

THE NIGERIAN COMMUNICATIONS COMMISSION

**FIXED DATA WIRELESS ACCESS AND
BROADBAND FIXED WIRELESS ACCESS
LICENSING**

INITIAL CONSULTATION DOCUMENT (ICD)



Foreword by the Honourable Minister of Communications

On behalf of the Federal Government of Nigeria, I am delighted to announce our intention to award licences for operators of Fixed Data Wireless Access networks. The licensing process is expected to take place towards the latter part of 2001.

The Government is determined to foster the development of a successful and competitive market for telecommunication services in Nigeria. This is essential to the future development of Nigeria, the national economy and our international competitiveness both within Africa and the wider global markets. In offering the licences openly, the Government is committed to a fair and transparent licensing process. We are acting to bring the full social and economic benefits through increased investment, job opportunities and competitive telecommunications services to the peoples of Nigeria. Those who are successful in obtaining a licence will have the opportunity to play a leading role and benefit from the development of the huge unrealised potential of Nigeria's domestic telecommunications market.

This consultation document introduces the Nigerian Communications Commission's plans for the licensing process.

We welcome your comments.

Dr. Bello Haliru Mohammed
Minister of Communications

1. Introduction

The Federal Government of Nigeria and the Nigerian Communications Commission (NCC) are committed to facilitating the development of fixed wireless access (FWA) communications in Nigeria. Fixed wireless access offers a fast and efficient means for local connections to the telecommunications network, providing improved access to Internet and data services. The NCC recognises that there is considerable demand for access to these services that is only partially met at present. Many potential users and operators have called for licences to be issued as soon as possible to facilitate the development of fixed wireless services. The purpose of this document is to begin ongoing consultation with interested parties in the run up to the licensing process.

The NCC wants to see strong competition in this market in order to deliver choice and maximise benefits to consumers. By allocating licences, the NCC is working to promote the emergence of a competitive market to the benefit of all.

Objectives

The Government's overall aim is to secure for the long-term benefit of consumers and the national economy, the timely and economically advantageous development of Fixed Data Wireless Access and Broadband Fixed Wireless Access services in Nigeria.

Subject to this overall aim the Government's objectives are to:

- i) Utilise the available spectrum for Fixed Data Wireless Access and Broadband Fixed Wireless Access services with optimum efficiency; and
- ii) Promote effective competition for the provision of Fixed Data Wireless Access and Broadband Fixed Wireless Access services.

Indicative Timetable for FWA Licensing

The intended timetable for the auction is as follows:

- September 2001 Issue of Information Memorandum
- October 2001 Applications to pre-qualify for the auction
- November 2001 Auction and grant of licences

This timetable is indicative only. The final timetable will be subject to the outcome of consultation, final decisions and market developments nearer the time.

2. Further Information

Although work is currently under way, there is much that needs to be taken forward both within Government and on the part of potential bidders who will need to prepare their business cases and bid strategies. The NCC has enhanced its website (www.ncc.gov.ng) and will use this as the primary medium for disseminating information openly and equitably to all interested parties. This further information is expected to include the following:

- details of the auction design;
- details of the regulatory framework;
- application procedure including amount of deposit;
- reserve price(s);
- spectrum packages;
- the draft licence.

The NCC will continue to consult with interested parties until the publication of a formal Information Memorandum providing full information for those parties wishing to bid for a licence.

To facilitate the consultation process potential bidders are urged to register now, in confidence and without obligation, for a copy of the Information Memorandum on the form enclosed. The Information Memorandum will be published in a downloadable format on the NCC website, but registering for it now means that any updates or additional information can be provided to those parties more readily.

3. Submitting Comments

The NCC wishes to encourage interest from the worldwide telecommunications community and welcomes responses to consultation from all interested parties. At this early stage, comments are sought on the matters outlined in the Initial Consultation Document and in particular on the anticipated timetable and any concerns of potential bidders. Decisions on the final timetable and procedures to be followed will give full weight to the picture that emerges from consultation. Comments and/or registration for a copy of the Information Memorandum should be submitted in writing to:

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Executive Vice Chairman/Chief Executive
Nigerian Communications Commission
Plot 19, Aguata Close
Near CBN H/Quarters, Garki II
P.M.B.326 FCT
Abuja
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Fax: +234 (0) 9-2344593
Email: fwa@ncc.gov.ng

Please note that the NCC reserves the right to publish any comments received and its response on the NCC website. However, the identity of those submitting comments will not be published where it is requested that this information is kept confidential.

It would be helpful if lengthy comments to be publicly available are also supplied on disk, preferably in 'Word' format for placement on the NCC's website.

4. The Fixed Wireless Access Opportunity

The rapid and unprecedented growth in telecommunications and information technology elsewhere in the world is now reaching saturation point and attention is shifting to Africa as one of the last major markets for telecommunications. In Nigeria, international businessmen, governments, educational institutions and private individuals are demanding high quality and easily available telecommunications services to the same standards as are available internationally.

With a population of over 120m, Nigeria is home to one out of every five people that inhabit sub-Saharan Africa and as such represents 20% of the telecommunications market in that area. The democratic government that was ushered in on 29 May 1999 has taken steps to focus world attention on Nigeria as the country with the highest potential for foreign investment on the African continent.

The Government of Nigeria is conscious of the role telecommunications can play in national development and is therefore committed to ensuring that the telecommunications network is expanded rapidly. To this end the Government intends to promote the development of Fixed Wireless Access throughout the country.

Fixed Wireless Access, also known as Radio Fixed Access or Wireless in the Local Loop, is the use of radio technology to provide the so called "last mile" connection between users and the core telecommunications network. Fixed Wireless Access allows fast deployment, taking typically half the time to rollout as alternative access solutions (copper, fibre) and so allows operators a quick flexible market entry.

There are broadly speaking two forms of Fixed Wireless Access systems – narrowband and broadband – distinguished by the data rates they offer. In the remainder of this report the term Fixed Data Wireless Access (FDWA) is used for narrowband systems offering up to 2 Mbps. It is expected that FDWA will be capable of delivering the following services:

Voice telephony; together with
Data-services (always on access to the Internet, data transfer) with achievable typical speeds of 64kbps to 2Mbps.

The data rates ultimately offered to FDWA customers will be the result of commercial decisions by operators and will be made on the basis of the bandwidth available relative to the requirements of their target market.

Broadband Fixed Wireless Access (BFWA) services are characterised by the maximum bandwidth or bit-rate available to the end user. In comparison with FDWA, BFWA services are usually considered to be those offering data rates in excess of 2 Mbps. However this is very much a minimum figure and it is expected BFWA systems should provide for data rates of around 2 to 5 Mbps to the end user in order to compete with, or complement, other delivery technologies. It should be recognised that the data rates ultimately offered to BFWA customers will depend on the operators' spectrum allocations, modulation techniques, their network deployment strategies and radio planning.

The services BFWA will deliver are likely to include:

- fast always-on access to the Internet;
- high capacity data transfer;
- video conferencing;
- leisure services (interactive games and audio);
- on-line banking and shopping;
- LAN access; and
- web serving.

5. Why an Auction?

Auctions are a fast, fair and transparent way of allocating licences as witnessed in the recent digital mobile licensing process conducted in Nigeria. They are objective – their outcome is easy to understand, and difficult to challenge. Use of an auction process to allocate licences can overcome the inherent difficulties of the alternative method of comparative selection whereby Government officials are required to judge applicants and their proposals to decide who is “best”. Auctions thereby free the selection process from any pressures to favour any vested interests, national or international bidders, or any confusion of objectives.

An important advantage of the auction process is that it allows the market rather than Government to value the licences. In assessing what to bid for a licence, bidders are forced to calculate the true value to them of that licence. In making these valuations transparent through the bidding process, an auction ensures that the full value of a licence is then shared with the community through the licence fee.

Auctions are economically efficient. Where the demand for licences exceeds the supply, a carefully designed and properly run auction, with well informed bidders will ensure that licences go to those who value them most and will make best use of them. As a completely objective process, auctions open the opportunities to the widest possible range of companies or consortia, and encourage competition. By providing a relatively fast licensing process without the complications of comparative selection, an auction can achieve licensing certainty more quickly allowing for an earlier roll-out of services and thus an earlier start to the economic and social benefits that flow from them.

NCC is considering allocating the spectrum through an auction process but welcomes views on the best process to adopt to ensure fairness and transparency.

6. What is the NCC doing now?

The NCC is currently reviewing a number of areas, including the following:

Spectrum and number of licences

The NCC is looking at the amount of spectrum that should be made available for FWA and at the bands that would be suitable. It has identified three bands that could be made available for Fixed Data Wireless Access and Broadband Fixed Wireless Access – 3.5, 10 and 26 GHz - and is examining how much spectrum might be available in each of them. There may be other bands that are suitable and the NCC will consider these as they become available. The intention is to auction FDWA initially, followed by BFWA. For FDWA, the aim would be to auction paired channels in both the 3.5 GHz and 10 GHz bands.

The NCC does not wish to specify the number of licences that should be available in a licensing region or the amount of spectrum contained in each licence. Bidders will decide how much spectrum they need to deliver their service and will bid for it subject to minimum and maximum amounts.

The NCC welcomes views on the bands suggested for FDWA and on the minimum amount of spectrum required in each band.

Licence coverage areas

Fixed Wireless Access is essentially a localised service but licence coverage areas can be much larger. Large licence areas provide a more viable commercial opportunity and allow more efficient use of the available spectrum. The Government considers that regional licence areas would be a way of meeting the demand both for services at the State Government level and for national coverage: an operator looking for national coverage could do this by obtaining a licence in each region. The NCC is considering using the 36 states plus the Federal Capital Territory to give 37 licensing regions. Due to the complexities involved the NCC is considering whether to hold a number of licensing processes at different times for the different regions or to conduct them simultaneously.

The NCC welcomes views on whether licence coverage areas should be local, national or regional and the licensing process being staggered.

Auction Design

The NCC is looking closely at the design of the auction to ensure that an appropriate process with clear, straightforward rules can be achieved. Decisions will need to be taken as to the pre-qualification requirements to be applied to applicants, the fixing of reserve prices for the licences and deposit. A decision as to the optimum auction design will be developed in the light of the overall objectives for the auction, the evaluation of licensing options, the likely number of bidders and technical feasibility.

The NCC recognises the advantages to companies joining to form consortia to ensure the appropriate financial backing and technical expertise. Such collaboration in bidding for licences must not, however, lend itself to anti-competitive practices and the auction rules will be developed to address this area. An important aspect of the pre-qualification criteria will

be linked to the need to establish effective competition. Anti-competition issues would arise if the same company successfully bid as part of more than one consortium for a licence.

The NCC welcomes views on issues, in particular competition issues, arising from bidding by consortia.

Licensing

The licences will contain a 'use it or lose it' obligation. Its purpose will be to ensure the efficient use of the spectrum. It is not intended to set commercial targets for operators, which must be a matter for their own judgement. But it will require the timely provision of services to end users. Failure to meet the obligation could result in licence revocation.

The NCC welcomes views on what constitutes a reasonable obligation, given the logistics, differing licence packages and costs of establishing a fixed wireless access network.

7. NCC Advisors

The NCC has engaged Radio Spectrum International Consulting Limited (RSI) as its main advisor on the development and management of the auction process. RSI is a joint venture between the UK Government's Radiocommunications Agency (which is responsible for the licensing and management of the UK's civil radio spectrum) and CMG, a major European Consultancy. RSI were closely involved in the development of the UK's auction for third generation mobile spectrum licences held in 2000. It also advised the NCC on the digital mobile licensing auction that was successfully completed in January 2001.

Nigeria Fixed Wireless Access Licence Auction

Please use the following to register to receive a copy of the Information Memorandum for the auction of Fixed Data Wireless Access Licences in Nigeria.

Kindly complete the form below and fax to 234 (0) 9-2344593.

Name: _____

Title: _____

Company: _____

At the following address:

Telephone No: _____

Fax No: _____

Email: _____