



NATIONAL CYBERSECURITY POLICY

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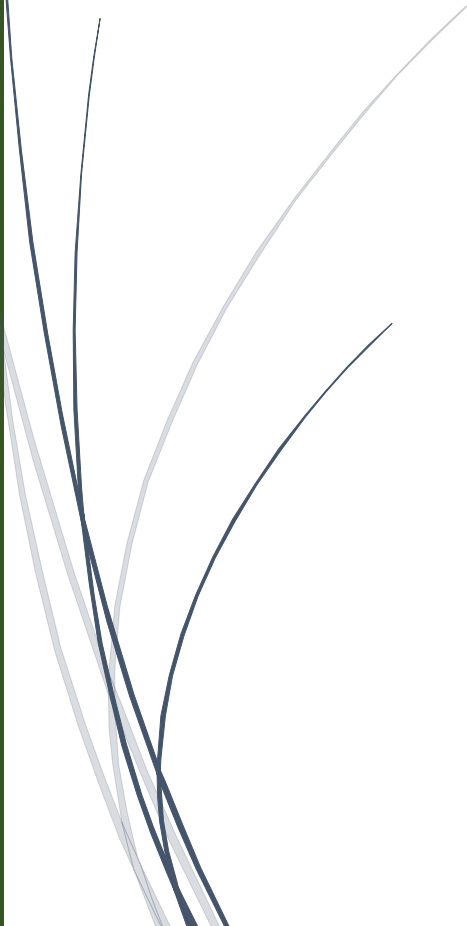


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FOREWORD BY THE NATIONAL SECURITY ADVISER

Cyberspace is a virtual global domain impacting almost every commercial and non-commercial sectors including economic, national security and critical infrastructure. The nation's economy is increasingly becoming digital in architecture, mobility, delivery, and in landscape. It has transformed the country's economic and security posture more than ever before, creating opportunity for innovation and prosperity and the means to improve general welfare of the people.

However, behind this transformation lie great risks that threaten the nation's security, institutional and corporate investments, vulnerable public infrastructure, enterprises, and individual and corporate rights.

It is the responsibility of government to harness creative ideas and innovative ways to address our unwholesome digital vulnerabilities to safeguard the nation's presence in cyberspace, while ensuring that Nigeria, together with the larger communities of nations, can realize the full potential of the information technology revolution.

The Federal government is not unmindful of the huge implications of the nation's risk exposure in cyberspace. It is the responsibility of government to provide cohesive measures to address this growing problem effectively now and in the future. Furthermore, cybersecurity is the shared responsibility of all stakeholders and thus requires active support and participation of private sector actors and other key players.

In this regard, government has developed a framework that aggregates common interests to derive a holistic vision and roadmap to address the cybersecurity challenges. Government is committed to develop the relevant policies, processes, people, and technology required to mitigate cybersecurity-related risks within the framework of National Security Strategy

My office has facilitated a new approach to National Cybersecurity Agenda in collaboration with other agencies of government and key actors from the private sector. Our approach is anchored on the Cohesion Ideology, which involves, building a Nigerian cyber-community cohesion through framework of the National Cybersecurity Policy and National Cybersecurity Strategy, infusing the

framework with stakeholders' consultation, dialogue, contributions, cooperation and consensus.

It is my hope that a new trusted relationship will emerge between stakeholders from different backgrounds including those from critical and non-critical sectors of the economy. We undertook various important processes during the development of the framework. We recognized stakeholders as the critical mass, as well as the investors, consumers, owners, and operators of cybersecurity infrastructure. Thus my office will continue to explore common grounds around in which we can work together with stakeholders for the good of the country on cybersecurity.

The more cooperation that exists between diverse stakeholders, and the more responsive a state is to its citizenry, the more likely a society will be cohesive and possess the inclusive proactive mechanisms necessary for engaging, mediating and managing a national incident before it is escalated.

In this regard, I express my appreciation to the cross section of contributors and stakeholders, including professional bodies, corporate leaders and captains of industries in our efforts towards creating an enduring multi-stakeholder partnership for National Cybersecurity Agenda.

Mohammed Sambo Dasuki

National Security Adviser

ACKNOWLEDGEMENT

The office of the National Security Adviser (ONSA) wishes to thank the Chairman of the Interagency Committee and the immense contributions by its members. We would also like to thank Chairman of the stakeholders' engagement forum.

We acknowledge the contribution of the Federal Ministry of Communication Technology (FMCT), Federal Ministry of Justice (FMOJ), National Information Technology Development Agency (NITDA), Nigerian Communications Commission (NCC), Central Bank of Nigeria (CBN), Economic & Financial Crimes Commission (EFCC), Galaxy Backbone Ltd, Nigerian Communications Satellite Ltd (NIGCOMSAT), and Defense Intelligence Agency

The ONSA also wishes to recognize contributions from, Etisalat Nigeria, Vodafone, Intel Nigeria, Akintola Williams Deloitte, ISACA, NIRA, GNC, Main One, ATCON, ISPON, CPN, AFICTA, NBA, Teledom Group, Interglobal University of Abuja; Philips Consulting and hosts of other important stakeholders who contributed significantly at the various stakeholders consultations.

The stakeholders' consultation phase of the policy process attracted a huge number of participants, which was reflective of the importance of the policy framework.

We further acknowledge stakeholders contributions from public institutions, private sector groups, civil societies, professional bodies, trade associations, academia, students and youths, military and para-military organizations, security and law enforcement agencies, government, law makers, ICT industry, internet users, media groups from print, electronic and online media, scholars and research scientists, as well as captains of industries across various sectors of the country.

EXECUTIVE SUMMARY

Cyberspace, also known as the Internet or the 5th global domain, has transformed Nigerian government functions, citizens' interactions, and corporate organisations ways of communicating, conducting personal and commercial interactions at great speed and efficiency. It has greatly transformed the way many Nigerians interact with the world at large.

While accolades to the commercial success of the Internet may be made, there is also a challenge in identifying and curbing cyber threat in cyberspace. It is well documented that the Internet is being used as a vehicle to carry out criminal activity within Nigeria's borders. These activities adversely affect the country economy, individuals and organisations within Nigeria's physical territorial boundaries from a financial, reputational, security and privacy perspective.

Where external threat actors such as foreign intelligence agencies, hackers and other online criminals, are carrying out the activities they can also threaten the national security posture, which includes the economic, political and social fabric of Nigeria.

This policy is developed to set out the statement of purpose, actions, activities and responsibilities for mitigating national cyber risk exposure, curtailing cybercrime activities, being launched from both internal and external threat actors by outlining key areas, which will be harnessed and engaged to tackle cyber threats that are inimical to the national security posture and the Nigerian economy well being in cyberspace.

This policy is a vital element for safeguarding National Security. It helps to enlighten its citizens on the components that are to be used to empower the nation to understand, respond to and collectively deter activities in cyberspace, which can have a negative impact on its economic, political, social and reputational wellbeing.

The policy outlines and explains the Doctrines, Roadmaps, Priorities and Principles for achieving this aim through a coordinated effort of the Office of the National Security Adviser.

PART ONE

INTRODUCTION

This part sets out the overview of the National Cybersecurity Policy process and provides a background of Nigeria's cybersecurity status in relation to the global context as well as rationale for the institution of a National Cybersecurity Policy.

1.1 Background:

Vision 2020 envisaged improved socio-economic activities in Nigeria through the use of Information and Communication Technology (ICT). Similarly, recent developments in telecommunications and Internet expansion occasioned by introduction of undersea fibre optics, has resulted in improved use of the internet for social and business activities in Nigeria. Thus, the nation is operating progressively and actively in cyberspace.

Cyberspace has become an essential component of 21st century activities. As critical and non-critical activities are increasingly migrating to cyberspace, globalisation and the increasing interdependence of nations has also put significant pressure on nations to continuously look for ways of ensuring that the domain remains safe for players utilising it for social, economic and national activities.

The purpose of the national cybersecurity policy is multifaceted it considers the versatile threat landscape and the various stakeholders involved. Similarly, measures necessary to address national challenges come from an articulated approach, which has taken into consideration the peculiarities and international commitments of the country.

1.2 Global Cybersecurity Context

Cyberspace has become an indispensable global domain coming after Land, Sea, Air, and Space as number five. Increasingly, nations are depending on information and communications infrastructures in governing societies, conducting business, exercising individual rights on interactions and freedom of communication.

Cyberspace is open for diverse engagements. In contrast to land, air, sea and space, cyberspace poses unique difficulties in terms of the Non-boundary and universal nature of its networks, which does not recognise the conventional rules-based international systems.

State actors, organised syndicate criminals, insurgents and terrorists can exploit cyberspace for their own intended purposes.

The world is confronted with growing challenges of cyber threat that constantly challenge confidentiality, integrity and availability of cyberspace, all of which can affect the critical functioning of nation states, including Nigeria. Global connectivity, vulnerable technologies, and anonymous nature enable the spread of disruptive cyber-activities that may cause considerable collateral damage to a country's national interests. Cybersecurity is an international challenge, which requires international cooperation in order to successfully attain an acceptable level of confidence and trust at global level.

1.3 National Cybersecurity Threat

Five key cyber threats have been identified and listed as posing significant challenges to the country and inimical to national growth and security of the nation.

They are:

- a) Cybercrime
- b) Cyber-espionage
- c) Cyber conflict
- d) Cyber-Terrorism
- e) Child Online Abuse & Exploitation

These threats have serious implications for the nation's presence and active participation in the global ecosystem. The Country's readiness towards securing its cyberspace requires coordinated efforts from all stakeholders at various levels of participation.

Government is striving to understand the emergent complex threat landscape and contending with the breadth and depth of cyber attacks, especially those affiliated with nation-states or organised crime.

Activities taking place on the Internet or on using information systems have impact on the level of risk exposure, resistance and protection of associated national critical and non-critical infrastructure.

Therefore, the protection, security, and sustainability of the nation's active presence in cyberspace are dependent on the country's readiness to articulate a strategic approach and engagement roadmap to secure the nation's cyberspace.

In 2004, the Nigerian government developed a framework for cyber security following recommendations by the Presidential Committee on illegal online activities. The strategic framework deals with the overall goal of setting a clear direction, coordination of the nation's engagements in cyberspace, as well protect and defend national interests and the sovereignty of the nation.

This culminated into the establishment of the cyber security focal point at the Office of the National Security Adviser (ONSA). Various activities and initiatives have been taken by ONSA in collaboration with various stakeholders towards ensuring security of the country's presence in cyberspace.

PART TWO

THE NATIONAL DOCTRINES

Part 2 describes national cybersecurity doctrines in specific terms. It also provides basic understanding of the doctrinal frameworks within which they are defined.

2.1 Doctrine on Cyberspace:

2.1.1 Cyberspace is an interdependent network of critical and non-critical national information infrastructures, convergence of interconnected information and communication resources through the use of information and communication technologies. It encompasses all forms of digital engagements, interactions, socializations and transactional activities; contents, contacts and resources deployed through interconnected networks.

2.1.2 Cyberspace is recognized as a domain for non-critical and critical national functions such as economic development, trade and commerce, social interactions, communication, medical and health, government operations, national security and defence.

2.2. Doctrine on Cyberspace Critical Assets & Infrastructure:

2.2.1 The operation, sustaining and survival of critical national functions is anchored on a safe and secure national critical information infrastructure, robust policies and processes with skilled manpower to manage such critical infrastructure. These complements of empowered people, processes and systems are fundamental to the cardinal objectives of National Cybersecurity Policy and its abiding principles.

2.3 Doctrine on Cyber-Risk Exposure:

- 2.3.1 National functions rely on interdependent networks of critical information infrastructures for confidentiality, integrity, availability and accessibility.
- 2.3.2 Interdependent network of critical information infrastructures do not exist in isolation of global networks, i.e. the cyberspace.
- 2.3.3 National functions are recurrently exposed to predictable and unpredictable risks in the cyberspace.
- 2.3.3 Any disruption of critical national functions as a result of their exposure to cyber risks, that compromise their confidentiality, integrity, availability and accessibility constitute a threat to the doctrines of National Security.

2.4 Doctrine on Cybersecurity:

- 2.4.1 National provision of sustainable proactive measures mitigates, protects, and safeguards the nation from cyberspace risk exposures, including cyber-threat and vulnerability. An insecure cyberspace is inimical to the nation's sovereignty, national security and economic development.

PART THREE

NATIONAL SECURITY & CYBERSECURITY

3.1 The Goal of National Security Strategy on Cybersecurity

- 3.1.1 The fundamental aim of the National Security Strategy as enshrined in the National Security Policy framework seeks for a harmonized security strategy that will respond to the dynamism of the national security threat landscape.
- 3.1.2 One of such emergent national security threat landscape is national risk exposure and uncoordinated presence in cyberspace.
- 3.2.3 In the context of the immediate and future security challenges, instruments of National Cybersecurity Policy and National Cybersecurity Strategy are intended to manage security threats in cyberspace in line with the overall national security objective.

PART FOUR

NATIONAL CYBERSECURITY ROADMAP

4.1 National Cybersecurity Vision:

A safe, secured, vibrant, resilient and trusted community that provides opportunities for its citizenry, safeguards national assets and interests, promote peaceful interactions and proactive engagement in cyberspace for national prosperity.

4.2 National Cybersecurity Mission:

To foster harmonious, sustainable and integrated national cybersecurity readiness and coordination capacities towards addressing and mitigating the nation's cyber risks exposure in cyberspace.

4.3 Policy Objectives:

4.3.1 Statement of Purpose

The aim of this National Cybersecurity Policy is to chart a course towards an assured and trusted presence in cyberspace.

4.3.2 Objectives

The objectives of National Cybersecurity policy are stated as follows:

- i. To facilitate an effective legal framework and governance mechanism for the nation's presence in cyberspace and cybersecurity ecosystem.
- ii. To develop an information security and control mechanism for the protection and safety of the national critical information infrastructure and its associated economic infrastructures operating in cyberspace.

- iii. To provide measures for the identification, monitoring, analysis, and evaluation of the national critical information infrastructure for maintaining the nation's active presence in cyberspace.
- iv. To develop a national cybersecurity assurance framework, compliance and enforcement administration.
- v. To develop a centralized national emergency readiness and incident management coordination capability.
- vi. To promote emergence of an appropriate legislative environment with respect to freedom of access to information, intellectual property, data protection and privacy rights.
- vii. To promote and engage cybersecurity innovations through research and development in partnership with industry and academic institutions.
- viii. To develop a national benchmark for regular statistical data and situational report on the nation's cybersecurity status.
- ix. To develop a framework for inter-agency collaboration on combating cybercrime and cybersecurity.
- x. To establish multi-stakeholder partnerships, cooperation and leadership advisory mechanisms for information sharing, intelligence gathering and coordinated response.
- xi. Infusion of the culture of cybersecurity and promotion of adherence to principles, standards and guidelines in the country.
- xii. To develop a coordinated national awareness strategy, capacity building, and structured cybersecurity professional cadres across all national constituents.
- xiii. To develop national criteria for the development of cybersecurity manpower, identify baseline requirements, qualifications for

cybersecurity professionals and implement measures for certifications and regulations of cybersecurity skills, products, and services.

- xiv. To promote and strengthen national commitments to regional and global partnerships and cooperation on cybersecurity.
- xv. To facilitate institution of a unified National Strategy on Cybersecurity to provide guidance, initiatives and measurable action plan in the development, implementation, and sustainability of a national cybersecurity roadmap.
- xvi. To develop a national mechanism for the establishment of National Cybersecurity Coordination Center (NCCC) to serve as the focal point for cybersecurity incident monitoring and response; coordinate and regulate sectoral Computer Emergency Response Team (S-CERT) and establishment of a National Digital Forensic Laboratory (NDFL) in the country.

4.4 Policy Mandates:

- 4.4.1 The National Cybersecurity Policy mandate is derived from a Presidential directive vested on the Office of the National Security Adviser in pursuant of the comprehensive National Security Policy and Strategies.
- 4.4.2 The Presidential order mandated the Office of National Security Adviser to establish cybersecurity structure within the Office of the National Security Adviser (ONSA).
- 4.4.3 The mandate of the cybersecurity structure among others is to develop a National Cybersecurity Policy and implement a National Cybersecurity Strategy for the country.
- 4.4.4 The Office of the National Security Adviser, therefore in exercise of its power authorized the institution of effective National Cybersecurity Policy and National Cybersecurity Strategy. These are parts of a comprehensive National

Security Policy framework based on the immediate and long-term national security risks mitigation strategy.

4.5 The Guiding Principles:

4.5.1 The following guiding principles provide direction to the national approach to cybersecurity while simultaneously addressing critical areas of conflict.

4.5.2 These principles form the underlying philosophy of the country's response to the identified five cyber threats inimical to the national security and interest:

i. General Principles:

- The policy is taking cognisance of the borderless nature and global landscape of cyberspace.
- The policy measures to improve Nigeria's cybersecurity posture are adaptable to the dynamism of cyber threats and flexible legislative landscape.
- The policy measures are based upon national capabilities in identifying and managing cyber-risks with understanding of the underlying threats and vulnerabilities.
- Initiatives to improve Nigeria's cybersecurity posture must be anchored on stakeholder's coordination, cooperation and international collaboration.
- The policy recognizes the protection and safety of the nation's most critical assets i.e. its citizenry and vulnerabilities online, thus, the policy takes a stand against online child abuse and exploitation.
- The policy recognizes the need for a cybersecurity regulatory framework for the country through stakeholders' collaboration.

ii. Principles on Cybercrime and Proactive Measures:

- Cybercriminal exploits vulnerability of the nation's cyberspace. The rise of cybercrime has a negative socio-economic effect on the nation's integrity and the citizens.

- It is cardinal principle of this policy to put in place appropriate proactive measures towards preventing threats to the nation's cyberspace while mitigating the impact on its citizens.
- The proactive policy measures recognized global principles on cybersecurity and will work towards addressing the following objectives:
 - a. Technical measures to identify, monitor, detect, prevent, respond and investigate cybercrime.
 - b. Legal measures to deter, prosecute, and investigate cybercrime
 - c. Economic measures to provide appropriate assistance to combat cybercrime.
 - d. Social measures and capacity building aimed at raising awareness among Nigerian nationals towards reducing the nation's cybersecurity exposure footprint.
 - e. Fostering of international commitment and cooperation against cybercrime.

iii. Principles on Cyber-espionages and Comprehensive Measures:

- The Cyber-espionage comprising economic and military espionage constitute critical cyber threats that can compromise national security and stunt economic growth.
- An abiding principle of this policy is to put in place appropriate comprehensive measures involving multidimensional engagements of military and civil security collaborations, national and international security cooperation to detect and deter cyber-espionage.

iv. Principles on Cyber Conflicts, Cyber terrorism and Integrated Containment Measures:

- At the centre of this policy lays the principle of integrated containment of conflicts, violence and terror perpetuated against the sovereignty of

the nation by agents and groups exploiting the borderless nature of cyberspace.

- It is the core principle of this policy to articulate integrated containment measures which focus on shared responsibilities and cooperation among all the state actors at the national, regional and global levels.

v. Principles on Child Online Abuse & Exploitation and Counter-measures:

- Social media has become a vital attractive channel and tool for social interactions and productive engagements. The openness and transparency nature of cyberspace have been exploited for good causes and malicious intents.
- It is the cardinal principle of this policy to harness counter-measures through a legislative framework, policy and strategic actions to address cyber abuse and online exploitation of the Nigerian Children.
- This policy seeks to prevent and contain cybercriminal intents and related malicious acts inimical to the national dignity, security and economic interests of the country.

vi. Principles on Balancing Security, Data Protection, Privacy Rights, Freedom of Expression and Information sharing:

- The policy shall promote full trust and protection of economic benefits of cyberspace by sustaining balance between citizen's expectations on freedom of information and privacy, and government responsibilities on data protection.
- The Policy shall ensure that conflicting issues of data protection and information sharing will be addressed through appropriate cybercrime legislative frameworks that will include socialisation of legislations.
- The policy is committed to provide appropriate data governance measures and an effective data protection and privacy regime, where data owners

and their processors shall have their obligations to protect citizen's personal data, as well as operate within the law when collecting, protecting and processing such information.

vii. Principles on Freedom of Expression & Political Stability:

- The policy shall respect the free flow of information under secured and trusted environment that satisfies the security needs of government, citizens and private sector.
- The policy shall ensure commitment to default position where Nigerians and individuals within its borders shall be free to express their opinions without fear or reproach when using online media.
- The policy shall ensure that where individuals, organisations' or corporations' expressions undermine the national security posture and or political stability of the nation, in such instances, individuals, organisations or corporations making such expressions shall be prosecuted under new legislations, which will be addressed by the cybercrime legislative framework.

viii. Principles on Privacy and Lawful Interception:

- In order to address the conflicting issues of privacy and lawful interception, the policy shall ensure commitment to the default position where Nigerians and other nationals communicating within its borders shall be allowed to communicate without having their communications intercepted or eaves dropped on.
- This right to privacy shall only be removed where individuals are reasonably suspected of committing a crime or are involved in activities that threaten or undermine the nation's national security posture.

ix. Principles on Public and Private Sector Partnership:

- The policy recognises the important role of private sector in cyberspace and its massive investments in the provision of critical resources,

intellectual assets and management of critical national information infrastructure.

- The policy recognises the cyber risk exposure of critical infrastructures, which leads to Industries increasingly becoming the primary target of cybercrime, cyber espionage, and most recently, serious cyber attacks.
- The policy is committed to building trusted channels for strategic partnerships with the private sector through public-private partnerships and multi-stakeholder engagement measures.
- It is strategic intent of this policy to facilitate cross-sector harmonization, development and application of a common regulatory framework towards entrenching a cohesive cybersecurity response. This is to improve cybersecurity across the critical information infrastructure.

x. Principles on Sustainable National Awareness, Advocacy and Capacity Building:

- The policy seeks to improve the country's cybersecurity posture. Therefore it is the abiding principle of this policy to provide measures on sustainable national awareness, advocacy and capacity building across various spectrums, encompassing government and private sectors institutions, security and law enforcement agencies as well as individual citizens.

xi. Principles on Cybersecurity Innovation & Manpower Development:

- The policy recognizes the need for national expertise, local skills development, and harnessing of local potentials through coordinated national mechanism, towards addressing fast changing cyberthreat and the dynamism of the nation's cyber risk exposure.

- This includes encouraging knowledge sharing and transfer, creativity and innovation necessary to respond to such changing cyberthreat landscape.

xii. Principles on Cloud Computing Security, National Data Security Management & Hosting:

- The policy recognizes cloud computing as an evolving sub-domain of cyberspace. The policy will harness and align cloud computing security frameworks and guidelines in line with national interest and economic protection needs of the country.
- Within the context of national security, the policy maintains a position that the nation and its organizations do not transfer hosting of critical national data to countries that do not have effective data protection and privacy regimes.
- The policy recognizes the evolving nature of the country's capability on local data hosting infrastructure and management services. Thus, the policy will facilitate country capability in partnership with stakeholders.

xiii. Principles on Cyber-Physical Infrastructures:

- The policy seeks to facilitate a regulatory framework that would secure the most critical cyber-physical systems, which control core infrastructure whose failure could adversely disrupt economic activity and national security.

xiv. Principles on Organizational Cybersecurity:

- The policy supports cybersecurity capability of the nation's business entity, thus enabling businesses to work with government, to dynamically evaluate measures as appropriate towards addressing threat and vulnerability.

xv. Principles on Multi-Stakeholders Engagement:

- The policy recognizes shared responsibility on cybersecurity and multi-stakeholder nature of cyberspace. Therefore, the policy would promote National Cybersecurity Multi-stakeholder Intervention to support effort on a cohesive security incident response and management.

xvi. Principles on International Commitment & Governance:

- The policy is committed to abide by the national legal framework, regional jurisprudences, international agreements, facilitating bilateral co-operations, multilateral partnerships, cybercrime conventions and treaties on cyberspace and cybersecurity.
- The policy would seek to promote international alignment and harmonization on global cybersecurity.

PART FIVE

NATIONAL PRIORITIES

5.1 Introduction

This part addresses strategic areas of national priority and defines critical areas of focus for policy actions towards coordinated cybersecurity engagements.

5.2 Strategic Areas of Focus

5.2.1 Legal Framework

- i. The Government has the responsibility of taking legal and regulatory actions to improve and update its federal and state laws to combat cybercrime.
- ii. This policy recognises and supports various enacted laws administered by different government agencies that impact on cybercrime countermeasures and cybersecurity.
- iii. It is the policy of the government to develop an appropriate Cybercrime legal Framework to provide legal response to tackle, prosecute and deter cybercrime activities in Nigeria.
- iv. The Cybercrime Legal Framework will have processes to ensure that it is constantly reviewed so that it can enact or amend laws that are effective in meeting the fast paced changes and technological developments in the cybercrime environment.
- v. The policy shall facilitate and promote a set of related legislations, which have impact on the nation cybersecurity strategy and engagement in cyberspace.

- vi. The Cybercrime Legal Framework will adopt international conventions and best practices. It shall include international cooperation and their law enforcement agencies to tackle cybercrimes that are committed inside the nation's borders with impact on individuals and organizations outside of Nigeria. It will also address activities emanating from outside of Nigeria which affect individuals and organizations in Nigeria.
- vii. The framework will use appropriate cooperation and collaboration platforms to participate in international fora to allow government and citizens of Nigerians to have a voice in decisions that could adversely affect their participation on the Internet. Such discussions include but are not limited to Internet Protocol Address profiling.
- viii. The Cybercrime Legal Framework will reform substantive and procedural criminal laws in Nigeria to address the phenomenon of cybercrime.
- ix. The Cybercrime legal Framework will establish legislations to combat cybercrime. New legislations will aim to meet the changing cybercrime landscape and as a minimum consist of the following legislations to compliment already existing criminal laws: Anti-Spam, Child Online Protection; Child Pornography; Cookies; Computer Misuse; Cyber Blackmail; Cyber bullying and Harassment; Cyber Espionage; Cyber Terrorism, Digital Evidence and Preservation; Data Protection; Data Retention; activism; Identity Theft; Information Security; Intellectual Property Rights; Lawful Interception; Online Fraud; Privacy; tribalism and Xenophobia; Software Piracy; Security Breach Notifications; Unauthorized System Interference among others.
- x. It is the policy of the Nigerian Government as part of this legal framework to ensure capacity building of the judiciary, lawyers and regulatory bodies towards guaranteeing that Nigeria has appropriately trained and skilled resources to adjudicate and advise on the complex issues that will arise from prosecuting cybercrime.
- xi. The policy proposes for an advisory and assistance mechanism to the

legislative authority on the appropriate time to enact changes to cybercrime laws.

- xii. It is the policy of the Nigerian Government that cybersecurity and cybercrime legal education be adopted into the syllabus of institutes of higher learning to ensure that new entrants to the industry have basic knowledge and understanding of the issues relating to cybercrime and cybersecurity.

5.2.2 Structures & Coordination

- i. It is required that there shall be a unified coordination of national cybersecurity policies and strategies in the country. This coordination requires a national structure to facilitate national cohesion at strategic and tactical levels.
- ii. This policy, therefore, provides for the setting up of a National Cybersecurity Structure, which will be the National Cybersecurity Coordinating Center and the international focal point for cybersecurity in the Office of National Security Adviser (ONSA).
- iii. The NCCC shall provide the following cybersecurity responsibilities;
 - Provide national cohesion and intervention at operational and strategic levels through the implementation of a national cybersecurity strategy.
 - Provide coordination and implementation of cybercrime counter-measures for law enforcement and security agencies.
 - Supervise, coordinate and regulate sectoral cybersecurity measures.
 - Develop and provide collaborating mechanisms and counter-measures on online abuses and exploitations of Nigerian children.
 - Provide mechanism for information sharing, intelligence data gathering and surveillance of national cyberspace, which must be within national jurisprudence.

- Develop and provide mechanisms for national cybersecurity assurance; cybersecurity emergency readiness; and incident responses capabilities.
 - Develop a national laboratory, research and innovation capability for digital forensics.
 - Develop national technical standards on cybersecurity framework, provide guidelines on compliance, training and capacity building for all military and non-military public institutions, institutions, including the Judiciary.
 - Perform regular cybersecurity exercise, national cyber-risk exposure assessment, determine needs and provides appropriate responses for mitigations.
 - Develop, implement and facilitate a national mechanism on public awareness, cybersecurity education, advocacy on cyber safety and culture of cybersecurity for the country
 - Provide a national technical focal point on cybersecurity for regional and international collaborations and partnerships.
 - Provide and facilitate mechanisms for cybersecurity skill development, innovation, research and development in partnership with stakeholders.
 - Provide all other cybersecurity functions that safeguard national interest on cyberspace.
- iv.** The policy recommends the setting up of National Advisory Council on Cybersecurity (NACC) whose membership should reflect public-private partnership and multi-stakeholder nature of the guiding principles of this policy.
- v.** The NACC will provide the following responsibilities:

- Guidance and advisory to the National Security Adviser on policy and other matters relevant to cybersecurity and cybercrime countermeasures.
- Facilitate multi-stakeholder engagements as well as public and private sector collaborations on cybersecurity.
- Promote cooperation and partnership among all government institutions.
- Provide other functions that may enhance the capability of NCCC towards achieving trust and confidence in the country.

5.2.3 Monitoring & Assurance

- i. The nation's capabilities to provide assurance, i.e monitoring, compliance and audit, on various cyber security measures, plans and programs depend largely on her ability to perform monitoring, evaluations, assessments and reviews of cybersecurity programs implemented to ensure that they meet national expectations.
- ii. This policy seeks harmonized framework for relevant international standards and technical measures that respect national priorities that are not inimical to critical national interests.
- iii. Such framework must recognize national innovations, promote national cohesion and reposition the country for global trust and confidence in its digital economic agenda.
- iv. The following shall serve as the basis for guiding strategy on assurance, monitoring and compliance in the country:
 - A risk-management based and technology neutral approach shall be adopted in performing assurance activities.
 - Continuous improvement in the nation's security posture shall be an objective underpinning assurance activities and recommendations.

- All cyber security initiatives shall be assessed for conformity with relevant laws, harmonized frameworks, cost effectiveness and the ability to provide a secure and a safe cyberspace that contributes positively to the nation's growth.
- A continuous monitoring approach shall be used to monitor security trends, threats and risks that face the nation's cyberspace.
- Regular security audits shall be performed to determine the status of implemented cyber security controls and general security posture of the nation's cyberspace.

5.2.4 Critical Information Infrastructure Protection (CIIP)

- i. It is the policy of the Government to develop national guidelines and criteria for profiling information infrastructure with a strategic intent of determining, identifying, and classifying critical national information infrastructure.
- ii. This policy will enable a mechanism for addressing vulnerability of nation's Critical Information Infrastructure.
- iii. This policy seeks proactive security measures and controls throughout all government institutions towards addressing vulnerabilities and related security gaps within internal information systems, processes and users.
- iv. Such measures should adapt to the national cybersecurity standards and guidelines as provided for in the National Cybersecurity Strategy.
- v. The dynamism of cyberthreat and the adverse impact on Critical Information Infrastructure will be addressed through continuous engagement of stakeholders from organized privates sector.

5.2.5 Unified Measures

- i. The policy shall harness, harmonize and prioritize various frameworks to address the following critical areas of national cybersecurity agenda;
 - Computer Incident Security Response
 - Online Child Abuse & Exploitations
 - Nigeria Internet safety.
- ii. The framework for the establishment of computer incident security response shall be in harmony with international best practices, taking into consideration various international conventions, standards and guidelines.
- iii. The policy shall address Online Child Abuse & Exploitations from the following approaches; law enforcement and security countermeasures; legal framework; multi-stakeholder intervention; and international cooperation. The policy seeks to bridge these approaches towards cohesive measures.
- iv. The policy will promote multi-stakeholders' initiatives and relevant framework for safeguarding Nigeria community and citizens' engagement in cyberspace.

5.2.6 Cybersecurity Skills & Empowerment

- i. The policy prioritizes the strategic needs to develop national manpower and skill development in cybersecurity knowledge and education across the sectors.
- ii. The dynamism of cyberspace, cyberthreat and national vulnerability requires structural and continuous capacity building, cybersecurity skills development and empowerment framework where the nation can effectively deploy her nationals to safeguard her national interests.
- iii. This policy provides for the following frameworks for the development of cybersecurity skills in the country and for law enforcement and security agencies specifically.

- Setting up of a cybersecurity institute in partnership with stakeholders.
- Development of minimum set of standards for the regulation and coordination of professional practices in information security.
- Development of national cybersecurity curriculum framework and specific requirements that cuts across law, social sciences, information and communication technology, information assurance, management and cyber-diplomacy.
- Establishment of operational cadres for cybersecurity professionals in Military and non-military security agencies, government institutions, department and agencies.
- Enabling private sector support in cybersecurity professional development relevant to the nation's economic and national security interests.
- Development and adoption of national mechanism for the infusion of cybersecurity knowledge and culture at all levels of education.

5.2.7 National Advocacy for Stakeholder Engagement

- i. National advocacy for stakeholders' engagement is the critical success factor of National Cybersecurity Policy which is anchored on trust, transparency and confidence building in the policy actions of government.
- ii. This policy will harness its comprehensive approach, guiding principles and all the three modes of engaging different levels of stakeholders using the following principles:
 - Coordination within government towards achieving a unity of purpose across the different levels government, especially within federal

government and between states and local government administrations.

- Cooperation with local non-governmental stakeholders including organised and non-organised private sector, formal and informal sectors which are central to national cybersecurity issues. The policy will facilitate voluntary cooperation and harmonious relationship through formation of public-private partnership and multi-stakeholders partnership towards facilitating exchange of information on the development of new legislation and regulation between stakeholders.
- Collaboration within the regional and international community, bilateral and multi-lateral institutions, multi-national corporations, and global cyberspace governing bodies. The policy recognises various contributions of international discourse on Internet governance, policies and management of cyberspace critical resources and contributions of global institutions.

5.2.8 Research & Development in Cybersecurity Innovation

- i. Cyberspace is a dynamic domain providing opportunities for global competitions driven by innovations while at the same time, cyber threats continue to evolve in complexity and gravity.
- ii. The policy will promote innovation in cybersecurity development towards the development of security tools and protection of information infrastructures.
- iii. The policy will stimulate government-industry-academia collaboration on cybersecurity research and development to prevent duplication of efforts and leveraging on collective capabilities.
- iv. The policy will facilitate national mechanism on cybersecurity research and development to help the country develop a process of transition from the current cyberspace infrastructure to a more resilient and secure platform. This is a critical imperative towards securing the nation's cyberspace.

5.2.9 International Synergy

- i. It is the principle of this policy on cybersecurity to encourage active international synergy and participation in relevant international cyber security fora and multi-national agencies discourse on cyberthreat and cyberspace.
- ii. The policy will promote the country's active participation in relevant international cyber security policy formulation, technical fora, hosting of national and international cybersecurity conferences that will facilitate the country's leading role in transnational cybersecurity measures.

5.3 Strategic Approach

- i. The strategic approach to the development of an all-inclusive National Cybersecurity Policy requires taking a look at cyber security from national security and national economic interest perspectives. Similarly, perspectives from local and global stakeholders that are applicable to national peculiarities that can help the nation to meet her national and international commitments are equally vital.
- ii. The policy considered past outcomes, submissions, and recommendations of various stakeholders meetings, fora, workshops and conferences.
- iii. The policy further examines the basic decisions that must underpin national policy and strategy on cybersecurity, while identifying the national stakeholder groups that will work with the strategy.

5.4 National Expectations & Strategic Benefits

This policy offers the country unique opportunities of building a reliable and trusted connected community with the following strategic benefits;

- i. Global confidence in the nation's digital economy
- ii. Safeguarding of the nation's presence in cyberspace
- iii. Stakeholders confidence and trust in the nation's ICT sectors and infrastructures
- iv. National safety and protection of national critical Infrastructures
- v. Positive impacts on economic growth and enhances the nation's competitive advantage
- vi. Promotes national values, dignity, identity in cyberspace and improves national image
- vii. Stimulates foreign direct and indirect investment flows into country
- viii. Promotes a vibrant and safe environment for social interactions and e-commerce transactions.
- ix. Enables the country address emergent security challenges, builds the nation's capacity to detect, analyse, respond and manage cybersecurity incidents.
- x. Reduces prevalence of cybercrime activities while inducing safety and security consciousness among the public.
- xi. Assures the provision of a comprehensive national security strategy for immediate and future engagements; and
- xii. Consolidates the leading and functional roles of Nigeria at regional and global levels on matters relating to cybersecurity.

PART SIX

PRINCIPLES ON INCIDENT MANAGEMENT & ECOSYSTEM

6.1 Preparation:

- i. To ensure resilient national cyberspace, a coordinated incident management capability shall be required to manage cybersecurity incidents.
- ii. Nigerian Computer Emergency Response Team (ngCERT) mechanism shall be established and empowered as the focal point for all national cyber incident management.
- iii. The ngCERT mechanism shall be managed under the supervision of NCCC.
- iv. There shall be one national CERT. It shall function as a central coordinating unit under the NCCC to manage all cyber-incident activities within the national cyberspace that may affect national security.
- v. A National Incident Response Plan (NIRP) will be formulated towards achieving a coordinated emergency response strategy based on the National Security Policy.
- vi. The NIRP will integrate processes for monitoring with rapid response, and efficient resolution to mitigate impact to the security and the economic wellbeing of the nation.
- vii. The NIRP will be implemented and coordinated by ngCERT under the supervision of NCCC.
- viii. NCCC shall develop standards and guidelines in collaboration with relevant statutory federal government agency for the establishment and operations of sectoral CERT.

6.2 Indications and warning:

- i. All key national information infrastructures shall have a proactive network monitoring system for effective monitoring and interception.
- ii. A centralised Cyber Emergency Monitoring System (CEMS) under ngCERT coordination shall be implemented to identify indicators for potential threats to the nation's cyberspace.
- iii. Based on the potential threat identified by the CEMS, alerts and warnings will be issued to various agencies and entities for rapid response and vulnerability patches.
- iv. All Internet service providers and internet exchanges shall interface with ngCERT for effective utilisation of a unified national alert and warning system to be established and maintained by the NCCC.

6.3 Detection and Response:

- i. Incident detection and prevention mechanism is required for all critical information infrastructures.
- ii. Security incident without localised expertise must be escalated to the central coordinating unit for additional support as will be outlined in the NIRP.
- iii. For business continuity purpose, cybercrime incident occurring must be recorded, reviewed and resolved following an established incident management process as may be define in NIRP.
- iv. All Cybercrime incidents must be documented and reported to ngCERT.

6.4 Vulnerability Handling:

- i. Security assessment and audit shall be periodically required on critical national information infrastructure. It shall be carried out at a pre-defined interval and integrated into the National Incident Response Plan (NIRP).
- ii. There shall be provision for the documentation and archiving of all vulnerabilities and patches according to manufacturer's specifications. A national record shall be kept for review.

6.5 Artifacts Handling:

- i. The policy requires the development of national guidelines on digital evidence handling which shall be incorporated into the NIRP.

6.6 Collaboration:

- i. ngCERT shall be saddled with advocacy to promote trust within the national cyberspace.
- ii. All collaboration with regional and international CERTs shall be coordinated by ngCERT as the National Point of Contact (POC).
- iii. All sectoral computer emergency response team (CERT) shall be promoted and supported by ngCERT. Technical support and expertise will be provided as when required.
- iv. A national trust level classification shall be established to cater for different tiers of sectoral CERT.

6.7 Sector-based CERT

- i. Sector-based CERT shall be set up by the sector supervising regulatory body and or other coordinating body within a particular sector.
- ii. Sector-based CERT shall serve as a single point of contact (POC) for each of the specific sectors and coordinate incident response activities in the sector
- iii. Sector-based CERT shall promote trust and confidence among stakeholders under the specific sector.

- iv. Sector-based CERT shall facilitate information sharing and technology exchange with ngCERT.
- v. Sector-based CERT shall facilitate provision of criteria, measures, standards, guidelines and best practices for the sector in line with national cybersecurity measures.
- vi. Sector-based CERT shall undertake cybersecurity readiness, information security assurance and compliance administration for the specific sector.
- vii. Sector-based CERT shall operate in cooperation with the ngCERT towards achieving the common goal of securing the nation's cyberspace.
- viii. There shall be strengthening of relationship between Sector-based CERT and ngCERT
- ix. All sector-based CERT shall constitute national ecosystem, with proper identifications with specific roles and mandates.
- x. All members of the eco-system shall be coordinated, regulated and certified by ngCERT.

6.8 Training, Research and Development:

- i. A localised approach shall be adopted to develop in-house technology and security tools for managing threats peculiar to the nation.
- ii. NgCERT will provide training, requirements and national criteria to sectoral CERT for ease of operation and efficient and effective response to security incidents.
- iii. NgCERT shall collaborate with sectoral CERT on research and development with the goal of fostering innovation in cybersecurity.

PART SEVEN

PRINCIPLES ON NATIONAL CRITICAL INFORMATION INFRASTRUCTURE PROTECTION

7.1 Introduction:

- i. It is the cardinal objective of this National Cybersecurity Policy to complement the efforts of the Federal Government of Nigeria on the existing plans and documents relating to safeguarding and protection of the nation's Critical Information Infrastructure.
- ii. The legislation on cybercrime and cybersecurity thus states that *The President may on the recommendation of the National Security Adviser, by Order published in the Federal Gazette, designate certain computer systems, and/or networks, whether physical or virtual, and/or the computer programs, computer data and/or traffic data vital to this country that the incapacity or destruction of or interference with such system and assets would have a debilitating impact on security, national or economic security, national public health and safety, or any combination of those matters as constituting Critical National Information Infrastructure.*
- iii. This policy recognizes that Nigeria's well-being depends largely on a secure and resilient critical national information infrastructure—the systems, assets and networks that underpin our national life.
- iv. Therefore, this policy details how the private sector will work with government in the identification and protection of critical infrastructure in order to manage risks and achieve resilience to national critical information infrastructure.

7.2 Vision of National Critical Information Infrastructure Protection Plan (NCIIPP)

The country envisions an environment where physical and cyber critical infrastructure are secure and resilient, with vulnerabilities reduced and consequences minimised to acceptable tolerable limits, where threats are identified and dealt with in a coordinated response and recovery strategy.

7.3 Policy Objectives of NCIIPP:

- i. Detect, identify, discourage, disrupt and prepare for threats and cyber hazards to Nigeria's critical information infrastructure
- ii. Reduce vulnerabilities of critical assets, systems and networks to deliberate, unintentional and natural threats.
- iii. Mitigate the potential consequences to critical infrastructure of incidents or adverse events that do occur through advance planning and mitigation efforts to save lives and ensure prompt recovery of essential services.
- iv. Share important and actionable information among the critical infrastructure community in order to build awareness and provide a risk-informed decision making.
- v. Promotes learning and rapid revision of NCIIPP during and after incidents.

7.4 Strategic Readiness Plan (SRP)

- i. The policy shall facilitate the development of a strategic action plan through a collaborative process involving stakeholders from all identified critical infrastructure sectors, all states of the federation and from all levels of government and industry.

- ii. Provide a clear call to action which will leverage on the coordination, cooperation, collaboration, smart risk management procedures, and focus on specific actions germane to the policy goals.

7.5 The Critical Infrastructure Sectors:

- i. Policy preparatory process on NCIIPP carried out a general national survey with the goal of identifying critical infrastructure sectors whose strategic operational backbone rely on functional and secure National Critical Information Infrastructure.
- ii. The policy identifies the following infrastructures.
 - a. Communications Sector
 - b. Government Facilities Sector
 - c. Manufacturing Sector
 - d. Dams Sector
 - e. Defence Sector
 - f. Chemical Sector {Oil and Gas}
 - g. Power and Energy Sector
 - h. Commercial Facilities Sector
 - i. Financial Services Sector
 - j. Food and Agriculture Sector
 - k. Emergency Services Sector
 - l. Transportation Systems Sector
 - m. Public Health and Healthcare Sector
 - n. Water & Waste Water systems
 - o. Information Technology Sector
- iii. Effective risk management requires an understanding of the significance of assets, systems, networks, as well as the associated dependency and interdependency of critical infrastructure.
- iv. Consequently, the policy encourages stakeholders to identify critical functions and resources that impact on their businesses and communities in order to support preparedness, planning and capability development.

- v. The policy describes a national unified effort to achieve critical infrastructure security and resilience. Given the diverse authorities, roles, and responsibilities of critical infrastructure partners, a proactive and inclusive partnership among all levels of government and the private and non-profit sectors is required to provide optimal critical infrastructure security and resilience.

7.6 Coordination Policy Specific to NCIIPP

- i. The NCIIPP for each sector details sector level performance objectives and feedback to the coordinating agency of government charged with the responsibility of managing the sector.
- ii. The NCCC shall be empowered through legislation to provide the following national critical information infrastructure protection roles:
 - National Coordination and Reporting Mechanism of cybersecurity incidents for critical infrastructure.
 - NCCC shall facilitate development and implementation of national criteria on best practices approach at each critical information infrastructure sector.
 - NCCC shall facilitate the development of a national Critical Information Infrastructure Measurable Programme (CIIMP) as part of the cohesive National Cybersecurity Strategy.
 - NCCC shall assist government and the private sectors to mitigate their cyber-risks
 - It shall provide legal framework for investigating cyber security incidents.
 - Promote regional and international cooperation on NCIIPP across national boundaries and assist in determining transnational solutions.

PART EIGHT

PRINCIPLES ON ASSURANCE & MONITORING

8.1 Introduction:

- i. Vulnerabilities exist in critical national information infrastructure for several reasons including: technological flaws, non-existent or weak security controls, non-compliance with defined security policies, dearth of effective mitigating strategies and plans amongst others.
- ii. Absence of a feedback reporting mechanism on how effective implemented controls are safeguarding the nation's cyberspace will lead to an assumed, unverified and false sense of protection.
- iii. The policy provides for the creation of a National Assurance & Monitoring mechanism for the nation's cyberspace.

8.2 Focal Points:

The National Assurance & Monitoring Mechanism, under the supervision and coordination of NCCC will achieve the following outcomes:

- i. Motivate compliance to national cybersecurity standards.
- ii. Ensure collection of relevant data that validates previous cyber security initiatives, and support its' on-going improvements.
- iii. Provide feedback on the status of the nations' cyber security posture, thus enabling stakeholders, partners and policy-makers to develop sound cyber security countermeasures and risk mitigation strategies.

- iv. Increase confidence that responsible stakeholders are complying with statutory cybersecurity requirements and frameworks
- v. Ensure efficient and effective solutions are deployed to protect the nation's cyberspace.
- vi. Ensure awareness of evolving threats to the nation's cyberspace thereby enabling proactive defence measures.

PART NINE

PRINCIPLES ON NATIONAL COMMITMENT & GOVERNANCE

9.1 Introduction:

- i. Nigeria is committed to establishing the highest level of governance and commitment in tackling cybercrime. To achieve this goal it will design and implement appropriate, sustainable and effective policies and practices. The ONSA will provide oversight responsibilities on matters relating to policies, practices, individuals and organisations charged with the responsibility of combating cybercrime.
- ii. The national commitment will ensure that these practices are continually being reviewed and improved by benchmarking against internationally accepted best practices and lessons learned.
- iii. The outcomes of the national commitment on governance are:
 - To give Nigerian citizens and the rest of the world comfort and understanding of our resolve and stance on tackling cybercrime.
 - Allow the nation to identify progress on the key strategies that need to be implemented
 - Steer the country towards efficient and transparent methods of conducting operations for cybercrime especially where there are conflicting objectives.

- iv. It is the policy of the Government of Nigeria to have and maintain principles on national commitments and governance.
- v. These principles will allow the nation to foster cooperation and coordination in the drive to maintain a positive image across local, regional and global communities in the nation's drive to reduce the effects of cybercrime.

9.2 Nature of Commitment

- i. In order to ensure the fight against cybersecurity in Nigeria is sustained. Nigeria commits to putting in place perpetual counter-measure instruments and cybercrime fighting environment that will be sufficiently funded and which in turn will be monitored and supported by the national security agencies.
- ii. It will ensure that it appoints the most suitably trained and qualified individuals to oversee the delivery of its commitment to combat cybercrime and make it difficult for cybercriminals to successfully operate within the nation's cyberspace.

9.3 Nature of Governance

- i. In order to ensure the fight against cybercrime is successful, the government will commit to putting in place, effective governance and control mechanisms to ensure its national security agencies have appropriate oversight of the activities within its cyberspace environment.
- ii. This will include amongst other areas identifying the institutions and bodies that control activities and services that can impact on its cyberspace environment. Such organisations and bodies will include but are not limited to;
 - Internet Service Providers
 - Domain Name Registration Body
 - Telecommunications Service Providers
 - Internet Exchanges; and
 - Other associated bodies

- iii. The governance oversight will allow for centralization, prompt and effective response to cybercrime activities.

9.4 National Legal Commitments

- i. An integral part of the nation's National Cybersecurity Policy is the adoption of regional and international harmonised legislations against the misuse and abuse of cyberspace for criminal and other unlawful purposes.
- ii. In order for Nigeria to ensure its policy on cybercrime is successful, Nigeria commits to enacting appropriate laws relating to cybercrime.
- iii. The nation's commitment will include reviewing these laws on a regular basis so that they can be updated when the need arises. The benefit of this approach will be that the nation's legal landscape will be adaptable to the changing cybercrime environment.

9.5 Regional Commitments and Governance

- i. To ensure its policy on cybercrime is comprehensively successful, Government commits to fostering initiatives for the cooperation, collaboration, information sharing and coordination of anti-cybercrime strategies with countries, law enforcement agencies and regulatory bodies in the African Region.
- ii. Government will build and foster partnerships with willing and participating countries by sharing information and combining efforts to combat cybercrime.
- iii. Nigeria will engage in regional discourse, consultations and negotiations that impact positively on regional cybersecurity efforts.

PART TEN

PRINCIPLES ON ONLINE CHILD ABUSE & EXPLOITATION

10: 1 Introduction:

- i. The Nigerian Cybersecurity Policy recognises growing engagement of the nation's active young population in cyberspace.
- ii. The resultant impact of this engagement has contributed significantly to digital knowledge acquisitions and economic empowerment of this critical segment of the nation's population.
- iii. Unrestricted access to digital contents, contacts and communications through Cyberspace has raised new areas of national security concern on vulnerability, exploitation and abuse especially as it affects this critical segment of the nation's population.
- iv. There are growing national concerns on the distribution of digital content and materials targeted to young population which are making them vulnerable to cyber-terrorism recruitment, child pornography, sexual abuse, harassment, exploitation, extremism, violence and human trafficking resulting into unpleasant outcomes.

10.2 Strategic Areas of Focus:

- i. National Cybersecurity Policy will work within the current and future legislative frameworks to provide countermeasure mechanisms on Online Child Abuse and Exploitation within the nation's cyberspace.

- ii. The policy provides for a partnership framework for counter-measures towards safeguarding the safety and security of the Nigeria children online.
- iii. The policy seeks membership of relevant global law enforcement bodies, which provides a 24/7 mechanism to receive reports about illegal behavior or content from persons in member countries.
- iv. The policy seeks for national awareness and capacity building of Nigerian law enforcement community and the judicial sector on countermeasures, investigating child online abuse and exploitation as well as prosecution within current and future legislation.
- v. The policy seeks for the creation of national mechanisms guaranteeing that Child Abuse Materials found in the nation's cyberspace are channeled towards appropriate law enforcement apparatus within the Nigeria Police Force.
- vi. The policy seeks for the development of working mechanisms to provide means for reporting illegal content found in the country's cyberspace, which has the capacity to respond rapidly and have illegal materials removed or rendered inaccessible.
- vii. The policy seeks for multi-stakeholder partnership, bilateral and multilateral cooperation, collaboration and information exchanges on online crime against children.

PART ELEVEN

MISCELLANEOUS PRINCIPLES

- i. It is the policy of the Nigerian government to provide and sustain continuity of government in the advent of cybersecurity emergency.
- ii. The policy seeks citizen's proactive and collective participatory measures towards ensuring that national cybersecurity policy obligations are effectively respected in regards to national security, strategic economic interest and patriotism.

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APPENDIX 1

ABBREVIATIONS

CEMS	Cyber Emergency Monitoring System
CERT	Computer Emergency Response Team
CIA	Confidentiality, Integrity, Availability
CIIMP	Critical Information Infrastructure Measurable Programme
CNIIPP	Critical National Information Infrastructure Protection Plan
CERT	Computer Security Information Response Team
ICT	Information and Communications Technologies
NACC	National Cybersecurity Coordinating Center
NCCC	National Cybersecurity Coordinating Center
NDFL	National Digital Forensic Laboratory
ngCERT	Nigerian Computer Emergency Response Team
NIRP	The National Incident Response Plan
ONSA	Office of National Security Adviser
POC	Point of Contact
S-CERT	Sectorial Computer Emergency Response Team
SRP	Strategic Readiness Plan

APPENDIX 2

DEFINITIONS OF TERMS

Cookies	Cookies are small text files, given Identity tags that are stored on your computer's browser directory or program data subfolders.
Critical Infrastructure	A term used by governments to describe assets, processes, systems, and networks, whether physical or digital, that are fundamental for the functioning of a society and economy such that their breakdown, disruption or destruction would have a devastating effect on national security, national economic and well being of the country.
Cybercrime	Cybercrime is criminal activity undertaken using computers and the Internet.
Cyber-diplomacy	The evolution of public diplomacy to include and use the new platforms of communication in the 21st century.
Cyber-espionage	The act or practice of obtaining secrets without the permission of the holder of the information
Cyberspace	The electronic medium of computer networks, in which online communication takes place
Cybersecurity	Cyber security includes information and technical security applied to hardware, software and systems that make up networks
Cyberthreat	The possibility of a malicious attempt to damage or disrupt a computer network or system
Cyber-Terrorism	The intentional use of computer, networks, and public internet to cause destruction and harm
Data Protection	Legal obligations around control over processing ,access and use of personally identifiable information

Data Retention	Data retention defines the policies of persistent data and records management for meeting legal and business data archival requirements
Domain	The name of a realm of administrative autonomy, authority, or control of the Internet
Economic espionage	A form of espionage conducted for commercial purposes instead of purely national security
Ecosystem	A distributed, adaptive, open socio-technical system with properties of self-organisation, scalability and sustainability inspired from natural ecosystems.
Hactivism	The use of computers and computer networks to promote political ends, chiefly free speech, human rights, and information ethics. It is carried out under the premise that proper use of technology can produce results similar to those of conventional acts of protest, activism, and civil disobedience.
Jurisprudence	The study and theory of law
Lawful Interception	Obtaining communications network data pursuant to lawful authority for the purpose of analysis or evidence.
Military espionage	Spying on potential or actual enemies primarily for military purposes
Privacy	The right to be free from secret surveillance and to determine whether, when, how, and to whom, one's personal or organisational information is to be revealed
Vision 2020:20	National Plan to position Nigeria as one of the top 20 economies in the world by the year 2020
Vulnerability	A weakness which allows an attacker to reduce a system's information assurance

APPENDIX 1

Abbreviations

3PC	Public-Private Partnership for Cyber Security
CAM	Child Abuse Material
CCLR	Cybercrime Legislative Review Committee
CEMS	Cyber Emergency Monitoring System
CERT	Computer Emergency Response Team
CII	Critical Information Infrastructure
CIIPR	Critical Information Infrastructure Protection and Resilience
CIP	Critical Infrastructure Protection
CIPMA	Critical Infrastructure Program for Modelling and Analysis
COAEPS	Child Online Abuse and Exploitation Protection Strategy
COBIT	Control Objectives for Information and Related Technology
CERT	Computer Security Incident Response Team
CTM	Countermeasures Technical Mechanisms
ESP	Email Service Provider
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information and Communications Technology
IEEE	Institute of Electrical and Electronic Engineers
IGF	Internet Governance Forum
INTERPOL	International Police
ISP	Internet Service Provider
ITIL	Information Technology Infrastructure Library
ITU	International Telecommunication Union
KGI	Key Gold Indicator
KPI	Key Performance Indicators
MINT	Malaysia,Indonesia,Nigeria,Turkey
NCC	Nigerian Communications Commission
NCCC	National Cybersecurity Coordinating Center
NCII	National Critical Information Infrastructure
NCIIP	National Critical Information Protection Plan
NCSS	National Cyber Security Strategy
NgCERT	Nigeria Computer Emergency Team
NIOC	Nigerian Institute of National Security
NIRP	National Incident Response Plan

NISI	National Internet Safety Initiative
NITDA	National Information Technology Development Agency
NTWG	National Technical Working Group
ONSA	Office of the National Security Advisor
PMBOK	Project Management Body of Knowledge
PPP	Public-Private Partnership
PPPMF	Public-Private Partnership Management Framework
PPPMS	Public-Private Partnership Management Strategy
PRINCE2	Project Management in a Controlled Environment
SPV	Special Purpose Vehicle
SSP	Sector Specific Plan
TISN	Trust Information Sharing Network
TOGAF	The Open Group Architecture Framework
USD	United States Dollar
UNICEF	United Nations Children's Fund
VNT	Virtual National Task Force

APPENDIX 2

DEFINITIONS

Architecture	The structure and behavior of the technology infrastructure. Covers the client and server nodes of the hardware configuration, the infrastructure applications that run on them, the infrastructure services they offer to applications, the protocols and networks that connect applications and nodes.
Assurance	Part of corporate governance in which a management provides accurate and current information to the stakeholders about the efficiency and effectiveness of its policies and operations, and the status of its compliance with statutory obligations
Artifacts	
Critical Infrastructure	A term used by governments to describe assets that are essential for the functioning of a society and economy.
Cyber Conflict	The carrying out of large-scale, economic, political and commercial conflicts through cyberspace.
Cybercrime	Cybercrime is criminal activity undertaken using computers and the Internet.
Cyberspace	The electronic medium of computer networks, in which online communication takes place
Cybersecurity	Cyber security includes information and technical security applied to hardware, software and systems that make up networks
Cyber Risk	The specific risks that relate to the use of computers information technology and the Internet
Cyberthreat	The possibility of a malicious attempt to damage or disrupt a computer network or system
Cyber-Terrorism	The intentional use of computer, networks, and public internet to cause destruction and harm
Data Protection	legal obligations around control over processing ,access and use of personally identifiable information

Data Retention	Data retention defines the policies of persistent data and records management for meeting legal and business data archival requirements
Economic espionage	A form of espionage conducted for commercial purposes instead of purely national security
Exposure	The quantified potential for loss that might occur as a result of some activity
Hactivists	Individuals or organisations who use computers and computer networks to promote political ends, chiefly free speech, human rights, and information ethics. They carry these out under the premise that proper use of technology can produce results similar to those of conventional acts of protest, activism, and civil disobedience.
Lawful Interception	Obtaining communications network data pursuant to lawful authority for the purpose of analysis or evidence.
Incident Management	The activities of an organisation to identify, analyse, and correct hazards to prevent a future re-occurrence.
Military espionage	Spying on potential or actual enemies primarily for military purposes
Privacy	The right to be free from secret surveillance and to determine whether, when, how, and to whom, one's personal or organizational information is to be revealed
Vision 2020:20	Plan to position Nigeria as one of the top 20 economies in the world by the year 2020
Vulnerability	A weakness which allows an attacker to reduce a system's information assurance

