LINX Memorandum of Understanding

Version 14.01 – approved 18th November 2014

This document, together with its appendices and the documents referred to in clause 15 below, forms the LINX Memorandum of Understanding (the “MoU” and referred to from time to time as “this Agreement”), which together with the Memorandum and Articles of Association governs membership of LINX.

The MoU sets out:

• the terms on which LINX provides its services to its members,
• the terms on which an individual or organisation can become a LINX member or associate member, and
• the commitments LINX members and associate members make to LINX.

Once the Membership Agreement or Associate Membership Agreement has been signed by both you and by LINX this MoU will be a binding agreement between you and LINX. Notwithstanding any other term of this MoU, this MoU does not create or give rise to any enforceable rights as between LINX members. This MoU can be amended unilaterally by LINX by a majority vote of the LINX members or in some circumstances by the Council of Management (as set out in clause 14 of this MoU). Such amended version(s) of the MoU shall automatically be binding on both you and LINX.

This MoU is put in the public domain to help organisations that wish to join LINX understand what LINX is, and what those who wish to join will need to be and need to do.
Definitions

In this Agreement:

"Affiliate" means an entity which controls, is controlled by, or is under common control with another entity. To control an entity means the right or power to dictate its management by any of: (a) holding directly or indirectly the majority of the issued share capital or stock (or other ownership interest if not a corporation) of such entity ordinarily having voting rights; (b) controlling the majority of the voting rights in such entity; or (c) having the right to appoint or remove directors holding a majority of the voting rights at the meetings of the board of directors of such entity.

"Appeal Procedure" means the process described in the Appeal Procedure document referenced in clause 15.

"Application Form" means the application form, which is referenced in clause 15.

"Associate Membership Application Form" means the application form, which is referenced in clause 15.

"Authenticated access to the LINX website" means an individual accessing the LINX website and providing a user identifier and password sufficient to verify their identity and their authority to represent a member of LINX.

"Channel Partner" means the authorised LINX member referred to in the Channel Programme.

"Channel Programme" means where LINX has authorised a member to sell LINX membership and provide connectivity via a vLAN.

"connection" means the physical connection of your router (directly or via a third party network) to the LINX infrastructure.

"Connection Form" means the connection form, which is referenced in clause 15.

"Council of Management" or "Council" means the elected or appointed representatives of the members of LINX who oversee the affairs of LINX and can represent and speak on behalf of LINX on all matters pertaining to this MoU. It is also known as the Council or the Board. The Council and its powers are defined and set out in Articles 30 to 33 of the LINX Articles of Association.

"Corporate Representation Form" shall mean the form referenced in clause 15.

"Corporate Representative" shall mean the corporate representative(s) or the representatives of your organisation named and provided by you to LINX in accordance with clause 4.

"Fees" mean the fees payable for LINX services defined in the LINX Fees Schedule referenced in clause 15.

"General Meeting" means General Meeting as defined in the LINX Memorandum and Articles of Association.

"Joining Procedure" means the Joining Procedure document referenced in clause 15. It lists the practical steps involved in the process of becoming a LINX member set out in Appendix 2 to this MoU.

"LINX" means The London Internet Exchange Limited constituted as a UK company limited by guarantee. All members of LINX are members of this company.

"LINX associate member" means any organisation that LINX members admit into associate membership of LINX. LINX associate members are subject to such terms and conditions as the LINX members may from time to time determine, save that LINX associate members shall not be members of LINX (as defined and described in the LINX Memorandum and Articles of Association). Until such time as the LINX members may otherwise determine, LINX associate members may attend, but shall not be entitled to vote, at any general meeting of the members.

"LINX member" or "you" means any organisation admitted to membership of LINX pursuant to Articles 5 to 8 of LINX Articles of Association. Where the context permits, the term member shall include associate members.
“LINX Memorandum and Articles of Association” means the Memorandum and Articles of Association for LINX. These are referenced in clause 15.

“LINX Peering LAN” means a layer 2 ethernet network allowing the exchange of traffic between LINX members.

"Member interface" means the physical or logical port (VLAN), which connects a member to the LINX network.

“Regional Internet Registries” means the bodies appointed by the Internet Assigned Numbers Authority to be responsible for the allocation of Internet Number Resources in a specific geographic region to their members.

“Services” mean the services LINX provides for LINX members defined in the Services Definition referenced in clause 15.
It is agreed as follows:

1 Membership requirements

1.1 As a LINX member you warrant that you meet, and will continue to meet, the following requirements:
   1.1.1 you are a recognised legal entity or incorporated association;
   1.1.2 you have an ASN (Autonomous System Number) assigned by one of the Regional Internet Registries (or their predecessors) or an alternative agreed by the LINX members;
   1.1.3 you present to LINX an Autonomous System that is visible from the LINX transit router;
   1.1.4 you use BGP-4 for peerings.

1.2 Failure to meet any of the requirements of 1.1 at any time shall be regarded as a material breach of this MoU.

1.3 Before any individual or organisation can become a LINX member it must complete the steps listed in Appendix 2, or Appendix 3 to become a LINX member through the Channel Programme, or Appendix 4 to become a LINX associate member.

1.4 You must achieve operational peering within three months of becoming a LINX member. This is achieved by:
   1.4.1 connecting to at least one of the LINX Peering LANs, and
   1.4.2 peering with the LINX collector router, and
   1.4.3 peering with at least one existing LINX member or the LINX route servers.

1.5 If you do not achieve operational peering within three months of becoming a member of LINX, or subsequently do not maintain operational peering for more than twenty-one days continuously, then this shall be regarded as a material breach of this MoU.

1.6 You are not permitted to vote at or appoint a proxy to vote at a LINX General Meeting until you have achieved operational peering.

1.7 You are required to abide by the terms and conditions laid out in this MoU in addition to the requirements set out in the Memorandum and Articles of Association, and to continue to do so for as long as you are a LINX member. These include, but are not limited to, the Membership requirements referred to in clauses 1.1 to 1.6 and the Technical requirements (referred to in Appendix 1). Failure to do so may constitute a material breach of this MoU for the purposes of clause 5.

1.8 Without prejudice to any specific reference in this MoU to “material breach”, any failure to meet any of the material requirements set out in this clause 1 and all other material terms and conditions set out in this MoU will constitute a material breach of this MoU for the purposes of clause 5 and may result in suspension and termination.

1.9 You may, by notice in writing, nominate an Affiliate or Affiliates who may for the time being exercise your rights under this MoU. This may include any Affiliate that possesses a separate and distinct ASN, in which case such Affiliate will be permitted to substitute and use its ASN for purposes of the Agreement. As noted in Appendix 1, clause 4.7, Members may use more than one ASN for their LINX peering provided that each ASN presented shares the same NOC and peering contact details. Notwithstanding the foregoing or anything contained in this MoU to the contrary, LINX may list as the LINX member the entity named on the Membership Agreement or Associate Membership Agreement as appropriate. Both you and any nominated Affiliate shall at all times be jointly and severally liable for the acts and omissions of such Affiliate.

1.10 Use of your Connection in accordance with section 1.9 will not, of itself, constitute a breach of this MoU.
2 Ceasing LINX membership

2.1 Subject to clause 2.2 you have the right to end your membership of LINX at any time.

2.2 You must give LINX or your Channel Partner notice of resignation of membership in writing. Members connected to LINX via the Channel Programme must have a co-signed notice of resignation of membership in writing. Membership will cease 30 days after the date the notice given in accordance with this clause is deemed to have been received by LINX.

2.3 When you give LINX notice that you wish to end your membership, LINX will send you a final invoice. LINX will refund any fees paid in advance that are refundable and any fees that have not been invoiced will be charged pro-rata to the date your membership finishes. You agree that you will pay this invoice in full within 30 days of the invoice date. This clause is not applicable to members that are connected to LINX via the Channel Programme. Fees paid in advance and final invoicing will be dealt with by their Channel Partner.

2.4 This agreement terminates at the end of the notice period, with the exception of clauses 2.3, 6, 7.2.4, 9, 10, 12 and 13 and (to the extent applicable) 7.1 and 7.3.2 and 8.1, 9, 10 and 12, which will remain in force for seven years from the end of the notice period.

3 LINX Services

3.1 LINX provides its members with services for which fees are payable.

3.1.1 The services LINX provides are described in the LINX Services Definition and the LINX Public Affairs Services Definition, which can be found at the links referred to in clause 15.

3.1.2 LINX undertakes to use reasonable efforts to provide its services.

3.2 LINX endeavours not to compete with its members except for the introduction of services with the approval of the LINX members.

3.3 Unless otherwise required to do so by law or any governmental entity having appropriate jurisdiction LINX may not monitor any of your ports or connections or view or collect the contents of your data or traffic save in the following circumstances:

3.3.1 LINX may monitor any control traffic, flow data by standard sampling methods or TCP/IP header and protocol information necessary for the operation, problem resolution and engineering of LINX’s network.

3.3.2 LINX may collect statistical information derived from your data traffic for the purposes of the proper operation, problem resolution and engineering of its network.

3.3.3 If the Council reasonably believes that the content of your traffic gives rise to a material breach of this MoU or your membership of LINX.

3.3.4 If you have explicitly requested the specific monitoring or have consented to it following a request from LINX.

PROVIDED that the rights granted to LINX pursuant to clauses 3.3.1 to 3.3.4 shall not include a right to monitor or access the personal information of any of your customers, suppliers, employees, contractors, directors or officers.

AND ALSO that LINX shall not be entitled to disclose or provide such information or any statistical information derived from such traffic data to third parties unless otherwise required to do so by law or governmental entity having appropriate jurisdiction.
3.3.5 Clause 3.3 shall not be interpreted to prevent LINX collecting and publishing aggregate statistics, provided these do not identify any LINX member.

3.4 Where LINX does monitor a port/connection, it will endeavour (if possible) to make sure that any monitoring will neither:

3.4.1 have a substantially adverse affect on the services provided to you; nor
3.4.2 compromise your confidentiality, or that of your Affiliates and your and their customers, suppliers, employees, contractors, directors, officers, agents, successors, and assigns.

3.5 Where LINX does monitor a port/connection, unless prevented by law, LINX will use reasonable efforts to notify the LINX member whose port/connection is being monitored.

3.6 LINX shall use commercially reasonable efforts to secure its network from unauthorized access, transmission, or use and shall cooperate with you to address security issues and develop security procedures.

4 Member Responsibilities

4.1 You shall appoint one or more people to be your Corporate Representatives. You shall advise LINX of the identity of your Corporate Representative(s) by completing a Corporate Representation Form and returning this to LINX. You agree to be bound by any decision confirmed by your Corporate Representatives, which may be communicated through authenticated access to the LINX website or otherwise. Such decisions may include the appointment of further Corporate Representatives and the removal of Corporate Representatives.

4.2 You shall maintain at least one member of operations personnel who understands this MoU. They should be able to speak and understand spoken and written English, or have immediate access to in-house or outsourced personnel who are able to speak and understand spoken and written English to translate and communicate for them. If you do not comply with the terms of this clause 4.2, then this shall be regarded as a material breach of this MoU.

4.3 You will make sure that all contact information that is held by LINX to do with your membership is correct and kept up-to-date. If you do not, then this shall be regarded as a material breach of this MoU. The contact information will include:

4.3.1 details of how to contact your operations staff twenty-four hours a day every day of the year for the use of LINX staff and other Members,
4.3.2 an email address for which requests for peering should be sent,
4.3.3 an email address for each of your Corporate Representatives, which should be personal to each representative, not to a group or role, and (if you are an individual) your e-mail address for the purposes of receiving notices and communications under this MoU, and
4.3.4 the postal address specified in the Membership Agreement or Associate Membership Agreement (as applicable) to which written notices under this MoU may be sent.

4.4 You will confirm receipt of a peering request made to the email address specified in 4.3.2 above by any LINX Member within two working days of the request. An auto-responder is considered acceptable. Failure to comply with this clause 4.4 shall be regarded as a material breach of this MoU.

4.5 You will not refer your customers, or any agent of your customers, directly to LINX support staff unless specifically sanctioned by a member of LINX staff by email.

4.6 You will make sure that at least one member of your staff is subscribed to the following mailing lists:
5 Suspension and Termination

5.1 If you are in material breach of this MoU (including the terms set out in clauses 1, 4 and 7) or you have repeatedly breached the terms of this MoU in such a way as to (in aggregate) constitute a material breach, then at their sole discretion, LINX may do any or all of the following:

5.1.1 If the material breach of the term is remediable (but not otherwise) order your immediate temporary disconnection from the services LINX provides until you remedy the breach (but without prejudice to LINX’s rights to terminate this MoU at any time in accordance with this clause 5 irrespective of whether the breach is remedied);

5.1.2 Suspend the operation of this MoU with a view to the termination of both this agreement and your membership of LINX. This shall have the following effects:

5.1.2.1 Your suspension will be announced immediately to the membership.

5.1.2.2 You will be disconnected from all LINX services while suspended.

5.1.2.3 You will not be entitled to vote or to make use of any other right of membership with the sole exceptions that:
   you may attend General Meetings of LINX; where you may only speak in respect of any motion to terminate your membership of LINX
   you may exercise the right of appeal in 5.2.

5.1.2.4 You will not be entitled to a refund of any fees paid to LINX before the suspension. Whether or not this MoU is or is not terminated (and accordingly whether or not your LINX membership is terminated), you must still pay any applicable fees for the period of suspension.

5.1.2.5 You must continue to comply with all your obligations under this agreement which are not affected by the suspension.

5.1.2.6 LINX will include a list of suspended LINX members as part of the notice calling any General Meeting.
a) The Council, or any three non-suspended LINX members, may call for a formal vote at the General Meeting to consider the termination of this MoU between LINX and you. The termination shall take effect if, and only if, there is a vote in favour by a majority of the LINX members who vote, and termination shall be with immediate effect at the end of that General Meeting.

b) If no vote is called, the termination of this MoU with you will take place automatically and with immediate effect at the end of that General Meeting.

c) Without prejudice to any other accrued rights and remedies LINX or you may have if this Agreement with you is terminated, your LINX membership will also terminate automatically on and with effect from the same date.

5.1.2.7 Clauses 2.3, 6, 7.2.4, 9, 10, 12 and 13 and (to the extent applicable) 7.1 and 7.3.2 and 8.1, 9, 10 and 12 shall survive termination of this agreement.

5.1.2.8 If you remedy the breach before this MoU is terminated, the Council may choose to end your suspension and to take no further action with regard to the breach.

5.1.3 Notify LINX membership of your breach and/or other failure to comply with your obligations under this MoU, and of any subsequent action taken by the Council.

5.2 You may appeal against the decision of the Council about the suspension of this MoU. To do this, you must follow the Appeal Procedure.

5.3 If your LINX membership (and accordingly this MoU) is terminated as described in 5.1.2, you may reapply for LINX membership. Your application will have to follow the procedure described in Appendix 2 or 3 (as appropriate) of this MoU.

5.4 LINX will apply the following general principles to disconnections and suspension of your Connection as described above:

5.4.1 If LINX suspends, disconnects, or discontinues the Services, and/or imposes any conditions on your Connection because of a traffic-related violation by you, LINX will promptly lift such suspension, disconnection, discontinuance, or condition, as applicable, and otherwise re-establish your Connection upon the earlier of

(i) you issuing a notice in form and substance reasonably acceptable to LINX informing LINX that the traffic-related violation has been substantially resolved and is not likely to cause material damage or interference to the LINX Infrastructure and providing LINX a technical summary of the steps taken to resolve the traffic related violation, or

(ii) LINX otherwise becoming aware that the traffic-related violation has been substantially resolved and is not likely to cause material damage or interference to the LINX infrastructure.

5.4.2 LINX will not terminate the Agreement (in whole or in part) as a consequence of your breach or other failure to comply with your obligations under the Agreement without (i) providing you with at least 30 days’ prior written notice of such breach or failure to comply, and (ii) affording you at least 30 days to cure such breach or failure to comply, with such cure period to commence upon your receipt of notice from LINX under clause (i) of this paragraph. LINX will act reasonably in imposing any conditions on your Connection as a consequence of your breach or other failure to comply with the obligations under the Agreement.

5.4.3 In no event will any violation of traffic-related rules by you result in termination of the Agreement or your Connection unless (i) you are suspended more than three times during three consecutive months, and (ii) you fail to give reasonable assurances to LINX that no similar traffic-related violations are likely to occur in the future that will have a material adverse effect on the LINX infrastructure.
6 Communication

6.1 Email is the primary means of communication between LINX and LINX members or LINX associate members. Any reference to “in writing” in this MoU shall include communication by email. It is sufficient for communications (including notices sent under this MoU) to be sent by an e-mail:

6.1.1 to you, if you are an individual: addressed to you personally, or to one of your Corporate Representatives, at the address(es) last advised to LINX in accordance with clauses 4.2 and 4.3 of this MoU;

6.1.2 to you, if you are a company: addressed to a director of your board of directors, or to one of your Corporate Representatives;

6.1.3 to LINX: addressed to notices@linx.net.

6.2 An email is deemed to have arrived two working days after it has been sent provided that the sender can show that it was addressed to the correct email address in accordance with this clause 6.

6.3 Communications may also be sent by post:

6.3.1 to you: addressed to you at the address specified in the Membership Agreement or Associate Membership Agreement (as applicable) or such other address that you notify to LINX in writing.

6.3.2 to LINX; addressed to LINX at its registered office.

6.4 Communication by post is deemed to have arrived when a signed delivery receipt is received from the postal service which delivers to the recipient.

6.5 This clause 6 shall be without limitation or prejudice to the provisions of clause 4.6.

7 Fees

7.1 You agree to pay the Fees in accordance with the Fees Schedule, or if an Associate member to pay any Fees agreed in writing. Subject to clause 7.4, you can choose to pay Fees in advance (in accordance with sub-clause 7.2) or in arrears (in accordance with sub-clause 7.3). This clause is not applicable to members connected through the Channel Programme as all fees are paid to, and payment terms agreed with, their Channel Partner.

7.2 Payment of Fees in advance:

7.2.1 If your payment is received within thirty days from the date of the invoice, no late payment fees will be charged.

7.2.2 If your payment is received after thirty days from the date of the invoice, a late payment fee will be added. The late payment fee will be calculated on the outstanding sum or sums owed at 8% p.a. above the Bank of England base-lending rate in force at the date the invoice was raised.

7.2.3 If your payment has not been received sixty days from the date of the invoice, you will be considered in breach of payment terms, which is regarded as a material breach of the MoU.

7.2.4 If significant extra effort is needed by LINX to collect your fees, for example when payment has not been received within sixty days of the date of the invoice, then at the discretion of the Council, LINX may add a further late payment excess charge. The late payment excess charge is defined in the LINX Fees Schedule 'Excess Charges - Late payment'. Any late payment fees and administrative charges will be added to your next quarterly invoice, and will remain payable even if your LINX membership is terminated.

7.3 Payment of Fees in arrears:
7.3.1 To pay Fees in arrears you must agree to pay monthly by direct debit. If your bank account does not allow payment by direct debit, then you must agree to pay by monthly standing order.

7.3.2 Where a direct debit or standing order payment fails because of your actions or omission, LINX may charge you an additional levy not exceeding the amount defined in LINX Fees Schedule 'Excess Charges - Direct debit failure'. Where your payment fails in this way more than once, LINX may require you to pay in advance. Repeated failure to make payment under an agreed direct debit or standing order is regarded as a material breach of the MoU.

7.4 All membership fees and other payments payable by you or owing by you (up to the date of any of the following events) shall become immediately due and payable upon the occurrence of any of the following events:

a) If an individual, upon death, or if you become bankrupt, petition for bankruptcy, or make any arrangement with your creditors generally, or become of unsound mind, or are convicted of any indictable offence concerning fraud or financial irregularity, or of any indictable offence for which you are sentenced to a term of imprisonment (excluding suspended sentences unless later put into effect).

b) If an organisation, you go into liquidation or administration, make any arrangement with your creditors generally, or if you petition to be wound up.

c) If at any time in the preceding twelve months part or all of your LINX services were suspended or disconnected because you did not pay or delayed paying any LINX fees.

7.5 Membership of LINX shall continue in perpetuity unless you have served notice of termination under clause 2 or your membership is otherwise terminated in accordance with the terms of this MoU.

7.6 All LINX services that you order shall continue in perpetuity unless you have either formally cancelled them and LINX has received your cancellation in writing, or you have served notice of termination of your LINX membership under clause 2.

7.7 All invoices for Fees are in Pounds Sterling (GBP).

7.8 You can request that an invoice be issued in Euros or in United States Dollars (USD). In such an event, Fees will be calculated in Pounds Sterling (GBP) and invoiced in the required currency at the Bank of England's current rate of exchange in force at the date the invoice was raised.

7.9 The value received for any invoice will be the funds received in Pounds Sterling (GBP) into LINX's bank account less any commission payments charged to LINX for currency conversion or for processing credit cards or other means of payment where LINX is charged a fee. LINX reserves the right to charge you any shortfall between the invoice amount and the funds received. If the shortfall is significant in the view of the Council, LINX may deem the invoice to be unpaid and proceed as in Clauses 7.2 or 7.3 as appropriate.

8 Publicity

8.1 You will not publish any press release mentioning LINX unless the text of that press release has previously been approved for publication by or on behalf of the Council and communicated to you in writing following the procedure in the LINX Corporate Identity Guidelines.

8.2 LINX will not publish any press releases mentioning your name unless you have approved the text of the press release in writing.

8.3 You will only use the LINX name and trademarks following the guidance set out in the LINX Corporate Identity Guidelines.
8.4 If the operation of this MoU is suspended under clause 5.1.2, you will not describe yourself in any manner as a member of LINX unless the wording "membership suspended for breach of the rules" is clearly included as part of the description.

9 Confidentiality
LINX members and associate members, as well as LINX, have a duty of confidentiality to the other LINX members and associate members in LINX affairs. Any information, not already in the public domain, passed between LINX and/or its members or associate members shall be kept confidential and shall not be passed or revealed to any third party outside of LINX membership, without the prior written consent of the party to which it relates.

10 Insurance and Liability

10.1 LINX’s liability to you for claims you have is limited as follows:

10.1.1 nothing in this agreement limits or excludes the liability of LINX: for death or personal injury resulting from LINX’s negligence; or for any damage or liability incurred by you as a result of fraud, wilful misconduct or fraudulent misrepresentation by LINX;

10.1.2 for all other claims, there is a limit of one million pounds sterling (GBP) for which LINX will procure suitable insurance cover which will provide cover in respect of liability for employees and third parties and for damage to property.

10.1.3 LINX shall not be liable for any loss resulting from

(i) your illegal or unlawful use of LINX services
(ii) your use of LINX services which does not conform to the terms of this MoU or any other document which sets out the basis upon which LINX services are supplied
(iii) breach of any of the terms of the MoU by you
(iv) breach by any other LINX Member of an MoU entered into between LINX and that Member.

10.1.4 LINX shall not be liable to you for any direct or indirect loss whatsoever suffered by you (which may include suspension and disconnection) resulting from any action LINX takes against a Channel Partner following a breach of the obligations entered into with LINX by the Channel Partner who provides your connection to LINX through the Channel Programme.

10.2 Your liability to LINX for actual damages is limited to:

10.2.1 one million pounds sterling. You shall procure insurance cover or self-insure to or in excess of this limit which will provide cover in respect of liability for employees and third parties and for damage to property. You shall provide evidence to LINX of the cover should LINX request it. Failure to provide such evidence within seven days of its request in writing by LINX is regarded as a material breach of the MoU. Self-insurance shall only be accepted by LINX from members with specific capitalisation or who can show third-party bonding in a form acceptable to LINX.

10.2.2 The liability limits in 10.1.2 and 10.2.1 above shall, however, be increased if you purchase services from LINX which LINX procures on your behalf, including fibre and co-location services, and in procuring these services LINX incurs liabilities and insurance obligations in excess of those limits in clause 10.2.1. The limit and insurance cover in 10.2.1 under these circumstances shall be increased to at least the same figure as LINX has incurred in procuring these services for you, provided always that LINX has notified you in writing of that figure. The increased figure shall only apply where you or LINX have incurred the higher liability.
10.3 Neither party will be liable to the other for any special, indirect or consequential loss, loss of profits, business, revenue, and goodwill.

10.4 A party who is not a party to this agreement between you and LINX shall not have any rights under or in connection with it by virtue of the Contracts (Rights Of Third Parties) Act 1999 and, in particular, no rights shall be conferred upon any other Member of LINX by this MoU.

11 Member’s Obligations

11.1 You will exercise your voting rights in relation to any amendments to the MoU honestly and in good faith.

11.2 You are not entitled to represent LINX. You will not hold yourself out as being entitled to represent or enter into binding agreements on behalf of LINX.

11.3 You will not bring LINX into disrepute or make any defamatory statement about LINX.

12 Governing Law

The governing law of this MoU is that of England, and the jurisdiction recognised is that of the English courts.

13 Interpretation

13.1 If there is any inconsistency between any of the provisions of this MoU and the provisions of the documents referred to in Clause 15 (including the LIX Memorandum and Articles of Association) the provisions of this MoU shall prevail, but not so as to amend the Memorandum and Articles of Association.

13.2 The clause headings used in this MoU shall not have any legal meaning in the interpretation of this MoU.

13.3. References to clauses or enumerations of clauses in this MoU shall mean the clauses of this MoU and no other document (including appendices to this MoU or any documents referred to in the MoU) unless expressly indicated otherwise.

13.4. The word including or include as used in this MoU shall not be assumed to be limiting in its application and shall mean “including without limitation” wherever it appears.

13.5. Each provision of this agreement is severable and distinct from the others. If any one or more of such provisions becomes unenforceable at any time the validity, legality or enforceability of the remaining provisions shall not be affected or impaired.

14 Changes

14.1 This MoU and any document referred to in clause 15 or appended to it now forms the whole agreement between the parties and replaces any previous arrangement, understanding or agreement between them relating to the matters addressed in this agreement.

14.2 LINX may vary this agreement unilaterally in accordance with the terms of an Ordinary Resolution of the members of LIX such amendment to take effect on the date that you are notified by LIX as to the terms of the amendment.

14.3 LIX may unilaterally make minor and/or consequential amendments to this agreement to:

   (i) give effect to changes of addresses, telephones, email addresses;
(ii) give effect to changes consequent upon duly authorised changes to other documents governing the relationship between you and LINX in any respect including without limitation the Memorandum or Articles of Association of LINX;

(iii) correct any manifest typographical errors in this MoU.

14.4 For the avoidance of doubt, governance documents referenced in 15.2.2 are changeable by LINX staff and do not require a vote at a General Meeting. Documents referenced in 15.2.3 are external documents and are not under the control of LINX.

15 References

15.1 Further Governance Documents

Appeal Procedure document which is documented at https://www.linx.net/govern/aplsproc.html

15.2 Other References

15.2.1 Part of the Agreement and only changeable at a General Meeting

LINX Memorandum & Articles of Association document which is documented at https://www.linx.net/govern/manda.html

Partnership Programme document which is documented at https://www.linx.net/govern/partnership-programme.html

Associate Membership Terms and Conditions document which is documented at https://www.linx.net/files/govern/associate_membership_agreement.pdf

15.2.2 Part of the Agreement and changeable by LINX staff

Application Form at https://www.linx.net/join/application.html

Connection Form at https://www.linx.net/join/connection.html

Corporate Identity Guidelines document which is documented at https://www.linx.net/publicity/corporate-id.html

Corporate Representation Form at https://www.linx.net/files/meetings/corprep.pdf

Route Aggregation Best Current Practice document which is documented at https://www.linx.net/good/bcp/rabcp.html

Joining Procedure document which is documented at https://www.linx.net/join/procedure.html

LINX Accounting Policy document which is documented at https://www.linx.net/govern/LINX_Accounting_Policy.html

Services Definition and Fees Schedule document which is documented at https://www.linx.net/govern/servicesfees.html

Public Affairs Services document which is documented at https://www.linx.net/govern/pa-servicesdefn.html

From time to time the Services Definition and Fees Schedule may be separate documents or a single document, and references to them shall be construed accordingly.

15.2.3 Other References

Internet Standards
ftp://ftp.isi.edu/in-notes/std/std1.txt
APPENDIX 1 - Technical Requirements

Members’ use of the LINX shall at all times conform to the relevant standards as laid out in STD0001 and associated Internet STD documents.

1. Physical
   1.1 It is recommended that Ethernet and FastEthernet interfaces are configured with duplex, speed and other configurations and not be auto-sensing. GigE and higher speed interfaces shall be configured to be auto negotiating.

2. MAC Layer
   2.1 Frames forwarded to LINX ports shall have one of the following ethtypes
   - 0x0800 - IPv4
   - 0x0806 - ARP
   - 0x86dd - IPv6
   2.2 Frames forwarded from attached member device(s) to a member interface on the LINX Peering LAN(s) shall all have the same source MAC address.
   2.2.1 A member interface delivered over a link-aggregated port shall be treated as a single ingress port for the purposes of clause 2.2.
   2.3 Frames forwarded to a member interface which is part of the LINX peering LAN(s) shall not be addressed to a multicast or broadcast MAC destination address except as follows:
      - broadcast ARP packets
      - multicast IPv6 Neighbour Discovery packets
      where a member interface is a member of the LINX multicast VLAN, in which case frames may be forwarded which are destined to multicast group addresses
   2.4 Traffic for link-local protocols shall not be forwarded to member interfaces which are part of the LINX peering LAN(s) except for the following:
      - ARP
      - IPv6 ND
      where a member interface is a member of the LINX multicast VLAN, in which case PIM-SM and MSDP may be run on the interface

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 LINX peering LAN ports shall only use IP addresses and netmasks (prefix lengths) assigned to them by LINX. 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 LINX peering LAN directed broadcast address shall not be automatically forwarded to LINX ports.

4. Routing

4.1 All exchange of routes across the LINX network shall be via BGP4, except where a member interface is a member of the LINX multicast VLAN, in which case PIM-SM and MSDP may also be run on that interface.

4.2 AS numbers used in BGP-4 sessions across the LINX network shall not be from ranges reserved for private use. The only exception to this is when a BGP speaker is collecting routing information for analysis and not for immediate routing decisions. In this case the BGP speaker may use a private AS number. If it does so it shall not advertise any routes.

4.3 LINX supports good engineering practice and LINX Members are encouraged to aggregate their routes in accordance with LINX Route Aggregation Best Current Practice, from time to time in force.

4.4 IP address space assigned to the LINX peering LANs shall not be advertised to other networks without explicit permission of LINX.

4.5 All routes advertised across the LINX network shall point to the router advertising it UNLESS agreement has been made in advance in writing by LINX and the two members involved. (For the avoidance of doubt) The LINX route servers are not routers and shall advertise routes pointing to the advertising router.

4.6 All routes to be advertised in a peering session across LINX shall be registered in the RIPE or other public routing registry.

4.7 Members may use more than one ASN for their LINX peering provided that each ASN presented shares the same NOC and peering contact details.

5. Forwarding

5.1 Traffic on member interfaces connected to the LINX peering LAN(s) shall only be forwarded to a LINX Member when permission has been given by the receiving Member either:

5.1.1 by advertising a route across the LINX network, or

5.1.2 explicitly in writing.

5.2 Traffic shall not be routinely exchanged between two member interfaces connected to the LINX peering LAN(s) and owned by the same LINX Member.

6. Members who take Fibre, Co-location Services or other services from LINX shall adhere to the relevant conditions of service detailed in the LINX Services Definition, from time to time in force.
APPENDIX 2 - Steps to become a LINX Member

1. The applicant must complete an Application Form and send it to LINX online.

2. LINX Council will approve or reject the application within one working day or such longer time that LINX reasonably requires to examine the application using due diligence. A rejection is only valid if it states grounds (by reference to the application or otherwise) upon which the Council, acting reasonably, consider that the applicant would not or could not abide by the MoU.

   2.1 If the application is rejected either the CEO, any member of the Council or any LINX member may state that they believe it is in the interests of LINX to accept the application and call for a formal vote. This call must be made within five working days of the rejection being announced. If such a call is made, then the matter will be put to a vote at a General Meeting of LINX not more than four months after the date of the announcement. The notice calling the meeting will be sent out at least twenty one clear days beforehand and will explicitly state that the application in question is being voted on. The meeting may place temporary or permanent conditions on the LINX membership. The meeting will determine the exact wording of the motion to be voted on. The vote will be decided by a simple majority of those members present (including present by proxy) and voting, with the chair of the meeting having a casting vote if necessary.

3. LINX will notify the applicant whether or not their application has succeeded and will send them an invoice for any fees they must pay.

4. The applicant must then:

   4.1 sign a copy of the Membership Agreement and send it to LINX;
   4.2 fill in a LINX Connection Form and send it to LINX;
   4.3 pay any fees listed on the invoice sent as part of step 3.

5. When LINX has received the applicant’s payment, signed MoU and LINX connection form, the applicant will become a member of LINX and shall be entered on the register of members. The applicant will not be permitted to vote at any General Meeting until they have achieved operational peering.

6. If the applicant fails to complete 4.1, 4.2 and 4.3 within three months of their application succeeding, the application will lapse and if the applicant wishes to join LINX they should re-apply from step 1 above.

7. Further details of these steps are listed in the Joining Procedure.
APPENDIX 3 -
Steps to become a LINX Member through the Channel Programme

1 The Channel Partner will complete an Application Form on behalf of the applicant and send it to LINX online.

2 LINX Council will approve or reject the application within one working day or such longer time that LINX reasonably requires to examine the application using due diligence. A rejection is only valid if it states grounds (by reference to the application or otherwise) upon which the Council, acting reasonably, consider that the applicant would not or could not abide by the MoU.

2.1 If the application is rejected either the CEO, any member of the Council or any LINX member may state that they believe it is in the interests of LINX to accept the application and call for a formal vote. This call must be made within five working days of the rejection being announced. If such a call is made, then the matter will be put to a vote at a General Meeting of LINX not more than four months after the date of the announcement. The notice calling the meeting will be sent out at least twenty one clear days beforehand and will explicitly state that the application in question is being voted on. The meeting may place temporary or permanent conditions on the LINX membership. The meeting will determine the exact wording of the motion to be voted on. The vote will be decided by a simple majority of those members present (including present by proxy) and voting, with the chair of the meeting having a casting vote if necessary.

3 LINX will notify the Channel Partner whether or not the application has succeeded and will send them an invoice for any fees they must pay.

4 The Channel Partner will:

4.1 receive a signed copy of the Membership Agreement from the applicant and send it to LINX;

4.2 complete a LINX Connection Form and send it to LINX;

4.3 pay any fees listed on the invoice sent as part of step 3.

5 When LINX has received payment a signed MoU and LINX connection form, the applicant will become a member of LINX and shall be entered on the register of members. The applicant will not be permitted to vote at any General Meeting until they have achieved operational peering.

6 If clauses 4.1, 4.2 and 4.3 are not completed within three months of their application succeeding, the application will lapse and if the applicant wishes to join LINX they should re-apply from step 1 above.

7 Further details of these steps are listed in the Joining Procedure.
APPENDIX 4 - Steps to become a LINX Associate Member

1 LINX will invite an applicant to apply to be an Associate Member

2 The applicant must complete an Associate Member Application Form and send it to LINX online. The application then needs to be approved by the LINX Council

3 LINX will notify the applicant whether or not their application has succeeded and if any fees are payable will send them an invoice for any fees they must pay.

4 The applicant must then:
   4.1 sign a copy of the Associate Membership Agreement and send it to LINX;
   4.2 fill in a LINX Connection Form and send it to LINX;
   4.3 pay any fees listed on the invoice sent as part of step 3.

5 When LINX has received the applicant’s payment, signed Associate Membership Agreement and LINX connection form, the applicant will become an Associate Member of LINX and shall be entered on the register of associate members. The applicant will be bound by the terms of the MoU and LINX’s Memorandum and Articles of Association but will not be required to pay a membership fee or other fees save those agreed in writing. Unless otherwise determined by the LINX members, the applicant shall be entitled to attend but not be entitled to vote at any General Meeting and the MoU shall be construed accordingly (and in particular, but without limitation, clauses 1.6, 2.3, 3.1, 5.1.2.3, 5.1.2.6, 5.2 and 11.1).

6 If the applicant fails to complete 4.1, 4.2 and 4.3 within three months of their application succeeding, the application will lapse and if the applicant wishes to join LINX they should re-apply from step 1 above.

7 Further details of these steps are listed in the Associate Member Joining Procedure.