

**INFORMATION  
MEMORANDUM  
AND APPLICATION  
INSTRUCTIONS**

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**NIGERIAN COMMUNICATIONS COMMISSION**

**LICENSING A SECOND NATIONAL OPERATOR  
IN THE NIGERIAN TELECOMMUNICATIONS MARKET**



## IMPORTANT NOTICE

This Information Memorandum (the ‘**Memorandum**’) was prepared by the Nigerian Communications Commission (the ‘**Commission**’) through consultation with its advisers Radio Spectrum International Consulting Ltd (‘**RSI**’), Mason Communications Ltd, Paul Usoro & Co and D.D. Dodo (SAN) & Co in connection with the proposed licensing process for a Second National Operator (‘**SNO**’) in the Nigerian Telecommunications Market.

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## TABLE OF CONTENTS

1	EXECUTIVE SUMMARY.....	8
	1.1 Introduction.....	8
	1.2 SNO and Policy Background.....	10
	1.2.1 SNO Overview .....	10
	1.3 The National Carrier Licence.....	10
	1.4 Digital Mobile Licence .....	11
	1.5 The Licensing Process .....	11
	1.6 The Licensing Process .....	11
	1.7 Application Process .....	12
	1.8 Indicative Timetable .....	12
2	REGULATORY ISSUES.....	14
	2.1 Regulatory Framework .....	14
	2.2 Competition Issues.....	15
	2.3 The Licences .....	16
	2.3.1 Duration of Licences .....	16
	2.3.2 Principles of National Carrier Licence.....	16
	2.3.3 Scope of National Carrier Licence .....	17
	2.3.4 Overview of NCL Terms and Conditions .....	18
	2.3.5 NCL Obligations.....	18
	2.3.6 Digital Mobile Licence overview.....	20
	2.3.7 Summary of DML terms .....	20
	2.3.8 Licence fee .....	23
	2.3.9 Provision of Information.....	23
	2.4 FWA Licensing Process.....	23
	2.5 Long Distance Operator Licensing Policy.....	23
	2.6 Infrastructure Sharing .....	24
3	OPERATIONAL ISSUES .....	25
	3.1 Fixed Market Demand Analysis .....	25
	3.1.1 Fixed Market Demand Evaluation .....	25
	3.1.2 Overview .....	25
	3.2 Market Demand Forecast .....	26
	3.2.1 Key Outputs.....	26
	3.2.2 Voice Line Demand .....	27
	3.2.3 Voice Traffic Forecast.....	28
	3.2.4 Data Service Bandwidth Demand .....	29
	3.2.5 Fixed Line Demand.....	31
	3.2.6 Business Lines Assumptions .....	32
	3.3 Fixed Traffic Demand.....	33
	3.3.1 Voice Traffic .....	33
	3.3.2 Dial-up Internet Traffic .....	34
	3.4 Data Service Demand.....	36

3.4.1	Overview .....	36
3.5	Fully Distributed Topology.....	38
3.5.1	Flexible Network Topology .....	38
3.6	Technical Design.....	39
3.6.1	Technology Options .....	39
3.7	Transmission Technologies deployed in Nigeria .....	39
3.7.1	Locations of Primary and Secondary Switching Exchanges .....	40
3.7.2	Choice of Switching and Transport Technologies .....	41
3.7.3	Interconnection Requirements.....	41
3.7.4	IP - Data Network .....	42
3.8	Value Added Services.....	42
3.9	Operational Considerations .....	43
3.9.1	Billing and Customer Care Support Systems (BCCS) .....	43
3.9.2	Accounting (Retail and Wholesale) .....	43
3.9.3	Maintenance and Control Functionality.....	43
3.9.4	Emergency Services .....	44
3.9.5	Numbering .....	44
4	LICENSING PROCESS.....	45
4.1	Introduction.....	45
4.2	Activity Rules .....	46
4.2.1	Relationships with other Licensees.....	46
4.2.2	Confidential Information.....	46
4.2.3	Anti-competitive Behaviour .....	47
4.2.4	Advisers to the Nigerian Communications Commission.....	47
4.3	Stage 1: Licence Application Stage .....	47
4.3.1	Reserve Price .....	48
4.4	The Deposit .....	48
4.5	The Application and Processing Fee.....	49
4.6	Stage 2: Technical Evaluation Stage.....	49
4.6.1	Qualification Tests .....	49
4.6.2	Technical Evaluation .....	50
4.6.3	Evaluation Criteria .....	51
4.6.4	Conclusion of the Technical Evaluation Stage .....	51
4.7	Stage 3: Financial Bid Stage .....	52
4.8	Stage 4: Grant Stage .....	52
4.8.1	Announcement of Successful Bidder .....	52
4.8.2	Payment methodology.....	53
4.9	The Timetable .....	53
5	APPLICATION INSTRUCTIONS.....	55
5.1	Instructions to Applicants on Application Form.....	55
5.2	Information for Technical Evaluation.....	57
5.2.1	Response Instructions.....	57

5.2.2	Presentations .....	57
5.2.3	Modifications and Supplements .....	57
5.3	Executive summary.....	58
5.4	Track Record.....	58
5.4.1	Current Business, Business History and Other Obligations .....	58
5.4.2	The Applicant’s Strategic Goals and Objectives.....	59
5.4.3	Proposed Management Team for the SNO .....	60
5.5	Strategic Suppliers/Partners .....	60
5.6	Market Plan.....	61
5.7	Sales and Marketing .....	62
5.8	Operational Network Technical Solution, Processes and Support Systems ..	63
5.9	Business Systems Processes and Technical Solution .....	66
5.10	Business Schedule and Business Case.....	67
5.11	Proposed Capital Structure .....	67
5.12	Employment.....	68
5.13	Environment Policy.....	69
6	CONTACTS AND FURTHER INFORMATION .....	70
6.1	Contacts for Further Enquiries .....	70
6.2	Further Information.....	70
	APPENDIX 1 FORMS .....	71
	APPENDIX 2 LICENCES.....	79
	APPENDIX 3 BANK DETAILS .....	80

## **1 EXECUTIVE SUMMARY**

### **1.1 Introduction**

This Memorandum has been produced to provide information for interested parties wishing to apply to become the Second National Operator in Nigeria. The SNO will be authorised to provide a range of telecommunications services at national level, including but not limited to long distance transmission network, full international gateway services, mobile telephony services, fixed telephony services, and value added services, etc. For these services, the SNO will be awarded the SNO Licence made up of a National Carrier Licence, an International Gateway Licence, and Digital Mobile Licence.

In particular, this Memorandum:

- provides information concerning the content and scope of the SNO Licence and the obligations to be imposed upon the SNO;
- describes the licensing process;
- defines the timetable for the licensing process;
- details the application requirements.

Those Recipients considering submitting an application for the SNO Licensing Process should note the following key issues:

- Any telecommunications licence(s) previously issued by the Commission which are effectively duplicated by the award of the SNO Licence will be revoked and the terms of the SNO Licence or any of them will apply (see section 2.3);
- The licensing process will consist of four Stages. Once applications have been received and verified (e.g. checked for completeness), Qualified Applicants will proceed to a Technical Evaluation Stage where detailed financial and technical information will be assessed. Qualified Applicants, which score above 80% in this Stage, will be entitled to proceed to a Financial Bid Stage during which a single sealed bid will be submitted by each Bidder. The successful Bidder will be determined through the process specified hereafter and will then be provisionally awarded the SNO Licence pending payment of the bid amount.

- On submission of Applications and as a condition of qualification, Applicants will be required to provide a non-refundable Application and Processing Fee of US\$50,000, along with details of company ownership structure and the information requested in Chapters 4 and 5.
- Applicants, which are successful in the Technical Evaluation Stage and are thus invited to participate as Bidders in the Financial Bid Stage must provide a deposit of US\$20million before they may submit a bid. In the event that an Applicant is successful in the Licensing Process, the Deposit will be offset against payment for the Licences. All Deposits will accrue interest for the periods that they are retained by the Commission. The Deposits of the three highest Bidders will be retained by the Commission until after Final Award of Licences while the Deposits of other Bidders will be returned to them, with the accrued interest amounts, within 7 (seven) days of the Provisional Award of the Licences to the highest Bidder.
- Upon conclusion of the Financial Bid Stage, the highest Bidder will be invited to pay the balance of the Licence Fee within 14 (fourteen) Business Days from the date of Provisional Award of the Licences. If the highest Bidder defaults on the payment of the Licence Fee within the stipulated deadline, the second highest Bidder will be provisionally awarded the Licences and invited to pay the requisite fee (i.e. the Bidder's bid price). If the second highest Bidder also defaults on the payment of the Licence Fee, the third highest Bidder shall be provisionally awarded the Licences and invited to pay the requisite fee. If the third highest Bidder defaults on the payment of the Fee, the Commission shall abort the SNO Licensing Process and may pursue other licensing options.
- Each of the 3 (three) highest Bidders shall be given the same deadline within which to pay the Licence Fee i.e. 14 (fourteen) Business Days from the respective dates of Provisional SNO Licence Award to them. Out of the 3 (three) highest Bidders, the Bidder who pays the Licence Fee (i.e. the Bidder's bid price) consequent upon the process outlined above shall become the Successful Bidder. Bidders who have been provisionally awarded the Licences and who default in the payment of the Licence Fee or decline further participation in the licensing process shall forfeit their Deposit amounts and the Licences. The Deposit of any of the three highest Bidders which was not offered the Licence will be returned, with accrued interest, within 7 (seven) days of the Final Award of the SNO Licence to the Successful Bidder.
- An Applicant must be a limited liability company incorporated in Nigeria and must not be related to any other Applicant applying to be the SNO. Subject to the requirement for an Applicant to be a Nigerian incorporated limited liability company, consortia may bid for the SNO Licence.

- The SNO Licence will be awarded to the Successful Bidder which pays its Bid Price following the processes specified above. The minimum permitted Bid at the Financial Bid Phase shall be the Reserve Price of US\$200m.
- The successful Licensee will be subject to rollout conditions and service obligations as detailed in the SNO Licence to ensure the timely provision of quality services to the end user.
- All times given in the Memorandum are Nigerian local times.

Recipients should note that details relating to the process for submitting the sealed bid at the Financial Bid Stage i.e. the time and exact location in Abuja will be notified to Qualified Bidders.

Further details are provided in the Memorandum.

**Recipients of this Memorandum who intend to apply for the SNO Licence should note that the information contained in the Memorandum does not purport to be complete. The intention of the Memorandum is to highlight a number of key issues and provide instructions for the Licensing Process. Recipients will need to continue their own detailed investigations of the relevant issues and where appropriate direct questions to the Commission.**

## **1.2 SNO and Policy Background**

### **1.2.1 SNO Overview**

Despite recent growth, the Nigerian telecommunications sector is still struggling to meet huge demand for services across the country. The Commission has for some time, been considering the introduction of an additional national operator which would compete on equal terms with the incumbent operator, Nigerian Telecommunications Limited (“**Nitel**”). The Commission has considered the potential growth of Nitel and Other Licensed Operators (“**OLOs**”) and concluded that future demand will require and support a SNO. The SNO will be authorised to offer the same services as Nitel. The scope of these SNO services is discussed further in Chapter 3.

## **1.3 The National Carrier Licence**

The Commission is offering a NCL, a draft of which is included in Appendix 2. The licence authorises the provision of telecommunications services on a national basis for a term of

twenty years from the date of award with renewal for a further fifteen years upon payment of a new fee. The licence contains conditions relating to service obligations which are set at levels to encourage the development of services across Nigeria but also take account of the starting position of the SNO in relation to Nitel and other licensed operators. The Commission reserves the right to revoke the licence should any of these conditions be breached by the licence holder. The licence holder will have a right of appeal in the event of revocation.

#### **1.4 Digital Mobile Licence**

In January 2001, the Commission allocated four Digital Mobile Licences (DMLs) via an auction process. Each Licensee was allocated four equally sized spectrum packages, each of which contained 40MHz of spectrum comprising:

2x5MHz in the 900MHz band;  
2x15MHz in the 1.8GHz band.

Following the provisional award of all four licences, one of the licences was not finally awarded. This licence and its spectrum allocation remain available and in order to promote further parity with Nitel is to be offered to the SNO. The SNO is therefore obliged to roll out both fixed and mobile networks subject to regulatory requirements for account separation. The SNO will be required to meet the terms and obligations set out in the DML (see Appendix 2).

#### **1.5 The Licensing Process**

The SNO will be awarded an IGL with unlimited capabilities to provide international access services. Currently, Nitel is the only Operator with such capabilities. The Licences of the other two Digital Mobile Operators give them limited international access capabilities, with authorisation to build and operate international gateways for carrying only their respective traffic, without the capabilities to carry third-party traffic. The Commission has decided to place a cap on issuance of additional IGLs with full capabilities, for a period of at least 3 (three) years.

#### **1.6 The Licensing Process**

The Commission has chosen a four-stage process as explained in Chapter 4. The process combines a detailed technical and financial evaluation followed by the submission of a single sealed bid. Following submission of Applications (The Licence Application Stage) Applications will be assessed (The Technical Evaluation Stage). Those Applicants which score 80% or more in the Technical Evaluation Stage will qualify as Bidders and upon payment of the Deposit, be eligible to submit a sealed bid (The Financial Bid Stage). Once

the Financial Bid Stage is concluded, the SNO Licence will be awarded to the Successful Bidder in the manner specified in paragraph 1.1 of this Memorandum (The Grant Stage).

### **1.7 Application Process**

Interested parties are required to submit their applications by 18 July 2002. The Application will consist of the following:

- A Licence Application Form;
- A Compliance Certificate – which states *inter alia* that the Bidder is eligible to take part in the Licensing Process, has provided accurate information about itself and is able to meet the obligations of the SNO Licence should it be successful;
- A non-refundable Application and Processing Fee of US\$50,000;
- Information for Evaluation as required in Chapter 5.

### **1.8 Indicative Timetable**

There is no pre-set timetable and the Commission reserves the right to determine the overall timetable of the Licensing Process. However, the table overleaf sets out an indicative timetable of activities:

**Indicative Timetable of Activities**

<b>DATE</b>	<b>ACTIVITY</b>
	<b>Licence Application Stage</b>
Thursday 18 July 2002	Submission of Applications "Application Date"
	<b>Technical Evaluation Stage</b>
Friday 19 July 2002	Technical Evaluation of Applications commences.
Tuesday 30 July 2002	Notification of Applicants qualified to proceed to Financial Bid Stage, subject to payment of Deposit
	<b>Financial Bid Stage</b>
Tuesday 6 August 2002	Deposit funds to have cleared into Nominated Account.
Wednesday 7 August 2002	Notification of Bidders eligible to participate in the Financial Bid Stage.
Friday 9 August 2002	Submission of Sealed Bids and Announcement of the three highest Bidders.
	<b>Grant stage</b>
Monday 12 August 2002	Notification of Provisional Award of SNO Licence
Friday 30 August 2002	Deadline for payment of requisite Licence Fee.

## **2 REGULATORY ISSUES**

### **2.1 Regulatory Framework**

The telecommunications industry in Nigeria consists of the following operatives:

- The Federal Government;
- Ministry of Communications;
- The Nigerian Communications Commission; and
- Telecommunications service providers.

The Federal Government is responsible for:

- Giving overall direction for telecommunications development;
- Ensuring that the Telecommunications Policy is consistent with other national policies; and
- Enacting necessary laws and taking other measures in support of the national telecommunications policy.

The Ministry of Communications is responsible for broad telecommunications policy. In particular, this includes:

- Proposing policy options and recommending appropriate legislation to Government;
- Monitoring the implementation of Government policy;
- Establishing policies for promoting universal access;
- Representing Government on international organisations.

The Nigerian Communications Commission:

Concerns about the poor telecommunications infrastructure in Nigeria, particularly with regard to the low level of connections per capita, led to the initiation of a process of deregulation in the early 1990s and the establishment of the Commission.

The main objectives of the Commission include the following:

- Creating a regulatory environment to facilitate the supply of telecommunications services and facilities;

- To promote the development of other sectors of the Nigerian economy through commercial supply of modern telecommunications services;
- Facilitating the entry of private entrepreneurs into the telecommunications market; and
- Promoting fair competition and efficient market conduct among all players in the industry.

The functions of the Commission include the following:

- Licensing of telecommunications operators;
- Assignment and registration of radio spectrum to duly licensed operators;
- Administration of national numbering plan;
- Promoting and enforcing a fair competitive environment for all operators;
- Defining standards for economic regulation of dominant operators, including tariff regulation;
- Establishing mechanisms for promoting universal access to telecommunications services in Nigeria;
- Establishing and enforcing technical operational standards and practices for all operators including the imposition of penalties for violations; and
- Protection of consumers from unfair practices of Licensees.

The Commission also sets the guidelines for private sector participation in the telecommunications market and has the power to revoke licences (by following a set procedure) *inter alia*, if it perceives that operating companies are in breach of the conditions of their licences. Without prejudice to the above it can also impose other relevant sanctions if operators do not meet the conditions and obligations of their licence.

Telecommunications Services Providers:

These are enterprises which are duly licensed by the Commission to provide telecommunications services to the public and/or other operators as relevant. Winners of the SNO Licence will fall into this category.

## **2.2 Competition Issues**

The Commission has authority to sanction a Licensee which engages in anti-trust practices. These practices include:

- Unfair cross-subsidies – Licensees must ensure that businesses under licence are not unfairly cross-subsidised from any other source, except where the Licensee is under obligation to provide a service in an area of insufficient demand or prospective demand.
- Anti-competitive conduct, such as:
  - Collusive agreements to fix the price of any apparatus or service;
  - Boycotting the supply of goods or services to competitors;
  - Entering into exclusive arrangements which prevent competitors from having access to supplies or outlets; and
  - Agreements between Licensees to share the available market between them along geographic or customer lines.
- Undue preference for or undue discrimination against a person in respect of the provision of services under the licence.

## **2.3 The Licences**

The successful bidder in the SNO Licensing Process will be awarded the SNO Licence. Where the Successful Bidder already holds one or more telecommunications licence(s) issued by the Commission and there is duplication with any of the SNO Licence, any such licence(s) will be superceded by the relevant SNO Licence. The previously issued licence(s) will be revoked and the terms and conditions contained in the SNO Licence will subsist.

### **2.3.1 Duration of Licences**

The NCL and IGL respectively authorise the provision of telecommunications services on a national basis for a term of twenty years from the date of award with renewal for a further fifteen-year term upon payment of a renewal fee. The DML authorises the use of specified mobile spectrum for a term of fifteen years from the date of award with renewal for a further term of five years upon payment of a renewal fee.

### **2.3.2 Principles of National Carrier Licence**

The terms and conditions of the NCL will ensure that the following general principles apply:

- **Transparency**
  - ◆ Accounting, and where appropriate Structural Separation, of network businesses e.g. split into retail, network & access (including prohibition of cross subsidies, linked and exclusive sales);
  - ◆ Requirement to publish tariff data and customer service agreements;
  - ◆ Interconnect Agreement.

- **Unbundling of network cost elements**
  - ◆ To deal with issues of whether a customer (including Other Licensed Operators) should buy a package of bundled services/applications or whether they should buy only those functions required.
- **Cost-oriented**
  - ◆ Charges made by the SNO for Interconnection shall be set on the basis of objective criteria using (wherever possible) actual costs of providing the service based on a forward looking incremental cost approach.

The Commission will act to ensure that all operators conduct their respective businesses fairly in a manner not deemed to be anti-competitive. The SNO will not be designated as having achieved Significant Market Power (SMP)/Dominant Operator status until such time as determined by the Commission.

The SNO will be expressly forbidden from rendering any other communications services not expressly included within the scope of its Licences unless licensed separately by the Commission for such services.

### 2.3.3 Scope of National Carrier Licence

The NCL shall be granted under Section 12 of NCC Act No. 75 1992 for the provision and operation of Fixed Terrestrial Networks comprising Radio, Cable or Satellite, or a combination of any of these systems as approved by the Commission throughout the entire territory of Nigeria, deployed for the purpose of providing:

- Domestic and International fixed and switched or unswitched, including point-to-point or point-to-multipoint communications for the conveyance of voice, data (including IP) and video;
- Carrier Services for the conveyance of voice, data, images or any other kind of message for reception within Nigeria or any other overseas country which entails the provision of telecommunications services by means of a telecommunications network;
- Payphone services;
- Value Added Services that are ancillary to the provision of the above mentioned services subject to prior agreement with the Commission, soon after the Effective Date of the Licence, on the list of value added services that the SNO shall provide (which list shall be updated from time to time), and the conditions for provision of the service (see Section 8).

The SNO will be required, under the terms of its licence, to provide the following additional services:

- Rural Telephony Services;
- Public Payphone Services;
- Directory Enquiries;

- Public Emergency Services;
- Resale to Third Party Service Providers;
- Equal Access including Carrier Pre-selection (CPS);
- Number Portability;
- Interconnection (and termination services) to Other Licensed Operators.

### 2.3.4 Overview of NCL Terms and Conditions

The NCL includes the following features:

- At no additional cost other than the Licence Fee, the SNO will be assigned Fixed Wireless Access (“**FWA**”) frequency spectrum by the Commission based on the SNO’s specific request and within available spectrum bands. Such request must be made within 6 (six) months from the Effective Date of the Licence.
- Should the Licensed Carrier require other frequencies to carry out its licensed undertakings, such as microwave spectrum, etc. it would have to apply for and pay for these other frequency assignments.
- The initial Licence term of 20 years will be automatically renewed for a further term of 15 years subject to such modified terms as the Commission may stipulate and to payment of the stipulated renewal fee by the Licensed Carrier.
- The Commission shall consider recommendations made by the Licensed Carrier in regard to the National Numbering Plan and which will ensure that sufficient numbers are made available to the Licensed Carrier having regard to the anticipated growth in and demand for telecommunication services.

### 2.3.5 NCL Obligations

The Commission will set and agree on rollout obligations for the SNO in order to meet the following specific requirements:

- The Federal Government’s objective of improving telecommunications access throughout the entire territory of Nigeria;
- Expand and modernise the telecommunications core infrastructure;

- Ensure that investors in the SNO achieve a reasonable return on investment to encourage growth and expansion.

Targets and obligations illustrated below took cognisance of those agreed with Nitel.

### 2.3.5.1 Rollout Targets

The SNO should provide at least 1% of its installed capacity at any given time in each State of the Federation.

Rollout targets will be measured according to the following time scale (duration from award of Licence):

- 12 months                      a minimum of 150,000 fixed lines;
- 36 months                     a minimum of 550,000 fixed lines;
- 60 months                    a minimum of 1,200,000 fixed lines.

Utilisation of installed exchange capacity to be at least 80% i.e. =80% of installed capacity to be connected to customers.

### 2.3.5.2 Quality of Service Measures

The SNO will be expected to provide a high Quality of Service (QoS) to ensure that the level of service delivery is fully compliant with international standards.

Within 24 months after licence award, the SNO is to provide the following minimum service requirements:

- A Grade of Service (GoS) of at least 99.9% (receipt of dial tone);
- No greater than 100 faults per 100 lines per annum;
- 70% of fault clearance within 24 hours.

The Commission is also developing QoS targets in the following areas that will be applied equally to all operators once the standards have been agreed within the industry:

- Customer waiting and activation times;
- Dial tone delay
- Interconnect (technical and commercial);
- Accuracy of Billing (Retail and Wholesale);
- Handling of complaints;
- Leased circuits;
- Directory and Operator services.

In line with other operators, the SNO will be required to submit reports on specified Key Performance Indicators (KPIs) including QoS to the Commission biannually in an agreed format. Penalties for failure to meet the QoS will include such compensation as the Commission may direct to customers

directly affected by inadequate service and/or N500,000.00 payable to the Commission for every month during which the QoS is less than that specified above.

### 2.3.5.3 Environmental Terms and Conditions

Subject to the terms and conditions of the Licence, the SNO will be obliged to ensure that Conservation Areas, National Parks and other areas of special environmental interest are adequately protected and/or installation work is carried out in accordance with the provisions of the Licence e.g. restrictions of physical routing and prohibition of overhead cables etc.

### 2.3.6 Digital Mobile Licence overview

The DML authorises an operator to use appropriate equipment in a designated part of the electromagnetic spectrum and permits it to operate a network for the provision of public telecommunications services. In particular, the Licence authorises the provision of mobile telephony services for the conveyance of voice and data (including IP) within the designated spectrum. The successful Bidder will be permitted to choose one of two spectrum packages proposed by the Commission. The two alternatives are:

- Alternative A: 20MHz Dual Band (5MHz in the 900MHz plus 15MHz in the 1800MHz Band)
- Alternative B: 25MHz Single Band (25MHz in the 1800MHz Band)

The DML is annexed to this Memorandum in Appendix 2

### 2.3.7 Summary of DML terms

The DML includes the following:

- (a) a term providing that the Licence shall commence on the date of its award and continue in force for fifteen years unless earlier revoked by the Commission in accordance with the terms specified in paragraph (b) below or surrendered by the Licensee;

Licence Variation and Revocation

- (b) a term providing that the Commission may not revoke the Licence save at the request or with the consent of the Licensee except *inter alia* :
  - (i) if there has been a material breach of any of the terms of the Licence or the provisions in the Licence schedules;

- (ii) if the Licensee is found, to the reasonable satisfaction of the Commission, to have been involved in any act, or omission of any act, constituting a material breach of the rules and procedures as set out in this Information Memorandum;
- (c) A term providing that the Commission may not vary the Licence save at the request or with the consent of the Licensee except in relation to technical requirements for the Radio Equipment, if the Commission has reasonable grounds for concluding that use of the Radio Equipment in accordance with such specified technical requirements is causing or is likely to cause undue interference to other authorised users of radio equipment;
- (d) a term providing that the Licence shall not be assigned except with the prior express authorisation of the Commission;

#### Access and Inspection

- (e) a term providing that the Licensee shall permit a person authorised by the Commission to have access to the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time to ensure the Radio Equipment is being used in accordance with the terms of the Licence;

#### Modification, Restriction and Closedown

- (f) a term providing that a person authorised by the Commission may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by the Commission:
  - (i) a material breach of the Licence has occurred; and/or
  - (ii) the use of the Radio Equipment is, or may be, causing or contributing to undue interference to the use of other authorised Radio Equipment;
- (g) a term providing that the Commission may in the event of a national or local state of emergency being declared require the Radio Equipment to be modified or restricted in use, or temporarily or permanently closed down either immediately or on the expiry of such period as it may specify and that it shall exercise this power by a written Notice served on the Licensee or by a general Notice applicable to holders of this class of Licence published in suitable media;
- (h) a term providing that the Licence only authorises the Licensee in relation to Radio Equipment operating in the frequency ranges specified for that Licence.

### Roaming

- (i) a term providing that the Licensee shall not be permitted to roam on to other digital mobile networks within Nigeria until 3 months after Commercial Launch and only with the prior written authorisation of the Commission.

### Technical Standards

- (j) a term providing that the Radio Equipment is required to comply with the requirements stipulated by the Commission and the Federal Government of Nigeria.

### Roll out and Coverage Obligation

- (k) a term providing that the Licensee shall install, maintain and use Radio Equipment in such a way as to enable the provision of services by means of the Digital Mobile Network in the Federal Republic of Nigeria as follows:
  - (i) a minimum of 100,000 Lines connected to subscribers 12 months after Commercial Launch;
  - (ii) a minimum of 750,000 Lines connected to subscribers 36 months after Commercial Launch;
  - (iii) a minimum of 1,500,000 Lines connected to subscribers 60 months after Commercial Launch.
- (l) a term providing that the Licensee shall provide by 36 months after Commercial Launch, a minimum of 5% of its total Lines connected to subscribers to each of the geopolitical zones in the Federal Republic of Nigeria as defined in the Licence.

### Tariff structure

- (m) a term providing that tariffs must be in a form approved by the Commission which will provide written reasons in the event of non-approval.

On grant each of the Licences shall also include terms and conditions relating to:

- (a) technical requirements for the Radio Equipment by the Commission;
- (b) site approval;
- (c) notifications by the Licensee to the Commission of changes to the detail of the Licensee;

- (d) the maintenance of records and other information and the provision of such records and information to the Commission.

### **2.3.8 Licence fee**

The fee payable for the licences will be determined in the Financial Bid Stage of the Licensing Process. A single fee will be paid for the award of the three Licences

However, the respective Licences require that annual operating fees representing 2.5% of the Licensee's audited net revenue be paid within three months of the end of the second year of the Licences, and thereafter quarterly on the Licensed Carrier's assessed net revenue within 30 days of the end of such quarter to be adjusted immediately on receipt of the audited annual financial statements of the Licensee.

### **2.3.9 Provision of Information**

The SNO is obliged generally to provide information, documents and data to the Commission, at its request, for reasons that include but are not limited to the collection and collation of industry statistics and assessment of compliance with rollout obligations and targets. In specific regard to network rollout obligations, failure to provide such information may be regarded as a failure to meet a rollout obligation and may result in the imposition of pecuniary penalties and/or a licence being revoked.

## **2.4 FWA Licensing Process**

The Commission recently conducted an auction process to award regional licences for FWA services. A total of eighty licences for spectrum in the 3.5GHz Band were offered and currently the Commission has provisionally awarded sixty seven of these. The Commission intends to make FWA spectrum available to the SNO, based on the SNO's written requests and within available frequency bands but at no additional cost to the SNO.

## **2.5 Long Distance Operator Licensing Policy**

The Commission has licensed two Long Distance Operators (LDOs) for the conveyance of national traffic within the territory of Nigeria. The Licensees are; NEPSKOM Communications Limited, which is a joint venture company between ESKOM of South Africa and Nigeria's National Electric Power Authority, and Mobile Telecommunications Services Limited. Restrictions apply to LDOs for the origination and termination of Local Access and International traffic. The Commission is not minded to licence any further LDO's in the foreseeable future.

## **2.6 Infrastructure Sharing**

The SNO will be permitted to enter into infrastructure sharing and/or partnership arrangements with third parties in order to comply with the rollout obligations, as stated in Section 2.3.4.1. Where the SNO deploys the infrastructure of a third party carrier the Quality of Service measures applicable to the SNO will be deemed to apply and failure of the third party to comply with the obligations will be deemed to be a failure by the SNO.

### **3 OPERATIONAL ISSUES**

#### **3.1 Fixed Market Demand Analysis**

##### **3.1.1 Fixed Market Demand Evaluation**

With a fifth of the Sub Sahara's population, Nigeria is considered as one of the 'sleeping giants' of the African telecommunications market. This section of the Information Memorandum focuses on sizing the extent of the present and future fixed services telecommunications demand in Nigeria.

Data used in the construction of the accompanying models was drawn from a number of secondary sources, including official government statistics, and from primary research conducted on behalf of the Commission, in Abuja and Lagos, between 20<sup>th</sup> August and 30<sup>th</sup> August 2001.

Services considered in this demand evaluation cover the residential and business sectors of the market and include:

- Fixed line telephony;
- Data communications services (including Internet).

Market Demand data relating to mobile services is not covered by this Memorandum. However, for guidance purposes only, applicants should note that the present operational DML networks attained over 600,000 subscriber base within 8 months of launch.

##### **3.1.2 Overview**

The Market Demand Analysis represents the total demand for all fixed network services in Nigeria i.e. the combined capacity for the entire national network across all fixed network operators. The actual installed capacity provided by an individual operator will ultimately be determined by a number of factors including, but not limited to, market and commercial forces, network investment and rollout obligations.

The primary objective of the Market Demand Analysis was to analyse the total fixed network voice, data and IP demand for Nigeria and construct a nationwide market demand model, compliant with the objectives stipulated by the Nigerian Telecommunications Policy.

It is evident from the accompanying projections that the requirements for Nigeria to reach its minimum GDP and teledensity targets on/before 2010 are beyond the reach of the present incumbent operator (Nitel) alone, based on past and future network investment plans. In addition to promoting further Local and Regional fixed network competition, through the granting of individual licences, the Commission intends to licence an SNO as a "Multi-Service Access Operator" (MSAO), as defined by the Nigerian Telecommunications Policy.

Creation of an SNO will ensure that customers, whether retail, Other Licensed Operators or Internet Service Providers (ISPs), receive a total end-to-end service to published quality standards and have a single point of contact for service queries.

The Market Demand Analysis provided with this Memorandum will assist prospective Applicants in determining the most appropriate mix of service provision to meet the obligations.

## 3.2 Market Demand Forecast

The market demand projections from the analysis of the Commission's primary and secondary research indicate that the Nigerian telecommunications market has the potential to grow substantially in the next 5 to 10 years. To address the pent-up demand and provide the range of products and services necessary to project Nigeria to the forefront of African telecommunications will require substantial investment in both the Nitel network and the introduction of competitive networks at both national and local level.

The Commission recognises that sizing the extent of telecommunications demand in Nigeria is a difficult task. Without doubt, the biggest challenge to increasing the teledensity is the funding of rural development of telecommunications in Nigeria, as in most developing nations. The target communities, where a large part of the perceived demand lies, are very poor and isolated and often cannot afford to pay current commercial tariff for services.

Although the model is essentially a needs-driven analysis, it includes a poverty index to influence the calculation of the addressable market. The Commission has assumed that the needs in the rural areas could be met through the provision of shared facilities, for example community tele-centres, public call offices and/or new innovative services, including those based on FWA technology.

The demand model is independent of the technology used to deliver the services, and independent of any existing private or public networks.

### 3.2.1 Key Outputs

Forecasts are provided for:

- Basic voice line demand per State;
- 'Raw' fixed line traffic volume per State;
- Data service bandwidth demand per State.

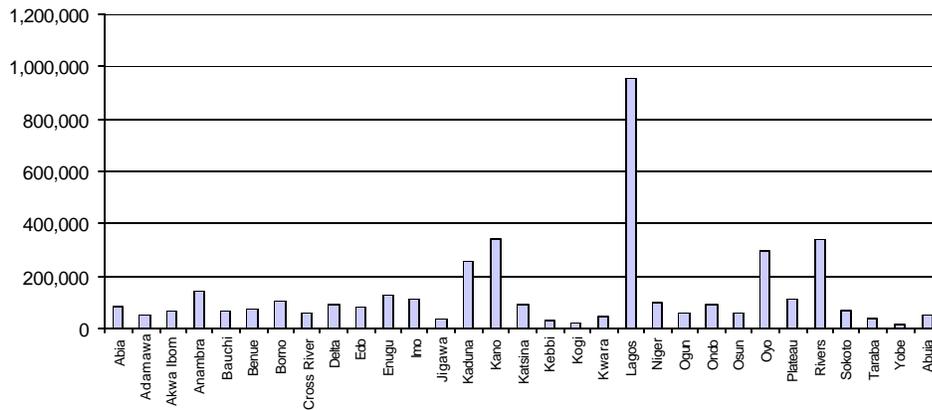
The results support the collective view within the industry that there is a considerable level of pent-up demand for telecommunications services in Nigeria. Furthermore, it must be emphasised that whatever the choice of technology for Nigeria, it should be capable of supporting data applications in addition to voice such as e-mail, fax, Internet access and video. The statistics for some newly-created States have been included in the old States from where they were carved out as follows:

<u>New State</u>	<u>Statistics included in</u>
Nassarawa	Plateau
Ebonyi	Enugu
Ekiti	Ondo
Zamfara	Sokoto
Gombe	Bauchi
Bayelsa	Rivers

### 3.2.2 Voice Line Demand

<i>Million lines</i>									
	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Fixed Lines</b>	4.03	4.93	6.04	7.07	7.77	8.85	9.43	9.83	10.25
<i>Of which:</i>									
<b>Business</b>	0.65	1.06	1.42	1.53	1.61	1.69	1.74	1.80	1.85
<b>Residential</b>	3.38	3.87	4.62	5.54	6.16	7.16	7.69	8.03	8.40
<b>Teledensity</b>	3.4%	4.1%	4.9%	5.5%	5.9%	6.5%	6.8%	6.9%	7.0%
<i>(based on demand)</i>									

**Table 1: Assessment of Voice Line Demand, 2001 – 2009**



**Figure 1: Breakdown of Immediate Voice Line Demand, September 2001**

3.2.3 Voice Traffic Forecast

<i>Million minutes per month</i>										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	
<b>Total fixed traffic</b>	2,461	2,704	3,242	3,599	4,086	5,489	6,671	7,723	8,590	
<i>Of which:</i>										
<b>Business voice</b>	419	669	849	879	884	887	871	898	927	
<b>Res. voice</b>	2,030	2,010	2,311	2,492	2,618	3,043	3,266	3,413	3,569	
<b>Business dial-up</b>	9	19	54	136	263	624	760	1,023	1,023	
<b>Res. dial-up</b>	2	6	29	91	322	936	1,774	2,388	3,070	
<b>%age of traffic residential</b>	82.6%	74.6%	72.2%	71.8%	71.9%	72.5%	75.5%	75.1%	77.3%	

Table 2: Voice Traffic Forecast, 2001 - 2009

	Within State	IDD	Calls to Mobile	ISP	Lagos	Abuja	Port H (Rivers)	Benin City (Edo)	Onitsha (Anambra)	Kaduna	Kano	Other Tier 2	Tier 3	Total
Abia	38,970,326	1,065,980	1,503,742	292,999	4,292,345	600,928	600,928	600,928	600,928	600,928	600,928	343,388	343,388	50.42
Adamawa	22,504,656	319,140	846,693	47,542	2,276,302	318,682	318,682	318,682	318,682	318,682	318,682	182,104	198,049	28.29
Akwa Ibom	29,081,398	1,767,855	1,164,897	296,115	3,407,870	181,753	181,753	181,753	181,753	181,753	181,753	1,635,778	681,574	39.13
Anambra	64,804,874	3,207,393	2,543,559	373,852	7,114,742	406,557	406,557	406,557	406,557	406,557	406,557	3,659,010	1,422,948	85.16
Bauchi	28,666,063	1,594,005	1,137,645	233,831	3,261,901	173,968	173,968	173,968	173,968	173,968	173,968	1,565,713	652,380	38.16
Benue	33,807,090	582,381	1,279,458	113,673	3,489,836	488,577	488,577	488,577	488,577	488,577	488,577	279,187	279,187	42.76
Borno	48,082,797	2,068,312	1,864,979	155,706	5,074,945	270,664	270,664	270,664	270,664	270,664	270,664	2,435,973	1,014,989	62.32
Cross River	27,362,891	1,396,266	1,076,979	174,259	3,031,588	161,685	161,685	161,685	161,685	161,685	161,685	1,455,162	606,318	36.07
Delta	43,340,200	742,684	1,639,960	144,119	4,471,241	625,974	625,974	625,974	625,974	625,974	625,974	357,699	357,699	54.81
Edo	35,848,358	2,126,237	1,432,173	344,320	4,166,159	238,066	238,066	238,066	238,066	238,066	238,066	2,142,596	833,232	48.08
Enugu	59,396,849	2,936,955	2,331,099	341,569	6,519,191	347,690	347,690	347,690	347,690	347,690	347,690	3,129,212	1,303,838	78.04
Imo	51,363,480	2,599,437	2,020,084	318,696	5,676,568	302,750	302,750	302,750	302,750	302,750	302,750	2,724,752	1,135,314	67.65
Jigawa	17,203,434	292,426	650,791	56,232	1,773,190	248,247	248,247	248,247	248,247	248,247	248,247	141,855	141,855	21.75
Kaduna	118,209,049	5,748,850	4,632,384	642,211	12,911,257	737,786	737,786	737,786	737,786	737,786	737,786	6,640,075	2,582,251	155.06
Kano	161,021,806	7,216,659	6,266,254	634,812	17,185,214	982,012	982,012	982,012	982,012	982,012	982,012	8,838,110	3,437,043	209.51
Katsina	43,521,576	746,803	1,646,897	145,137	4,490,643	628,690	628,690	628,690	628,690	628,690	628,690	359,251	359,251	55.04
Kebbi	12,974,016	266,543	494,162	61,289	1,368,677	191,615	191,615	191,615	191,615	191,615	191,615	109,494	109,494	16.53
Kogi	9,621,127	183,890	365,448	39,799	1,005,565	140,779	140,779	140,779	140,779	140,779	140,779	80,445	80,445	12.22
Kwara	20,586,909	1,175,343	819,200	179,878	2,362,604	126,006	126,006	126,006	126,006	126,006	126,006	1,134,050	472,521	27.49
Lagos	396,669,976	65,814,626	17,609,974	3,640,673	0	16,035,685	16,035,685	16,035,685	16,035,685	16,035,685	16,035,685	5,345,228	5,345,228	590.64
Niger	46,826,535	743,801	1,767,590	131,653	4,790,877	670,723	670,723	670,723	670,723	670,723	670,723	383,270	383,270	59.05
Ogun	26,718,218	639,938	1,024,320	163,575	2,880,770	403,308	403,308	403,308	403,308	403,308	403,308	230,462	230,462	34.31
Ondo	44,777,049	807,471	1,697,268	165,380	4,646,905	650,567	650,567	650,567	650,567	650,567	650,567	371,752	371,752	56.74
Osun	26,862,544	614,228	1,027,720	152,489	2,876,413	402,698	402,698	402,698	402,698	402,698	402,698	230,113	230,113	34.41
Oyo	135,819,186	7,254,339	5,368,852	991,455	15,259,683	813,850	813,850	813,850	813,850	813,850	813,850	7,324,648	3,051,937	179.95
Plateau	51,133,725	2,657,943	2,016,058	344,670	5,697,096	303,845	303,845	303,845	303,845	303,845	303,845	2,734,606	1,139,419	67.55
Rivers	157,765,404	7,089,183	6,140,849	629,190	16,849,764	898,654	0	962,844	962,844	962,844	962,844	8,665,593	3,369,953	205.26
Sokoto	31,085,617	973,770	1,208,530	284,387	3,508,210	491,149	491,149	491,149	491,149	491,149	491,149	280,657	280,657	40.57
Taraba	18,189,120	244,692	683,360	32,988	1,830,746	256,304	256,304	256,304	256,304	256,304	256,304	146,460	146,460	22.81
Yobe	7,035,796	169,034	269,776	43,287	758,956	106,254	106,254	106,254	106,254	106,254	106,254	60,716	60,716	9.04
Abuja	22,904,048	1,753,242	943,233	374,214	2,920,293	0	166,874	166,874	166,874	166,874	166,874	1,501,865	584,059	31.82
														2,461

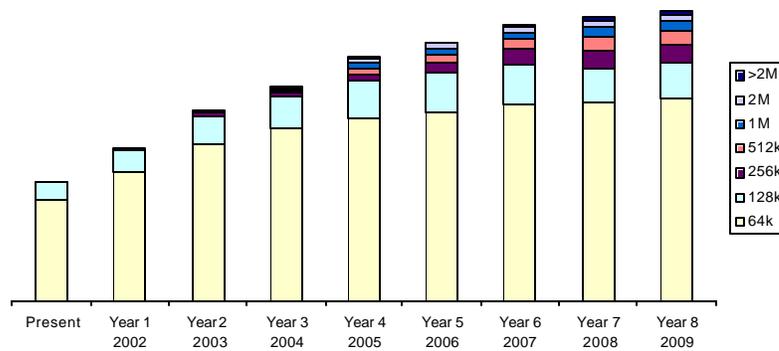
(Million minutes per month)

Table 3: Voice Traffic Matrix, 2001

### 3.2.4 Data Service Bandwidth Demand

<i>Number of Access Ports</i>									
	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total connections</b>	6,253	7,944	9,915	11,140	12,677	13,465	14,373	14,737	15,050
<i>Of which:</i>									
<b>64k</b>	5,300	6,726	8,172	8,924	9,499	9,834	10,199	10,316	10,535
<b>128k</b>	869	1,107	1,487	1,671	1,902	2,023	2,142	1,842	1,881
<b>256k</b>	44	57	101	173	385	544	724	884	903
<b>512k</b>	15	20	53	171	319	409	580	737	752
<b>1M</b>	15	20	50	89	254	270	296	516	527
<b>2M</b>	10	14	50	89	255	303	323	332	339
<b>&gt;2M</b>	0	0	1	24	65	101	108	111	113
<b>Total subscribers</b>	1579	1,898	2,347	2,782	3,076	3,381	3,985	4,133	4,233
<b>Average no. conx per subscriber</b>	4.0	4.2	4.2	4.0	4.1	4.0	3.6	3.6	3.6

**Table 4: Assessment of Data Service Demand, 2001-2009**



**Figure 2: Data Speed Demand, 2001-2009**

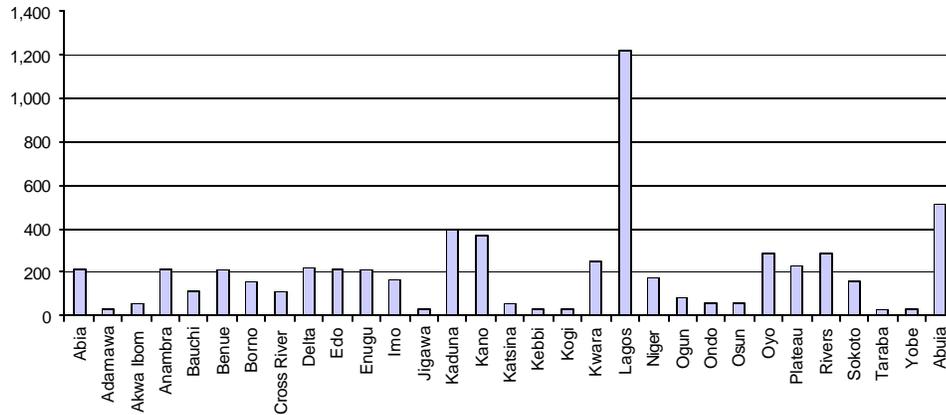


Figure 3: Data Access Speed Demand, Breakdown by State 2001

Number of access ports

	Demand Evolution							
	2002	2003	2004	2005	2006	2007	2008	2009
Head	12	12	12	12	12	12	12	12
Branch	409	511	562	554	582	594	606	618
Other Ent.	77	102	128	146	165	197	205	209
<b>Total</b>	<b>498</b>	<b>625</b>	<b>702</b>	<b>712</b>	<b>759</b>	<b>803</b>	<b>822</b>	<b>839</b>
64	422	516	564	534	554	570	576	587
128	69	94	105	107	114	120	103	105
256	4	6	11	21	30	40	49	50
512	1	3	11	18	23	32	41	42
1M	1	3	5	14	15	16	29	29
2M	1	3	5	14	17	18	19	19
>2M	0	0	1	4	6	6	6	6
<b>Total</b>	<b>498</b>	<b>625</b>	<b>702</b>	<b>712</b>	<b>759</b>	<b>803</b>	<b>822</b>	<b>839</b>

Table 5: Data Access Port Demand, 2002-2009 - Example State (Kaduna)

### **3.2.5 Fixed Line Demand**

#### **3.2.5.1 Residential Lines Assumptions**

The residential voice demand forecast is derived from the assumptions described below:

#### **3.2.5.2 Population Growth Rate & Average Household Size**

An annual population growth rate of 2.83% was applied. The average household size across the country of 4.89 was assumed to remain constant throughout the forecast period.

#### **3.2.5.3 Affordability Assessment**

The addressable market for residential lines is derived from the percentage of the labour force (within the 15 to 64 age group) above the poverty line. The National Population Commission uses three categories to describe the percentage poverty headcount: Non-poor, moderately poor and extremely poor. The Commission included only the non-poor proportion of the population in the model calculations.

Household income ranking for urban households was factored into the addressable market, to develop the immediate percentage demand of the addressable market per State for fixed voice lines. This gave an immediate total residential fixed line demand of 3,511,712 lines.

#### **3.2.5.4 Demand Evolution**

The immediate residential fixed line demand figure represents a household penetration of 14.6%.

The demand evolution applied for residential fixed lines is based on a forecast of percentage growth of household penetration in accordance with the poverty ranking of the individual States. The overall household penetration in Nigeria, based on the demand for lines, is 30.64% by 2009.

Due to the supply-driven nature of the market, the Commission does not believe that price elasticities will affect the level of base demand within the forecast period.

#### **3.2.5.5 Mobile Technology Substitution**

Over the forecast period, the Commission expects to see a certain degree of mobile technology substitution in the operators' stated rollout focus areas. According to the mobile operators' rollout plans, the demand for mobile connections grows from approximately 500,000 in 2001 to approximately 5 million by 2006.

The GSM companies have established presence in the cities of Lagos, Ibadan, Abuja, Port- Harcourt, Kano, Warri, Kaduna, Enugu, Aba, Uyo, Asaba, Onitsha, Abeokuta, Benin, Owerri. The planned expansion is ongoing.

### 3.2.6 Business Lines Assumptions

The business fixed voice demand forecast is derived from the assumptions described below:

#### 3.2.6.1 Ranking by State and Company Growth

The States have been segmented into three tiers according to the current level of commercial and Government activity within that State, taking into account the presence of 'Top 500' companies in that State (Goldstar Publications, June 2001) and the average number of employees per telephone line at present. These are listed in Table 6. The most recent data for the breakdown of number of companies by size to State level were from The Federal Office of Statistics for 1997.

#### 3.2.6.2 Average number of fixed lines per company

The three -tier segmentation was also used to apply assumptions on the average number of telephone lines per company in each State between 2001 and 2009, using the primary and secondary research data.

Tier	States	Annual company growth	Average lines/co. 2001	Average lines/co. 2009
Tier 1	Lagos, Abuja	6%	20	35
Tier 2	Akwa Ibom, Anambra, Bauchi, Borno, Cross-River, Delta, Edo, Enugu, Imo, Kaduna, Kano, Oyo, Plateau, Rivers	2%	12	28
Tier 3	Abia, Adamawa, Benue, Bayelsa, Ebonyi, Ekiti, Gombe, Jigawa, Katsina, Kebbi, Kogi, Kwara, Nassarawa, Niger, Ogun, Ondo, Osun, Sokoto, Taraba, Yobe, Zamfara	1%	4	12

**Table 6: Corporate Activity - Ranking Assessment, 2001**

### 3.3 Fixed Traffic Demand

#### 3.3.1 Voice Traffic

##### 3.3.1.1 Residential traffic profiles

The level of minutes per line is very high in Nigeria (almost double the average figure for North America). This is due primarily to the high number of users per telephone line. As the teledensity increases, the Commission expects the average number of minutes per line to fall to the same levels as those typical in more developed markets – approximately 425 minutes per line per month. The present number of minutes per line in Nigeria is 600 for a residential line. The calculations assume a gradual depreciation of minutes until 2005, when it levels out at 425 minutes.

The assumptions on residential call traffic destination, according to the originating State, is illustrated in Table 7.

Originating location	Call Destination	2001	Year 1 2002	Year 2 2003	Year 3 2004	Year 4 2005	Year 5 2006	Year 6 2007	Year 7 2008	Year 8 2009
Lagos	Within state	70%	68%	65%	62%	60%	60%	60%	60%	60%
	Long dist	17%	20%	23%	27%	29%	29%	29%	29%	29%
	Fixed-mobile	3%	4%	5%	5%	6%	6%	6%	6%	6%
	IDD	10%	8%	7%	6%	5%	5%	5%	5%	5%
Abuja + Tier 2	Within state	78%	78%	75%	75%	70%	70%	70%	70%	70%
	Long dist	16%	16%	18%	18%	22%	22%	22%	22%	22%
	Fixed-mobile	3%	3%	4%	4%	5%	5%	5%	5%	5%
	IDD	3%	3%	3%	3%	3%	3%	3%	3%	3%
Tier 3	Within state	80%	80%	75%	75%	70%	70%	70%	70%	70%
	Long dist	16%	16%	20%	20%	24%	24%	24%	24%	24%
	Fixed-mobile	3%	3%	4%	4%	5%	5%	5%	5%	5%
	IDD	1%	1%	1%	1%	1%	1%	1%	1%	1%

**Table 7: Residential Traffic Profile, 2001-2009**

The Internet is likely to divert traffic from high revenue-generating international voice communications. At the moment, 80% to 90% of e-mails are sent to and received from outside of the continent. However, given the pressures on rate rebalancing which are unconnected with the Internet, it is possible that e-mail will become relatively less attractive as a substitute for voice or fax especially if international call costs drop and local call costs increase.

### 3.3.1.2 Business traffic profiles

The number of minutes per business line is presently 650 minutes per line per month. As with the residential minutes per line, a gradual depreciation has been applied until this figure levels out in 2007 at 500 minutes per line per month.

The assumptions on business call traffic destination, according to the originating State, is illustrated in Table 8.

Originating location		2001	Year 1 2002	Year 2 2003	Year 3 2004	Year 4 2005	Year 5 2006	Year 6 2007	Year 7 2008	Year 8 2009
<b>Lagos</b>	Within state	60%	56%	55%	52%	50%	50%	50%	50%	50%
	Long dist	22%	27%	28%	32%	34%	34%	34%	34%	34%
	Fixed-mobile	3%	4%	5%	5%	6%	6%	6%	6%	6%
	IDD	15%	13%	12%	11%	10%	10%	10%	10%	10%
<b>Abuja + Tier 2</b>	Within state	68%	68%	65%	65%	60%	60%	60%	60%	60%
	Long dist	21%	21%	23%	23%	27%	27%	27%	27%	27%
	Fixed-mobile	3%	3%	4%	4%	5%	5%	5%	5%	5%
	IDD	8%	8%	8%	8%	8%	8%	8%	8%	8%
<b>Tier 3</b>	Within state	70%	70%	65%	65%	60%	60%	60%	60%	60%
	Long dist	21%	21%	25%	25%	29%	29%	29%	29%	29%
	Fixed-mobile	3%	3%	4%	4%	5%	5%	5%	5%	5%
	IDD	6%	6%	6%	6%	6%	6%	6%	6%	6%

**Table 8: Business Traffic Profile, 2001-2009**

### 3.3.2 Dial-up Internet Traffic

The recent opening up of the Nigerian Internet market has begun to have an impact on the level of Internet use in the country, and will have a significant impact on the number of minutes of traffic to be carried over the proposed national network. The Commission has licensed over 100 ISPs to sell services, of which about 30 are currently active.

Analogue dial-up access is the principal form of Internet access for the majority of businesses and will continue to be for the foreseeable future. The main advantage of analogue modems is that they require little or no external set up and do not need any additional installations.

The internet demand model has been developed on the assumption that there will be no obstacles in meeting the demand for dial-up Internet. Potential barriers could include the ISPs obtaining sufficient international bandwidth for delivering web pages over the Internet, or the quality and availability of telecommunications infrastructure.

The majority of popular African Internet sites are hosted outside the country on servers in Europe or the U.S. If the ISPs operate their own independent international links without local interconnections

(peering), the traffic between the subscribers of two ISPs in the same city would have to travel to the US or Europe and back.

### **3.3.2.1 Number of Internet users**

The Commission estimates that there were approximately 115,000 Internet users by the end of 2001. Each computer with an Internet or e-mail connection usually supports a range of three to five users. The starting figure of 28,875 Internet connections is based on an assumption of four users per connection.

In the absence of studies in Africa on the number of household versus work users or rural versus urban users, the Commission has assumed that users in the cities vastly outnumber rural users and estimate that 20% of the dial-up traffic will initially be generated via residential fixed lines. The corporate sectors, Government, educational establishments and Internet cafes will initially account for the large majority of the dial-up traffic.

The figure of 115,000 Internet users works out at about one Internet user for every 1000 people, compared to a world average of about one user for every 30 people, and a North American and European average of about one in every 3 people. (The UNDP World Development Report figures for other developing regions in 1999 were: 1 in 125 for Latin America and the Caribbean, 1 in 250 for East Asia, 1 in 200 for South East Asia & the Pacific, 1 in 500 for the Arab States and 1 in 2500 for South Asia).

### **3.3.2.2 Internet User Growth**

By Year 8 (2009) the demand model forecasts one Internet user for every 17 people. There will be many users included in this figure that have access via more than one medium, such as a permanent leased line connection at their place of work, and a dial-up connection at home.

There is also a rapidly growing interest in kiosks and cyber-cafes, and a growing number of hotels and business centres provide PCs with Internet access. Other forms of public Internet access include the addition of PCs to community phone-shops, schools, police stations and clinics that can share the cost of equipment and access amongst a larger number of users. Many existing 'phone shops' are now adding Internet access to their services, even in remote towns where it requires making a long-distance call to the nearest dial-up access point.

### **3.3.2.3 Internet User Profiles**

Until 2005, the model assumes that an average of four users share one Internet connection, and three users per connection between 2005 and 2009.

The number of minutes per connection currently averages around 400 minutes per month. This is relatively low. This is expected to increase to 1400 minutes per connection per month by 2008, as connections become more reliable and Internet content improves.

## **3.4 Data Service Demand**

### **3.4.1 Overview**

A significant proportion of the data traffic in Nigeria is presently carried over private networks. In particular, two-way satellite-based data and Internet services using very small aperture terminals (VSAT) are used extensively.

The Commission has based its data forecast on the actual raw access speed required by end users, not the technology or service specific elements. Two distinct types of end-user were identified for data services, namely:

- The Key Government and Corporate Sectors: This group consists of the Federal Government, health sector, education sector, broadcasting, oil & gas industry, commercial banks, merchant banks, insurance sector and other 'Top 500' major industries;
- All other Enterprises outside the Top 500 companies in Nigeria.

#### **3.4.1.1 The 'Top 500' classification of companies in Nigeria**

The top 500 companies classification (developed by Goldstar publications, June 2001) form the core demand for data networking within the forecast period in Nigeria. Their data requirements are characterised by:

- Increasing reliance on permanent Internet access for their business;
- Enterprise networks between the head office and branch sites;
- Plans for e-Business implementation.

#### **3.4.1.2 Company and Branch Site Growth Assumptions**

The same company growth assumptions used to determine the Fixed Line demand were applied in this data model.

The average number of networked branch sites is presently 9, and grows to 20.5 per company by 2009.

### 3.4.1.3 Requirement for data bandwidth

We have assumed that all Top 500 companies require some form of Enterprise Network and/or Internet Bandwidth solution. The data requirement for other enterprises is shown in Table 9.

Employees per site	Present Demand	
	%age requirement WANS	%age dedicated Internet
0-4	0%	0%
5-9	0%	1%
10-19	1%	1%
20-49	2%	3%
50-99	4%	5%
100-199	4%	5%
200-499	5%	7%
500-999	8%	10%
1000+	8%	10%

**Table 9: Present Data Service Requirement – ‘Other Enterprises’**

There are several types of leased line, running from around 64kbit/s to 622 Mbit/s for a high speed ATM connection.

### 3.4.1.4 Demand evolution for data bandwidth

In the short and medium term, the emphasis will be on 64 kbit/s and 128 kbit/s connections. Data services will become increasingly accessible to the less affluent companies that will look for the guaranteed levels of service and security that a dedicated data connection provides. The demand for the higher speed lines - those of 2 Mbit/s and higher - is likely to come from the oil, financial and media sectors, which represent a very small number of the total potential number of data connections in Nigeria.

### 3.5 Fully Distributed Topology

#### 3.5.1 Flexible Network Topology

The Commission anticipates that the SNO will utilise a flexible network topology consisting of a mix of a conventional hierarchical exchange network, as illustrated in Figure 4 below, and a fully distributed topology. The proportion of each topology to be used or where to deploy the various network elements shall be based on traffic, economic and geographical considerations.

The SNO will be permitted, subject to the legal requirements for account separation and restrictions on cross-subsidy, to deploy the fixed infrastructure for the provision of mobile services provided under the terms of the DML. Applicants shall indicate, where applicable, the proportion of share infrastructure deployed.

- Local Exchanges (LE) handle traffic within a town;
- Primary Exchanges (PE) handle traffic within a State (or group of States);
- Secondary Exchanges (SE) handle inter-State traffic;
- International Gateway (IG) handles international traffic.

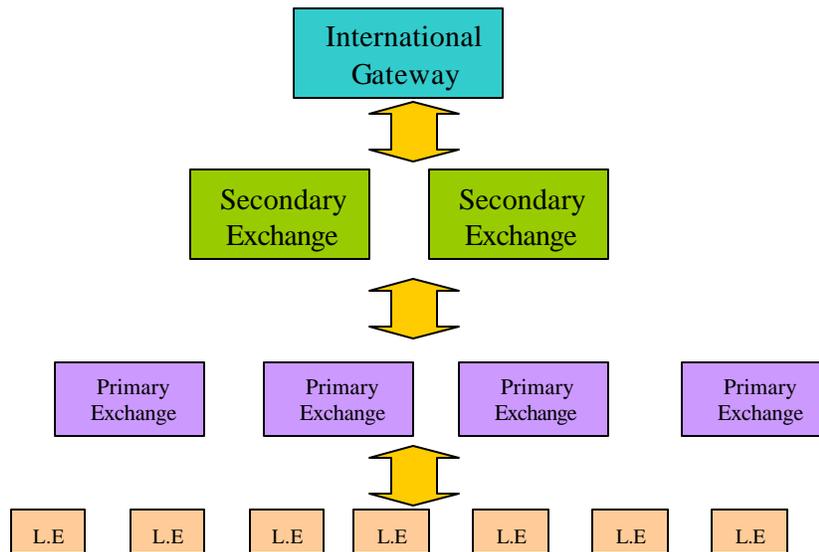


Figure 4 Hierarchy of Exchanges

## 3.6 Technical Design

### 3.6.1 Technology Options

Applicants should take a number of considerations into account when reviewing the most appropriate technology solutions for infrastructure to be provided for the SNO network, including but not limited to:

- Locations of Primary and Secondary Exchanges;
- Topology of inter-State transmission routes, i.e. the connectivity of Secondary Exchanges;
- Topology of the connectivity of Primary to Secondary Exchanges;
- Capacity of inter-State, and Primary to Secondary transmission routes;
- Choice of switching technologies - Circuit Switched, TDM, ATM, Packet Switched, IP;
- Choice of transmission transport technology - PDH, SDH / SONET, ATM;
- Choice of transmission transport medium - microwave radio, optical fibre, coaxial (or, exceptionally, VSAT), copper cable;
- Choice of signalling protocol (subject to prevailing Nigerian standards) – including SS7, R2, R5, H323 etc.;
- The requirements/constraints applied to the network in providing mobile services.

Designs should consider Quality of Service (QoS), benchmarking against similar fixed line network solutions where appropriate, and future proofing and demand calculations.

## 3.7 Transmission Technologies deployed in Nigeria

There are a number of different technologies currently utilised in public and private secondary and primary backbone networks within Nigeria, including:

- Single mode optical fibre cable (G652 Optical Fibre Specification);
- Coaxial Cable;
- Microwave;

- VSAT.

In addition to buried and aerial copper, operators connect Local Exchanges to customers using the following technologies:

- Wireless Local Loop (WLL) - suited only to local access and is bandwidth limited, typically due to spectrum efficiency and amount of licensed spectrum;
- Fixed Wireless Access – typically narrow or broad band point to point or point to multi-point systems.

The decision on which access technology to deploy will ultimately be decided by the Applicant based on (a) forecast demand for a range of services and (b) a number of associated criteria including, but not limited to:

- Local terrain;
- Regulations;
- Distribution of customers (within a particular geographical area);
- Rights of way;
- Infrastructure, e.g. erection of masts, civil works etc;
- User service requirements;
- Maintenance;
- Available spectrum and licensing.

At the SNO's request the Commission will use its best endeavours to facilitate the provision of incentives, which may include securing rights-of-way for the SNO's backbone infrastructure build-out.

### **3.7.1 Locations of Primary and Secondary Switching Exchanges**

The location of primary and secondary switching centres will be dependent on a number of variables, such as:

- Population;
- Distance from other key centres;
- Availability of interconnect to Other Licensed Operators (OLOs);
- Traffic tromboning, i.e. where traffic is returned back to its origin.

The location of the Primary and Secondary Exchanges should, as far as is practicable, be based on idealised conditions and take into consideration the tier system introduced in the Market Demand

Analysis. Best practice network design procedures must be applied throughout to determine the location of the exchanges, with consideration towards network resilience and redundancy.

### **3.7.2 Choice of Switching and Transport Technologies**

Choice of technology (or mix thereof) will be at the discretion of the Applicant, but is expected to include:

- a) ATM;
- b) SDH;
- c) IP.

Applicants must demonstrate that their choices of technology (and/or service platforms) have been made to optimise QoS considerations, consistent with the demands of the network and provide sufficient capacity and technical interfaces to interconnect to OLOs throughout the network.

#### **3.7.2.1 International Gateways**

The International Gateways serve as the highest layer connecting international traffic between Nigeria and other countries. International traffic from all the lower tiers will be aggregated at a gateway dependent on local / national routing.

There are currently three International Gateways for fixed network traffic, operated by Nitel in Nigeria, located at Lagos, Enugu and Kaduna. GSM operators each have the capability to install an International Gateway strictly for their own customer traffic. Following the issue of an International Gateway Licence to the SNO, the Commission will not issue any further IGLs, with full capabilities, for at least three years.

### **3.7.3 Interconnection Requirements**

The SNO will have an obligation, under the terms of the Licence, to interconnect to Other Licensed Operators (OLOs). Subject to the terms and conditions of their respective Interconnection Agreement, it will be necessary for operators to ensure that sufficient interconnection capacity is available to enable the efficient and effective transport of traffic from one network to another without undue technical or commercial discrimination.

The Interconnection Agreement must stipulate, and require both parties to agree and maintain, a minimum set of technical and signalling standards, as determined by the Commission from time to time.

Market Demand forecast must include expected traffic to be generated by OLOs that will require interconnection. The Commission suggests that for planning purposes the SNO add 25% to the network traffic dimensioning to cater for interconnect traffic at all Points of Interconnection and on the transmission backbone.

### 3.7.4 IP - Data Network

Applicants should clearly state how they intend to transport IP based traffic throughout the network.

Though present requirements for an IP network are low on a nationwide scale, there are some regions that display a much higher requirement, in particular Lagos, Port Harcourt, Abuja and Kano which, due to their large concentration of corporate and governmental institutions, are more demanding with regard to data/IP services.

#### 3.7.4.1 Internet Exchange Point

Internet usage in Nigeria lags far behind developed countries and even behind similar developing countries in Africa and Asia-Pacific.

A contributing factor to the low Internet usage in Nigeria is the fact that most Internet traffic is routed internationally. This leads to long delays when using the Internet, even for traffic meant for local destinations, and higher than expected costs. The Commission therefore regards the early introduction of an Internet Exchange Point (IXE) in Nigeria as essential to alleviate these problems.

As the IXE is extremely important for Internet and data traffic flow, it is imperative that the SNO has some form of disaster recovery in place e.g. a backup system in case the main IXE is out of service.

SNO Applicants must include a national IXE and suitable backup systems in their proposals.

### 3.8 Value Added Services

In addition to the provision of adequate basic voice and data/IP services in Nigeria, as a vital means to accelerating GDP growth, considerable financial and service benefits will accrue from the rollout of Value Added Services (VAS).

VAS will enable the generation of additional sources of revenue for the SNO and provide customers with high quality digital services, comparable to those available in other key telecommunications markets of the world. The types of VAS range in complexity from simple Class services to more complex services, such as IP and Virtual Private Networks (VPNs).

Applicants should state which VAS they wish to deploy. These might include:

- Class Services:
  - ◆ call diversion;
  - ◆ call return;
  - ◆ call waiting;
  - ◆ ring back.
- Voice mail;
- ISDN;
- xDSL;
- Centrex;
- VPNs;

- Number Translation Services (NTS):
  - ◆ e.g. free phone, premium rate and local rate numbers.

Incremental traffic arising from VAS should be taken into account in both the resultant market demand and network dimensioning calculations.

In addition to VAS there will be a number of services primarily aimed at delivering the social requirements of mandatory Universal Services Obligation and Rollout requirements, as determined by the Commission. These services ensure basic telephony access to those that may be considered low net-worth customers, e.g. rural communities and low-income individuals. Additional services will include, but not be limited to:

- Pre-paid calling card;
- Community Pay phones.

### **3.9 Operational Considerations**

The Commission recognises that the choice and dimensioning of operational components for all network operators (including the SNO) in compliance with legal and regulatory obligations will be taken largely on the basis of private commercial decisions. Therefore, although it may not be appropriate to review the design and application of operational systems prior to the award of the SNO Licence, they will be reviewed where they impact on the network design, in particular Billing and Customer Care Support Systems and Accounting (both Retail and Wholesale).

#### **3.9.1 Billing and Customer Care Support Systems (BCCS)**

It is critical that the SNO maintains an accurate and efficient billing and customer care platform. Call Data Records (CDRs) must be kept for a predetermined period of time, as they are critical for accurate billing and accounting and dispute handling. The SNO must also provide customer care support systems, such as call centres and contact centres, which will ensure that customer queries and problems can be dealt with quickly and efficiently. Applicants must clearly state how the BCCS will be integrated into the network and the QoS that customers can expect and the remedies that the SNO will apply should it fail to meet its own internal targets.

#### **3.9.2 Accounting (Retail and Wholesale)**

The SNO Licence mandates for accounting separation between all relevant business units and the requirements for accounting conventions under prevailing Nigerian legislation.

#### **3.9.3 Maintenance and Control Functionality**

Prospective SNO Applicants must state how they intend to monitor and control network performance, provide a fault repair service and operational management of interconnection services. The SNO may choose to have either centralised monitoring or a distributed

monitoring system e.g. one main Network Management Centre (NMC) or a number of smaller remote NMCs located throughout the country. Where centralised monitoring is deployed, a backup facility must be provided in the event of systems failure etc.

#### **3.9.4 Emergency Services**

The SNO will be obliged to provide connections for calls to the emergency services via the 199 emergency telephone number and/or local phone numbers for the respective services. Emergency calls must always be transmitted as priority traffic.

Where the SNO does not have a direct connection to an emergency services call centre, they will be obliged to enter into the required interconnection agreement with any other network operator to establish such a connection.

#### **3.9.5 Numbering**

The SNO shall comply with the Commission Regulations concerning the implementation of the National Numbering Plan.

The Commission will allocate to the SNO sufficient numbers from the National Numbering Plan having regard to the anticipated growth and demand for telecommunication services.

## 4 LICENSING PROCESS

### 4.1 Introduction

The Commission has decided to introduce a SNO into the Nigerian telecommunications market, which will be required to meet certain obligations as detailed in this Memorandum. Consequently the Commission has chosen to select the SNO through an open and transparent process combining technical evaluation and a sealed bid. The technical evaluation will assess the Applicant's capability to roll out a **fixed** network. However, the SNO will also be required to become the fourth digital mobile operator in Nigeria.

The Commission has adopted a four-stage licensing process as detailed below. If there is no compliant Applicant or if none is successful at the Technical Evaluation Stage or eligible to bid in the Financial Bid Stage, the Commission will halt the Licensing Process. In this event the Commission does not intend to rerun the process and will examine other licensing options.

- At the ***Licence Application Stage***, bidders must submit the following to constitute an Application to become the SNO:
  - Application Form;
  - Compliance Certificate;
  - All Information as requested in Chapter 5;
  - Application and Processing Fee;

The Commission will verify that Applicants have supplied the requisite information and the Application and Processing Fee has cleared. .

- At the ***Technical Evaluation Stage***, a detailed review of the information submitted by the Applicants will be conducted. Each Applicant will be rated and all Applicants which score 80% or above will be notified by the Commission that they are eligible to Bid in the next Stage.
- At the ***Financial Bid Stage***, those Applicants which have qualified as Bidders in the previous Stage will be required to provide a Deposit amount of US\$20million. Once this amount has cleared into the nominated bank account a bidder will be invited to submit a single sealed bid at or above the Reserve Price for the Licences.

- Finally, a **Grant Stage** will complete the licensing process.

Each of these four stages is explained in further detail below.

## **4.2 Activity Rules**

This section describes the rules that govern the activities of Applicants during the four-stage Licensing Process. The term “Applicant” refers to the body corporate that submits an Application and to which the SNO Licence would be awarded following successful completion of the four-stage process. (Note that the term “Bidder” refers to an “Applicant” which has qualified to submit a sealed bid in the Financial Bid Stage).

The Activity Rules will take effect from the date of submission of Applications. In the event of a breach of the Activity Rules by an Applicant or its Insiders, the Commission may, at its sole discretion, impose a fine on the Applicant (the amount of which will be deducted from the Deposit amount) and/or exclude that Applicant from the Licensing Process. If an Applicant is excluded from the Licensing Process for a breach of the Activity Rules, the Commission may also declare some or all of that Applicant’s Deposit forfeit.

### **4.2.1 Relationships with other Licensees**

An Applicant is not permitted to have a relationship with either the existing National Carrier, or existing digital mobile operators (i.e. Nigerian Telecommunications Limited; Econet Wireless Nigeria Limited; MTN Nigeria Communications Limited). A Relationship is where an Applicant or any person or entity that owns, directly or indirectly, an ownership stake of more than 10% of such Applicant ("Attributable Interest") has, directly or indirectly, an ownership stake of more than 10% in either the existing National Carrier or the existing digital mobile operators, or any person or entity that has an Attributable Interest in either the existing National Carrier or the existing digital mobile operators.

### **4.2.2 Confidential Information**

Certain unpublished information relating to an application/bid is defined as Confidential Information. Confidential Information means any unpublished information (i.e. not publicly available), which, if known to other Applicants, would affect the price that the other Applicants would be willing to pay for the Licences in the Financial Bid Stage. Such information would include (but not necessarily be limited to) the Applicant’s business case and the price it is willing to bid for the Licences. Any party to whom Confidential Information in relation to an Applicant is disclosed is deemed an “Insider” in relation to that Applicant. Applicants and Insiders must not convey Confidential Information to any other Applicants or Insiders.

#### **4.2.3 Anti-competitive Behaviour**

Applicants must not enter into any arrangements with suppliers of equipment or software that would restrict the supplier's ability to supply such equipment or software to other Applicants for the purposes of planning, building or operating a network under either the SNO Licence or DML. Applicants are also not permitted to agree with suppliers of equipment or software on any form of restriction as to the prices charged or other terms and conditions that such suppliers may agree with any other Applicant.

#### **4.2.4 Advisers to the Nigerian Communications Commission**

Applicants are not permitted to receive advice on matters related to the Application and Licensing process from any person who has been retained as an adviser to the Commission (or a sub-contractor to such adviser) in relation to this licensing process. Advisers to the Commission in this regard are:

- Radio Spectrum International Consulting Ltd;
- Mason Communications Ltd;
- Paul Usoro & Co.;
- Messrs D. D. Dodo (SAN) & Co.

#### **4.3 Stage 1: Licence Application Stage**

The purpose of the Licence Application Stage is to receive applications and verify that all the required information has been provided by the Applicants. This verification will include confirmation that the Application and Processing Fee of UD\$50,000 has been cleared into the designated bank account.

The Application Form requires the Applicant to provide certain basic information about itself and its Consortia Members where applicable. It contains instructions to Applicants as to how information should be presented. It also makes clear which pages of the form may be published as part of the qualification process.

The Compliance Certificate requires the Applicant to certify, amongst other things, that:

- i) it is legally capable of both bidding for and satisfying its obligations under the SNO Licence;
- ii) it will comply with the provisions of this document;

- iii) the information provided in its Application is true, accurate and complete; and
- iv) it is not the subject of criminal or civil proceedings that could be expected adversely to affect their business or the Applicant's ability to take part in the Licensing Process.

The Compliance Certificate must be signed by two directors, or a director and the company secretary, of the Applicant (defined as "Authorised Officers").

#### 4.3.1 Reserve Price

For the Financial Bid Stage, a *Reserve Price* of US\$200m has been set. The Reserve Price effectively defines the minimum bid, which would be accepted in the Financial Bid Stage. The reason the Commission has set a minimum price is because the SNO will receive not only the authority to roll out national fixed and mobile networks, but also an allocation of radio spectrum which is a valuable and finite national resource and full capabilities to provide International Gateway services. Applicants must make their own assessment as to the value of their bids in the Financial Bid Stage but any bid below the Reserve Price will not be accepted.

#### 4.4 The Deposit

Applicants which are successful in the Technical Evaluation Stage and are thus invited to participate as Bidders in the Financial Bid Stage must each, as a condition precedent, provide a deposit of US\$20million before they may submit a bid. In the event that an Applicant is successful in the Licensing Process, the Deposit will be offset against payment for the Licences. All Deposits will accrue interest for the periods that they are retained by the Commission. The Deposit by the three highest Bidders will be retained by the Commission until after Final Award of Licences while the Deposit by other Bidders will be returned to them, with the accrued interest amounts, within 7 (seven) days of the provisional award of the Licences to the highest Bidder.

Upon conclusion of the Financial Bid Stage, the highest Bidder will be invited to pay the balance of the Licence Fee within 14 (fourteen) Business Days from the date of Provisional Award of the Licences. If the highest Bidder defaults in the payment of the Licence Fee within the stipulated deadline, the second highest Bidder will be provisionally awarded the Licences and invited to pay the requisite Fee (i.e. its bid price). If the second highest Bidder also defaults in the payment of the Licence Fee, the third highest Bidder shall be provisionally awarded the Licences and invited to pay the Licence Fee. If the third highest Bidder defaults in the payment of the Fee, the Commission shall abort the SNO Licensing Process and may pursue other licensing options.

Out of the 3 (three) highest Bidders, the Bidder which pays the Licence Fee (i.e. its bid price) consequent upon the process outlined above shall become the Successful Bidder. Bidders which have been provisionally awarded the Licences and which default in the payment of the Licence Fee or decline further participation in the licensing process shall forfeit their Deposit amounts. The Deposits of any of the three highest Bidders which was not offered the Licence will be returned, with accrued interest, within 7 (seven) days of the Final Award of the SNO Licence to the Successful Bidder.

Applicants should note that the Deposit will be deemed to have been submitted only when funds have cleared in the bank account duly designated for that purpose by the Commission. The deadline for these funds is 5.00pm on 6 August 2002.

Bank details and Instructions for the payment of the Deposit is as indicated in **Appendix 3** to this Memorandum.

#### **4.5 The Application and Processing Fee**

On submission of Applications and as a condition of qualification, Applicants will be required to submit an Application and Processing Fee of US\$50,000. This fee is non-refundable regardless of whether an Applicant is successful or not in the Licensing Process. Applicants should note that the Application and Processing Fee will be deemed to have been submitted only when funds have cleared into the bank account duly designated for that purpose by the Commission. The deadline for these funds is 5.00pm on the Application Date.

Bank details and Instructions for the payment of the Application and Processing Fee is as indicated in **Appendix 3** to this Memorandum.

#### **4.6 Stage 2: Technical Evaluation Stage**

The Technical Evaluation Stage begins as soon as the Commission has verified applications and announced which Applicants may proceed to this Stage. The duration of this Stage will depend upon the volume of applications and may result in minor changes to the timetable of the subsequent Stages.

##### **4.6.1 Qualification Tests**

In order to qualify for the Technical Evaluation Stage, the Applicant must satisfy the following tests:

a) *Application Requirements*

The Applicant must comply with the requirements for provision of information, the required certification and payment of the Application and Processing Fee as set out in this

Memorandum. Failure to comply with these requirements or to make the payment at the time specified may result in the Applicant not qualifying for the Technical Evaluation Stage and taking no further part in the Licensing Process.

*b) Ownership restrictions*

The Commission must be satisfied that the Applicant does not have a Relationship (as defined in 4.2.1) with the existing National Carrier, or the existing digital mobile operators.

*c) General power of exclusion*

The Commission will retain a general power to exclude any Applicant if, in its' opinion:

- i) the holding of the SNO Licence by that Applicant would be prejudicial to the interests of national security; or
- ii) any shareholder or Director of the Applicant is not a fit and proper person to have an interest in the Applicant. Account will be taken of responses to all the questions in the Application Form in assessing whether an Applicant is a fit and proper person.

The discretion of the Commission in this regard shall not be subject howsoever to question by any Applicant or any third party hereto.

During the Technical Evaluation Stage, the Commission may ask an Applicant to provide additional information or documentation relating to its Application. Any such request may set a reasonable period for provision. Applicants must use their best endeavours to satisfy the request.

#### **4.6.2 Technical Evaluation**

If any Applicant fails to supply relevant documents or incorrectly completes the Application Form, the Commission may, at its own discretion, give the Applicant extra time to supply such documents or correct their Applications. Once the Commission has received and checked all the Application Forms, it will publish a list of all qualified Applicants on its website.

The information provided by Applicants will be assessed in relation to the services to be deployed, the supporting network design and the management of the whole business in particular network deployment and operations, service provisioning, sales and marketing, billing and customer care.

### 4.6.3 Evaluation Criteria

A detailed review of the Applicants' responses to the requirements outlined in Chapter 5 will be undertaken. The evaluation shall be based on clear evidence submitted supporting all statements and recommendations and will be segmented in the following areas of assessment with the stated evaluation weighting:

- Compliance Assessment – an evaluation of the Applicant's stated compliance to the requirements (10%);
- Track Record Assessment (Sections 4 and 5) – based on evidence/references submitted with regard to the Applicant's or the relevant Consortium member's track record of successfully deploying and managing a similar national network operation and support from credible supplier/partners (20%);
- Market Planning Assessment (Sections 6 and 7) – the assessment of the proposed Market Plan and the Sales and Marketing Plan (15%);
- Technical Assessment (Section 8) – the assessment of the Applicant's network solution to meet the market requirements as detailed in the Market Plan (15%);
- Business Processes Assessment (Section 9) – an assessment of the proposed business processes and relevant systems support to ensure the commercially successful delivery of communications services (15%);
- Commercial Assessment (Sections 10 and 11) – an evaluation of the Applicant's Business Plan, Business Case and proposed Capital Structure (15%);
- Supplementary Value Assessment (Includes Sections 12 and 13) – an assessment of the risks and 'value add' issues associated with selecting a particular Applicant (10%).

All Applicants that achieve a score of 80% or above will qualify for the Financial Bid Stage of the Licensing Process.

### 4.6.4 Conclusion of the Technical Evaluation Stage

Upon completion of the Technical Evaluation Stage, the Commission will inform Applicants as to whether they have achieved a score of 80% or above and are thus eligible to become Bidders in the Financial Bid Stage upon payment of the Deposit. The Commission will also publish the list of Bidders on its website.

Bidders which provide the Deposit amount as at the specified deadline will be invited to proceed to Financial Bid Stage.

#### **4.7 Stage 3: Financial Bid Stage**

In this Stage Bidders will be required to submit a single sealed bid in US Dollar denominated whole amounts which must not be less than the Reserve Price. Please note that Qualified Bidders will be notified of the precise time and location in Abuja for the submission of the sealed bids. If there is only one Bidder eligible to take part in this Stage, the Licences will be provisionally awarded to this Bidder at the Reserve Price.

The sealed bids should be submitted on a form which will be provided by the Commission at the end of the Technical Evaluation Stage to those Applicants which are eligible for and confirm that they wish to proceed to this Stage. Sealed bids must be signed and dated by an Authorised Officer. Bidders will not be permitted to submit further bids or change their original bid. The only exception to this rule will be where more than one Bidder submits the highest bid. In the unlikely event that this occurs, those Bidders which submitted the tied bid will be instructed to submit a further sealed bid at such time as is notified by the Commission. This further bid must be greater than the tied bids.

The sealed bid form will include instructions on how the bid amount should be written. Any submitted bid which is below the Reserve Price will be deemed invalid. The Commission intends to announce the value of all sealed bids on the day they are opened.

#### **4.8 Stage 4: Grant Stage**

##### **4.8.1 Announcement of Successful Bidder**

Upon conclusion of the Financial Bid Stage, the highest Bidder will be invited to pay the balance of the Licence Fee within 14 (fourteen) Business Days from the date of Provisional Award of the Licences. If the highest Bidder defaults in the payment of the Licence Fee within the stipulated deadline, the second highest Bidder will be provisionally awarded the Licences and invited to pay its bid price for the Licences. If the second highest Bidder also defaults in the payment of the Licence Fee, the third highest Bidder shall be provisionally awarded the Licences and invited to pay its bid price for the Licences.

Each of the 3 (three) highest Bidders shall be given the same deadline within which to pay the Licence Fee i.e. 14 (fourteen) Business Days from the respective dates of Provisional SNO Licence Award to them. Out of the 3 (three) highest Bidders, the Bidder which pays the Licence Fee (i.e. its bid price) consequent upon the process outlined above shall become the Successful Bidder. The Commission will then make the Final Award of the SNO Licence to the Successful Bidder.

#### **4.8.2 Payment methodology**

The Successful Bidder must pay the full balance on the Licence Fee by making an unconditional payment of the full amount (after deduction of the initial deposit) within 14 Business Days of provisional award of the licence. Bidders who have consecutively been provisionally awarded the Licences as specified in paragraph 4.8.1 of this Memorandum and who default in the payment of their respective bid prices (i.e. Licence Fee) shall forfeit their Deposit amounts and the Licences. Other penalties may also apply. A payment will only be considered to have been made if funds are cleared into the account by 5pm on the deadline for payments.

#### **4.9 The Timetable**

There is no pre-set timetable and the Commission reserves the right to determine the overall timetable of the Licensing Process. The following table provides an indicative timetable.

It is the Commission's intention to proceed with the Licensing Process as described in this Chapter. Nevertheless, the Commission reserves the right not to proceed with this Licensing Process, including any or all of the Stages, or to change the timing or any other aspect of this proposed process at any time without prior notice.

**Indicative Timetable of Activities**

<b>DATE</b>	<b>ACTIVITY</b>
Thursday 18 July 2002	<b>Licence Application Stage</b> Submission of Applications "Application Date"
Friday 19 July 2002	<b>Technical Evaluation Stage</b> Technical Evaluation of Applications commences.
Tuesday 30 July 2002	Notification of Applicants qualified to proceed to Financial Bid Stage, subject to payment of Deposit
Tuesday 6 August 2002	<b>Financial Bid Stage</b> Deposit funds to have cleared into Nominated Account.
Wednesday 7 August 2002	Notification of Bidders eligible to participate in the Financial Bid Stage.
Friday 9 August 2002	Submission of Sealed Bids and Announcement of the three highest Bidders.
Monday 12 August	<b>Grant stage</b> Notification of Provisional Award of SNO Licence
Friday 30 August 2002	Deadline for payment of requisite Licence Fee.

## 5 APPLICATION INSTRUCTIONS

### 5.1 Instructions to Applicants on Application Form

Instructions on the information required in the Application Form and the form of its presentation are set out below.

#### **Details of the Applicant [and Consortia members]**

- Provide the name of the Applicant;
- Provide contact address, telephone and fax number;
- Provide the names, job title and passport photograph of each of the Authorised Officers who have signed the Compliance Certificate;
- Also provide telephone, fax and e-mail (if available) contact details;
- Provide the Certificate of Incorporation of the Applicant;
- Provide the address of the Registered Office of the Applicant;
- Provide the name and job title of each of the Directors of the Applicant;
- Provide details of the form of the Applicant's share capital (class of shares, number and value of shares in each class of shares);
- Provide details of the ownership of each class of share disclosed;
- If the class of shares is listed on a Recognised Stock Exchange, provide details of all Participants in that class of shares. If the class of shares is not listed, provide a list of all the holders of that class of shares;
- If the Applicant has been formed by a consortium for the purposes of taking part in the Licensing Process, provide details of each member of the consortium's financial investments in and commitments to the Applicant and similar details as outlined above in respect of each member of the consortium e.g. each consortium member's equity ownership, Board and other details.

Additionally:

- Provide the name and role of all the Applicant's Insiders;
- Provide a certified true copy of the Memorandum and Articles of Association of the Applicant;
- Provide a copy of the most recent Annual Report and Accounts of the Applicant;
- Provide a copy of the most recent Annual Report and Accounts of all ultimate parent companies;
- Provide Applicant's tax clearance certificate.
- If the Applicant has been formed by a Consortium, provide similar details as above in respect of each member of the Consortium.

## **5.2 Information for Technical Evaluation**

### **5.2.1 Response Instructions**

- a) The Applicant shall provide an appropriate formal response to each clause that contains 'The Applicant shall ...' or 'The successful Applicant shall...'. 'The successful Applicant shall...' refers to the requirements of the Licensee once the SNO Licence has been obtained. In this case a statement of compliance must be made in the response.
- b) Where a compliance statement is required the Applicant shall state C, PC or NC whether Compliant, Partially Compliant or Non-Compliant respectively. If partially compliant the Applicant shall further explain the partial compliance.
- c) The Applicant shall clearly state all relevant assumptions.
- d) The Applicant shall clearly identify any significant financial, commercial, or technical risks and submit an appropriate mitigation plan.
- e) The Applicant shall provide a point-by-point response to Sections 5.2 through to 5.13 of this Chapter.
- f) Where separate documents are submitted the Applicant shall reference the relevant document in the point-by-point response.
- g) The Applicant shall submit all financial quantitative information in United States Dollars.

### **5.2.2 Presentations**

Presentations may be requested from the Applicants. The purpose of the presentation is for the Applicant to describe and justify any or all aspects of the proposed SNO solution and to answer any queries from the Commission or its representatives.

The Applicant shall state whether it will, on request, give a presentation to describe and justify the proposed solution and to answer any queries from the Commission or its representatives.

### **5.2.3 Modifications and Supplements**

Prospective applicants should note that at any time prior to the last date for submission of Applications, the Commission may, for any reason, whether at its own initiative or in response to a clarification requested by any prospective Applicant, amend this Chapter by

way of an addendum. Each addendum shall be sent to all prospective Applicants which have indicated interest in this Information Memorandum.

### **5.3 Executive summary**

The Applicant shall submit an Executive Summary that provides a succinct overview highlighting the key content of the response to Sections 5.4 to 5.13, inclusive. Note that the Executive Summary will not be evaluated.

### **5.4 Track Record**

The SNO will play a vital role in improving the Nigerian economy and the quality of life for the Nigerian people. To successfully rollout, operate and to make a commercial success of a national fixed line operator business is a substantial, long-term challenge. It is therefore imperative that the Applicants (which for the purposes of this Section shall be deemed to include Applicants consortium members) have a proven record of successfully implementing such a commercial concern.

The following sections make up the Track Record Assessment Area and will count towards 20% of the total evaluation mark.

#### **5.4.1 Current Business, Business History and Other Obligations**

This section addresses the commercial history of the bidding organisation and/or, in the case of a consortium, all members of the consortium.

In addition to the mandatory requirements for the Applicant to supply information detailed in Section 5.2, Applicants and/or relevant Consortium members shall submit:

- ◆ A track record of successfully establishing a fixed-line public network delivering local, national and international communication services;
  - ◆ A track record of managing and operating a commercially successful fixed-line public network delivering local, national and international communication services;
  - ◆ A declaration of risk on the SNO caused by the Applicant's current business(es).
- a) The Applicant shall submit the last three years of consolidated, audited financial statements (where applicable, for each consortium member).
  - b) The Applicant shall submit the most recent (no older than three months) set of interim financial statements (where applicable, for each Consortium member).

- c) The Applicant shall describe the company(ies) organisational structure which details all major components of the Applicant including where appropriate:

- ◆ The holding company
- ◆ Sister companies
- ◆ Divisions
- ◆ Business units.

In terms of:

- ◆ Legal structure
- ◆ Shareholders and shareholdings
- ◆ Revenue
- ◆ Nature of business
- ◆ Number of employees
- ◆ Country of operation

- d) The Applicant shall describe how the SNO will be incorporated into other businesses owned by the Applicant or Consortium member(s) as necessary.
- e) The Applicant shall submit curricula vitae for all Board Members that, at least, provide education details and career history for the past ten years.
- f) The Applicant shall highlight specific experience of Board Members relevant to establishing and managing a national fixed line public network.
- g) The Applicant and/or relevant Consortium members shall state the details of any of their respective financial, legal or regulatory obligations including their duration and what impact they may have on the success of the SNO.
- e) For all those obligations that may mean a moderate or significant risk to the success of the SNO the Applicant shall submit an appropriate risk mitigation plan.

#### **5.4.2 The Applicant's Strategic Goals and Objectives**

The Applicant's rationale for establishing, managing and operating the SNO should complement the Applicant's current business' strategic goals and objectives, therefore the Applicant and/or its relevant Consortium members shall:

- a) Describe its strategic intent(s).
- b) Submit the last three years Annual Reports and/or official strategy statements to the 'Financial Markets', shareholders and/or other investors and major stakeholders (if available).

- c) Describe the strategic fit of the SNO and the remainder of the Applicant's and/or relevant Consortium members' businesses including synergies with:
- ◆ The Applicant's/Consortium members' strategic goals
  - ◆ Services and products
  - ◆ Target markets (customer types)
  - ◆ Geographical area

### 5.4.3 Proposed Management Team for the SNO

In order to maximise the SNO's probability of success the proposed Senior Management and their operational first line should have significant experience in establishing, managing and operating a national fixed-line public network.

- a) The Applicant shall submit curricula vitae for all the proposed Senior Management Team members and their operational first line for the SNO that, at least, provide education details and career history for the past ten years. The curricula vitae submitted for the Senior Management Team members must include as a minimum the:
- ◆ Managing Director
  - ◆ Financial Director
  - ◆ Sales/Marketing Director
  - ◆ Operations/Technical Director
  - ◆ Human Resource Director
- b) The Applicant shall submit the curricula vitae of any proposed non-executive Directors providing, at least, details of their other business positions and interests, education and career history for the past ten years.
- c) The Applicant shall highlight specific experience of Senior Management Team members relevant to establishing and managing a national fixed line public network.
- d) The Applicant shall provide an organisational chart that includes at least all members of the Senior Management Team of the SNO and their first line reports. The organisation chart shall show all lines of reporting.

### 5.5 Strategic Suppliers/Partners

It is accepted that the successful Applicant will be reliant on strategic suppliers/partners in the short- and long-term to successfully manage and operate a national fixed telecommunications network. The selection of appropriate suppliers/partners is therefore key to the success of the SNO. The Applicant shall demonstrate the credibility and appropriateness of its intended supplier/partners to ensure its success.

The Applicant shall give details and describe roles of all proposed strategic supplier/partners during network build and post-service-launch operation. The details shall include as a minimum:

- Name
- Brief description of type of business and history
- Description of current or previous relationships with the Applicant
- Description of intended type of commercial relationship e.g. simple supplier, commission based, shared risk/reward etc. (Note that investors are covered by Section 5.11)
- Location
- Number of personnel segmented by type (e.g. professional, sales, technical support) per location
- Financial highlights.

For the following types of supplier/partner where applicable:

- Equipment vendors for the operational network and support systems and for the corporate network and support systems
- Facilities management, outsource partners and other service providers
- Construction companies for, for example, deploying fibre infrastructure
- Prime and subcontractor policy
- Network operators / service providers / IP peering partners
- Sales channel partners
- Advisory services including financial, tax and legal services
- Other supplier/partners.

## 5.6 Market Plan

A Market Plan should demonstrate the Applicant's understanding of the current and future Market needs and strategies for fulfilling its licence obligations (with reference to Chapter 3), state the SNO's forecast market share and how it intends to acquire that market share within the first 3 years of operation.

The Applicant shall submit a comprehensive Market Plan which shall include the following items:

- a) Situation Analysis including:
  - ◆ A description of the current and future (up to three years) key market characteristics reflecting the Applicant's view of the evolving Nigerian telecommunications market (making reference to Chapter 3 where appropriate).

- ◆ Key market trends analysis indicating how the key market trends will influence the SNO
  - ◆ The effect of competition on the Market and on the SNO.
- b) A description of the proposed products and/or services including:
- ◆ Service levels and roadmap
  - ◆ Key target markets
  - ◆ Pricing
- c) Market forecast and strategy for the first three years of operation including:
- ◆ Forecast sales by product/service, target segments, geographical area and geographical area type e.g. urban, suburban and rural
  - ◆ The SNO's strategies for fulfilment of roll-out obligations
- d) Generic pricing strategy
- e) Channel strategy including use of third-party distributors/retailers /resellers/agents
- f) Promotions and branding strategy including a breakdown of spend
- g) Identification of market risks and associated mitigation plan
- h) New product and/or service development plan including research and development spend
- i) Other relevant information.

## 5.7 Sales and Marketing

The Sales and Marketing Plan should describe the practical solutions for executing the Market Plan for the first year of operation.

The Applicant shall submit a comprehensive Sales and Marketing Plan which will at least include the following items:

- a) A comprehensive sales plan for first year of operation segmented by products/services, target market, customer types and channels to market
- b) A comprehensive marketing plan for the first year of operation including spend by marketing media e.g. direct marketing, bill boards, magazines and newspapers, TV and radio etc.

- c) Structure of sales and marketing organisation including descriptions of roles
- d) The discount policy to third party resellers / distributors / agents etc.
- e) Commissions to sales personnel and third party distributors/retailers
- f) Details of intended channels to market including the details of third party distributors/retailers
- g) Other relevant information.

## 5.8 Operational Network Technical Solution, Processes and Support Systems

The response to this section should demonstrate the Applicant's technical and operational expertise by recommending the most appropriate technical and operational strategy and processes. A total end-to-end service to published quality standards with a single point of contact for Customer Care is to at least meet those obligations as stated in Section 10 of Chapter 3 of this document. The operational network shall also be supported by the appropriate operational support systems (OSS). The strategy should consider as a minimum:

- Quality of service
  - Scalability
  - Flexibility
  - 'Futureproofness'
  - Cost-effectiveness in terms of capital and operational expense
  - The timely provisioning of services.
- a) For the following network areas fully describe, with reference to the proposed services including the provision of emergency services and traffic profiles (type and volume), the generic technical solution and evolution plan for:
    - ◆ Access
    - ◆ Switching/routing
    - ◆ Transmission
    - ◆ Interconnection
    - ◆ Value added service (VAS) platforms
  - b) The Applicant shall provide an appropriate disaster recovery / major system redundancy strategy.
  - c) The Applicant shall submit a solution to provide convenient, cost-effective public access to shared communications facilities (not including the standard payphone solution) for rural areas.

- d) The Applicant shall describe its Public Payphone technical strategy including, if applicable, integration with the rest of the network and systems.
- e) The successful Applicant shall be required to provide Number Portability.
- f) The Applicant shall describe its preferred technical solution to meet its Number Portability obligation.
- g) It is likely that the Internet and IP -based services will play a major role in initial and future services. IP-based services will be dependent on connectivity to the 'World Wide Web' through the appropriate peering partners and/or by becoming a Tier 1 Internet Service Provider (ISP). The Applicant shall describe its IP -based service strategy that shall include its peering and Internet Exchange strategy.
- h) The Applicant shall describe its Network Management technical strategy and intended system(s) and how the proposed solution and the benefits it will provide including quality of service, network usage efficiency, service provisioning, resilience etc.
- i) The Applicant shall describe any systems or management tools to aid the efficient, high quality end-to-end provisioning of services to its customers and how these systems and tools will support the service provisioning processes.
- j) The Applicant shall describe the proposed billing system and how it will support the pricing strategy as detailed in Section 5.6.
- k) The Applicant shall describe the systems required to support Customer Care. The Applicant shall state the intended service levels and include a description of how these service levels will support all customers including residential, business and OLO customers.
- l) The Applicant shall describe the systems required to support Directory Services. The Applicant shall state the intended service levels and include a description of how these service levels will be supported.
- m) The Applicant shall submit the proposed operational network architecture diagram identifying main switching/service hosting sites, other points of presence, transmission routes and interconnect points with associated bandwidths after 1 year, 3 years, 5 years and 10 years of SNO operation.
- n) The Applicant shall detail all main, relevant technical standards to be adopted and their context, for example, Small Network Management Protocol (SNMP) for the

interworking of network support systems, V5.2 for the interworking of access equipment etc.

- o) The Applicant shall detail any industry standard models relevant to the design or operation of a telecommunications network and/or business, for example, the Total Managed Network (TMN) model.
- p) The Applicant shall describe the generic process of Service Provisioning from receiving an order to the service becoming live for a typical residential, business and interconnect service.
- q) The Applicant shall describe the generic process of network fault resolution for critical and major faults including target response and fault resolution times and escalation policy.
- r) The Applicant shall submit a forecast traffic matrix for major terminals (i.e. Within State, International, to Mobile Operators, to ISPs and geographical locations) as defined by Table 1.3 in Section 1.6 of Chapter 3 in terms of millions of minutes or peak bandwidth as appropriate.
- s) The Applicant shall state which vendors are the SNO's preferred suppliers of main sets of equipment/systems including equipment/systems for:
  - ◆ Customer Premises Equipment
  - ◆ Access
  - ◆ Transmission
  - ◆ Switching/routing
  - ◆ Network management
  - ◆ Payphone terminals
  - ◆ Billing systems
  - ◆ Customer care systems.
- t) The Applicant shall submit a ten-year capital expenditure forecast on a quarterly basis.
- u) The Applicant shall submit a ten-year operational expenditure forecast on a quarterly basis.
- v) The successful Applicant shall comply with appropriate working practices and health and safety policies.
- w) The successful Applicant shall only use type-approved equipment.

## 5.9 Business Systems Processes and Technical Solution

The successful management and operation of a modern organisation depends significantly on the support provided by its business systems including its voice and data network, software applications, accounting and financial systems, purchasing systems and, more commonly, management information systems. In this Section the Applicant should demonstrate that it shall be investing wisely in the appropriate business systems to successfully and efficiently manage and operate the business.

- a) The applicant shall provide details of the proposed business systems (hardware and software applications) in terms of name, vendor and functionality for the following systems:
  - o Corporate voice network
  - o Corporate data network
  - o Accounting/financial systems
  - o Purchasing systems
  - o Management information systems
- b) The Applicant shall describe any financial control methods/processes that it intends to adopt.
- c) The Applicant shall describe the generic process for authorising preferred suppliers and purchasing goods. It shall include details of the purchase authorisation policy.
- d) The Applicant shall provide typical contracts for a customer of a typical business service and a customer of a typical residential service.
- e) The Applicant shall state the accounting practices to be adopted e.g. US GAAP.
- f) The Applicant shall describe the generic annual sales budgeting process.
- g) The Applicant shall submit a ten-year capital expenditure forecast on a quarterly basis for the business systems.
- h) The Applicant shall submit a ten-year operational expenditure forecast on a quarterly basis for the business systems including the corporate telephony and data network.

### 5.10 Business Schedule and Business Case

- a) The Applicant shall submit a comprehensive business schedule for the first 5 years of the SNO' life. The schedule shall at a minimum itemise all major tasks in establishing the SNO, state timelines and key milestones starting from the award of the Licence.
- b) The Applicant shall submit a comprehensive financial business case for the first ten years of the SNO' life. It shall include:
  - Profit and Loss forecasts on a per monthly and financial year basis
  - Cash Flow forecasts on a per monthly and financial year basis
  - End of financial year Balance Sheets
  - Relevant financial metrics including, as a minimum, Internal Rate of Return (IRR) and Net Present Value (NPV).
  - Other information

### 5.11 Proposed Capital Structure

- a) The Applicant shall submit a Working Capital Plan for the first 5 years of the SNO's life highlighting target gearing.
- b) The Applicant shall submit a comprehensive description of its proposed capital structure for the first 5 years of the SNO's life. It shall include details of financing instruments including as a minimum Debt and Equity.
- c) The Applicant shall submit details of all major investors, that is, investors with a 5% or greater interest. The details shall include:
  - Name
  - Size of investment
  - Status of investment e.g. secured, conditional, initial talks
  - Any conditions attached to the securing of the investment
  - Brief description of investor and history
  - Description of current or previous relationships with the Applicant
  - Location
  - Financial highlights

## 5.12 Employment

The establishment of a substantial new organisation will provide economic and employment benefits to Nigeria. The Commission would like an indication of the scale and quality of the direct employment opportunities that the successful Applicant will realise especially employment opportunities for the people of Nigeria.

- a) The Applicant shall describe the breakdown of proposed employment by completing the following table:

<i>Functional Area</i>	<i>Skill Level</i>	<i>Year 1</i>		<i>Year 2</i>		<i>Year 3</i>		<i>Year 4</i>		<i>Year 5</i>	
		<i>Total</i>	<i>% Nigerian</i>								
<b>Director/Snr Mgmt</b>	<b>N/A</b>										
<b>Technical</b>	<b>High</b>										
<b>Technical</b>	<b>Medium</b>										
<b>Technical</b>	<b>Low</b>										
<b>Total Technical</b>	<b>All</b>										
<b>Sales and Marketing</b>	<b>High</b>										
<b>Sales and Marketing</b>	<b>Medium</b>										
<b>Sales and Marketing</b>	<b>Low</b>										
<b>Total Sales &amp; Marketing</b>	<b>All</b>										
<b>Other</b>	<b>High</b>										
<b>Other</b>	<b>Medium</b>										
<b>Other</b>	<b>Low</b>										
<b>Total Other</b>	<b>All</b>										
<b>Total</b>	<b>All</b>										

- b) The Applicant shall submit examples of the following items that will form the basis of the final respective items:

- Human Resource policy
- Salary structure
- Employee terms and conditions

### 5.13 Environment Policy

The Commission promotes the conservation of the natural environment and would look favourably upon Applicants which also take care in protecting the environment.

- a) The Applicant shall submit an environmental policy and plan which will consider:
- The minimisation of waste product pollutants during normal operations
  - The minimisation of electro-magnetic radiation and as a minimum adherence to appropriate international Electro-Magnetic Compatibility (EMC) guidelines
  - The appropriate disposal of hazardous redundant products/materials
  - Maximum use of recyclable materials
  - The preservation of natural beauty
  - The use of power efficient equipment
  - Other steps towards the improving or preserving the natural environment.

## **6 CONTACTS AND FURTHER INFORMATION**

### **6.1 Contacts for Further Enquiries**

Any further enquiries relating to the Memorandum and the SNO Licensing Process should be addressed in writing and sent by post or fax directly to the Commission. These should be addressed to:

Ernest C. A. Ndukwe  
Executive Vice Chairman/Chief Executive  
Nigerian Communications Commission  
Benue Plaza  
Plot 72, Ahmadu Bello Way  
Central Business District  
Abuja  
NIGERIA

Fax: +234 (0) 9-2344593

All correspondence should be marked, “SNO Licensing Process”

### **6.2 Further Information**

Following the issue of the Memorandum, the Commission may publish further information and any questions received along with the answers provided. The Commission however, reserves the right not to publish a particular question and answer, in whole or in part. The identity of those posing questions will not be attributed to the published version without the questioner’s permission. The Commission will publish all additional information via its website ([www.ncc.gov.ng](http://www.ncc.gov.ng)). Further copies of the Memorandum may be downloaded from this site.

## **APPENDIX 1 FORMS**

The following pages of this Appendix contain the forms as listed below:

- Application Form;
- Compliance Certificate.

**1.1 Name of Applicant:** \_\_\_\_\_

**1.2 Contact Details:**  
**Address**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Telephone No.** \_\_\_\_\_

**Facsimile No.** \_\_\_\_\_

**1.3 Authorised Officers:**

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_

**Facsimile No.** \_\_\_\_\_

**E-mail.** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_

**Facsimile No.** \_\_\_\_\_

**E-mail.** \_\_\_\_\_

**1.4 Legal form of Applicant:** \_\_\_\_\_

**Registered No.** \_\_\_\_\_

**1.5 Registered Office:** \_\_\_\_\_

**(if different from address above)**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Telephone No.** \_\_\_\_\_

**Facsimile No.** \_\_\_\_\_

SNO Licensing Process

Application Form Section 1

***This page will not be disclosed to other Applicants***

**Directors of the Applicant**

**1.6 Name & Title**

**Name & Title**

If additional space is required, insert duplicate sheets, numbered 2a, 2b etc.

*This page will not be disclosed to other Applicants*

**1.7 Capital Structure of the Applicant**

If additional space is required, insert duplicate sheets numbered 3a, 3b etc.



## COMPLIANCE CERTIFICATE

### Part A

The Applicant certifies and undertakes that:

- (i) the Authorised Officers of the Applicant have read and understood the relevant legislation and the Information Memorandum.
- (ii) the Applicant is legally capable of taking part in the licensing process and has in place all necessary consents, permissions and board approvals for this purpose, save those which, by virtue of legal or regulatory process, are not obtainable until after the results of the process are known.
- (iii) the Applicant understands and will be legally capable of satisfying its obligations under the terms and conditions of the Licence granted pursuant to the licensing process and the terms of any Licence granted as a consequence of this process.
- (iv) the factual information provided in, or in support of, the Application is, to the best of the Applicant's knowledge and belief, true, accurate and complete in all material respects and that any opinion expressed is honestly held.
- (v) the Applicant will comply and ensure, to the best of his ability, that all of its Insiders will comply with the provisions of the Information Memorandum.
- (vi) the Applicant will not collude or otherwise manipulate or attempt to manipulate the outcome of this process with any other Applicant in respect of any other Applicant, and shall not from the time of submission of this Application disclose or obtain or seek to obtain any Confidential Information in relation to any other Applicant.
- (vii) the Applicant will not have in place any arrangements or understanding with any other Applicant to collude or otherwise manipulate or attempt to manipulate the outcome of the Licensing Process.
- (viii) the Applicant will not have entered into, and will not seek to enter into, any exclusive agreements in contemplation of the Licensing Process which might restrict the ability of any other Applicant to build and operate a network efficiently or which might restrict their means of determining a business case.

### Part B

The Applicant certifies and undertakes that, save as disclosed in this Certificate:

- (i) the Applicant in the Application is not the subject, and none of its Directors, officers or representatives are the subject, of criminal investigations or proceedings in Nigeria or abroad which might reasonably be expected to affect adversely their business or materially affect the Applicant's ability to take part in this Licensing Process or to satisfy the terms of any Licence awarded pursuant to the process, and that there is no reason to believe that such investigations or proceedings might occur during the process.
- (ii) the Applicant in the Application has not had any telecommunications or radiocommunications licence, consent, authority, permission, concession agreement, or other such document or allocation of radio spectrum **outside of Nigeria** removed or revoked owing to default or breach by the Bidder

of the terms of that licence consent, authority, permission, concession agreement, or other such document or allocation of radio spectrum **outside of Nigeria**.

- (iii) the Applicant identified in the Application is not a party to any civil litigation or proceedings which may be expected to have a material adverse impact on the Applicant's ability to take part in the Licensing Process or to satisfy the terms of any Licence awarded pursuant to the process.

Signed: .....

Signed: .....

[Authorised Officer]

[Authorised Officer]

## **APPENDIX 2 LICENCES**

This Appendix contains the National Carrier and Digital Mobile Licences.

### **APPENDIX 3 – BANK DETAILS FOR PAYMENT OF APPLICATION AND PROCESSING FEES AND DEPOSITS**

1. By 5.00 p.m. (Nigerian time) on Thursday, 18 July 2002 Applicants must each have transferred the non-refundable Application and Processing Fee of US\$50,000.00 into the undermentioned account with JPMorgan Chase Bank so that it is received in cleared funds by the Bank as at the specified deadline. Payment of this amount is a pre-condition for participation in the SNO licensing process.
2. By 5.00 p.m. (Nigerian time) on Tuesday, 6 August 2002 Qualified Applicants who have passed the Technical Evaluation Stage must each pay the Deposit amount of US\$20million into the Commission's nominated account specified below with JPMorgan Chase Bank. Payment of the Deposit amount is a pre-condition for participation in the Financial Bid Stage and the amount would be treated in the manner specified in Section 4.4 of the Information Memorandum.

The Account to which Bidders must send their Application and Processing Fees and Deposits is:

**To:** JPMorgan Chase Bank, New York  
**SWIFT:** CHASUS 33  
**ABA:** 021-000-021  
**Account:** JPMorgan Chase Bank, London Branch  
**Account Number:** 001-0-962009

**For Further Credit A/C:** 24069507  
**Account Name:** JPM RE: NCC Deposit Account  
**Ref:** NCC Escrow Account  
**Attention:** Will Manns, Institutional Trust Services, Telephone 44 20 7777 5550

The payment should be marked with a unique identifier consisting of the registered name of the Bidder prefaced by "NCC Escrow Account"

The funds for each bidder will be transferred into sub-accounts specific to each bidder. The funds will earn interest. The interest will be calculated using the JPMorgan Chase overnight bid rate for deposits in USD minus 50 basis points. This is the rate that JPMorgan Chase's treasury applies to deposits in USD from day to day. Interest is calculated on the outstanding balance on a daily basis and credited to the account on a monthly basis. Interest earned on deposits will be used to pay the escrow agent's fees on a pro-rata basis prior to the bidder earning interest for itself.