

AFIX Technical Workshop: Session 7

Exercise: Group B

Instructions

- The class should divide into three groups.
- Before you start the exercise, nominate a spokesperson for your group when the class reconvenes.
- Now read through the IXP policy document below. As a group, discuss the following questions (make sure your spokesperson takes notes for reporting back to the class):
 1. How has this IXP resolved the following issues covered during the presentation:
 - Location
 - Ownership and form
 - Governance
 - Additional services
 - Pricing
 - Interconnection policy
 - Acceptable use
 2. What elements of this policy, if any, would be appropriate for your local conditions?
 3. What would be the most appropriate policy or set of policies for your local conditions?
- Be prepared to report your conclusions back to the class and take part in further discussion.
- You have a maximum of half an hour to complete this exercise.

Kenya Internet Exchange Point (KIXP) Policy

1. The KIXP is legally constituted as a neutral and independent organization, a not-for-profit corporation governed by an unremunerated board of three, elected annually by the members of the KIXP.
2. The members shall have the right to attempt to recall a member of the board mid-year by a 51% vote of no-confidence if 75% of the members agree that such a vote is necessary. In all voting, each member present shall cast one equally-weighted vote.
3. Members shall be defined as each of the organizations which directly connect to the exchange.
4. All votes shall be cast in real-time, in person or by telepresence, at the annual or properly-noticed interim meeting of the KIXP membership. All members' votes, as well as all business of the meeting, shall be recorded in minutes, which shall be made publicly available on the KIXP web site.
5. Any individual can be nominated or self-nominate for election to the board, with the caveat that the board members are individually and jointly responsible for the labor of maintaining the exchange. That is, no one should volunteer to stand for election to the board if they are unwilling to perform at least a third of the small amount of work necessary to keep the exchange operating, and to do so without compensation of any kind. The membership should, in considering how to cast their votes for board members, carefully evaluate the technical and business competence, as well as the energy and spirit of volunteerism, of the candidates.

6. Board members shall act upon their own personal and individual authority, and shall not be representatives of any employer, KIXP member organization, or other party.
7. Board members shall attempt to govern the IX in accordance with technical and policy best-practices generally accepted within the global community of IX operators as represented by AfrISPA, AfIX-TF, APOPS, Euro-IX, and similar associations.
8. From time to time, the Board may recommend certain charges to the Members. Such recommendations may only be implemented with the approval of a majority vote by the Members.
9. General KIXP technical, business, and operational policies shall be made publicly available on the KIXP web site.
10. The KIXP shall impose no restriction upon the types of organization or individual who may become members and connect to the exchange.
11. The KIXP shall impose no restrictions upon the internal technical, business, or operational policies of its members.
12. The KIXP shall make no policy and establish no restrictions upon the bilateral or multilateral relationships or transactions which the members may form between each other, so long as the KIXP corporation shall not be involved.
13. Members must provide 24x7 operational contact details for the use of KIXP staff and other Members. The personnel available by this means must understand the requirements of this Memorandum of Understanding.
14. Members shall be required to sign a copy of the KIXP policies document, indicating that they understand and agree to abide by its policies, before any resources shall be allocated to them.
15. The primary means of communication with other Members will be via email.
16. Members must provide an email address in which requests for peering should be sent.
17. Members have a duty of confidentiality to the other KIXP Members in KIXP affairs.
18. Members must not refer their customers, or any agent of their customers, directly to KIXP member's support staff. All queries must be directed through the KIXP technical staff.
19. Members must not carry out any illegal activities through KIXP.
20. Members must ensure that all contact information held by KIXP in connection with their Membership is correct and up to date.
21. All applications to join the KIXP must follow the correct joining procedure as follows:
22. Applications must be accompanied by;
23. Completed Application Form
24. Completed Technical Details Form
25. Any relevant Joining Fees
26. If required, the 1st Quarters Port Charges
27. Where required, first quarters charges will be applied for service from the first of the following month. Charges for the part month from activation date to the first of the following month will be billed separately.
28. Members shall be required to provide and maintain current technical contact information, which shall be publicly posted on the KIXP web site. This information shall include at a minimum an internationally-dialable voice phone number, a NOC email role account, the IP address assigned to the member at the exchange, and the member's Autonomous System Number if they have one.
29. Members shall subscribe to a KIXP email list, operated by the KIXP board.
30. Members may only connect equipment that is owned and operated by that Member to KIXP. Members may not connect equipment to KIXP on behalf of third parties.
31. Members must only use IP addresses on the interface(s) of their router(s) connected to the KIXP allocated to them by the KIXP.

32. Members may only present a single MAC address to any individual KIXP port that is allocated to them.
33. It is preferred that each member have their own Autonomous System number, members without an ASN allocation will be assigned an ASN from private ASN space by the KIXP Board. Any member who has previously been connected to the KIXP using private ASN and then later acquires their own full ASN must notify the KIXP Board as soon as possible in order to incorporate this development into the BGP peering at KIXP.
34. Peering between Members' routers across KIXP will be via BGP-4.
35. Members shall not generate unnecessary route flap, or advertise unnecessarily specific routes in peering sessions with other Members across KIXP.
36. Members may not advertise routes with a next-hop other than that of their own routers without the prior written permission of the advertised party, the advertisee, and KIXP.
37. Members may not forward traffic across KIXP unless either the traffic follows a route advertised in a peering session at KIXP or where prior written permission of the Member to whom the traffic is forwarded has been given.
38. Members must, on all interfaces connected to the KIXP, disable: Proxy ARP, ICMP redirects, CDP, IRDP, Directed broadcasts, IEEE802 Spanning Tree, Interior routing protocol broadcasts, and all other MAC layer broadcasts except ARP.
39. Members must, on all interfaces connected to KIXP, disable any duplex, speed, or other link parameter auto-sensing.
40. Members shall not announce ("leak") prefixes including some or all of the KIXP peering LAN to other networks without explicit permission of KIXP.
41. Members must set net masks on all interfaces connected to KIXP to include the entire KIXP peering LAN.
42. Any equipment and/or cabling installed by a Member at KIXP must be clearly labeled as belonging to the Member.
43. Members will not touch equipment and/or cabling owned by other Members and installed at KIXP or in the room containing the KIXP without the explicit permission of the Member who owns the equipment.
44. Members will not install 'sniffers' to monitor traffic passing through KIXP, except through their own ports. KIXP may monitor any port but will keep any information gathered confidential, except where required by law or where a violation of this Memorandum of Understanding has been determined by the KIXP Board.
45. Members will not circulate correspondence on confidential KIXP mailing lists to non-members.
46. Members must ensure that their usage of KIXP is not detrimental to the usage of the KIXP by other Members.
47. Members may not directly connect customers who are not KIXP members via circuits to their router housed in any KIXP rack.
48. Members should not routinely use the KIXP for carrying traffic between their own routers.
49. Members will be required to install routers that support the full BGP-4 standard. A list of recommended routers available online.
50. The technical committee will set up certain monitoring features on the server at the KIXP. Certain KIXP members will be asked to have their NOCs monitor these features such that any problems can be referred to KIXP technical support personnel as quickly as possible..