

## **Beirut IX Policy Document**

### **Beirut IXP Membership Eligibility**

Must have an ASN

Must have a BGP-speaking router

Must keep current contact information up-to-date with Management and Operations Committee

Must subscribe to members and announcement email lists

Must abide by the applicable laws of Lebanon

### **Membership Meetings**

All members may participate in the membership meeting which must be called by the Management and Operations Committee at least once annually. In addition to the annual general membership meeting, special meetings may be convened at the request of the MOC, the Arbitrator, or more than half of the membership. Each entity which connects a BGP-speaking router to the IXP shall be considered one member. At that membership meeting, this policy document may be reviewed and amended as necessary by vote of the members present, a new Management and Operations Committee shall be elected by the members present, and a public spokesperson shall be elected by the members present. In addition to the routine IXP business discussion, membership meetings may be necessary to address emergencies, votes of no-confidence in the MOC, or special circumstances like layer-2 switch-fabric extensions.

### **Special Membership Meetings**

Is called a special meeting, a meeting where one or more of the following events might occur: election of the Management and Operations Committee, election of the spokesman, and/or amendment of this policy document. Each member is entitled to a single vote in each election. Minimum notice for special meetings is two weeks and the quorum is half of the membership. If the quorum is not reached, the meeting is rescheduled for the following week and the quorum is considered valid regardless of the number of attendees, and the seated MOC and spokesman will continue until that time.

### **Management and Operations Committee (MOC)**

The three members of the Management and Operations Committee shall be responsible for the work and day-to-day management decisions of the IXP, in accord with this policy document. The members of the MOC shall be responsible for answering email to the info email list, and shall be responsible for posting to the announcement email list, and moderating membership of each of the email lists. They shall not delegate work or decisions to third parties. The three members of the MOC are elected as individuals, and in their role on the MOC, are responsible to the entire membership, rather than just their own organization. The members of the MOC are nominated and voted upon by the members.

### **Public Spokesperson**

The public spokesperson shall be the sole representative of the IXP in matters dealing with the press and government, and shall speak in this capacity only after thorough investigation.

### **Arbitration**

The arbitrator shall be responsible for adjudicating disputes between members, or between members and the MOC, and shall be responsible for administering any votes of no confidence in the MOC. The role of arbitrator shall be filled by the PCA.

### **Disconnection Procedure**

The MOC shall initiate a process of investigation, correction, or ultimately disconnection, in the event of any infraction of the rules of this policy document, or any problem which threatens the operation of the IXP.

MOC will attempt contact first, if no one responds, may disconnect at will.

### **Operational Standards**

MOC shall keep a public record on the IXP web site of all significant actions taken.

The MOC shall publish a current roster of members and their contact information on the web site at all times.

Participants and the MOC shall use the general IXP members email list to inform each other of operational changes.

Members shall never refer their customers or down-stream connected networks to the MOC for support.

Participants are expected to be good “net citizens” by preventing their customers from prosecuting DDoS attacks across the IXP, forging source addresses, et cetera, and shall actively cooperate in mitigating such attacks.

A route-server shall be provided for the optional use of the participants of the IXP. This shall not preclude voluntary bilateral peering, nor shall any participants be required to peer with the route-server or any other participants.

No layer-2 devices shall be attached to the IXP switch fabric except by decision taken at a membership meeting.

### **Layer-2 (Ethernet) Technical Policies:**

Ethernet interfaces connected to the IXP shall be explicitly configured with duplex and speed settings and shall not be auto-sensing.

Only Ethernet II (or “DIX Ethernet”) standard layer-2 frames may be forwarded across the IXP. LLC/SNAP encapsulation (802.2) is not permitted, and those frames must have one of the following ethertypes:

0x0800 - IPv4

0x0806 - ARP

0x86dd - IPv6

Only one source MAC address shall be used on any IXP port.

No frames other than ARPs may be addressed to the broadcast MAC address.

Proxy-ARP shall be explicitly disabled.

No link-local protocols other than ARP and IPv6 ND may be forwarded across the IXP.

### **Layer-3 (IP) Technical Policies:**

Interfaces connected to the IXP shall use only IP addresses and netmasks assigned to them by the IXP operator. Any auto-configuration, auto-discovery, or site-local addressing must be explicitly disabled.

Packets addressed to the IXP broadcast address must be filtered before they reach the IXP switch fabric.

BGP4 and its successors are the only routing protocol which shall be employed across the IXP.

Participants may employ and advertise only IP addresses and ASNs assigned to them and their down-stream customers. No reserved range addresses or ASNs shall be used, advertised, or forwarded.

Participants should employ good practices of route-aggregation wherever possible, and remember that deaggregation places a disproportionate burden upon other participants and the Internet as a whole.

NEXT-HOP-SELF shall be set on all routing advertisements made across the IXP.

Participants shall not routinely forward packets between multiple IXP interfaces under their own control.

**Read and approved by**

Name	Entity	Signature and Date

This agreement is printed and signed in