

# APPENDIX F

## FREQUENCY SPECTRUM LICENCE

NO. SL/2.3GHz/00/13

GRANTED TO

XXXXXXXXXXXX LIMITED

UNDER SECTIONS 121 AND 125 OF THE NIGERIAN COMMUNICATIONS  
ACT 2003

### THE LICENCE

1. This Licence issued by the Nigerian Communications Commission (“the Commission”) under Section 6 of the Wireless Telegraphy Act (WTA) Cap 469, Laws of the Federation of Nigeria, 1990 and Sections 121 and 125 of the Nigerian Communications Act, 2003 (“the Act”) authorises XYZ Limited (“the Licensee”) of XXX Street, Nigeria to; establish, install, and use radio transmitting and receiving stations and/or radio equipment (herein jointly referred to as “the Radio Equipment”) subject to the terms and conditions set out below.
2. This Licence is for a term of 10 (ten) years and shall enter into force on DDDD, unless it is earlier revoked in accordance with relevant provisions of the Act, WTA and this Licence.
3. This Licence is valid for the provision and operation of the services specified in the Special Conditions to this Licence within Nigeria.

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DR. EUGENE JUWAH  
EXECUTIVE VICE-CHAIRMAN/CHIEF EXECUTIVE

## GENERAL CONDITIONS

### 1. Amendment of Licence

- (a) The Commission may amend this Licence if the Commission determines that such amendment is necessary to achieve the objectives of the Act or any relevant Regulations or the public interest taking into consideration the rights and interests of the Licensee.
- (b) The Commission shall give the Licensee a written notice of its intention to amend a licence and the Licensee may make submissions on the issue within the time period specified by the Commission in its written notice, but not less than 30 (thirty) days from the date of the said Notice.

### 2. Changes in Licensee's Particulars

The Licensee shall give prompt written notice to the Commission of any changes in its particulars.

### 3. Take over of Equipment

If an operator's frequency Licence is revoked, leading to cessation of service, the operator shall be required by the Commission to buy back all Customer Premises Equipment sold by the operator that cannot be used on other networks, or the operator shall be required to refund a mutually agreed depreciated value of the Customer Premises Equipment.

### 4. Expiration and Renewal of Licence

- (a) This Licence shall expire and all operating authorization under it terminate:
  - (i) Upon the expiration of the Licence term, unless renewed in accordance with this Licence.
  - (ii) By Mutual Agreement between the Commission and the Licensee.

- (b) This Licence shall be renewed upon the expiration of the tenure granted and remain valid for such further period as the Commission may determine unless the Licensee has given written notice to the Commission before the expiry date of its intention not to renew the Licence.
- (c) The Commission reserves the right not to renew the frequency spectrum Licence at the expiration of the Licence upon giving the licensee notice of at least six (6) months before the expiry date of the renewed Licence of its intention not to renew/reassign the frequency.
- (d) In all cases of renewal, the Commission shall have the right to refuse renewal in the event of the occurrence of any of the following circumstance
  - (i) If the Licensee refuses, fails or neglects to pay the renewal fees in the manner specified in this Licence;
  - (ii) If the licensee refuses, fails or neglects to settle its interconnection bills with other operators;
  - (iii) If the licensee refuses, fails or neglects to pay its annual operating levy as may be specified in the licensee's operating Licence;
  - (iv) If the Licensee refuses, fails or neglects to pay any other outstanding financial obligations to the Commission.

## 5. Transfer of Licence

- (a) The Licensee shall not transfer or assign in any manner the rights, interests, or obligations under this Licence to another person without the prior express written consent of the Commission.
- (b) This Licence shall be personal to the Licensee and shall not without the prior express written consent of the Commission be operated by any third party, organization, or person whomsoever including but not limited to the Licensee's subsidiary or associated companies.

6. Licence Renewal Fees

Not later than 6 (six) months prior to the expiration of this Licence, the Licensee shall pay such licence renewal fees as shall be determined by the Commission, without set-off or counter-claim, failing which the Commission may refuse to renew this Licence.

7. Refund of Licence Fees

If this Licence is revoked in any of the circumstances aforementioned, there shall be no refund of the Licence fee or any installment of the Licence fee whether in whole or in part, except at the absolute discretion of the Commission, whose decision shall be final.

8. Licence Revocation

The Commission may at any time after giving the Licensee 3 (three) months notice to that effect, revoke this Licence in any of the following circumstances:

- (a) If the Licensee agrees in writing with the Commission that this Licence be revoked.
- (b) If for 12 (twelve) consecutive months the Licensee ceases to provide the services for which it was issued a Licence under the Act.
- (c) If the Licensee is in willful and repeated breach of any of the conditions attached to this Licence or any conditions of the Act and such breach has not been ratified within 60 (sixty) days from the date of notification by the Commission to the Licensee of same.
- (d) If the Licensee, without due authorisation from the Commission uses the frequency bands assigned to it under this Licence for the provision of any service other than that for which it was assigned.
- (e) If the Licensee has made false statements, representations or warranties in applying for and obtaining this Licence.
- (f) If the Licensee enters into liquidation or is otherwise declared insolvent, bankrupt or is in receivership.

- (g) If the Commission, in accordance with the Act, considers it to be in the National Interest, or in war or National emergency situation.
- (h) If the Licensee fails to eliminate interference caused to other users after being duly directed by the Commission.
- (i) If there are changes in the share structure of the company in excess of 10% of the total equity without due approval by the Commission.
- (j) If the spectrum fees are not paid as and when due.

9. Uses of Frequency

The use to which the Licence shall be applied by the Licensee shall be as specified in the Special Conditions hereto.

10. Co-ordination of Frequency Assignment

The Licensee is required to implement frequency co-ordination in conjunction with other licensees in adjacent licensing regions or frequency bands in order to come into agreement on the location of cell sites, selection of frequency slots or release of guard bands in order to avoid interference.

11. Radio Equipment Use

The Licensee shall ensure that the Radio Equipment is constructed and used only in accordance with the provision specified in the Special Conditions to this Licence. Any proposal to amend the specification in Special Condition of this Licence shall be implemented only after the prior written consent of the Commission had been sought and obtained and the Licence has been amended accordingly.

12. Type Approval of Equipment

The Licensee shall ensure that its equipment is type approved by the Commission or any agent accredited to the Commission before commencing operations; and such other equipment that are acquired after commencement of operations shall also be type approved in accordance with the Act.

13. Access and Inspection

The Licensee shall permit any person(s) authorised by the Commission:

- (a) to have access to the Radio Equipment; and
- (b) to perform any measurement on the equipment for the purpose of assessing its performance;

at any and all reasonable times or, when in the opinion of the Commission an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of this Licence.

14. Modification, Restriction and Closedown

The Commission may require the Radio Equipment or any part thereof, to be modified, restricted in use, or to be permanently or temporarily closed down immediately if in the opinion of the Commission:

- (a) a material breach of this Licence has occurred; and/or
- (b) the use of the Radio Equipment is, or may be, causing or contributing to undue interference to the use of other authorised radio equipment.

15. Emergency

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 closed down either immediately or on the expiry of such period as it may specify.

16. Geographical Boundaries

The geographical boundary of the Licence in particular, the location of station, relocation of station otherwise referred to as bearing or any of its derivatives, signal coverage or any other matter relating to or connected with geographical boundary or limitation shall be as specified in the Special Conditions to this Licence. The Licensee shall ensure that under no condition shall the radio emission from its equipment go beyond the Nigeria International boundary especially when the authorised region of operation is adjacent to any neighbouring country or a littoral state.

17. International Boundaries/Co-ordination

All licensees of radio communication services, whose operating region is near or adjacent to Nigeria's international border, must ensure that radio signals from its equipment are contained within the geographical boundaries of the Federal Republic of Nigeria. Where co-ordination is required with neighbouring countries, the licensee must take a written application for such co-ordination to the Commission.

18. Adjacent Channels Co-ordination

Licensees are required to strictly adhere to the ITU technical specifications on emission and to co-ordinate with operators in the adjacent frequency slots to control their out-of-Band Emissions to avoid interfering with each other.

19. Penalty for Interference

- (a) Major Interference: Where emission constitutes a harmful interference to another licensee's operation which in the opinion of the Commission is within the reasonable control of the interfering Licensee, the Licensee shall without prejudice to the provision of Section 9(c) of WTA be required to remove the source of the interference immediately the Licensee is notified, failing which the Licensee shall be in breach of this Licence.
- (b) Permissible Interference: In the case of minor interference, the Licensee shall eliminate the interference within the time limit that may be stipulated by the Commission in each case.
- (c) Where emission constitutes any form of interference as stated above, the Licensee shall be liable to payment of a penalty as stipulated in the Nigerian Communications (Enforcement Processes, etc) Regulations, 2005 or any amendment thereto.
- (d) Further and in addition to 19(c) above, the interfering licensee may be required to pay compensation to the affected party if the interference causes a loss of revenue.

20. Keeping of Records

During the period that this Licence remains in force and for 6 months thereafter, the Licensee shall compile, maintain and make available to

the Commission accurate records of the following details relating to the Radio Equipment in the format specified by the Commission:

- i. Antenna height, type, direction of radiation, maximum EIRP and polarisation;
- ii. Radio frequencies in operation and emission designation;
- iii. Break in service affecting 30% or more of the system and lasting more than 30 (thirty) minutes; and the Licensee shall produce the above records when a person authorised by the Commission requires it to do so.
- iv. Any other operational parameter of the Radio Equipment as may be required.

21. Network Build-Out Record

- (1) During the period that this Licence remains in force and for 6 months thereafter, the Licensee shall compile and maintain accurate records of the following:
  - (i) The number, location and geographical coordinates of cell sites/BTSs built and/or commissioned by the Licensee;
  - (ii) Location and geographical coordinates of all equipment capable of radiating, receiving or reflecting wireless radio signals used in the network. These include, but not limited to base station controllers and other similar equipment; repeater stations (Passive and Active) used for intra-city backhaul or inter-city long distance transmission. These records shall be submitted in the format as may be specified by the Commission from time to time.
- (2) The Licensee shall send an updated copy of the above records to the Commission on a quarterly basis for every year during which the Licence remains in force. The updates should include previous submissions in black font, indications of deleted links in red, added links in blue and/or links with parameters modified in purple, and should be filed on the 1st of April, August and December. The Licensee shall also produce the above records when a person authorised by the Commission requires him to do so.
- (3) The template for the submission of the data shall be such as is provided from time to time on the website of the Commission.



22. Radio Equipment Operation

The Licensee shall ensure that the Radio Equipment operates in accordance with the appropriate Standards published by the Commission.

23. Support Facilities

Tower: All towers shall meet the detailed standards on structural materials, finishing and other parameters specified in the Technical Specifications for the Installation of Masts and Towers issued by the Commission (and as may be amended from time to time) or issued by other agencies of government authorised to make such specifications.

24. Use-It-Or-Lose-It

The launch of commercial services shall be no later than 12 (twelve) months from the effective date of this License

25. Roll-Out, Coverage and Service Obligations

The winning licensee shall be required after the operational license award to roll out services at least as follows:

- i, Three states capitals in year 1,
- ii, Four additional state capitals in year 2,
- iii, Six additional state capitals in year 3,
- iv, Twelve additional state capitals in year 4
- v, Twelve additional state capitals in year 5 and
- vi, 2/3 of all local government headquarters in the remaining License period.

In the event of the winning licensee's inability to deploy services as specified herein, the Commission reserves the right to sanction the licensee based on relevant sections of existing regulations except for areas where force majeure is established.

For the purpose of this licensing process, roll out shall be understood to mean that a service signal is available to at least one-third (1/3) of the population of each state and local government area (LGA) as appropriate.

## SCHEDULE 1 TO THIS LICENCE

This Schedule forms part of Licence No. XXXXX, issued to XYZ Limited (“the Licensee”) effective from DDDDD.

### SPECIAL CONDITIONS

1. Scope  
To build and operate a telecommunications network to provide voice telephony, video services, multimedia services, web browsing, real-time video streaming, video surveillance, network gaming, e-mail, SMS, file transfer, broadband data and location based services, and other services that may be authorised. The network should also allow end-users to gain access to other telecommunications service providers.
2. In providing the above services, the Licensee must ensure that there is no breach of copy right laws and regulations
3. The network built and operated shall at all times comply with:
  - a. Electromagnetic compatibility specifications
  - b. International specifications and standards
  - c. Coordination guidelines to avoid harmful interference to other telecommunication service providers
  - d. Spectral mask defined for the relevant services
  - e. Restrictions on permissible field strength at the borders with neighbouring countries
  - f. Quality of Service benchmarks for data services published by the Commission
  - g. Memorandum of Understanding (MoU) reached with neighbouring countries as it relates to coordination of signals at border locations.
4. The Licensee shall perform its own analysis of potential interference scenarios and negotiate with third parties where its equipment is co-located close to other licensees’ equipment.

5. The Licensee must at all time comply with all relevant Nigerian legislations on issues which include but are not limited to Data Retention, Emergency services, Lawful Interception, Freedom of Information.
6. The services to be provided further to the issuance of this Licence shall only be provided within the geographical boundary of the Federal Republic of Nigeria
7. The frequencies to be used for the provision of the services are as outlined in Annexure 1 hereof. All other frequencies such as backhaul microwave frequencies etc. that are required to roll-out services shall be applied for separately and shall be at additional cost.

## ANNEXURE 1

### ASSIGNED FREQUENCIES

#### *1.1 Duplexing Technique*

Time Division Duplex (TDD)

#### *1.2 Frequency Spectrum Slot*

2360-2390 MHz

#### *1.3 Area/State(s) of Operation*

National Coverage

## Interpretation

In this Licence:

- (a) The Special Condition and the annexure hereto form part of this Licence;
- (b) The establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installations as well as equipment for wireless telegraphy as specified in Section 2 of the WTA;
- (c) The Interpretation Act, Cap 192 Laws of the Federation of Nigeria, 1990 shall apply for the purpose of interpreting this Licence.

Access Point Transceivers – Any station that provides connection between the Licensee’s network and other telecommunications networks.

Assigned Frequency Spectrum – The centre of the frequency band assigned to a station.

Assigned Frequency Spectrum Band – The frequency band which the emission of a station is authorised; the width of the band equals the necessary bandwidth plus twice the frequency tolerance. The width of the band is symmetrical around the centre frequency within which the sideband emissions are to be contained.

Assignment – Authorisation given by an administration for a radio station to use a radio frequency or radio frequency channel under specified conditions.

Authorised Bandwidth – Necessary bandwidth.

Carrier Power – The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.

Class of Emission – The set of characteristics of an emission, designated by standard alphanumeric symbols, e.g. type of modulation of the main carrier, modulating signal, type of information to be transmitted, and also, if appropriate, any additional signal characteristics.

Customer Premises Equipment – (CPE) means any station that provides connection between the Licensee's network and an end user, not including connection to any telecommunication equipment forming part of any other public telecommunication system;

Deep Space - Space at distance from earth equal to, or greater than 2 million kilometers.

Earth Station – A station located either on the Earth's or within the major portion of the Earth's atmosphere and intended for communication:

- with one more space stations; or
- with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

EIMP – Effective monopole radiated power (in a given direction): The product of the Power supplied to the antenna and its gain relative to a short vertical antenna in a given direction.

EIRP – Equivalent isotropically radiated power: The product of the power supplied to the antenna and its gain relative to a short vertical antenna in a given direction.

ERP – Effective radiated power (in a given direction): The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Electromagnetic Compatibility (EMC) – The prevailing condition under which a telecommunications equipment is capable of operating under its specified performance range in a common electromagnetic environment without causing or suffering unacceptable degradation in performance due to unintentional electromagnetic radiation to or from other equipment within the same environment.

Emission – Radiation produced, or the production of radiation by a radio transmitting station.

Feeder Link – A radio link from an earth station at a given location to a space station or vice versa conveying information for a space radio communication service but which is not for a fixed satellite service. The given location may be at a specified fixed point, or at any fixed point within specified areas.

Frequency Spectrum Bands – A frequency band is a given range of frequencies defined by a lower limit and an upper frequency limit. The band is usually known or called by its centre (mid-point) frequency and may comprise two or more sub-bands. E.g. 3.5 GHz covers the range 3.4 to 3.6 GHz. Mid frequency = 3.5 GHz.

Frequency Spectrum Shift – Maximum permissible departure of the centre frequency of the frequency band occupied by the emission from the assigned frequency.

Harmful Interference – Interference that endangers the functioning of a radio navigation service or other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communication service operating in accordance with radio regulations. Any form of unwanted signal that causes a total or partial loss of service to a radio communication station or any unwanted emission of radiation that endangers life such as interference to aircraft operation, distress channels, ambulance or security services.

Inspect – includes examine and test.

Interference – The effect of unwanted energy due to emissions, radiations or inductions upon the reception of a radio communication system manifested by any performance degradation, misinterpretation, loss of information which could be extracted in the absence of such unwanted energy.

Landing Right – Right to transmit signals to and from the territory of a country other than the one that licensed the satellite.

Mean Power – The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.

NCAA – Nigerian Civil Aviation Authority.

Necessary Bandwidth – The least bandwidth that permits satisfactory transmission of a signal.

Necessary bandwidth – For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

Occupied Bandwidth – The bandwidth symmetrical around the assigned frequency within which 99% of the radiated power is contained or the width of a frequency such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage  $\hat{\alpha}/2$  of the total mean power of a given emission.

Unless otherwise specified in an ITU-R Recommendation for the appropriate class of emission, the value of  $\hat{\alpha}/2$  should be taken as 0.5%.

Out-of-Band-Emissions – Emission on a frequency or frequencies immediately outside the necessary bandwidth which results from the modulation process, but excluding spurious emissions.

Peak Envelope Power – The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.

Permissible Interference – Observed or predicted interference which complies with quantitative interference and sharing criteria contained in these regulations or in ITU-R Recommendations or in special agreements as provided for in these Regulations. Any form of unwanted radiation, whether intentional or non-intentional, that causes a degradation of or tolerable disturbance to a radio communication service to the extent that it does not cause a partial or total loss of service.

Protection Ratio – The minimum value of the wanted to unwanted signal ratio, usually expressed in decibels (dB), at the receiver input, determined under specified conditions such that a specified reception quality of the wanted signal is achieved at the receiver output.



Radiodetermination – The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radio Equipment – Equipment used as transceivers including Access Point Transceivers, customer premises equipment and radio relay repeaters which are connected within a network.

Radio Location – Radiodetermination used for the purposes other than those of radionavigation.

Radionavigation – Radiodetermination used for the purpose of navigation, including obstruction warning.

Radio Relay Repeater – means any station of the network that forwards a communication to another station of the network.

Radiotelemetry – Telemetry by means of radio waves.

Satellite Link – A radio link between a transmitting earth station and a receiving earth station through one satellite. A satellite link comprises one uplink and one downlink.

Spurious Emission – Emission on a frequency or frequencies which are outside necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasite emissions, intermodulation products and frequency conversion products, but exclude out-of-band emissions.

Station (Radio) – One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radio communication service, or the radio astronomy service.

Subsidiary or Associated Companies – Any company of which the Licensee has a controlling or substantial interest.

Telecommand – The use of telecommunication for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.

Telemetry – The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.

Third Party Organisation – Any organization to which this Licence has not been issued which is carrying on or intends to carry on telecommunications undertaking.

Undue Interference – shall have the same meaning that it has under the Act.