

# COMMUNICATIONS STATISTICS

## 1. Introduction

In the System of National Accounts, the Communications sub-sector consists of the activities of Nigerian Postal Services (NIPOST), Nigeria Telecommunications PLC (NITEL) as well as Radio and Television services. Communications is a small sub-sector, which accounts for less than one per cent of Nigeria's Gross Domestic Product at constant factor cost. The database prepared for communications in the National Bureau of Statistics in addition to these three sub-sectors includes the Print Media (Newspapers and Magazines). The latter is normally included in Printing and Publishing under the manufacturing sub-sector but here it is incorporated to capture data on communications in all its ramifications.

Communications facilities are vital parts of a nation's infrastructure. The commercial, political, social, cultural and industrial development of any nation depends, to a large extent, on the efficiency of its communications systems. This is because the closeness of any two given communities is realistically not as much a function of physical distance as of accessibility via various means of communications. These facilitate intra-community relationships at various levels in the country and also enhance the fundamental basis for relationships between the country and the rest of the world.

The provision of postal and telecommunications services in Nigeria was, for a long time, been the preserve of the public sector monopolies (NITEL and NIPOST). In an attempt to enhance service delivery, the Government licensed a number of private companies to provide courier services. Under the deregulation policy, the communications sub-sector has grown tremendously into a multi-trillion Naira range of activities.

NITEL began operations in 1985 when the Nigerian External Telecommunications and the Telecommunications Division of the Post and Telegraphs (P&T) Department were merged. Prior to this development, it was the P & T that was responsible for the provision of domestic telecommunications services, while the Nigeria External Telecommunication (NET) provided international services.

Today, apart from the Government-owned NIPOST, NITEL and MobiTel, there are several courier firms, private telephone operators, GSM and other related service providers.

Until the early-to-mid 1990s, when private operators began to come on-stream, the provision of radio and television (broadcast) services

was monopolised by the State and Federal Governments. The Technical Services Division of the Ministry of Communications regulates the broadcast industry in the country.

The print media, especially the newspaper publishing, dates back to the colonial era. Among the several newspapers that made significant impact as pioneers were Daily News, West African Pilot, Daily Times and Nigerian Tribune which were privately-owned. Today, the print media is dominated by private ownership even as the Federal and State Governments are increasingly divesting from direct ownership and management of newspapers and magazines. The entry of the Internet (E-Mail, web-search, etc.) has added further dimensions to the communications sub-sector.

For the purpose of data banking, the communications sub-sector would be discussed under the following segments: NITEL, NIPOST, Radio and Television and Print Media (Newspapers and Magazines).

## **2. Coverage, Scope, Uses and Users of Communications Statistics**

Telecommunications in the International Standard Industrial Classification (ISIC) incorporates the transmission of sound, images, data or other information via cables, broadcasting, relay or satellite. It includes telephone, telegraph and telex communications as well as the maintenance of the networks. Programmes, with or without broadcasting, are excluded as they are considered separately.

Postal activities include the pick-up, transportation and delivery/distribution of mails and parcels (domestic or international) as well as the sale of postage stamps. Activities such as mail sorting into boxes and bag rentals, *poste restante*, etc., are also included. The statistics on this sub-sector are mainly national, though some data are available at the State and Zonal levels.

Courier activities, other than national postal services, include the pick-up, transportation and delivery of letters and other mailtypes (usually small parcels and packages). One or more modes of transport may be involved and the activity may be carried out with self-owned (private) transport, media or public transport. The coverage of these activities is international, but statistics can be collected at the headquarters of courier organisations in the country.

Radio and television activities include the production of radio and television programmes live, on tape or other recording medium, and whether or not combined with broadcasting. The programmes produced may be for entertainment, advertising, education or news dissemination. The production generally results in a permanent tape which may be sold, rented or stored for broadcast or re-broadcast. Also included are such productions as sports coverage, weather

forecasts, interviews, magazines, etc. The coverage here may be national, State or regional depending mainly on the level of the media, that is, national/network or local.

Print media include newspapers, journals, magazines and periodicals of technical or general contents, trade journals, comics, etc.

All the data generated in the process of executing the activities itemised in the segments stated above are included in Communications Statistics. The statistics to be included are those on equipment and infrastructural facilities, services, circulation, operating accounts, financial data, manpower, staff development and workers' remuneration, editors and feature writers/producers. Statistics on media can provide guides for business and private organisations as to which medium is available for paid advertisements and public notices such as marriage ceremonies and change of name. It is invaluable for education and general socialisation and development. For example, the Nigerian Television Authority (NTA) runs programmes that address specific sections of the syllabi for primary and secondary schools in the country.

The Government uses statistics on communications for public information monitoring. Communications statistics are required for planning and maintaining appropriate levels of all sub-sectoral services as well as for monitoring the performances of each sub-sector of the national economy. These statistics can also guide the Government in the choice of which medium can be used in the promotion of its policies, programmes and activities.

Some of the development indicators for international comparison are based on communications statistics and population data. These include per capita consumption of newsprint, access to telephone and ownership of radio and television sets.

### **3. Sources and Methods of Compiling Communications Statistics**

The Ministry of Communications is the major source of statistical information on telecommunications and postal services in Nigeria. This is because it maintains a reasonable measure of control on the activities of the communication agencies. Most of the information published by the Ministry are obtained directly from reports from NITEL and NIPOST.

As the principal regulatory agency, the Nigerian Communications Commission is the major source of information on telecommunications. NITEL and NIPOST also provide vital data on their segments of operations in the sub-sector. Information on international telecommunications and postal transactions by Nigerian

residents can also be obtained from the foreign country concerned where national statistics are not available.

Information on courier services can be obtained from the national offices of the individual courier companies.

There are many sources of statistical information on the electronic media. These are the Nigerian Broadcasting Commission (NBC), Broadcasting Organisations of Nigeria (BON), Radio Nigeria, NTA, State radio and television corporations, private radio and television stations, Radio, Television and Theatre Workers' Union (RATTAWU)

The sources of information on the print media include the News Agency of Nigeria (NAN), Nigerian Union of Journalists (NUJ), Nigerian Institute of Journalism (NIJ), Nigerian Press Organisation (NPO), Newspapers Proprietors' Association of Nigeria (NPAN) and the Nigerian Press Council (NPC).

In NITEL, for instance, six surveys are conducted periodically to generate data on telecommunications. These are:

(i) Potential Subscribers' Survey, conducted annually by the Local Line Division of the company to estimate the number of potential users of telecommunication facilities.

(ii) Land Survey, conducted annually by the Building, Engineering, and Accommodation Services Division of NITEL to determine the physical features of land in each of its Territories.

(iii) Soil Test Survey, conducted annually by the Building, Engineering and Accommodation Division of the company to determine soil strength in each of its Territories.

(iv) Building Materials Market Survey, conducted weekly by the Building, Engineering and Accommodation Division of NITEL to determine the prices of selected building materials in each selected location for proper costing of the company's buildings.

(v) Telephone Exchange Expansion Survey, conducted monthly by the Telephone Switching Division of NITEL to determine the appropriate size and capacity of equipment in order to facilitate costing of expansion programmes.

(vi) Transmission Rate Survey, conducted annually by the Transmission Division of NITEL to determine optimum routing of lines and the profile and bearing of existing routes.

All the surveys have national coverage and are used internally by the different professional units of NITEL such as architects for Land Survey, structural engineers, for Soil Test Survey and quantity surveyors for Market Survey of Building Materials. The other three surveys are submitted to the company Managing Director. Of the six surveys, only the Telephone Exchange Expansion Survey uses a prepared questionnaire for data collection.

Most of NITEL's data which are produced for public use are in the category of administrative statistics. These are collated from statistical returns on technical and commercial operations of the company. The unit responsible for collation is the Operations and Maintenance Unit. Each of the hundreds of telephone exchanges nationwide renders monthly returns on its switching and transmission activities as well as on external lines, plant systems and vehicles.

The data collected are processed, collated and aggregated manually from returns from local exchanges to zonal and national levels. Three reports which contain collation summaries and aggregates of some of the returns described above are prepared and issued by NITEL. These are:

(1) Operation and Maintenance Report, which is on technical and commercial operations. It is a quarterly report submitted to the Ministry of Communications and NIPOST.

(2) Statistical Report on Technical and Commercial Activities, which is an annual report submitted to the Ministry and NITEL.

(3) Nigeria Telecommunication PLC Annual Report, which is released for wide circulation. The contents of a typical report include: company review, administrative report and financial Statement, report of the directors, auditors report and company's accounts.

These reports form the major inputs into the statistical publication by the Planning Research and Statistics Department of the Ministry of Communications.

Unlike NITEL, NIPOST does not conduct any survey but it has a statistical unit. Each of its territorial units nationwide prepares monthly reports which are collated, summarised and aggregated on zonal and national bases to produce the following four reports:

(i) Territorial Report on staff, which contains information on demographic and socio-economic characteristics of NIPOST staff.

(ii) Revenue Report, which contains information on sales of stamps, orders, and on postal clearance and delivery.

(iii) Postal Establishment Report which contains information on the number of postal agencies, post offices, their categories and locations.

(vi) Traffic Count and Postal Correspondence Report, which contains information on number of postal articles handled, disaggregated into those posted in Nigeria, despatched abroad and received from abroad.

Three other reports are also issued by NIPOST. These are:

(i) The Postmaster-General's Annual Report, which covers NIPOST's operations, achievements, service performance and evaluation and financial report.

(ii) Post Office Circular, which is a monthly report containing information on postal services notification and operational guidelines.

(iii) Nigeria Postal Services Marketing Plan Evaluation Report, whose contents include an overview of the year's marketing plan; environmental review; service performance such as service quality/mail traffic analysis, territorial revenue performance analysis; products/service revenue performance analysis as well as service performance constraints.

For 1992, for instance, the report included:

- (i) Summary of mails handled in Nigeria in 1992.
- (ii) Number of mails handled during the year disaggregated into six categories.
- (iii) Number of mails delivered in Nigeria disaggregated into five categories.
- (iv) Number of mails received from overseas disaggregated into three categories.
- (v) Number of mails despatched from Nigeria disaggregated into three categories.
- (vi) Comparative analysis of revenue projected/generated per territory in 1992.
- (vii) Comparative analysis of territorial revenue generating capacity in 1992, of 32 territories, one in each State, Abuja and Headquarters.
- (viii) Products/Service Comparative analysis (1992 revenue projected/generated): 38 services/ products itemised.
- (ix) Products/Service Comparative analysis: revenue generated by subheads (1991 and 1992), 38 services/products itemised.

The Planning, Research and Statistics Department (PRSD) of the Ministry of Communications receives quarterly returns on telephone exchanges plus international direct dialling service from NITEL and other operators, on Post Offices, Mails and Parcels from NIPOST, on radio licenses, frequency management from NITEL and on radio licenses and frequency management from the Directorate of Technical Services.

The PRSD of the Ministry published a maiden of **Digest of Statistics** (which contains information on budgetary capital allocations to the sub-sector, traffics and selected aspects of its parastatals services in Nigeria) in 1993.

As shown in the preceding paragraphs, all of Nigeria's published communications statistics are in the category of Administrative Statistics. The most frequently used data processing procedures are validation of statistical returns, summation over exchanges, territories and zones to obtain appropriate aggregates.

One of the major sources of statistical information on radio and television services in Nigeria is the Technical Services Department of the Ministry of Communications. Other sources include the Federal Ministry of Information & National Orientation, the Nigerian

Broadcasting Commission, Broadcasting Organisations of Nigeria, State Radio and Television Corporations, private radio and television stations, international radio monitoring stations as well as dealers in radio communications, sound and television equipment.

As in the case of telecommunications and national postal services statistics, the statistics of radio and television broadcasting and other related service in Nigeria are largely produced as by-products of administration. Such data are generated in the process of applications for channels, approvals allocation, issue or otherwise of channels or licenses to operate sound and television equipment.

Since most radio and television stations are State - owned and receive subvention to cover their costs, there has been little or no incentive to use surveys to investigate listeners' and viewers' preferences for stations and programmes.

In the maiden edition of the **Digest of Statistics** referred to above, there is information on radio licences issued, renewed and withdrawn; number of applications for channels received, and processed for the period under review; and the Technical Services Department's Traffic for ten different categories of sound and television licenses.

The print media is the most privatised segment of the communications sub-sector as defined in this document. Although some general information about activities in the segment may be available at the Federal Ministry of Information and the News Agency of Nigeria, each newspaper house will be the most important source of information, especially on its circulation statistics. While the Federal Ministry of Information does not have strict regulatory powers over the print media, NAN is more concerned with the collection and dissemination of news than with other aspects of the activities of the newspaper houses.

Since the publishing outfits for newspapers and magazines are establishments in the printing and publishing industry, the industrial survey conducted annually by the National Bureau of Statistics is also expected to be an important source of information on the following aspects of their activities:

- (1) Form of Ownership.
- (2) Paid-Up Capital by Source of Ownership.
- (3) Employment and Remuneration of Workers.
- (4) Value of Goods Sold.
- (5) Cost and Quantity of Raw Materials.
- (6) Value of Fixed Assets.
- (7) Gross output and Value-Added

However, as already reported in "Survey of Sources and Methods of Compiling Manufacturing Statistics in Nigeria", the future of the annual industrial survey conducted by the NBS is now threatened by

the serious problems of delayed response, non-response and incomplete response. Even for the establishments which respond to the survey, the two most interesting items of data; that is, physical quantities of goods sold (number of newspapers sold) and volume of raw materials used (weight of newsprint used) are not usually reported. Most establishments prefer to report on values of items than on their volumes.

#### **4. Current Methods of Data Storage and Dissemination**

As shown in the last section, communications statistics are some of the least coherent of Nigeria's official statistics. This is supported by the fact that the maiden issue of the **Digest of Statistics** was released by the Planning Research and Statistics Department of Ministry of Communications only in 1993. Although computerisation has reached very advanced stages in most of the day-to-day operations of NITEL, the electronic and print media, the issue of the establishment of a database or subsectoral data bases has never been addressed by the relevant ministries. Available data are in hard copies and in most cases they are unpublished thus restricting accessibility.

The National Bureau of Statistics (NBS) has proposed a data base of communications statistics consisting initially of 17 items and 230 detail names.

#### **5. NBS Data Base Coding System for Communication Statistics**

The attempt made in coding this sub-sector follows the International Standard Industrial Classification [ISIC], revision 3 of 1988. Thus, the division code, or the first two digits of the code assigned the Division, is 64.

##### **The Items and Detailed Codes**

While efforts have been made to ensure that the Division Code or the first two digits of the code assigned to each variable conforms as much as possible with the ISIC, the Items and Details Codes which form the last four digits of the code assigned for each variable are arbitrarily determined. The item under each data set is the elementary entity or group of elementary entities about which statistical data are gathered. For instance, "Nigerian Postal Services Revenue" coded 6401 is an item with 18 details.

Generally, the National Bureau of Statistics (NBS) is using a six-digit-code for attributes. The first two digits are used to identify a particular division, the first four for a particular item under the division. Where an item is repeated in two or more divisions, that item is assigned the same 3rd and 4th digits codes. The single-item



cases have details peculiar to them such as item 0101 titled “Total Revenue of NIPOST (Operations, Mails and Services)”.

In Coding the Details, six digits are used to identify a particular attribute (variable) as follows. The first two are the division code, the next two for the item and the last two for the Detail (variable). Based on this coding system, the NBS data structure (Statement of Requirements) Communications Statistics in Nigeria is as shown below:

## **6. CONCLUDING REMARKS**

There is a wide scope for establishing data bases of telecommunications and national postal statistics because the parastatals generate a lot of routine data in the course of their operations.

A considerable proportion of such routine data remains unprocessed in the form of completed forms, returns and working sheets. Also, the Technical Services Department of the Ministry of Communications can use its position as the registry of television and radio stations and, as the approving authority for allocated channels and frequencies to prescribe the range of information which broadcasting stations should supply regularly.

The maiden edition of the **Digest of Statistics** includes very little time-series data on communications.

On statistics of print media in respect of which there are no reliable time-series data, the Federal Ministry of Information can make it mandatory for each newspaper house to make monthly returns on selected aspects of its operations. Such a reporting system can be worked out with the Nigerian Union of Journalists (NUJ), Nigerian Press Council (NPC), Newspapers Proprietors’ Association of Nigeria (NPAN) and News Agency of Nigeria (NAN, among other relevant bodies.