

NATIONAL POLICY
FOR THE PROMOTION
OF INDIGENOUS CONTENT
IN THE NIGERIAN
TELECOMMUNICATIONS
SECTOR



FEDERAL MINISTRY OF COMMUNICATIONS AND DIGITAL ECONOMY

Leveraging Digital Fechnology for National Economic Development

CONTENTS

Mandate	3
Foreword by the Minister	
Authority	
Stakeholder Engagement	
Vision and Mission	
State of Affairs of the Telecom Sector	
Focus Areas and Policy Objectives	
Special Purpose Vehicle	
Acronyms	
Kev Stakeholders	20

Mandate

PRESIDENT'S MANDATE

The Telecommunications Sector plays an important role in our economy and also serves as a key enabler for other sectors of the economy. The Federal Government is committed to the diversification of the economy, away from an over-reliance on the oil sector, and the telecommunications sector is a prime sector to help in our diversification drive.

The National Policy for Indigenous Content in the Nigerian Telecommunications Sector is in line with this administration's commitment to ensure that Nigerians become active participants in the different sectors of the economy. This is clearly stated in our Presidential Order 005 on "Planning and Execution of Projects, Promotion of Nigerian Content in Contracts and Science, Engineering and Technology" and Presidential Executive Order 003 on "Support for Local Content Procurements by Ministries, Departments and Agencies of the Federal Government of Nigeria".

The Policy addresses the pertinent areas, including manufacturing, services, people, research and development. Developing the capacity of Nigerians in these areas will ensure an enhanced role for Nigerians in the sector. This is in line with mandate given to the Minister to actively collaborate with the private sector to create a large number of well-paying jobs for Nigerians and it will support towards our programme to take 100 million Nigerians out of poverty over a 10 year period.

As a country, our desire to produce what we eat and consume what we produce is not limited to the literal meaning; rather we want to work towards being self-sufficient in every sector of the economy. For the telecom sector, we want Nigerians to play a major role in the design and manufacture of devices, in meeting the manpower requirements and in becoming an active part of the telecommunications ecosystem of the country.

This Policy aims to achieve this and I therefore direct the Honourable Minister of Communications and Digital Economy to develop the structure of the implementation and forward to the Nigerian Communications Commission (NCC) to implement so as to create jobs and further develop our economy.

I commend the Honourable Minister, Dr Isa Ali Ibrahim (Pantami), for coordinating the development of the Policy and the significant progress in the telecommunications sector. I also commend all the stakeholders who participated in the development and review of the Policy. I urge you all to be committed to its implementation for the overall benefit of the sector and the entire country.

Muhammadu Buhari



Foreword by the Honourable Minister

The Journey So Far

Following my assumption of office as the Honourable Minister of Communications of the Federal Republic of Nigeria on the 21st of August, 2019, we assessed the role of the Ministry in the development of the economy and how we could align this with the global best practice. We then made a recommendation to His Excellency, President Muhammadu Buhari, GCFR, for the redesignation of the Ministry as the Federal Ministry of Communications and Digital Economy. Mr President approved this request on the 17th of October, 2019 and this was presented to the Federal Executive Council of the 23rd October, 2019. The implementation of the revised mandate of the Ministry commenced on the 24th of October 2019.

The National Digital Economy Policy and Strategy (NDEPS) for a Digital Nigeria was developed as part of efforts to develop Nigeria's digital economy. A National Broadband Plan (NNBP) was also developed to guide efforts of the Federal Government towards deepening broadband penetration in the country. His Excellency, President Muhammadu Buhari, GCFR, graciously launched and unveiled both the NDEPS and the NNBP on the 28th of November 2019 and the 19th of March 2020, respectively.

The implementation of both the NDEPS and the NNBP have commenced in earnest and have already started yielding a number of positive results and creating an enabling environment for the development of Nigeria's digital economy. For example, we have been able to resolve the Right of Way (RoW) challenge that had lingered for close to a decade. I met and discussed the issue with the State Governors under the auspices of the Nigeria Governors' Forum (NGF) on the 22nd of January 2020.

As a result of the meeting, several State Governors have now pegged their RoW

fees at a maximum of N145/linear metre, some now collect just N1 per kilometre of fibre and others have waived the fee altogether. Examples of amounts charged per linear metre in the past include N4,500 and N5,500. To give a better illustration, for a particular State, the estimated cost of connecting two Local Government Areas was a staggering N650 Million before the implementation of there solution and now it costs just N150,000!

In addition to the resolution of the RoW issues, the Mobile Network Operators (MNOs), telecom providers and other broadband companies can also heave a sigh of relieve regarding their repeated complaints about the vandalisation of their equipment. This is as a result of Mr President's approval of the request of the Federal Ministry of Communications and Digital Economy. Mr President directed the security agencies to protect all Critical National Infrastructure(CNI) in the country.

The recent 2020 Q2 Gross Domestic Product (GDP) Report released by the National Bureau of Statistics (NBS) showed that ICT contributed an unprecedented 17.83% to Nigeria's total real GDP. This is a reflection of the steps taken by the Ministry to reposition the sector.

The focus of the Policy aligns with Pillar #8 of the NDEPS document, which deals with the development of Indigenous Content Development and Adoption. The growth of indigenous content in the digital sector can accelerate the growth of the sector and ensure that the nation can stem the tide of capital flight and increase the value addition of indigenous content to the sector.

I wish to call on all stakeholders to support us in the implementation of this Policy.

Dr Isa Ali Ibrahim (Pantami), FNCS,FBCS,FIIM

Minister, Federal Ministry of Communications and Digital Economy of the Federal Republic of Nigeria

Authority

This Policy has been developed under the authority of the Honourable Minister of Communications and Digital Economy in line with the following sections of the Constitution of the Federal Republic of Nigeria 1999, as amended and the Nigerian Communications Act 2003 (NCA 2003):

- i. Section 148 of the Constitution: "The President may, in his discretion, assign to the Vice-President or any Minister of the Government of the Federation responsibility for any business of the Government of the Federation, including the administration of any department of government".
- ii. Subsection 23(a) of NCA 2003: The Minister shall have the following responsibilities and functions pursuant to this Act— the formulation, determination and monitoring, of the general policy for the communications sector in Nigeria with a view to ensuring, amongst others, the utilisation of the sector as a platform for the economic and social development of Nigeria; and
- iii. Subsection 25(1) of NCA 2003: The Minister shall, in writing, from time to time notify the Commission or and express his views on the general policy direction of the Federal Government in respect of the communications sector.
- iv. Presidential Mandate by His Excellency, President Muhammadu Buhari, GCFR, in the National Digital Economy Policy and Strategy document directing the "Honourable Minister of Communications and Digital Economy to work with all relevant government agencies to ensure that we rapidly expand our digital economy to take advantage of the immense opportunities on the continent and across the globe."

The Policy also derives its authority from the Presidential Executive Order 003 issued by the Federal Government in May 2017 on "Support for Local Content Procurements by Ministries, Department and Agencies of the Federal Government of Nigeria" and the Presidential Order 005 issued in February 2018 for the "Planning and Execution of Projects, Promotion of Nigerian Content in Contracts and Science, Engineering and Technology".

This document can be cited as "National Policy for the Promotion of Indigenous Content in the Nigerian Telecommunications Sector" and shall come into effect the date of the signature.

Stakeholder Engagement

The Policy formulation process involved the engagement of all relevant stakeholders in the public and private sector.

The engagements were in three phases. The draft Policy was shared with the stakeholders, they reviewed and provided invaluable comments and contributions which were included in the updated version.

Vision and Mission

Vision

"To develop and patronise indigenous content in the telecommunications sector to create top quality indigenous content to propel the sector"

Mission

"We develop a telecommunications sector where innovative indigenous solutions create value and prosperity for all."

Core Values

- Competence
- Integrity
- Creativity
- Innovation
- Entrepreneurship

State of Affairs of the Nigerian Telecom Sector

The Nigerian telecom sector has experienced a lot of growth over the last two decades. For example, the sector has experienced a significant increase in the number of subscribers and an exponential increase in the inflow of Foreign Direct Investment (FDI). The Nigerian Communications Commission, acknowledging the country's FDI gains stated that the industry moved from a paltry \$60 million private sector investment in 2000 to about \$68 billion in 2016.

Much as there has been a lot of progress in the sector, it is still useful to identify the areas where much progress can be made. One of such is the area of capital flight, which has also been significant. The Federal Government is committed to reducing this amount significantly, in line with the mandate of His Excellency, President Muhammadu Buhari GCFR that we "produce what we eat and consume what we produce".

According to available statistics provided by the leadership of the Association of Telecommunications Companies of Nigeria (ATCON), the annual outflow of foreign exchange for the telecommunications sector amounts to approximately \$2.16 billion. A breakdown of the forex spending is as follows:

- i. CAPEX Programs- \$750m
- ii. Network Software Licensing- \$250m
- iii. Management Fees- \$800m
- iv. Managed Services (Tier 2 & 3 Support)- \$157m
- v. Miscellaneous (International circuits,roaming and terminations reconciliations etc) \$200m

The statistics were based on the average annual reports of a sample of industry players in the telecommunications space over a 5 year period. This is a significant portion of our average annual budget and it is critical that this trend is reversed. A survey of industry players conducted by the Nigerian Communications Commission (NCC) in 2018 resulted in the following findings:

i. the ratio of Nigerians to Foreigners (for Senior, Line, Contract and Outsourced staff) in the industry is high in absolute terms (i.e. 98% to 2%). However, it should be noted that the larger operators (especially the Mobile Network Operators) have a healthier balance than smaller licensees and service providers;

- ii. there is also a higher percentage of foreigners among top management staff when compared with other staff, with Nigerians making up 31%, in relation to foreigners who make up 69%;
- iii. for software, 77% of software in use are foreign, while only 23% are obtained locally;
- iv. with respect to hardware being used by the companies interviewed, 86% of them are foreign while 14% come from local companies; and
- v. data on Base Transceiver Stations (BTS) also revealed a dominance of foreign products over those produced locally, as 88% are foreign with only 12% being manufactured in Nigeria.

Focus Areas and Policy Objectives

In order to successfully promote indigenous content in the telecommunications sector, this Policy focuses on key areas where the development of such capacity will have the greatest level of impact.

The following have been identified as such areas:

1. Manufacturing;

 Subscriber Identity Module (SIM) cards, smartphones, recharge cards, parts, fibre optic cables, masts, etc

2. Services and Software for Telecom sector;

Business Support Services (BSS), Operations Support Systems (OSS),
 Performance Monitoring, Customer Resource Management, Data Analytics and Network Inventory Management, etc.

3. People;

 An emphasis on skills rather than degrees, a support for emerging technologies, etc

4. Research and Development for Digital Innovation and Entrepreneurship.

Defining "Indigenous" within the Context of the Policy

It is important that this Policy provides clarity on the scope of interpretation of "Indigenous" in the context of the implementation of the Policy as this will assistin the monitoring and enforcement of compliance.

"Indigenous" in the context of this Policy, and in line with the Presidential Order 005 of February 2018, refers to companies that meet the following criteria, amongst others:

- (i) incorporated or otherwise organized in Nigeria;
- (ii) having its principal place of business located in Nigeria; and
- (iii) having at least 51% of its equity held by nationals of Nigeria.

The overall objectives of the Policy for Promoting Indigenous Content in the Nigerian Telecommunications sector are as follows:

- i. to create a framework for supporting indigenous telecom businesses to become world class service providers;
- ii. ensure compliance with existing regulatory guidelines for indigenous content;
- iii. to highlight and promote indigenous capacities in the telecommunications sector:
- iv. to foster collaboration between global Original Equipment Manufacturers (OEMs) engaged in the manufacturing of telecommunications equipmentand indigenous players;
- v. to ensure strategic partnerships with relevant regulatory agencies to create joint efforts to promote indigenous content;
- vi. to enable the indigenous telecom industry to contribute significantly towards the overall development of the telecom industry; and
- vii. to encourage and incentivise the participation of indigenous telecom institutions in relevant Standards Development Organisations.

The next section focuses on the overview and objectives for each of the focus areas of this Policy.

1. MANUFACTURING

Overview

The end-to-end value chain of the telecommunications industry is highly relianton the availability of the right equipment. For example, equipment like switches, base transceiver stations, fibre optic cables, multiplexers, modems, connectors, equipment racks and mobile phones are used across the value chain to provide, amongst other things, switching, transmission, and they also serve as customerservice equipment. This also includes the assembly and fabrication of equipment masts and tools.

A significant portion of expenditure in the telecom industry is on such equipment, most of which are manufactured outside the shores of the country. Furthermore, only a small percentage of the needs for telecom equipment are met by indigenous providers even though global manufacturers source raw materials from the country.

As part of the activities to promote the local manufacturing of telecommunication products, ancillary sub-sectors like the fabrication, telecommunications raw

materials and components, circuit board design and manufacture, battery manufacture and other sub-sectors need to be actively developed.

Generally, telecommunications equipment manufacturers and suppliers are classified into broad categories such as Consumer Premises Equipment (CPE) and Network Equipment category. The CPE segment is characterized by high volumes, less complexity, lower shelf-life and low maintenance. Conversely, the latter is characterised by low volumes (mainly Business2Business), higher complexity, higher shelf-life and higher maintenance. As such, this Policy prioritizes the manufacturing of CPEs.

Policy Objectives on Manufacturing

The objectives of the Manufacturing Focus Area include the following:

- i. to stimulate the design, development, production, sales and utilization of high quality telecom equipment and services developed by indigenous companies;
- ii. to develop indigenous telecommunication companies to become world class manufacturers service providers;
- iii.to incentivise the production of cables, connectors, masts and telecom tools in a way that meets global minimum and certification standards;
- iv. to support local manufacturing through relevant institutions, such as the Universal Service Provision Fund (USPF), Central Bank of Nigeria (CBN), etc;
- v. to encourage the establishment of vocational training institutes focused on the design, fabrication and assembly of telecom equipment; and
- vi.toencouragepartnershipsandcollaborationbetweenglobalOriginalEquipment Manufacturers (OEMs) engaged in the manufacturing of telecommunications equipment and indigenous players.

Telecom operators with foreign participation need to prepare and present to the Regulator plans for local manufacturing of foreign sourced software, equipment and devices. There is a need to begin the implementation of the National SIM Policy to manufacture locally with immediate effect.

Type Approval

The intended production and manufacturing of these devices and equipment should be Type Approved by the NCC and Standards Organisation of Nigeria (SON), where applicable. This is to ensure that the telecommunications devices

and equipment are up to the Commission's specifications and standards and also adhere to international standards.

Furthermore, the type approval process should also be firmly enforced by the Regulator to ensure that cheap, substandard devices are not allowed to proliferate in our country. There is also need for a strategy to develop initiatives to encourage the ability to acquire a good quality smartphone at affordable prices for large numbers of people especially in rural, unserved and underserved areas.

2. SERVICES

Telecommunications equipment require the right software services to operate optimally. According to a forecast by Statistica, the telecommunications software industry is expected to generate \$82.2 billion globally in 2020. Software deployments in the telecom sector cover a range of services for both business support systems (BSS) and operations support systems (OSS). Services like performance monitoring, billing, customer resource management, analytics andnetwork inventory management. Emerging technologies, such as data analytics, are now being utilized on a regular basis.

Telecommunication service providers also make use of a number of value added services, including Over-The-Top (OTT) services. This focus area also covers mobile virtual network operating services and other exclusive telecom services, such as call centre operation, mast site protection and other service contracts.

In addition, with the increased virtualization of services, normalization of work-from-home trends, and increased focus on digitalization (whether data privacy, data protection, data analytics, data mining, data retention), it is important to have a focus on data residency/localization as a strategic policy tool to tilt the economic power balance of global players within the country. Data localization requires that datacreated within certain borders stay within them hence focuses on the creation and storage of personal data within our geographical borders.

Enforcing the retention of such data would incentivize the development and growth of the indigenous data center industry driving investment in infrastructureand the creation of jobs, mitigate reliance on global data players for access to citizen and national data, and ensure the country is self-reliant in guaranteeing access to data and online services for its citizens, businesses and governments. According to a research by OMDIA Research and Consulting, voice traffic made up 72% of Nigeria overall \$6.58 billion mobile revenue in 2019. However, the 28% from data in 2019 was a 12% increase from the 2018 value. Data revenue is projected to reach 50% of the total revenue by 2024.

There is sufficient capacity for the indigenous development of these software

and services but the industry currently has a high level of dependence on foreign software and services. Indigenous providers can benefit from the many opportunities in services focus area.

Policy Objectives of Services

The objectives of the Services Focus Area include the following:

- i. to enable the indigenous telecom industry to contribute significantly towards the overall development of the telecom industry;
- ii. to increase public sector patronage of indigenous telecom businesses and services;
- iii. to create a conducive environment for companies and service providers to participate in the telecom industry;
- iv. to institutionalize a mechanism to ensure that certain category of telecom services are reserved for indigenous players; and
- v. to monitor and analyze indigenous content compliance by operators and service providers.

3. PEOPLE

According to a 2017 Report by the World Bank titled "Human Capital: The Greatest Asset of Economies on the Rise", 'the skills, knowledge, and innovation that people accumulate are the greatest assets of economies on the rise'. As such, it is evident that people are the most important assets of organisations, including those that support the telecom ecosystem. The number of employees in the telecom industry that can be classified as indigenous is still low when compared to non-indigenous employees. Furthermore, a large proportion of the indigenous employees handle roles that are non-technical in nature.

A number of reasons are adduced for this disparity but the most common one is the often stated lack of sufficient technical skills capacity by the indigenous employees to take up more technical roles.

Policy Objectives on People

The objectives of the People Focus Area include the following:

i. to build the skills capacity of Nigerians and the indigenous telecom companies in order to access opportunities within the sector;

- ii. to define minimum indigenous content levels for projects across the telecommunications value chain; and
- iii. to support the development of the local telecom startup and entrepreneurial ecosystem by making the licensing framework less cumbersome for new entrants and telecom startups, for example.

Succession Planning in the Telecom Sector

Telecom companies with foreign participation should have clear succession plans for Senior Management Positions with conscious actions at building the capacity and providing the opportunity for indigenes to attain senior management positions within the larger operators.

A minimum Expatriate Quota requirement, which states that each expatriate employed by a company should be understudied by two Nigerians and that Expatriate Quota approvals by Ministry of Interior have validity dates, should be adhered to. Further, the expatriate quota in the telecommunications sector should be referred to the regulator before approval leaving room as this will aid in compliance monitoring.

To support this approach, modalities should be put in place to ensure that foreign companies are not allowed to trade directly in certain segments of the telecommunications markets unless there is a certain percentage of indigenous content or ownership.

4. RESEARCH AND DEVELOPMENT FOR INNOVATION

The telecommunications sector is an example of a sector that relies on constant innovation in order to thrive. The level of innovation adopted by telecom institutions can distinguish them from their competitors. Research and Development (R&D) activities provide the bedrock for such innovation.

In line with global best practice, most leading telecommunication companies around the world have a dedicated and well supported R&D team. It is necessary to ensure that telecom companies in the country also create a well-supported R&D team to drive innovation in their institutions as well as in the telecommunications sector.

Indigenous telecommunications companies are encouraged to actively participate in the activities of Standards Development Organisations (SDOs) fora where telecommunications standards are set. These SDOs provide a platform for learning and innovation and have been critical in advancing and disseminating technological standards throughout the world.

Examples of SDOs include the IEEE Standards Association (IEEE-SA), European Telecommunications Standards Institute (ETSI), Alliance for Telecommunications Industry Solutions (ATIS), and ITU Telecommunication Standardization Sector (ITU-T).

Policy Objectives on Research and Development for Innovation

The objectives of the Research and Development for Innovation Focus Area include the following:

- i. to support win-win partnerships and knowledge transfer between indigenous and foreign companies;
- ii. to support research and development efforts aimed at advancing the impact of indigenous content in the telecom sector;
- iii. to drive the inclusion of telecommunications-related training and in the curricula of tertiary and skills-based institutions;
- iv. to mandate telecom institutions to create a platform for research and development within the country; and
- v. to encourage and incentivise the participation of indigenous research institutions, operators, and telecom equipment manufacturing companies in deliberations at the appropriate Standards Development Organisations.

Special Purpose Vehicle

The Nigeria Office for Developing the Indigenous Telecom Sector (NODITS) will serve as a Special Purpose Vehicle (SPV) under the purview of the Nigerian Communications Commission (NCC) to stimulate the development of indigenous content in the telecommunications sector of Nigeria. NODITS will implement this Policy, as well strategies, standards, guidelines and frameworks aimed at developing indigenous content in the Nigerian telecommunications sector.

The main functions of NODITS should include the following, where relevant:

- i. to support the creation and implementation of guidelines for the development of the indigenous content for the telecommunications sector;
- ii. to stimulate the growth of the sector through a focused, sustainable and incentives-based approach that encourages the active participation of the indigenous telecom operators;
- iii. liaise with the Office for Indigenous Content Development at NITDA; (Quarterly Meeting)- for synergy and convergence of digital technologies;
- iv. to facilitate the sourcing of indigenous products, manpower and services across the entire value chain of the telecom sector;
- v. to evaluate and endorse Indigenous Content plans for operators in the telecom sector;
- vi. to create a platform for research and capacity building programs that prepares Nigerians to play a leading role in the telecom sector;
- vii. to promote innovation and entrepreneurship in the telecom sector;
- viii. promotion of indigenous phones and other telecommunications equipment;
- ix. to create and update a roadmap for the implementation of this Policy and ensure active monitoring and enforcement mechanisms for promoting indigenous content in the telecommunications sector; and
- x. to monitor indigenous content compliance by operators and service providers.

Acronyms

ALTON - Association of Licensed Telecom Operators of Nigeria

ATCON - Association of Telecommunications Companies of Nigeria

BTS - BaseTransceiver Station

BSS - Business Support Systems

CAPEX - Capital Expenditure

CNI - Critical National Infrastructure

CPE - Consumer Premises Equipment

FDI - Foreign Direct Investment

FEC - Federal Executive Council

MDAs - Ministries, Departments and Agencies

MNO - Mobile Network Operators

NBS - National Bureau of Statistics

NCA - Nigerian Communications Act

NCC - Nigerian Communications Commission

NDEPS - National Digital Economy Policy and Strategy

NGF - Nigeria Governors' Forum

NNBP - Nigerian National Broadband Plan

OEM -Original Equipment Manufacturer

OSS - Operations Support Systems (OSS)

OPEX - Operating Expenditure

OTT - Over-The-Top

R&D - Research and Development

RoW- Right of Way

SON - Standards Organisation of Nigeria

SDO - Standards Development Organisation

Key Stakeholders

- 1. Federal Ministry of Communications and Digital Economy
- 2. Federal Ministry of Industry, Trade and Investment
- 3. Federal Ministry of Finance, Budget and Planning
- 4. Federal Ministry of Science and Technology
- 5. Nigerian Communications Commission
- 6. National Information Technology Development Agency
- 7. Galaxy Backbone Plc
- 8. Nigerian Communications Satellite Ltd
- 9. Universal Service Provision Fund
- 10. National Identity Management Commission
- 11. Central Bank of Nigeria
- 12. Standards Organisation of Nigeria
- 13. Bureau for Public Procurement
- 14. National Office for Technology Acquisition and Promotion
- 15. The National Assembly (Leadership and Applicable Committees)
- 16. Association of Telecommunications Companies of Nigeria (ATCON)
- 17. Association of Licensed Telecom Operators of Nigeria (ALTON)

