, calculations, structural details, and structural calculations showing or relating to the building works must be undertake by qualified persons.
(f) Provides for flexibility on the use of building material as long as they meet the standards set out under the Standards Act.
(g) Provides for all matters not provided in the current Code including parking refuse disposal, parking spaces in a building, landscaping, glazing and disaster management.
(h) Retains the salient provisions in the current Code

8.3 : Impact analysis of the Options

Table 2: Regulatory and non-regulatory opations

Impact on sectors	**Option one:** **Maintaining the Status quo**	**Option two:** **Self-regulation**	**Option three:** **Promulgating a National Building Code**
	This entails doing nothing and retaining the current state of affairs	This entails allowing the industry players to self-regulate themselves and government doesn't intervene	This entails replacing the 1968 building Code with a new National Building Code
Impact on Public sector	• lack of standard monitoring and evaluation framework; • low capacity for enforcement of standards and regulations; • poor quality of works as a result of poor workmanship and use of substandard materials; • continued use appropriate construction materials; • unsustainable construction/no requirement for green building design skills and construction practices to combat the negative effects of climate change; • compromised safety and health management; • lack of affordable project financing; • disharmony in policies, laws and regulations;	• risk of consumer abuse through monopolistic tendencies •	• framework standard monitoring and evaluation framework; • enhanced capacity for enforcement of standards and regulations; • improved quality of works as a result of poor workmanship and use of substandard materials; • promote the use appropriate construction materials; • sustainable construction/ green building design skills and construction practices to combat the negative effects of climate change; • enhanced safety and health management; • access to affordable project financing; • improved harmony in policies, laws and regulations;

Impact on sectors	**Option one:** **Maintaining the Status quo**	**Option two:** **Self-regulation**	**Option three:** **Promulgating a National Building Code**
	This entails doing nothing and retaining the current state of affairs	This entails allowing the industry players to self-regulate themselves and government doesn't intervene	This entails replacing the 1968 building Code with a new National Building Code
Impact on Private sector	• low technological uptake and exposure levels of stakeholders to international best practices; • low completion rates of construction projects; • unethical conduct and fair business practices; • employment of unskilled and incompetent workforce.	• p	• increased technological uptake and exposure levels of stakeholders to international best practices; • improved completion rates of construction projects; • promote ethical conduct and fair business practices; • promote skilled and competent workforce.
Economic Impact	• risk of collapsing buildings	• Risk of some industry players not conforming with the required standards	• Safe, secure and durable buildings • Improved access to buildings transforms into increased employment for PWDs
Social Impact	• Continued development of slums and informal settlements	• Risk of cartel formations and other unfair practices	• Well planned and controlled housing development
Human Rights Impact	• Discrimination of PWDs in certain aspects of construction	• No guarantee that PWDs will not be discriminated against	• Elimination of discrimination to PWDs by guaranteeing their access to public buildings
Impact on business	• Current state where building materials are largely imported to continue	• Possibility of improved business activity owing safeguarded interests	• Likely to spur the growth of building material industry since it facilitates use of local materials as long as the meet the specified standards • Contributes to ease of doing business at international level by providing for uniform and standardized materials
Impact on environment	• Does not address climate change issues as they relate to the construction industry	• No guarantee that climate change issues will be addressed	• Provides for green buildings to address climate change concerns • Promotes use of natural lighting and ventilation to achieve energy efficiency • Provides for use of renewable energy

Impact on sectors	**Option one:** Maintaining the Status quo	**Option two:** Self-regulation	**Option three:** Promulgating a National Building Code
	This entails doing nothing and retaining the current state of affairs	This entails allowing the industry players to self-regulate themselves and government doesn't intervene	This entails replacing the 1968 building Code with a new National Building Code
Impact on existing legal frameworks	• The existing legal gaps will not be addressed • Legal frameworks relating to construction industry will continue to be implemented in silos without a common reference point	• Regulatory concerns will remain un-addressed	• Addresses all the identified gaps • Provides harmony with related legal frameworks • No further legal amendments or enactments will be required

8.4 : **Preferred Option**

Based on the above analysis it is clear the third option (promulgating a new National Building Code) is the preferred option. Although it is not capable of providing monetary cost of the options, it is clear that the benefits and impact of promulgating a new National Building Code by far outweigh any estimated cost of its implementation. The other two options have little or no impact in addressing the problem.

Chapter 9: **COMPLIANCE AND IMPLEMENTATION**

As different aspects of the proposed regulations are evaluated and analyzed, it is important to determine how compliance and implementation of the actual provisions will be achieved. It is the duty of the regulator to assess the adequacy of the institutional framework and other incentives through which the regulation will take effect, and design responsive implementation strategies that make the best use of them[9].

As it has been pointed out elsewhere in this report, the current Building Code was designed as adoptive by-laws to be adopted, implemented and enforced by the respective local governments (municipalities) whose functions was later assumed by the county governments. It is arguable whether the local authorities or county governments had the required attributes to ensure full compliance and implementation of the Building Code. This probably explains why the code had little impact on the building industry.

In an ideal situation an institution responsible for enforcement a Building Code should have the capacity of co-ordination of institutional frameworks from a whole-of-government perspective, independence and sufficient authority, political support at a high political level, and integration into a broad concept of reform[10].

This institutional dilemma for an oversight body however was addressed when in 2020, the National Construction Act was amended by the the Business Laws (Amendment) Act, 2020. The amendments provided the Authority with the legal mandate to not only develop the Building Code but also to enforce it and to undertake mandatory inspection of construction works.

9 Source: OECD (1995), The 1995 Recommendation of the Council of the OECD on Improving the Quality of Government Regulation, Paris.

10 OECD, 2007: Good Governance for Development in Arab Countries Initiative Working Group IV: Public Service Deliv-ery, Public-Private Partnership and Regulatory Reform

Chapter 10: **CONCLUSION**

Based on the above analysis, the following matters are apparent:

(a) Regulatory-Making Authority and the legal mandate: Section 42 of the National Construction Act empowers the Cabinet Secretary in Consultation with the Board of the Authority to make regulations generally to give effect to the Act and in particular for the Building Code in the construction industry. The Board of the Construction Authority and the Cabinet Secretary therefore have the required legislative powers to propose the National Building Code.

(b) Requirements of the Statutory Instruments Act: Section 5 requires that a regulation-making authority to conduct public consultations and to drawing on the knowledge of persons having expertise in fields relevant to the proposed statutory instrument; and to ensure that persons likely to be affected by the proposed statutory instrument had an adequate opportunity to comment on its proposed content. Sections 6 and 7 require that a RIS be prepared where a statutory instrument is likely to impose significant costs on the community. The RIS must contain certain ke elements namely:
   (a) a statement of the objectives of the proposed legislation and the reasons,
   (b) a statement explaining the effect of the proposed legislation,
   (c) a statement of other practicable means of achieving those objectives, including other regulatory as well as non-regulatory options;
   (d) an assessment of the costs and benefits of the proposed statutory rule and of any other practicable means of achieving the same objectives; and
   (e) the reasons why the other means are not appropriate.

   The public consultation and RIA structure requirements have been fully met.

(c) Other existing legal frameworks: The draft National Building Code does not propose to have any new legislation to be enacted or any of the existing laws to be amended. It harmonizes with other laws making their implementation more effective.

(d) The draft National Building Code: The draft Building Code as drafted is clear, consistent, comprehensibleand comprehensive enough to cover all matters.

Chapter 11: **Recommendation**

In view of the above conclusions, it is recommended that the National Building Code, 2022 be adopted.

Chapter 12: **ANNEXURES**

The National Building Code

Stakeholder consultations matrix