AN OVERVIEW OF EVOLUTION OF THE
TELECOMMUNICATION INDUSTRY IN
NIGERIA AND CHALLENGES AHEAD

Chief Executive/Vice Chairman
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Telecom Summit 2003
Introduction

- Communication is a vital aspect of human existence
- Effective communication enhances value of Information
- Information has, today, become a critical factor of production vis-à-vis land, labour, capital and entrepreneurship
- Thus, communications and the technologies that support it (ICTs) occupy a strategic position now more than ever
Introduction

- Robust telecommunications network is important for economic growth
  - Constitutes significant portion of world economy
    - Revenue from Telecom services alone is estimated at USD1.26 trillion as at 2002.
  - Improves productivity and efficiency in other sectors
Introduction

- Increased adoption of ICTs in advanced societies implies that businesses in developing countries will adopt ICTs or become less competitive.
Introduction

- 30 of the 49 least developed countries are in Africa
- Telecom networks in Africa were among the least developed in the world
  - Accounted for 2% of the world’s main lines but 12% of the World’s population
Introduction

- Revolution is now taking place in telecoms in Africa
  - Africa is becoming the fastest growing region in the world for mobile communications (The ITU, 2003)
Introduction

- Africa presents the most fertile ground for investments in telecoms

“The enormous growth potential and revenue per line is higher in Africa than elsewhere.”

- Hamadoun Toure, 2003
  Head of the ITU Telecommunication Development Bureau
Telecom Trends: Global

- Two key events have defined development of telecoms globally:
  - Rapid Advances in Technology
  - Changes in Public Policy
    - mainly transition from Monopoly to Competition (Liberalization)
Telecom Trends: Global

- Technological Advancement
  - Rise of the Internet in the 1980s and 1990s creating opportunities for
    - New High speed data networks
    - New Multimedia applications
    - Voice Over Internet Protocol (Internet Phone) etc
  - Convergence of technologies
Telecom Trends: Global

- Transition from Monopoly to Competition / Liberalisation
  - Opening up of networks worldwide
  - Replacement of monopolies with competition
  - Separation of operating entities from regulators and policy makers
    - Over 120 countries worldwide now have independent regulatory agencies
Telecom Trends: Global

Countries establish separate regulatory body

Source: ITU World Telecommunication Regulatory Database
Telecom Trends: Global

- Transition from Monopoly to Competition / Liberalisation (Contd.)
  - Divestiture of government interests from telecom businesses
    - As at the beginning of 2003, more than half of the countries in the world have either fully or partially privatized
    - 17 African countries had partly privatised their incumbent operators by mid 2003
      (The ITU, ‘Trends in Telecommunications Reform 2003’)

- The success story on the positive impact of liberalisation continues
Telecom Trends: Global

Status of Liberalization

Source: ITU World Telecommunication Regulatory Database.

Source: The ITU, Trends 2003

30 October, 2003
Today, however, most of the planet’s 6.1 billion inhabitants are within reach of telephone service... for the first time in history there are now more telephone subscribers worldwide than there are households.

Source: The Official Daily Newspaper of ITU Telecom World 03.
Telecom Trends: Global

- Connected subscriber lines are growing
  - In 1999, there were 1.4 billion connected lines worldwide
    - Mobile 490 million; Fixed - 905 million
  - Today, there are nearly 2.5 billion lines
    - Mobile – 1.33 billion; Fixed – 1.21 billion
    (The ITU, 2003)
  - Thus in the last 4 years, we have added 1.1 billion lines to the 1.4 billion lines connected in all the years before
Telecom Trends: Global

- Mobile overtook fixed worldwide in 2002
  - In 2002 new users added worldwide:
    - Mobile – 200m; Fixed - 76m
  - As at year end 2002, the cumulative number of subscribers globally:
    - Mobile - 1.155b; Fixed – 1.129b
    - One in five people has a mobile phone as against one in 339 in 1991

(The ITU, Trends 2003)
Telecom Trends: Global

- Mobile overtook fixed (Contd)
  - Growth in mobile is generated mostly in developing countries
    - Between 1993 and 2002, mobile users in developing countries increased from 3m to over 500m
    - 45.8% of all mobile users are in developing countries
    - Some industrialized countries have reached market saturation with mobile penetration approaching 100% (ITU NEWS, Oct. 2003)
    - Mobile monthly subscriber additions: China – average of 5m per month since 2003; India – 1m added in July 2003 alone and in Aug 2003, Russia added 1.6m (The ITU, Trends 2003)
    - China is now the largest single telecom market in the world

30 October, 2003
Telecom Trends: Global

- Mobile overtook fixed (Contd)
  - Voice communication is preferred over mobile than fixed
    - In advanced societies with developed fixed networks, the number of households with fixed telephone lines has shrunk (The ITU, 2003)
    - Mobile accounts for more than one third of telecom revenues worldwide
    - In some countries, it accounts for more than half (The ITU, ‘Trends in Telecommunications Reform 2003’)

30 October, 2003
Telecom Trends: Global

Why has Mobile been so Successful?

- Effective Regulatory Framework
- 80% of countries have authorized competition
- Innovative Pricing Strategies, especially the Prepaid Platform
- Emergence of SMS
Telecom Trends: Global

- Developing world is becoming the El Dorado of new business opportunities
- Three out of four new phone users connected each year live in the developing world
- There are ten times more potential internet users in the developing world than in the developed world
Telecom Trends: Global

- Internet
  - Internet users grow by an average of 78 million new users annually
  - Almost all countries are on-line
    - An estimated 580m internet users worldwide as at the beginning of 2003
  - Broadband connection is growing at a rapid pace
    - In 2002, a third of all new internet users had broadband connections
    - As at year end 2002, cumulative number of broadband users was 63m

(The ITU, ‘Trends in Telecommunications Reform 2003’)

30 October, 2003
Telecom Trends: Global

- Roll out of advanced services increasing

Source: The ITU, Trends 2003
PART 2

TRENDS IN THE NIGERIAN TELECOMMUNICATIONS
At independence in 1960, there were less than 20,000 lines.

Early telecom development policies were influenced by political, administrative and military policies.
Upon independence in 1960, the Department of Post and Telecommunications (P&T) under the Ministry of Communications assumes responsibility for network operation and service provisioning.
Trends in Nigerian Telecoms – Post Independence

- Between independence in 1960 and 1985, there were 5 national development plans.
- The third national development plan 1975 – 80 targeted significant improvements in capacity and infrastructure in telecoms.
  - Roll-out target set at 1m lines.
  - Target later revised to 750,000 lines.
  - Target was however grossly unmet.
Trends in Nigerian Telecoms – Post Independence

- In 1984/85, telecom services became commercialized
  - postal and telecom functions of the P & T department became separated.
  - NITEL was created as government-owned monopoly operator

Scorecard as at 1987:

- Installed Capacity was 400,000 lines
- Connected lines stood at between 205,000 and 250,000 lines
- Range of services included
  - Fixed Telephone, Telegraph, Telex (and gentex) and Payphone

- No remarkable improvement recorded in performance of NITEL in the immediate subsequent years – demands were still unmet

- Possibly a retrogression
Trends in Nigerian Telecoms –

- Government therefore embarked on market-oriented reforms, partially liberalizing the Nigerian telecommunications sector via NCC Decree 75 of 1992

- Some of these reforms include amongst others:
  - Separation of the policy-making body (MOC) from industry regulator and network operators / service providers
  - Establishment of the Sector Regulator, the NCC, in 1992 (one of the oldest in Africa).
Trends in Nigerian Telecoms

- Without rules no game can be played fairly thus need for:
  - Sensible set of rules
  - Authority to enforce rules etc
- A strong and independent regulator becomes a prerequisite to enforce rule and regulations
Licensing of network operators / service providers began in 1996

NITEL continued to retain monopoly over voice Telephony in:
- National long distance
- International long distance
- Mobile Telephony etc
Trends in Nigerian Telecoms –

- Despite the huge potentials offered by the Nigerian telecom market, progress was slow
  - Military rule not favourable for independent regulatory performance
  - Political uncertainties and perceived policy inconsistencies, among other shortcomings prevalent at the time had combined to make for relatively unattractive investment climate in Nigeria.
Trends in Nigerian Telecoms –

- private investment was mere USD50m as at 1999
- huge unmet demand
  - an average of just 1 telephone line to 250 inhabitants as at that year.
  - About half of the functional connected lines held by government organizations and corporate bodies
  - An estimated 4 million lines in suppressed demand.
Trends in Nigerian Telecoms –

- Lines concentrated mostly in select urban centres
- Nigeria’s teledensity ranked better than only those of Afghanistan and Mongolia
- Weak Infrastructure Base
- Poor Quality of Service
  - Low Call Completion Rates
    - Byword - ‘All trunks are busy ….’
  - Billing Inaccuracy etc
    - usually overstated
    - two common alternatives: Pay or forfeit line
Trends in Nigerian Telecoms: NEED FOR SECTOR REFORM

Present Democratic government poised for growth

- To improve services
- Eradicate misuse of monopoly powers
- Increase sector efficiency through competition
- Encourage innovation and introduce advanced services
- Attract local & foreign investment
- Generate revenues for the government
Trends in Nigerian Telecoms:  
NEED FOR SECTOR REFORM

- Enhance value to consumers through improved range and pricing of services
- Extend services to underserved and unserved areas
PART 3

NIGERIA MOVES TO JOIN THE DIGITAL WORLD
Enthronement of democracy and responsive governance in 1999 with policy thrust to fully liberalise the industry

A new telecom policy released in year 2000, the hallmark of which, was the blueprint for full liberalization of the telecom industry.

The implementation of the policy has resulted in some measures highlighted below
Full Liberalisation: 2000 – Date
- Policy Measures

- Opening up, to competition, all market segments previously held under the monopoly of the incumbent operator e.g
  - national and international long distance services, mobile services, etc.

- Creation of a level-playing field
  - the incumbent operator, NITEL, brought under the regulatory oversight of the NCC in 2000
  - NITEL formally licensed in 2001
  - the appointment of management contractors, Pentascope Int’l, to ensure a more efficient NITEL.
  - efforts geared towards eventual privatization of the organization.
  - Management of Frequency Spectrum by NCC

- Strengthening the regulator
Full Liberalisation: 2000 - Date

- Easing or eliminating barriers to crossborder movement of capital and equipment vis:
  - Removal of Restrictions in level of Foreign Equity Participation
  - Reduction in level of import duties on telecommunications equipment from 25% to 5%
  - Simplification of procedures for importation of telecommunications equipment and development of related software
  - Granting of pioneer status to qualified investors
  - Fiscal incentives to encourage local manufacture
The Regulator, NCC - Objectives

- To extend **availability** of Telecommunications Services to all Nigerians.
- To promote effective competition in the market, to ensure fair pricing of good quality telecommunications services.
- Protecting consumer rights and interests.
- To Encourage massive investment in the Telecommunications Sector.
- Encouraging new and advanced services.
Positive Developments: Dividends of Liberalisation - 2000 - Date

- Strengthening the regulator and increasing its independence
  - A new telecommunications law signed by the President in July 2003 substantially increasing the powers and independence of the regulator.
  - The law specifically empowers the NCC to make regulations and guidelines for the industry.
Positive Developments: Dividends of Liberalisation - 2000 - Date

Licensing

- Successful Licensing of Four Digital Mobile Operators
- Licensing of Fixed Wireless Access (FWA) Operators
- Licensing of Second National Operator
- Licensing of two Long Distance Operators
- Licensing of Incumbent Operator – Nitel
Positive Developments – Dividends of Full Liberalisation

- Regulatory Intervention
  - Development of Spectrum Plan for the Nigeria
  - Spectrum Management transferred to the NCC
  - Interconnection Regulations and Guidelines published
  - Landmark resolution of interconnect disputes
  - Settlement of Interconnection Rates
  - Development of various regulations
Positive Developments – Dividends of Full Liberalisation

- Establishment of the Consumer Parliament – received national and international commendation
- Establishment of Consumer Affairs Bureau
### Positive Developments – Dividends of Full Liberalisation

#### Telephone subscribers

<table>
<thead>
<tr>
<th></th>
<th>Dec 99</th>
<th>Dec-00</th>
<th>Dec-01</th>
<th>Dec-02</th>
<th>Jun-03</th>
<th>Sep-03</th>
<th>Dec-03</th>
</tr>
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<tbody>
<tr>
<td>Digital Mobile</td>
<td>0</td>
<td>0</td>
<td>230,000</td>
<td>1,594,179</td>
<td>2,050,000</td>
<td>2,400,000</td>
<td>2,900,000</td>
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<tr>
<td>Fixed</td>
<td>450,000</td>
<td>536,202</td>
<td>600,321</td>
<td>702,000</td>
<td>724,790</td>
<td>1,200,000</td>
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<tr>
<td>Total Subscribers</td>
<td>450,000</td>
<td>536,202</td>
<td>830,321</td>
<td>2,296,179</td>
<td>2,774,790</td>
<td>3,124,802</td>
<td>4,100,000</td>
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#### No of Active Operators

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<tr>
<th></th>
<th>Dec 99</th>
<th>Dec-00</th>
<th>Dec-01</th>
<th>Dec-02</th>
<th>Jun-03</th>
<th>Sep-03</th>
<th>Dec-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Mobile</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td></td>
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<tr>
<td>Fixed (incl FWA)</td>
<td>9</td>
<td>16</td>
<td>16</td>
<td>19</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Carrier</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
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<tr>
<td>No. of Operating ISP</td>
<td>18</td>
<td>30</td>
<td>30</td>
<td>30 (est)</td>
<td>30 (est)</td>
<td>30 (est)</td>
<td>30</td>
</tr>
<tr>
<td>No of KM of Microwave Links</td>
<td>n/a</td>
<td>16,000km (est)</td>
<td>n/a</td>
<td>31,200km (est)</td>
<td>n/a</td>
<td>n/a</td>
<td>37000km</td>
</tr>
</tbody>
</table>

### Summary of Industry Milestones
Positive Developments – Dividends of Full Liberalisation

Growth in Connected Subscriber Lines

- Projected increase attributable to roll out plans of Fixed, Mobile and FWAs

Note: Dec 2003 figures are projections
Positive Developments – Dividends of Full Liberalisation

- Mobile overtakes Fixed
- Digital Mobile subscribers constitute 77% of total phone subscribers as at Sept 2003.
Positive Developments – Dividends of Full Liberalisation

- Connected telephone lines grew at an average of 10,000 lines per annum (in the 4 decades between independence in 1960 and end of 2000)
  - In last two years (Aug 2001 to Aug 2003), an average growth rate of 1m lines per annum was attained.
  - And by Sept 2003, total connected lines stood at estimated 3.1m.

- Nigeria – fastest growing mobile market in Africa and one of the fastest in the world
Private investment has grown by a phenomenal 5000% in about 3 years between Dec 1999 and June 2003.

Today, private investment in the telecom sector ranks second only to the oil & gas industry in the country.
Positive Developments – Dividends of Full Liberalisation: Growth in Investments

Significant positive correlation exist between investment and subscriber levels.
Positive Developments – Dividends of Full Liberalisation: Growth in Teledensity

- Total teledensity was 0.4 lines per 100 inhabitants in 1999; reached 1.96 in Dec 2002.
- It increased to 2.31 in June 2003 with mobile accounting for 74% of the total teledensity.
- By Sept 2003, the total teledensity was estimated at 2.6 lines per 100 inhabitants.
Positive Developments – Dividends of Full Liberalisation

- The mobile market was as at June 2003 dominated by two major operators, MTN & ECONET controlling over 90% of the market.

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Positive Developments – Dividends of Full Liberalisation

• With the entrance of GLOBACOM (Globacom deployed commercial services in Aug 2003), the competitive situation is changing.
Positive Developments – Dividends of Full Liberalisation

Universal Access Provision

• Boost in communications for the rural community
• The NCC Universal Service Provision (USP) programme at an advanced stage
• Pilot Projects identified for underserved, non commercially viable areas
• USP Fund soon to be established
• Ministry of Communications UA programme will provide additional access for rural community
Positive Developments –
Dividends of Full Liberalisation

Access Provision

• The ‘umbrella people’ are doing a great job providing access to many who cannot own telephones or mobile phones

• A major contribution to access provided by mobile and fixed operators
Positive Developments – Dividends of Full Liberalisation

- the ownership of mobile phones has been ‘democratised’:
  - Artisans, students, taxi drivers, market women etc now own phones

- Access to telecom greatly enhanced
  - Explosion of telecentres / cybercafe in all nooks and crannies of the country where signals are receivable
    - Cheap set-up costs
    - Low overhead – a table, an umbrella and a street corner

- This was not the case before when about half of the limited telephone lines were mainly held by government and corporate organizations.
Positive Developments – Dividends of Full Liberalisation: Tariff and Charges

- Reduction in Acquisition costs of New Lines
  - fixed telephone lines
    - Lines sold for an average of N100,000 at the end of 1999. But, today, low-end fixed lines go for as low as N20,000 or less.
  - analogue mobile lines
    - Reduced by 650% over the same period from N60,000 in 1999 to N7,999 in 2003.
Positive Developments – Dividends of Full Liberalisation: Tariff and Charges

Acquisition Cost of New Fixed Lines (=N=)

Note: PTO lines refer to the lowest end packages
Positive Developments – Dividends of Full Liberalisation: Tariff and Charges

Acquisition of Cost of GSM Lines

- NITEL GSM
- MTN
- ECONET
- Glomobile

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>Jun-03</th>
<th>Sep-03</th>
<th>Oct-03</th>
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</thead>
<tbody>
<tr>
<td>NITEL GSM</td>
<td>16,000</td>
<td>14,000</td>
<td>12,000</td>
<td>10,000</td>
<td>8,000</td>
</tr>
<tr>
<td>MTN</td>
<td>16,000</td>
<td>14,000</td>
<td>12,000</td>
<td>10,000</td>
<td>8,000</td>
</tr>
<tr>
<td>ECONET</td>
<td>16,000</td>
<td>14,000</td>
<td>12,000</td>
<td>10,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Glomobile</td>
<td>16,000</td>
<td>14,000</td>
<td>12,000</td>
<td>10,000</td>
<td>8,000</td>
</tr>
</tbody>
</table>
Positive Developments – Dividends of Full Liberalisation: Tariff and Charges

• Telecom Competition Intensifies
  • As Globacom introduces per-second billing along with a competitive tariff structure – Aug 2003.
  • MTN follows with introduction of per second billing,
    - reduction of call charges by 20% effective Dec 2003.

• Tariff / charges are expected to keep dropping.
Positive Developments – Dividends of Full Liberalisation: Tariff and Charges

- Reduction in costs

- Internet Usage
  - Charges for internet usage in cybercafe now range between N100 and N150 per hour as against N600 to N750 per hour in 1997
  - This represents about 500% reduction in usage charges over the period.
Positive Developments – Dividends of Full Liberalisation: Employment Generation

- **GSM**
  - Over 3500 people directly employed by the GSM operators alone
  - Estimated 400,000 indirect employment opportunities created through the operation of GSM
    - Recharge card hawkers, Resellers etc including the umbrella people
PART 4

CONNECTING WITH THE CONSUMER
The Consumer is king

- Consumer – the most important voice
- A lot of talk about technology
- No talk about what the consumer wants
- The consumer is one success factor for operators
- Without the consumer, the Operator, Regulator cannot be in existence
The Consumer - User of ICT Applications

- The Consumers are always faithful with use of new technologies and applications
- Data mobile estimated at 6 million as at 2002
- 31 billion emails were sent in 2002
- 60 billion emails estimated by 2007
- Usage is on the increase
What does the Consumer want - Consumer Expectation

- Reliability
- Simplicity
- Value for money
- Ease of use of technology
Changing Face of Customer Satisfaction

- Win – Win Situation
- Ensure customer service/satisfaction through segmentation
  - Segment customer base finely
  - Find out what each customer needs
  - Find out appropriate price for each segment.
- Delight the customer
- Security and Privacy essentials
Building Consumer Confidence

- Management of service is key
- Improve QoS
- Improve responsiveness to consumer complaints
- Woe the consumer – be sensitive to consumer needs
- Fair contracts/agreements
- Transparency
- Fair advertising
- Address consumer needs
PART 5

CHALLENGES
CHALLENGES

♦ LEGACY ISSUES

- Weak Infrastructure base
- Unusually huge demand for services due to inefficiencies of the past
- Spectrum Planning & Allocation problems
- Enabling Laws and Regulations limitations
- Unreliable Electric power supply
CURRENT ISSUES

- Interconnectivity
- Tariff Regulation
- Effective Competition
- Monitoring & Compliance
- Managing Consumer Expectation
- Consumer Education
- Institutional Strengthening
CHALLENGES – CONT’D

- Inadequate power supply leading to high cost of maintenance of generators and fueling
- Erratic availability of diesel
- Vandalisation by restive youths in some parts of the country
- Security issues – Need to increase security of personnel & equipment
CHALLENGES – CONT’D

- Paucity of Industry Information for policy, planning and regulatory rule-making
  - Information is needed by:
    - investors for business decision
    - Regulators for policy and regulatory rule-making
    - Government for Policy Making
    - Consumers and other stakeholders

Having the right information today is vital for success tomorrow
CONCLUSION

- TWO YEARS OF TELECOM SECTOR REFORM HAS BROUGHT ABOUT
  - Improvement in Investment Climate
  - Increase in number of market players
  - Unprecedented Growth in the Network
  - Substantial improvement in access to telecom facilities
  - Empowerment of the Nigerian
  - Respect from International Community
  - Employment Creation
  - Economic Stimulus
CONCLUSION
- Looking Ahead

- As the NCC prepares its next five year strategic plan, we need to address some of the challenges highlighted
- Moving towards asymmetric regulation
- Ensuring efficiency in the industry
- Ensure continuous improvement in the quality of service delivery
- Ensure efficient and cost effective service delivery
CONCLUSION

- Work towards managing consumer expectation
- Restore Consumer Confidence
- Concerted effort is required of all to improve socio-economic operating environment generally
CONCLUSION

- However, as we celebrate, let us remember that there are still scores of villages and communities in Nigeria that do not have connections of any sort.
- They must not be isolated and deprived of the benefits of ICTs
- We must strive to include all and exclude none, reach the unreached and provide for the have-nots in our country
CONCLUSION

Nigeria has cause to celebrate the two years of telecom revolution
Attaining an efficient and sustainable Nigerian Telecom industry is a collective responsibility of all - the Government, Operator, Regulator and the Consumer.
THANK YOU.

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