



www.ixp.net.ng

Internet eXchange Point of Nigeria

Memorandum of Understanding



Dated 1st January 2019

Table of Contents

1. Preamble
2. Definitions
3. Objectives of IXPN
4. Legal Structure of IXPN

PART II

5. Membership requirement
6. Associate Member
7. Member Responsibilities
8. Responsibilities and Services provided by IXPN
9. Non-Compliance
10. Termination
11. Communication
12. Fees
13. Publicity
14. Confidentiality
15. Insurance and Liability
16. Governing Law
17. Dispute Resolution
18. Amendment
19. References

Appendix 1-Technical Requirement

1. Preamble

This Memorandum of Understanding (MoU) contains the objectives of IXPN, membership requirement, being an IXPN member or associate member, services that IXPN provides to its members, the obligations of members and associate members. It shall be signed by all new members, and forms a formal agreement between IXPN and the member. This MoU is placed in the public domain to help organizations that wish to join to understand what IXPN is, and its requirements and commitments.

2. Definitions

“Associate Member” means any organization admitted into associate membership by IXPN upon such terms and conditions as the board may from time to time determine.

“Core Activity/ies” means an activity undertaken by IXPN, in furtherance of objectives in Section 3(1) of the MoU.

“Board” is Board of Directors as defined in the Memorandum and Articles of Association- See Section 19(1) “References”.

“Fees” are the charges paid for services, provided by IXPN, as contained in Section 8.

“Fees Schedule” refers to the document that sets out fees payable by a member for services - See Section 19(2) “References” and as contained in IXPN website.

“Joining Fee” refers to the one-off payment made by a new member as contained in Fees Schedule. -See Section 19 “References”.

“Membership Fee” refers to the quarterly payment made by a member as contained in the Fees Schedule.

“Joining Procedure” refers to the procedure for joining IXPN- See Section 19(3) “References”.

“IXPN” means the Internet eXchange Point of Nigeria, a duly registered legal entity.

“Member” refers to an organization that has (1) successfully met and continues to meet IXPN joining requirements as contained in part II Section 5 “membership requirement (2) has signed a copy of this MoU, (3) has complied with the Joining Procedure. Such a member is eligible to receive IXPN services under the terms of this MoU.

“Member’s Equipment” means any equipment owned by, leased to, or otherwise controlled by a member, who is here referred to as the “Owner” irrespective of the actual method of control or ownership.

“Memorandum of Understanding” or “MoU” means this agreement between IXPN and the member, together with its references, appendix, as well as its definitions.

“Non-Core Activity” means an activity undertaken in furtherance to the objectives in Section 3(2) of the MoU.

“Services” refers to the services provided by IXPN to a member.

“Technical Requirements” means those requirements to which all members shall adhere to and which are contained in Appendix 1 of this MoU.

3. Objectives of IXPN

IXPN has two primary objectives:

1. To provide efficient interconnectivity within the Federal Republic of Nigeria for the Internet (Core Activity).
2. To promote the interests of its members (Non-Core Activity).

4. Legal Structure of IXPN

IXPN is run as a Nigerian Company Limited by guarantee. All members of IXPN are members of this company and are bound by the Company’s [Memorandum and Articles of Association](#). Associate members are bound by such rules and regulations as the board may from time to time determine.

5. Membership Requirement

There are two main requirements for membership:

- (i) An intending member shall be a recognized legal entity, irrespective of Jurisdiction.
- (ii) Shall have an ASN (Autonomous System Number) and use BGP4+ for peering.
- (iii) An intending member is required to submit an application form for membership, which can be completed and submitted online or by email attachment. The application form is available [on IXPN website \(www.ixp.net.ng\)](#).
- (iv) An intending member’s application shall be processed and if successful; shall pay the fees set out in the invoice, which are the joining fee, the pro-rated membership fee and the pro-rated port charges as provided in Section 12 on fees. Such an intending member shall also comply with the joining Procedures.
- (v) An intending member’s connection shall only proceed after IXPN has received a duly completed application form and a copy of this MoU, signed by an authorized representative of the intending member.
- (vi) An intending member shall only be deemed to have full membership status including voting rights, once they meet all the requirements listed above.

- a. The above requirements together with the member's responsibilities in Section 7, and the technical requirements as contained in Appendix 1, constitutes continuing requirements for membership. Failure to maintain these requirements may lead to non-compliance under Section 9 of this MoU.

6. Associate Member

- (a) This MOU recognizes an associate member, as any company or organization having dealings or relationship with IXPN of a mutually beneficial nature.
- (b) Such a company or organization intending to be an associate member shall fill the membership application form.
- (c) IXPN shall at its sole discretion admit or refuse to admit such a company or organization into associate membership.
- (d) IXPN shall keep a register of companies or organization admitted into associate membership.
- (e) An associate member shall pay such fees as the IXPN management may decide.
- (f) An associate member shall be bound by the terms of the MOU and the Memorandum and Articles of Association.
- (g) An associate member may attend IXPN meetings but shall not have a right to vote.

7. Member Responsibilities

- (a) Members shall ensure that all contact information which is held by IXPN in connection with their membership is correct and kept up-to-date, specifically:
 - i. Members shall provide 24x7 operational contact details for the use of IXPN staff and other members, and their staff. The staff available shall understand the requirements of this MoU and shall be able to speak, and communicate effectively in English language or have immediate access to other staff who are able to communicate effectively in English language.
 - ii. Members are required to send to IXPN their escalation matrix to info@ixp.net.ng
 - iii. Failure to provide this information shall be regarded as "Non-Compliance" in accordance with Section 9 of this MoU.
- (b) Members shall ensure that at least one member of their staff is subscribed to the following mailing list: <mailto:IXPN-discuss@ixp.net.ng>. The mailing list forms part of this MoU and is intended to carry announcements of an urgent operational nature as well as notify relevant and authorized personnel of any amendment to this MOU. The mailing list shall also serve as a peer review forum for IXPN members and can be used to discuss IXPN issues including operational, technical, business and financial.

- i. Members shall comply with the requirement of the mailing list, as IXPN and all other members and associate members are entitled to assume, and to act, as if each member and associate member reads and appropriately deals with messages sent to the mailing list.
- ii. Members shall not refer their customers or any agent of their customers, directly to IXPN support staff, unless specifically authorized by IXPN via email.
- iii. Members are encouraged to advertise their local prefixes through the route servers.

8. Responsibilities and Services provided by IXPN

- (a) The day-to-day running of IXPN shall be carried out by the executive management, while the affairs of IXPN shall be overseen by the Board.
- (b) IXPN shall only monitor any port/connection where:
 - i. The information is required by law; or
 - ii. The information gathered is generic in nature and is harvested solely for statistical or network management purposes only; or
 - iii. The board reasonably believes a violation of this MoU is in progress.
- (c) IXPN agrees that it shall make reasonable efforts to ensure that any monitoring, will not adversely affect the services rendered to a member or compromise member's confidentiality.
 - a. The services that IXPN shall provide to its members shall be as contained in the [Fees Schedule](#).
 - b. IXPN shall not undertake new projects or offer new services, outside IXPN's core business of peering facilitation, which would be competitive to those of its members.

9. Non-compliance

- a. Members shall ensure that their usage of IXPN services is not detrimental to the IXPN network at all times. The term "detrimental" refers to usage which, in the reasonable opinion of IXPN board either:
 - 9.1.1. Does not conform to the Technical requirements – Appendix 1; or
 - 9.1.2. Causes undesirable load and/or traffic patterns; and
 - 9.1.3. a. Adversely affects other members and/or the entire exchange.
 - b. Failure of a member to comply with the provisions of Section 9.1.1 above or of any other material requirement of this MoU may result to any or all of the following:
 - i. Immediate disconnection from the services pending resolution of the non-compliance by the member.

- ii. Suspension of membership with a view to termination. This shall have the following effects:
 - 1. Suspension shall be immediately announced to all IXPN members.
 - 2. The member shall be disconnected from all services while suspended.
 - 3. The member shall not be entitled to vote or enjoy any other right of membership with the sole exceptions that.
 - a. The member may attend General Meetings of the Company;
 - b. The member may exercise the right of appeal
- i. The member shall not be entitled to a refund for any fees paid to IXPN before the termination, but if the membership is suspended, such a member shall still be required to pay any applicable fees for the period of suspension.
- ii. As part of the notice calling any General meeting, the Board shall include a list of the suspended members.
- iii. The Board or any three (non-suspended) members may call for a formal vote on the termination of membership for that member at the General Meeting, such vote shall be by a simple majority;
- iv. Failing such a call, or if the vote is in favour, the membership terminates at the end of that General Meeting and Section 9.1.3(d) below applies.
- v. A member shall be duly informed by the Board of the outcome of such a meeting.
 - c. A member may appeal against the decision of the Board in respect of suspension of their membership in accordance with IXPN Appeal Procedure that is available at IXPN website.
 - d. Any member whose membership has been terminated in accordance with Section 9 above may re-apply for IXPN membership, however any such application shall be in accordance with Section 5 of this MoU.

10. Termination

- a. A member shall have the right to terminate its membership for any reason and at any time upon sixty (60) days prior written notice to IXPN, or through an e-mail addressed to the ceo@ixp.net.ng.
 - i. Upon such termination, IXPN shall refund all fees paid in advance, excluding the joining fee, and those that have accrued for services received prior to the date of termination.
 - ii. A member may likewise cancel any services supplied by IXPN giving at least thirty (30) days' notice of such cancellation via email to billing@ixp.net.ng.
 - iii. Fees shall be applied until the end of the calendar month in which the service terminates, and a final invoice shall make any necessary corrections for payments in advance or arrears.

- iv. Services supplied by IXPN shall be deemed to be ordered on an on-going basis unless formal cancellation has been received from the member wishing to terminate the services.

11. Communication

All communication or official instructions between IXPN Staff and members and/ or associate members shall be via email, courier or a letter duly sent to the official address of the receiver

12. Fees

- a. The fees payable by members may be reviewed from time to time, provided that members are given at least 30 days' notice of such a review.
- b. Members shall pay the fees in accordance with the Fees Schedule.
- c. Membership Fees and Port charges shall be due quarterly on the first day of the following months January, April, July and October of each year, for the quarter starting on that date. Payment shall be made within fourteen (14) days from the date of the invoice. If the payment is not made within thirty (30) days but not exceeding sixty (60) days from the date of the invoice, then a penalty charge shall be applied to any and all unpaid fees at 2% per annum, above the average lending rate of Nigerian Banks in force at the date the invoice was raised. Such penalty charge shall be added to the next quarterly invoice issued to the member.
- d. A new member joining shall immediately pay the non-refundable joining fee, membership fee and port charges. The membership fee and port charges will be pro-rated from the month in which they joined to the end of that billing period as appropriate.
- e. Fees for any new service shall be paid in accordance with Section 12b above.
- f. Notwithstanding the above, all fees payable by a member shall be due immediately if any of the following happens:
 - i. If such a member goes into liquidation or, makes any arrangement with its creditors generally, or if it petitions to be wound up;
 - ii. If at any time in the preceding twelve (12) months part or all of the member's service was suspended or cut off because of failure to pay or delay in making payment
- g. IXPN retains its right under Section 9 "Non-Compliance" to sanction any member who does not adhere to IXPN payment terms as set out in this MoU and in the Fees Schedule.
- h. All invoices issued for fees shall be calculated in Naira (N) and where funds received are less than the invoiced amount, IXPN reserves the right to reclaim the shortfall in future invoicing.

- i. Where a member requests that an invoice be issued in another currency (limited to Euros, U.S. Dollars, or British Pounds), the fees shall still be calculated in Naira and invoiced in the required currency at the Central Bank of Nigeria's current rate of exchange in force at the date the invoice was raised.

13. Publicity

Members shall not issue any press release mentioning IXPN, unless the text of the press release had previously been cleared for publication by IXPN management.

- a. IXPN may not issue any press releases mentioning a member's name unless with the member's consent.
- b. IXPN shall normally issue a joint press release with new members upon their joining, subject to approval of both parties.
- c. Members shall permit IXPN to use their names in any publication or communication without the express consent of such a member.
- d. A member who is suspended under Section 9.1.3(b) shall not describe itself in any manner as a member of IXPN unless the wording "membership suspended for breach of the rules" is clearly included as part of the description.

14. Confidentiality

IXPN members and Associate members owe a duty of confidentiality to each other regarding IXPN affairs. As such, all and any information, not already in the public domain, passed between IXPN and/or its members or associate members shall at all times be kept confidential and shall not be passed or revealed to any third party outside of IXPN membership, without the prior written consent of the party to which it relates.

15. Insurance and Liability

- a. In the event of any claims made by a member against IXPN, the maximum amount payable for whatever claim shall be limited to a maximum of the fees paid by the member for the financial year in which the incident occurred or if twelve (12) months of the applicable financial year has not passed, the amount expected to be paid by the member during the entire financial year.
- b. Members shall not hold IXPN liable for any loss whatsoever resulting from the illegal use or use not conforming to the terms of this MoU by another member or an associate member.

- c. Any remedy that IXPN shall have against a member for breach of provision of this MoU shall be limited to liability for actual damages in any twelve (12) month period is One Million Naira (NGN1,000,000) or an amount equal to 100% of the fees billed to that member by IXPN in that twelve (12) month period, whichever is less.

Members shall at their sole discretion, arrange for suitable insurance covers for their equipment while within IXPN location. The insurance shall cover damages to the member's equipment, notwithstanding how the damage occurs, whether caused by IXPN staff or equipment or by the staff or equipment of another member or a third party, provided that the damage was not intentional or deliberate. Such a cover shall also extend to third party liability in the event the member's equipment causes damage to a staff or equipment of IXPN or to other member or a third party staff equipment.

16. Governing Law

- a. The Governing Law of this MoU is that of Nigeria, and the jurisdiction recognized is that of Nigerian courts.
- b. In the event of any inconsistencies between the provisions of this MoU and that of the Memorandum & Articles of Association, the latter shall take precedence. However, any inconsistencies between the provisions of this MOU and any governance document referred to in Section 19 "references", the provisions of this MOU shall take precedence.

17. Dispute Resolution

IXPN shall operate a dispute resolution service. Its scope shall be limited to IXPN core activities. Its use shall be voluntary and non-binding. Costs shall be borne by the concerned members. The details of the service shall be determined by the Board and are described in the Dispute Resolution Procedure.

18. Amendment

- a. This MoU shall only be modified, or amended by ordinary resolution of the members in General Meeting. In any event, this MoU shall not be unilaterally modified by IXPN as it pertains to a member without a resolution duly passed at a General Meeting. Unless otherwise stated in the amending resolution, the amendment shall take effect, and where relevant be binding on existing members, from the end of the General Meeting which passes the resolution.

- b. Except the Memorandum and Articles of association, all other governance documents referred to in Section 19 of this MoU, can be amended or modified by IXPN, and as such do not require a vote at the general meeting.

19. References

1. Memorandum & Articles of Association
2. Fees Schedule
3. Joining Procedure
4. Application form
5. Appeal Procedure
6. Dispute Resolution
7. Location Access Procedure

Signed on behalf of IXPN by:

Name:

Position:

Signature:

Date:

Signed on behalf of the member by:

Company Name:

Name:

Position:

Signature:

Date:

APPENDIX 1

TECHNICAL REQUIREMENT

Members use of the IXPN shall at all times conform to the relevant standards as laid out in [STD0001](#) and associated Internet STD documents.

1. Physical

- 1.1 Ethernet interfaces attached to IXPN ports shall be explicitly configured with duplex, speed and other configuration settings and shall not be auto-sensing.
- 1.2 IXPN expect that member's connection to the peering LAN should be terminated on a router (Layer 3) interface on member end of the connection. The connection can also be terminated on a routed (layer 3) port on a Layer 3 switch.

2. MAC Layer

- 2.1 Frames forwarded to IXPN ports shall have one of the following ether types
 - 0x0800 - IPv4
 - 0x0806 - ARP
 - 0x86dd - IPv6
- 2.2 All frames forwarded to an individual IXPN port shall all have the same source MAC address. Multiple physical interfaces connected as an aggregated port shall be treated as a single ingress port for the purpose of section 2.2
- 2.3 Frames forwarded to IXPN ports shall not be addressed to a multicast or broadcast MAC destination address except as follows:
 - Broadcast ARP packets
 - Multicast IPv6 Neighbor Discovery packets

This does not include Router-Advertisement (ND-RA) packets

- 2.4 Traffic for *link-local protocols* shall not be forwarded to IXPN ports except for the

following:

- ARP
- IPv6 ND

Link local protocols includes but is not limited to:

- IRDP
- ICMP redirects
- IEEE802 Spanning Tree
- Vendor proprietary discovery protocols (e.g. CDP, EDP)
- Interior routing protocol broadcasts (e.g. OSPF, ISIS, IGRP, EIGRP)
- BOOTP/DHCP
- PIM-SM
- PIM-DM
- DVMRP

3. IP Layer

- 3.1 Member interfaces connected to IXPN ports shall only use IP addresses and net masks (prefix lengths) assigned to them by IXPN. In particular: IPv6 addresses (link & global scope) shall be explicitly configured and not auto-configured. IPv6 site-local addresses shall not be used.
- 3.2 IP Packets addressed to IXPN peering LAN directed broadcast address shall not be automatically forwarded to IXPN ports.
- 3.3 Member device connected to the IXPN switch port should only replay to ARP queries for IP addresses of their directly connected interface. Proxy ARP is not allowed.

4. Routing

- 4.1 All exchange of routes across the IXPN network shall be via BGP4
- 4.2 AS numbers used in BGP4 sessions for routing purposes shall not be from ranges reserved for private use.
- 4.3 IXPN supports good engineering practice and IXPN members are encouraged to aggregate their routes in accordance with RFC2519 "A Framework for Inter-Domain Route Aggregation".

- 4.4 IP address space assigned to IXPN peering LAN shall not be advertised to other networks without explicit permission of IXPN.
- 4.5 All routes advertised across the IXPN network shall point to the router advertising it UNLESS agreement has been made in advance in writing by IXPN and the two members involved.
- 4.6 All routes to be advertised in peering sessions across IXPN shall be registered in the AfriNIC database or other public routing registry.
- 4.7 Members may use more than one ASN for their IXPN peering provided that each ASN presented shares the same NOC and peering contact details.

5. Forwarding

- 5.1 Traffic shall only be forwarded to an IXPN member when permission has been given by the receiving member either:
 - 5.1.1 By advertising a route across the IXPN network
 - 5.1.2 or explicitly in writing
- 5.2 Traffic shall not be routinely exchanged between two IXPN ports owned by the same IXPN member.

6. Additional Rules for member equipment hosted at an IXPN location:

Where member equipment is hosted at an IXPN location, members shall also adhere to the following Rules:

- 6.1 Member's equipment and cabling shall be clearly labeled with the name of the member
- 6.2 Persons working in IXPN locations on behalf of a member shall not interfere with another member's equipment or cables without explicit permission from the owner of the equipment.
- 6.3 Persons working in an IXPN location on behalf of a member shall adhere to the "Location Access Procedure" - see Section 19 - "References"