SECURING KENYA: OVERVIEW AND IMPLICATIONS OF THE CRITICAL INFRASTRUCTURE PROTECTION BILL

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THE NEED FOR THE CRITICAL INFRASTRUCTURE PROTECTION POLICY AND BILL

- The formulation of the Critical Infrastructure Bill was necessitated by the needs of the business community as articulated during the Northern Corridor, Presidential summit and Kenya Private Sector Alliance (KEPSA) Presidential Round Table III of 5th December 2014.
- On 27th March 2015 the then Cabinet Secretary in the Ministry of Information and Communications Dr. Fred Matiangi’ appointed a task force to formulate the Critical Infrastructure Policy, 2016 and Bill.
DEFINITION OF CRITICAL INFRASTRUCTURE

- Critical Infrastructure refers to physical and virtual assets or facilities, whether owned by private or public entities which are essential to the provision of vital services to Kenyans for their social and economic wellbeing, and which if destroyed, degraded or rendered unavailable, would impact on the social or economic wellbeing of the nation or affect Kenya's ability to conduct national defence and security.
THREATS TO CRITICAL INFRASTRUCTURE IN KENYA

a) Planning and coordination deficiencies make it easy for destruction of Critical Infrastructure.
b) Human activities that cause destruction.
c) Attitude and skills that promote damage to infrastructure.
d) Strides in development that have a reverse component.
e) The new Constitution that allows litigation from any person on any public project that has unfortunately resulted in stalling of national infrastructure projects for lengthy periods, making them more costly and untimely in delivery:
f) Natural causes derived from climate change such as floods.
g) Acts of terrorism. Most Critical Infrastructure is vulnerable because damage at any point of the system can result in a total shutdown.
h) Missing or weak laws in planning and management of Critical Infrastructure.
i) Unclear or weak accountability protocols especially to offenders.
j) Uncoordinated approval agencies without a central command or vision.
k) Lack of public buy-in as the primary protector of Critical Infrastructure.
CHALLENGES IN THE PROTECTION OF CRITICAL INFRASTRUCTURE

1. Lack of Co-ordination in terms of planning, coordination and implementation of infrastructure projects.
2. Competing interests amongst players and therefore find it difficult to voluntarily cooperate.
3. Multiplicity of regulators (per sector) there is duplication of efforts. They issue permits with different conditions and standards.
4. Lacks of a centralized data bank of crucial information on Critical Infrastructure.
5. The absence of a coordinated approach also makes it difficult to protect critical infrastructure in the event of natural calamities.
6. Lack of co-operation between National and county Governments due to competing interests.
7. The current laws focus on physical infrastructure developed on land and omits critical infrastructure and assets that are not tangible such as data transmission systems or infrastructure and assets embedded on the floor of the sea.

8. The traditional categorization of critical infrastructure, as that falling within the three sectors of transport, energy and communication is limiting and excludes other infrastructure and assets that is worthy of special protections.

9. The threat of terror

10. Accidental damage or destruction of critical infrastructure not provided for. Laws deal with willful acts of destruction

11. Inadequate legal framework.
a) Enactment of pertinent laws that are currently at draft bill stage eg Bill on Scrap Metal, Data Protection Bill dealing with cyber related threats.

b) Enforcement of existing laws such as the Disposal of Goods Act that provides the procedures of disposing such toxic waste as obsolete ICT goods.

c) Enhancement of existing laws to aid in management and protection of Critical Infrastructure e.g. the Land Act way leaves management.

d) Development of a legislative framework that will ensure proper and timely detection, delay, response and mitigation strategies for emergencies that involve Critical Infrastructure for new/emerging forms of Critical Infrastructure like nuclear energy and the Internet.

e) Ensure proper and sustainable enforcement of proposed CIP law.

f) Regulation on key standards in public service sector on Critical Infrastructure deployment and management, for example on, minimum standards of encryption and software for easy upgrades and better levels of protection.
The law on protection of Critical Infrastructure should be specific to each infrastructure to avoid generalizations for ease of interpretation, application and execution.

Take into consideration all the regional, bilateral and multilateral treaties that Kenya is party to on the different forms of Critical Infrastructure to ensure that it harmonizes and integrates all expectations.

Harmonization of levies, permits and approvals by the different public bodies and levels of government.

Need for keen focus on regulating the non-physical Critical Infrastructure e.g. cloud technologies, data protection, cyber security, audit and compliance.

Establish a centralized point of coordination of approvals and levies.

Enhanced public buy-in through Civic education.

Application of technology for survey and monitoring of deployed infrastructure.

Development of better mapping systems and databases that should be available from the zonal to national level of government.
PROPOSALS FOR THE PROTECTION OF CRITICAL INFRASTRUCTURE

(o) Provide for basis of sharing infrastructure, such as ducts, that can be leased out to providers.

(p) The government should make investing Critical Infrastructure more attractive through such vehicles as a Critical Infrastructure bond.

(q) Deployment of Critical Infrastructure should be accompanied by the deployment of security for the infrastructure at all times.

(r) Need for coordination and complementarity between county and national government.

(v) Establish institutions to regulate, supervise, coordinate, create awareness and harmonize policies on Critical Infrastructure.
DRAFT POLICY FRAMEWORK FOR THE PROTECTION OF CRITICAL INFRASTRUCTURE

OBJECTIVES OF THE CRITICAL INFRASTRUCTURE PROTECTION POLICY
Objectives of the CIP Policy:

- Establish a coordinated approach to the storing of information or data with regard to critical infrastructure.
- Mitigation of the vulnerability of critical infrastructure assets in Kenya.
- Establish a coordinated approach to securing critical infrastructure.
- Establish a coordinated approach to the management of critical infrastructure in the event of natural disasters.
- Establish a coordinated approach in creating public awareness of the importance of critical infrastructure.
- Identification of Critical Infrastructure in Kenya.
- Identification of threats and hazards to the Nation's critical infrastructure.
- Establish a coordinated approach to the planning, design and implementation of critical infrastructure in Kenya.
1. Cooperation and Coordination
In the protection of Critical Infrastructure the Government will encourage and promote cooperation and coordination among the key players in the various sectors. It will clearly set out rewards to be gained and penalties to be meted out in the event of non-cooperation and coordination.

2. Proportionality
In the protection of Critical Infrastructure the Government will ensure that key players are not burdened with unnecessary costs or inefficiencies.

3. Sustainability
The Government will ensure that all the projects it embarks on in the protection of Critical Infrastructure are sustainable and scalable.
STRATEGIC INTERVENTION IN THE PROTECTION OF CRITICAL INFRASTRUCTURE UNDER THE CRITICAL INFRASTRUCTURE PROTECTION POLICY

1. Enactment of a Critical Infrastructure Act
2. Establishment of an Independent unit to manage Critical Infrastructure
3. Establishment of a Register of Critical Infrastructure
4. Preparation and filing of the Critical Infrastructure Plans
5. Introduction of deterrence Penalties and reparation
6. Owners of CIA to plan for disaster management through elaborate business continuity plan.
7. Public education and awareness
8. Emphasis more on Secure Critical Infrastructure
9. Dispute resolution mechanism
Roles of the Critical Infrastructure Protection Unit

a) Designation of critical infrastructure.
b) Maintain a register and database of critical infrastructure.
c) Establish and maintain an integrated National Critical Infrastructure Plan.
d) Conduct public awareness campaigns.
e) Coordinate efforts to secure critical infrastructure installations.
f) Coordinate activities of National and County Governments with regard to critical infrastructure.
g) Provide guidelines for the proper coordination of the activities of owners of critical infrastructure.

2. The Ministry Hosting the Critical Infrastructure Protection Unit

The Government Ministry proposed to host the Critical Infrastructure Protection Unit is the Ministry in charge of internal security and will be responsible for coordinating the activities of various sectors as well as securing critical infrastructure installations.
AN OVERVIEW OF THE CRITICAL INFRASTRUCTURE PROTECTION BILL, 2015

The objective and purpose of the Act is -

• Establishment or identification of an institutional framework for the designation and protection of critical infrastructure;

• Establishment of a national database of Critical Infrastructure Assets;

• Undertaking research in order to identify the challenges and vulnerabilities faced by Critical Infrastructure Assets and to explore on mechanisms to mitigate the impact of such challenges and vulnerabilities;

• Co-ordinate the activities of all the concerned stakeholders including, the National Government, Authorities, County Governments, owners of primary and secondary critical infrastructure and members of the public, in the planning, designing and deployment of Critical Infrastructure;

• Providing special protection of Critical infrastructure Assets;
• Conducting civic education to promote awareness and sensitize the public on the value of Critical Infrastructure through dissemination of information, education and communication in order to foster in the public a sense of communal ownership and protection of Critical Infrastructure;
• Prior identification of any threats or hazards that may affect the country's critical infrastructure and preparation of a response thereto;
• Reduction of vulnerabilities of critical assets, systems and networks;
• Mitigation of the potential consequences to critical infrastructure of incidents or adverse effects that may occur;
• Co-ordination of the implementation of the Plans and programmes; and
• Strengthening relationships amongst the key actors and stakeholders in critical infrastructure fraternity, national and county government actors, the private sector and the public.
The Bill establishes a Critical Infrastructure Protection Committee shall be responsible for:

a) Formulating policy guidelines on critical infrastructure protection;
b) In consultation with other source ministries, formulate strategies and measures for the protection of critical infrastructure;
c) Approving the organizational structure of the unit;
d) Advising and making recommendations to the Cabinet Secretary on matters relating to critical infrastructure;
e) Formulate policy guidelines on matters relating to critical infrastructure protection;
f) Advise on the development and the implementation of an integrated critical infrastructure protection policy;
g) Performing any other function as may be conferred on it by this Act or any other written law.
The Bill establishes the Critical Infrastructure Protection Unit which shall

a) Serve as the secretariat and technical arm of the Committee;

b) Provide technical, financial and legal expertise to the Committee.

c) Determine the assets and facilities in Kenya that constitute Critical Infrastructure Assets.

d) Assess the value of the services provided using the assets or facilities and determine whether such services are essential to the social and economic wellbeing of the citizens of Kenya;

e) Assess the impact on the country, in the event that such assets or facilities are for any reason destroyed, degraded or rendered unavailable; and

f) Assess the value of such assets and facilities to the county's ability to conduct national defense and security.

g) Coordination of the planning, design, implementation and deployment of Critical Infrastructure in Kenya.

h) Supervision of the deployment and implementation of the Integrated National Critical Infrastructure Plan in Kenya.

i) Carrying out public education.

j) Ensure that owners of Critical Infrastructure Assets to take up an insurance cover against accidental damage.

k) The Bill creates a number of offences and provides for their penalties to offences with penalties ranging from a fine of not less than five million shillings to imprisonment for a term of not less than ten years or to both and in addition the court shall order for the convicted person to repair the damaged occasioned to the critical infrastructure asset.
STRUCTURE OF THE BILL

PART I
• preliminary provisions which include the short title of the Bill and interpretation of terms used in the Bill.

PART II
• establishes the Critical Infrastructure Protection Committee and provides for its powers, functions and qualification of the members of the Committee.

PART III
• establishes the CIP Unit and provides for its powers, functions and qualification of the members of the Unit.

PART IV
• provides for the Funds of the Committee and the manner in which such funds shall be expended and audited.

PART V
• sets out the procedure for determining assets that shall constitute Critical Infrastructure Assets by the Unit.
• The Unit is also required to keep a register of the assets.
STRUCTURE OF THE BILL

PART VI
• Sets out the mandate in the co-ordination and supervision of the planning, design, implementation and deployment of Critical Infrastructure in Kenya and implementation of the Integrated National Critical Infrastructure Plan in Kenya.

PART VII
• outlines duties and obligations of the Unit regarding Critical Infrastructure.
• duty to educate the public,
• to take necessary security measures for the assets’ safety.
• Enforcement of the insurance cover requirement to protect the assets from any damage.
• Provides for mode of settling disputes arising from implementation of the provisions of the Bill.

PART VIII
• sets out offences and the manner in which the Bill may be enforced to protect Critical Infrastructure.
• provides for the appointment of inspectors.
• PART IX of the Bill contains miscellaneous provisions on the Bill.
CRITICAL INFRASTRUCTURE ASSETS, ICT SECTOR

a) Fiber Optic Cable
b) Sub marine Cables
c) Telecommunication apparatus or
d) Telecommunication line, post or
e) Other thing whatsoever, being part of or used in or about any licensed telecommunication system or in the use thereof.
f) Data Centers
Thank you