

**User Fee for Exempt Organization  
 Determination Letter Request**  
 ▶ Attach this form to determination letter application.  
 (Form 8718 is NOT a determination letter application.)

OMB No. 1545-1798  
 Control number \_\_\_\_\_  
 Amount paid \_\_\_\_\_  
 User fee screener \_\_\_\_\_

1 Name of organization <b>OPEN-IX ASSOCIATION</b>	2 Employer Identification Number <b>46 3326593</b>
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**Caution.** Do not attach Form 8718 to an application for a pension plan determination letter. Use Form 8717 instead.

**3 Type of request** **Fee**

a  Initial request for a determination letter for:

- An exempt organization that has had annual gross receipts averaging not more than \$10,000 during the preceding 4 years or
- A new organization that anticipates gross receipts averaging not more than \$10,000 during its first 4 years ▶ **\$400**

**Note.** If you checked box 3a, you must complete the *Certification* below.

**Certification**

I certify that the annual gross receipts of \_\_\_\_\_ name of organization  
 have averaged (or are expected to average) not more than \$10,000 during the preceding 4 (or the first 4) years of operation.  
 Signature ▶ Title ▶

b  Initial request for a determination letter for:

- An exempt organization that has had annual gross receipts averaging more than \$10,000 during the preceding 4 years or
- A new organization that anticipates gross receipts averaging more than \$10,000 during its first 4 years . ▶ **\$850**

c  Group exemption letters . . . . . ▶ **\$3,000**

**Instructions**

The law requires payment of a user fee with each application for a determination letter. The user fees are listed on line 3 above. For more information, see Rev. Proc. 2009-8; 2009-1 I.R.B. 229, or latest annual update.

Check the box or boxes on line 3 for the type of application you are submitting. If you check box 3a, you must complete and sign the certification statement that appears under line 3a.

Attach to Form 8718 a check or money order payable to the "United States Treasury" for the full amount of the user fee. If you do not include the full amount, your application will be returned. Attach Form 8718 to your determination letter application.

Generally, the user fee will be refunded only if the Internal Revenue Service declines to issue a determination.

**Where To File**

Send the determination letter application and Form 8718 to:

Internal Revenue Service  
 P.O. Box 12192  
 Covington, KY 41012-0192

**Who Should File**

Organizations applying for federal income tax exemption, other than Form 1023 filers. Organizations submitting Form 1023 should refer to the instructions in that application package.

**Paperwork Reduction Act Notice.** We ask for the information on this form to carry out the Internal Revenue laws of the United States. If you want your organization to be recognized as tax-exempt by the IRS, you are required to give us this information. We need it to determine whether the organization meets the legal requirements for tax-exempt status.

You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. Books or records relating

to a form or its instructions must be retained as long as their contents may become material in the administration of any Internal Revenue law. The rules governing the confidentiality of Form 8718 are covered in section 6104.

The time needed to complete and file this form will vary depending on individual circumstances. The estimated average time is 5 minutes. If you have comments concerning the accuracy of this time estimate or suggestions for making this form simpler, we would be happy to hear from you. You can write to the Internal Revenue Service, Tax Products Coordinating Committee, SE:W:CAR:MP:T:T:SP, 1111 Constitution Ave. NW, IR-6526, Washington, DC 20224. Do not send this form to this address. Instead, see *Where To File* above.



## Application for Recognition of Exemption Under Section 501(a)

OMB No. 1545-0057

If exempt status is approved, this application will be open for public inspection.

Read the instructions for each Part carefully. **A User Fee must be attached to this application.**  
 If the required information and appropriate documents are not submitted along with Form 8718 (with payment of the appropriate user fee), the application may be returned to the organization.

**Complete the Procedural Checklist on page 6 of the instructions.**

**Part I. Identification of Applicant** (Must be completed by all applicants; also complete appropriate schedule.)  
 Submit only the schedule that applies to your organization. Do not submit blank schedules.

Check the appropriate box below to indicate the section under which the organization is applying:

- a  Section 501(c)(2)—Title holding corporations (Schedule A, page 7)
- b  Section 501(c)(4)—Civic leagues, social welfare organizations (including certain war veterans' organizations), or local associations of employees (Schedule B, page 8)
- c  Section 501(c)(5)—Labor, agricultural, or horticultural organizations (Schedule C, page 9)
- d  Section 501(c)(6)—Business leagues, chambers of commerce, etc. (Schedule C, page 9)
- e  Section 501(c)(7)—Social clubs (Schedule D, page 11)
- f  Section 501(c)(8)—Fraternal beneficiary societies, etc., providing life, sick, accident, or other benefits to members (Schedule E, page 13)
- g  Section 501(c)(9)—Voluntary employees' beneficiary associations (Parts I through IV and Schedule F, page 14)
- h  Section 501(c)(10)—Domestic fraternal societies, orders, etc., not providing life, sick, accident, or other benefits (Schedule E, page 13)
- i  Section 501(c)(12)—Benevolent life insurance associations, mutual ditch or irrigation companies, mutual or cooperative telephone companies, or like organizations (Schedule G, page 15)
- j  Section 501(c)(13)—Cemeteries, crematoria, and like corporations (Schedule H, page 16)
- k  Section 501(c)(15)—Mutual insurance companies or associations, other than life or marine (Schedule I, page 17)
- l  Section 501(c)(17)—Trusts providing for the payment of supplemental unemployment compensation benefits (Parts I through IV and Schedule J, page 18)
- m  Section 501(c)(19)—A post, organization, auxiliary unit, etc., of past or present members of the Armed Forces of the United States (Schedule K, page 19)
- n  Section 501(c)(25)—Title holding corporations or trusts (Schedule A, page 7)

<b>1a</b> Full name of organization (as shown in organizing document)  <b>OPEN-IX ASSOCIATION</b>		<b>2</b> Employer identification number (EIN) (if none, see <b>Specific Instructions</b> on page 2)  <b>46-3326593</b>
<b>1b</b> c/o Name (if applicable)  		<b>3</b> Name and telephone number of person to be contacted if additional information is needed  <b>Leonard Smith, CPA</b>  <b>( 781 ) 321-6065 ext 136</b>
<b>1c</b> Address (number and street) <b>PO BOX 452751</b>	Room/Suite	
<b>1d</b> City, town or post office, state, and ZIP + 4 If you have a foreign address, see <b>Specific Instructions</b> for Part I, page 2. <b>CAMBRIDGE, MA 02132</b>		
<b>1e</b> Web site address <b>HTTP://WWW.OPEN-IX.ORG/</b>	<b>4</b> Month the annual accounting period ends <b>DECEMBER</b>	<b>5</b> Date incorporated or formed <b>August 30, 2013</b>
<b>6</b> Did the organization previously apply for recognition of exemption under this Code section or under any other section of the Code? If "Yes," attach an explanation. <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>		
<b>7</b> Has the organization filed Federal income tax returns or exempt organization information returns? If "Yes," state the form numbers, years filed, and Internal Revenue office where filed. <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>		

**8** Check the box for the type of organization. ATTACH A CONFORMED COPY OF THE CORRESPONDING ORGANIZING DOCUMENTS TO THE APPLICATION BEFORE MAILING.

- a  Corporation— Attach a copy of the Articles of Incorporation (including amendments and restatements) showing approval by the appropriate state official; also attach a copy of the bylaws.
- b  Trust— Attach a copy of the Trust Indenture or Agreement, including all appropriate signatures and dates.
- c  Association— Attach a copy of the Articles of Association, Constitution, or other creating document, with a declaration (see instructions) or other evidence that the organization was formed by adoption of the document by more than one person. Also include a copy of the bylaws.

If this is a corporation or an unincorporated association that has not yet adopted bylaws, check here

I declare under the penalties of perjury that I am authorized to sign this application on behalf of the above organization, and that I have examined this application, including the accompanying schedules and attachments, and to the best of my knowledge it is true, correct, and complete.

**PLEASE SIGN HERE**

\_\_\_\_\_  
 (Signature)

**DAVID TEMKIN, BOARD CHA**  
 (Type or print name and title or authority of signer)

01-FEB-2014  
 (Date)

**Part II. Activities and Operational Information** (Must be completed by all applicants)

- 1** Provide a detailed narrative description of all the activities of the organization—past, present, and planned. Do not merely refer to or repeat the language in the organizational document. List each activity separately in the order of importance based on the relative time and other resources devoted to the activity. Indicate the percentage of time for each activity. Each description should include, as a minimum, the following: **(a)** a detailed description of the activity including its purpose and how each activity furthers your exempt purpose; **(b)** when the activity was or will be initiated; and **(c)** where and by whom the activity will be conducted.

**On or around June 3, 2013 in New Orleans, LA Open IX Association ("OIX") met to discuss organization and interest by potential members. At that meeting we presented our vision for the organization along with a white-paper outlining how the standard and certifications might work. See [APPENDIX 2] as a reference.**

**In June 2013, OIX also retained Laredo and Smith, LLP of Boston to write its bylaws and provide general legal advice. See [APPENDIX 3]**

**On or around August 3, 2013, the organization held an additional consultation with it's community in New York, NY. OIX also hired an anti-trust attorney to begin to insure compliance with anti-trust provisions of the law.**

**On or around September 13, 2013, the organization opened a checking account at Bank of America, Kendall Sq., Cambridge, MA USA. and transferred \$15,692.00 from our law firm's IOLTA account and then transferred an additional \$7,521.00 from "Paypal."**

**On or around September 30, 2013 OIX received a final version of bylaws and articles of incorporation for the orgnization. See [Appendix 1 & 3]**

**On or around September 31, 2013, OIX filed articles and bylaws in Delaware and was then incorporated.**

**Starting in October 2013, the organization began development of both the OIX-1 and OIX-2 standard.**

**Starting in December 2013, the organization began receiving applications for certification to the OIX-1 and OIX-2 standards.**

**On or around December 3, 2013 OIX filed a notice to the Department of Justice and the Federal Trade Commission under the National Cooperative Research and Production Act of 1993 See [APPENDIX 4]**

**On December 19, 2013 we received funds to provide our first OIX-1 certification to applicant London Internet Exchange, London, UK. Subsequently, and on January 6,**

- 2** List the organization's present and future sources of financial support, beginning with the largest source first.

**Main source of income is certification of two community developed technical standards. Secondary source of income is corporate sponsorship for annual general or member meetings and gatherings.**

**Part II. Activities and Operational Information** (continued)

**3** Give the following information about the organization's governing body:

<b>a</b> Names, addresses, and titles of officers, directors, trustees, etc.	<b>b</b> Annual compensation
<b>Martin J. Hannigan 17 High Road Boston, MA 02132</b>	<b>\$0</b>
<b>Donald S. Clark C/O Google, Inc. 1600 Amphitheatre Parkway Mountain View, CA 94034</b>	<b>\$0</b>
<b>Daniel G. Gilling 29276 Evergreen Ridge Ashburn, VA 20148</b>	<b>\$0</b>
<b>Keith N. Mitchell 13900 South Park Boulevard Shaker Heights, OH 44120</b>	<b>\$0</b>
<b>Paul L. Andersen C/O CIRA 350 Sparks St. Suite 360 Ottawa, ON K1P 6E5</b>	<b>\$0</b>
<b>David Temkin 226 Park Avenue #4 Hoboken, NJ 07030</b>	<b>\$0</b>
<b>Barry M. Tishgart C/O Comcast 1701 JFK Blvd. Philadelphia, PA 19103</b>	<b>\$0</b>

**4** If the organization is the outgrowth or continuation of any form of predecessor, state the name of each predecessor, the period during which it was in existence, and the reasons for its termination. Submit copies of all papers by which any transfer of assets was effected.  
**Not Applicable**

**5** If the applicant organization is now, or plans to be, connected in any way with any other organization, describe the other organization and explain the relationship (e.g., financial support on a continuing basis; shared facilities or employees; same officers, directors, or trustees).  
**Not Applicable**

**6** If the organization has capital stock issued and outstanding, state: **(1)** class or classes of the stock; **(2)** number and par value of the shares; **(3)** consideration for which they were issued; and **(4)** if any dividends have been paid or whether your organization's creating instrument authorizes dividend payments on any class of capital stock.  
**Not Applicable**

**7** State the qualifications necessary for membership in the organization; the classes of membership (with the number of members in each class); and the voting rights and privileges received. If any group or class of persons is required to join, describe the requirement and explain the relationship between those members and members who join voluntarily. Submit copies of any membership solicitation material. Attach sample copies of all types of membership certificates issued.

**All members are equal in a single class. Individuals who wish to join the association must have an interest in the engineering and operations of internet data centers and exchange points. Membership rights include the right to volunteer to staff a committee, the right to run for the board of directors and the right to vote for other members in**

**8** Explain how your organization's assets will be distributed on dissolution.

**Assets will be sold if required and in order to satisfy outstanding obligations with excess being donated to a like non-profit organization.**

**Part II. Activities and Operational Information (continued)**

**9** Has the organization made or does it plan to make any distribution of its property or surplus funds to shareholders or members? . . . . .  Yes  No  
 If "Yes," state the full details, including: **(1)** amounts or value; **(2)** source of funds or property distributed or to be distributed; and **(3)** basis of, and authority for, distribution or planned distribution.

**10** Does, or will, any part of your organization's receipts represent payments for services performed or to be performed? .  Yes  No  
 If "Yes," state in detail the amount received and the character of the services performed or to be performed.

**We provider certification of compliance to our OIX-1 and OIX-2 standards. Cost for certification is \$5,000.00 for each standard. See [APPENDIX 7]**

**11** Has the organization made, or does it plan to make, any payments to members or shareholders for services performed or to be performed? . . . . .  Yes  No  
 If "Yes," state in detail the amount paid, the character of the services, and to whom the payments have been, or will be, made.

**12** Does the organization have any arrangement to provide insurance for members, their dependents, or others (including provisions for the payment of sick or death benefits, pensions, or annuities)? . . . . .  Yes  No  
 If "Yes," describe and explain the arrangement's eligibility rules and attach a sample copy of each plan document and each type of policy issued.

**13** Is the organization under the supervisory jurisdiction of any public regulatory body, such as a social welfare agency, etc.? . . . . .  Yes  No  
 If "Yes," submit copies of all administrative opinions or court decisions regarding this supervision, as well as copies of applications or requests for the opinions or decisions.

**14** Does the organization now lease or does it plan to lease any property? . . . . .  Yes  No  
 If "Yes," explain in detail. Include the amount of rent, a description of the property, and any relationship between the applicant organization and the other party. Also, attach a copy of any rental or lease agreement. (If the organization is a party, as a lessor, to multiple leases of rental real property under similar lease agreements, please attach a single representative copy of the leases.)

**15** Has the organization spent or does it plan to spend any money attempting to influence the selection, nomination, election, or appointment of any person to any Federal, state, or local public office or to an office in a political organization? . .  Yes  No  
 If "Yes," explain in detail and list the amounts spent or to be spent in each case.

**16** Does the organization publish pamphlets, brochures, newsletters, journals, or similar printed material? . . . . .  Yes  No  
 If "Yes," attach a recent copy of each.

**Part III. Financial Data** (Must be completed by all applicants)

Complete the financial statements for the current year and for each of the 3 years immediately before it. If in existence less than 4 years, complete the statements for each year in existence. **If in existence less than 1 year, also provide proposed budgets for the 2 years following the current year.**

**A. Statement of Revenue and Expenses**

Revenue	(a) Current Tax Year	3 Prior Tax Years or Proposed Budget for Next 2 Years			(e) Total
	From 8/30/13 To 12/31/13	(b) 12/31/2014	(c) 12/31/2015	(d) -----	
1 Gross dues and assessments of members . . . . .	\$2,555	\$3,000	\$1,500		
2 Gross contributions, gifts, etc. . . . .	\$62,994	0	0		
3 Gross amounts derived from activities related to the organization's exempt purpose (attach schedule) (Include related cost of sales on line 9.)	\$4,980	\$130,000	\$170,000		
4 Gross amounts from unrelated business activities (attach schedule)					
5 Gain from sale of assets, excluding inventory items (attach schedule) . . . . .					
6 Investment income (see page 3 of the instructions)					
7 Other revenue (attach schedule). . . . .					
8 Total revenue (add lines 1 through 7) . . . . .	\$70,529	\$133,000	\$171,500		
<b>Expenses</b>					
9 Expenses attributable to activities related to the organization's exempt purposes. . . . .	\$61,780	\$114,200	\$86,700		
10 Expenses attributable to unrelated business activities					
11 Contributions, gifts, grants, and similar amounts paid (attach schedule). . . . .					
12 Disbursements to or for the benefit of members (attach schedule)					
13 Compensation of officers, directors, and trustees (attach schedule)					
14 Other salaries and wages. . . . .					
15 Interest . . . . .					
16 Occupancy . . . . .					
17 Depreciation and depletion . . . . .					
18 Other expenses (attach schedule) . . . . .					
19 Total expenses (add lines 9 through 18) . . . . .	\$61,780	\$114,200	\$86,700		
20 Excess of revenue over expenses (line 8 minus line 19) . . . . .	\$8,749	\$18,800	\$84,800		

**B. Balance Sheet (at the end of the period shown)**

		Current Tax Year as of 12/31/13
<b>Assets</b>		
1 Cash . . . . .	1	\$8,749
2 Accounts receivable, net . . . . .	2	
3 Inventories . . . . .	3	
4 Bonds and notes receivable (attach schedule) . . . . .	4	
5 Corporate stocks (attach schedule) . . . . .	5	
6 Mortgage loans (attach schedule) . . . . .	6	
7 Other investments (attach schedule) . . . . .	7	
8 Depreciable and depletable assets (attach schedule) . . . . .	8	
9 Land . . . . .	9	
10 Other assets (attach schedule) . . . . .	10	
11 <b>Total assets</b> . . . . .	11	\$8,749
<b>Liabilities</b>		
12 Accounts payable . . . . .	12	
13 Contributions, gifts, grants, etc., payable . . . . .	13	
14 Mortgages and notes payable (attach schedule) . . . . .	14	
15 Other liabilities (attach schedule) . . . . .	15	
16 <b>Total liabilities.</b> . . . . .	16	0
<b>Fund Balances or Net Assets</b>		
17 Total fund balances or net assets . . . . .	17	\$8,749
18 <b>Total liabilities and fund balances or net assets</b> (add line 16 and line 17) . . . . .	18	\$8,749

If there has been any substantial change in any aspect of the organization's financial activities since the end of the period shown above, check the box and attach a detailed explanation. ▶

**OPEN IX ASSOCIATION**

Statement of Revenues, Expenses, and Net Assets (Income Tax Basis)

	<u>8/30/13 - 12/31/13</u>	<u>1/1/14-12/31/14</u>	<u>1/1/15-12/31/15</u>
Member Donations	\$ 62,994	\$ -	\$ -
Member Dues	2,555	3,000	1,500
Member Certification Fees	4,980	130,000	170,000
Total Income	<u>70,529</u>	<u>133,000</u>	<u>171,500</u>
Legal and Professional Fees	(39,249)	(45,000)	(31,000)
Website Development Costs	(20,330)	-	-
Annual Meeting Expense	-	(3,000)	(4,000)
Insurance	-	(5,000)	(5,000)
Marketing & Communications	-	(42,000)	(27,000)
Call Services	-	(2,000)	(2,000)
Web Hosting	-	(1,000)	(1,500)
Accounting Services	-	(3,200)	(3,200)
Voting Process	-	(2,000)	(3,000)
Travel Expenses	(1,918)	(11,000)	(10,000)
Bank Fees	(283)	-	-
Total Expenses	<u>(61,780)</u>	<u>(114,200)</u>	<u>(86,700)</u>
Net Income	\$ 8,749	\$ 18,800	\$ 84,800
Net Assets, Beginning of Period	-	8,749	27,549
Net Assets, End of Period	\$ 8,749	\$ 27,549	\$ 112,349

**Part IV. Notice Requirements (Sections 501(c)(9) and 501(c)(17) Organizations Only)**

**1** Section 501(c)(9) and 501(c)(17) organizations:

Are you filing Form 1024 within 15 months from the end of the month in which the organization was created or formed as required by section 505(c)? . . . . .  **Yes**  **No**

If "Yes," skip the rest of this Part.

If "No," answer question 2.

**2** If you answer "No" to question 1, are you filing Form 1024 within 27 months from the end of the month in which the organization was created or formed? . . . . .  **Yes**  **No**

If "Yes," your organization qualifies under Regulation section 301.9100-2 for an automatic 12-month extension of the 15-month filing requirement. Do not answer questions 3 and 4.

If "No," answer question 3.

**3** If you answer "No" to question 2, does the organization wish to request an extension of time to apply under the "reasonable action and good faith" and the "no prejudice to the interest of the government" requirements of Regulations section 301.9100-3? . . . . .  **Yes**  **No**

If "Yes," give the reasons for not filing this application within the 27-month period described in question 2. See Specific Instructions, Part IV, Line 3, page 4, before completing this item. Do not answer question 4.

If "No," answer question 4.

**4** If you answer "No" to question 3, your organization's qualification as a section 501(c)(9) or 501(c)(17) organization can be recognized only from the date this application is filed. Therefore, does the organization want us to consider its application as a request for recognition of exemption as a section 501(c)(9) or 501(c)(17) organization from the date the application is received and not retroactively to the date the organization was created or formed? . . . . .  **Yes**  **No**

**Schedule A Organizations described in section 501(c)(2) or 501(c)(25) (Title holding corporations or trusts)**

**1** State the complete name, address, and EIN of each organization for which title to property is held and the number and type of the applicant organization's stock held by each organization.

**2** If the annual excess of revenue over expenses has not been or will not be turned over to the organization for which title to property is held, state the purpose for which the excess is or will be retained by the title holding organization.

**3** In the case of a corporation described in section 501(c)(2), state the purpose of the organization for which title to property is held (as shown in its governing instrument) and the Code sections under which it is classified as exempt from tax. If the organization has received a determination or ruling letter recognizing it as exempt from taxation, please attach a copy of the letter.

**4** In the case of a corporation or trust described in section 501(c)(25), state the basis whereby each shareholder is described in section 501(c)(25)(C). For each organization described that has received a determination or ruling letter recognizing that organization as exempt from taxation, please attach a copy of the letter.

**5** With respect to the activities of the organization.

**a** Is any rent received attributable to personal property leased with real property? . . . . .  **Yes**  **No**

If "Yes," what percentage of the total rent, as reported on the financial statements in Part III, is attributable to personal property?

**b** Will the organization receive income which is incidentally derived from the holding of real property, such as income from operation of a parking lot or from vending machines? . . . . .  **Yes**  **No**

If "Yes," what percentage of the organization's gross income, as reported on the financial statements in Part III, is incidentally derived from the holding of real property?

**c** Will the organization receive income other than rent from real property or personal property leased with real property or income which is incidentally derived from the holding of real property? . . . . .  **Yes**  **No**

If "Yes," describe the source of the income.

**Instructions**

**Line 1.**—Provide the requested information on each organization for which the applicant organization holds title to property. Also indicate the number and types of shares of the applicant organization's stock that are held by each.

**Line 2.**—For purposes of this question, "excess of revenue over expenses" is all of the organization's income for a particular tax year less operating expenses.

**Line 3.**—Give the exempt purpose of each organization that is the basis for its exempt status and the Internal Revenue Code section

that describes the organization (as shown in its IRS determination letter).

**Line 4.**—Indicate if the shareholder is one of the following:

**1.** A qualified pension, profit-sharing, or stock bonus plan that meets the requirements of the Code;

**2.** A government plan;

**3.** An organization described in section 501(c)(3); or

**4.** An organization described in section 501(c)(25).

**Schedule B Organizations Described in Section 501(c)(4) (Civic leagues, social welfare organizations (including posts, councils, etc., of veterans' organizations not qualifying or applying for exemption under section 501(c)(19)) or local associations of employees.)**

1 Has the Internal Revenue Service previously issued a ruling or determination letter recognizing the applicant organization (or any predecessor organization listed in question 4, Part II of the application) to be exempt under section 501(c)(3) and later revoked that recognition of exemption on the basis that the applicant organization (or its predecessor) was carrying on propaganda or otherwise attempting to influence legislation or on the basis that it engaged in political activity? . . .  Yes  No

If "Yes," indicate the earliest tax year for which recognition of exemption under section 501(c)(3) was revoked and the IRS district office that issued the revocation.

2 Does the organization perform or plan to perform (for members, shareholders, or others) services, such as maintaining the common areas of a condominium; buying food or other items on a cooperative basis; or providing recreational facilities or transportation services, job placement, or other similar undertakings? . . .  Yes  No

If "Yes," explain the activities in detail, including income realized and expenses incurred. Also, explain in detail the nature of the benefits to the general public from these activities. (If the answer to this question is explained in Part II of the application (pages 2, 3, and 4), enter the page and item number here.)

3 If the organization is claiming exemption as a homeowners' association, is access to any property or facilities it owns or maintains restricted in any way? . . .  Yes  No

If "Yes," explain.

4 If the organization is claiming exemption as a local association of employees, state the name and address of each employer whose employees are eligible for membership in the association. If employees of more than one plant or office of the same employer are eligible for membership, give the address of each plant or office.

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**Schedule C** **Organizations described in section 501(c)(5) (Labor, agricultural, including fishermen’s organizations, or horticultural organizations) or section 501(c)(6) (business leagues, chambers of commerce, etc.)**

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**1** Describe any services the organization performs for members or others. (If the description of the services is contained in Part II of the application, enter the page and item number here.)

**PAGE 4, QUESTION 10**

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**2** Fishermen’s organizations only.—What kinds of aquatic resources (not including mineral) are cultivated or harvested by those eligible for membership in the organization?

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**3** Labor organizations only.—Is the organization organized under the terms of a collective bargaining agreement? . . .  **Yes**  **No**

If “Yes,” attach a copy of the latest agreement.

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**Schedule D Organizations described in section 501(c)(7) (Social clubs)**

**1** Has the organization entered or does it plan to enter into any contract or agreement for the management or operation of its property and/or activities, such as restaurants, pro shops, lodges, etc.?  **Yes**  **No**

If "Yes," attach a copy of the contract or agreement. If one has not yet been drawn up, please explain the organization's plans.

**2** Does the organization seek or plan to seek public patronage of its facilities or activities by advertisement or otherwise?  **Yes**  **No**

If "Yes," attach sample copies of the advertisements or other requests.  
If the organization plans to seek public patronage, please explain the plans.

**3a** Are nonmembers, other than guests of members, permitted or will they be permitted to use the club facilities or participate in or attend any functions or activities conducted by the organization?  **Yes**  **No**  
If "Yes," describe the functions or activities in which there has been or will be nonmember participation or admittance. (Submit a copy of the house rules, if any.)

<b>b</b> State the amount of nonmember income included in Part III of the application, lines 3 and 4, column (a) . . . . .	_____
<b>c</b> Enter the percent of gross receipts from nonmembers for the use of club facilities . . . . .	_____ %
<b>d</b> Enter the percent of gross receipts received from investment income and nonmember use of the club's facilities . . . . .	_____ %

**4a** Does the organization's charter, bylaws, other governing instrument, or any written policy statement of the organization contain any provision that provides for discrimination against any person on the basis of race, color, or religion?  **Yes**  **No**

**b** If "Yes," state whether or not its provision will be kept.

**c** If the organization has such a provision that will be repealed, deleted, or otherwise stricken from its requirements, state when this will be done. \_\_\_\_\_

**d** If the organization formerly had such a requirement and it no longer applies, give the date it ceased to apply . . . . . \_\_\_\_\_

**e** If the organization restricts its membership to members of a particular religion, check here and attach the explanation specified in the instructions

**See reverse side for instructions**

## Instructions

**Line 1.**—Answer “Yes,” if any of the organization’s property or activities will be managed by another organization or company.

**Lines 3b, c, and d.**—Enter the figures for the current year. On an attached schedule, furnish the same information for each of the prior tax years for which you completed Part III of the application.

**Line 4e.**—If the organization restricts its membership to members of a particular religion, the organization must be:

1. An auxiliary of a fraternal beneficiary society that:

- a. Is described in section 501(c)(8) and exempt from tax under section 501(a), and

- b. Limits its membership to members of a particular religion; or

2. A club that, in good faith, limits its membership to the members of a particular religion in order to further the teachings or principles of that religion and not to exclude individuals of a particular race or color.

If you checked **4e**, your explanation must show how the organization meets one of these two requirements.

**Schedule E Organizations described in section 501(c)(8) or 501(c)(10) (Fraternal societies, orders, or associations)**

- 1 Is the organization a college fraternity or sorority, or chapter of a college fraternity or sorority? . . . . .  Yes  No  
If "Yes," read the instructions for Line 1, below, before completing this schedule.

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- 2 Does or will your organization operate under the lodge system? . . . . .  Yes  No  
If "No," does or will it operate for the exclusive benefit of the members of an organization operating under the lodge system? . . . . .  Yes  No

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- 3 Is the organization a subordinate or local lodge, etc.? . . . . .  Yes  No  
If "Yes," attach a certificate signed by the secretary of the parent organization, under the seal of the organization, certifying that the subordinate lodge is a duly constituted body operating under the jurisdiction of the parent body.

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- 4 Is the organization a parent or grand lodge? . . . . .  Yes  No  
If "Yes," attach a schedule for each subordinate lodge in active operation showing: (a) its name and address; (b) the number of members in it; and (c) how often it holds periodic meetings.

**Instructions**

**Line 1.**—To the extent that they qualify for exemption from Federal income tax, college fraternities and sororities generally qualify as organizations described in section 501(c)(7). Therefore, if the organization is a college fraternity or sorority, refer to the discussion of section 501(c)(7) organizations in Pub. 557. If section 501(c)(7) appears to apply to your organization, complete Schedule D instead of this schedule.

**Line 2.**—Operating under the lodge system means carrying on activities under a form of organization that is composed of local branches, chartered by a parent organization, largely self-governing, and called lodges, chapters, or the like.

**Schedule F Organizations described in section 501(c)(9) (Voluntary employees' beneficiary associations)**

**1** Describe the benefits available to members. Include copies of any plan documents that describe such benefits and the terms and conditions of eligibility for each benefit.

**2** Are any employees or classes of employees entitled to benefits to which other employees or classes of employees are not entitled?  **Yes**  **No**  
If "Yes," explain.

**3** Give the following information for each plan as of the last day of the most recent plan year and enter that date here. If there is more than one plan, attach a separate schedule / /  
(mo.) (day) (yr.)

**a** Total number of persons covered by the plan who are highly compensated individuals (See instructions below.) . . . \_\_\_\_\_

**b** Number of other employees covered by the plan. . . . . \_\_\_\_\_

**c** Number of employees not covered by the plan . . . . . \_\_\_\_\_

**d** Total number employed\* . . . . . \_\_\_\_\_

\* Should equal the total of **a**, **b**, and **c**—if not, explain any difference. Describe the eligibility requirements that prevent those employees not covered by the plan from participating.

**4** State the number of persons, if any, other than employees and their dependents (e.g., the proprietor of a business whose employees are members of the association) who are entitled to receive benefits . . . . . ►

**Instructions**

**Line 3a.**—A "highly compensated individual" is one who:

**(a)** Owned 5% or more of the employer at any time during the current year or the preceding year.

**(b)** Received more than \$80,000 (adjusted for inflation) in compensation from the employer for the preceding year, and

**(c)** Was among the top 20% of employees by compensation for the preceding year. However, the employer can choose not to have **(c)** apply.

**Schedule G Organizations described in section 501(c)(12) (Benevolent life insurance associations, mutual ditch or irrigation companies, mutual or cooperative telephone companies, or like organizations)**

- 1 Attach a schedule in columnar form for each tax year for which the organization is claiming exempt status. On each schedule:
  - a Show the total gross income received from members or shareholders.
  - b List, by source, the total amounts of gross income received from other sources.

- 2 If the organization is claiming exemption as a local benevolent insurance association, state:
  - a The counties from which members are accepted or will be accepted.

- b Whether stipulated premiums are or will be charged in advance, or whether losses are or will be paid solely through assessments.

- 3 If the organization is claiming exemption as a "like organization," explain how it is similar to a mutual ditch or irrigation company, or a mutual or cooperative telephone company.

- 4 Are the rights and interests of members in the organization's annual savings determined in proportion to their business with it?  Yes  No  
 If "Yes," does the organization keep the records necessary to determine at any time each member's rights and interests in such savings, including assets acquired with the savings?  Yes  No

- 5 If the organization is a mutual or cooperative telephone company and has contracts with other systems for long-distance telephone services, attach copies of the contracts.

**Instructions**

Mutual or cooperative electric or telephone companies should show income received from qualified pole rentals separately. Mutual or cooperative telephone companies should also show separately the gross amount of income received from nonmember telephone companies for performing services that

involve their members and the gross amount of income received from the sale of display advertising in a directory furnished to their members.

Do not net amounts due or paid to other sources against amounts due or received from those sources.

**Schedule H Organizations described in section 501(c)(13) (Cemeteries, crematoria, and like corporations)**

**1** Attach the following documents:

- a** Complete copy of sales contracts or other documents, including any "debt" certificates, involved in acquiring cemetery or crematorium property.
- b** Complete copy of any contract your organization has that designates an agent to sell its cemetery lots.
- c** A copy of the appraisal (obtained from a disinterested and qualified party) of the cemetery property as of the date acquired.

---

**2** Does your organization have, or does it plan to have, a perpetual care fund? . . . . .  **Yes**  **No**  
 If "Yes," attach a copy of the fund agreement and explain the nature of the fund (cash, securities, unsold land, etc.)

---

**3** If your organization is claiming exemption as a perpetual care fund for an organization described in section 501(c)(13), has the cemetery organization, for which funds are held, established exemption under that section? . . . . .  **Yes**  **No**  
 If "No," explain.

---

**Schedule I Organizations described in section 501(c)(15) (Small insurance companies or associations)**

**1** Is the organization a member of a controlled group of corporations as defined in section 831(b)(2)(B)(ii)? (Disregard section 1563(b)(2)(B) in determining whether the organization is a member of a controlled group.) . . . . .  **Yes**  **No**

If "Yes," include on lines 2 through 5 the total amount received by the organization and all other members of the controlled group.

If "No," include on lines 2 through 5 only the amounts that relate to the applicant organization.

	(a) Current Year	3 Prior Tax Years		
	From _____ To _____	(b) -----	(c) -----	(d) -----
<b>2</b> Direct written premiums . . . . .				
<b>3</b> Reinsurance assumed . . . . .				
<b>4</b> Reinsurance ceded . . . . .				
<b>5</b> Net written premiums ((line 2 plus line 3) minus line 4) . . . . .				
<b>6</b> If you entered an amount on line 3 or line 4, attach a copy of the reinsurance agreements the organization has entered into.				

**Instructions**

**Line 1.**— Answer "Yes," if the organization would be considered a member of a controlled group of corporations if it were not exempt from tax under section 501(a). In applying section 1563(a), use a "more than 50%" stock ownership test to determine whether the applicant or any other corporation is a member of a controlled group.

**Line 2.**— In addition to other direct written premiums, include on line 2 the full amount of any prepaid or advance premium in the year the prepayment is received. For example, if a \$5,000 premium for a 3-year policy was received in the current year, include the full \$5,000 amount in the Current Year column.

**Schedule J Organizations described in section 501(c)(17) (Trusts providing for the payment of supplemental unemployment compensation benefits)**

1 If benefits are provided for individual proprietors, partners, or self-employed persons under the plan, explain in detail.

2 If the plan provides other benefits in addition to the supplemental unemployment compensation benefits, explain in detail and state whether the other benefits are subordinate to the unemployment benefits.

3 Give the following information as of the last day of the most recent plan year and enter that date here \_\_\_\_\_

a Total number of employees covered by the plan who are shareholders, officers, self-employed persons, or highly compensated (See Schedule F instructions for line 3a on page 14.) \_\_\_\_\_

b Number of other employees covered by the plan \_\_\_\_\_

c Number of employees not covered by the plan \_\_\_\_\_

d Total number employed\* \_\_\_\_\_

\* Should equal the total of a, b, and c—if not, explain the difference. Describe the eligibility requirements that prevent those employees not covered by the plan from participating.

4 At any time after December 31, 1959, did any of the following persons engage in any of the transactions listed below with the trust: the creator of the trust or a contributor to the trust; a brother or sister (whole or half blood), a spouse, an ancestor, or a lineal descendant of such a creator or contributor; or a corporation controlled directly or indirectly by such a creator or contributor?

Note: If you know that the organization will be, or is considering being, a party to any of the transactions (or activities) listed below, check the "Planned" box. Give a detailed explanation of any "Yes" or "Planned" answer in the space below.

- a Borrow any part of the trust's income or corpus?  Yes  No  Planned
- b Receive any compensation for personal services?  Yes  No  Planned
- c Obtain any part of the trust's services?  Yes  No  Planned
- d Purchase any securities or other properties from the trust?  Yes  No  Planned
- e Sell any securities or other property to the trust?  Yes  No  Planned
- f Receive any of the trust's income or corpus in any other transaction?  Yes  No  Planned

5 Attach a copy of the Supplemental Unemployment Benefit Plan and related agreements.

**Schedule K Organizations described in section 501(c)(19)—A post or organization of past or present members of the Armed Forces of the United States, auxiliary units or societies for such a post or organization, and trusts or foundations formed for the benefit of such posts or organizations.**

1 To be completed by a post or organization of past or present members of the Armed Forces of the United States.

- a Total membership of the post or organization . . . . . \_\_\_\_\_
- b Number of members who are present or former members of the U.S. Armed Forces . . . . . \_\_\_\_\_
- c Number of members who are cadets (include students in college or university ROTC programs or at armed services academies only), or spouses, widows, or widowers of cadets or past or present members of the U.S. Armed Forces . . . . . \_\_\_\_\_

d Does the organization have a membership category other than the ones set out above? . . . . .  Yes  No

If "Yes," please explain in full. Enter number of members in this category . . . . . \_\_\_\_\_

e If you wish to apply for a determination that contributions to your organization are deductible by donors, enter the number of members from line 1b who are war veterans, as defined below. . . . . \_\_\_\_\_

A war veteran is a person who served in the Armed Forces of the United States during the following periods of war: April 21, 1898, through July 4, 1902; April 6, 1917, through November 11, 1918; December 7, 1941, through December 31, 1946; June 27, 1950, through January 31, 1955; and August 5, 1964, through May 7, 1975.

2 To be completed by an auxiliary unit or society of a post or organization of past or present members of the Armed Forces of the United States.

a Is the organization affiliated with and organized according to the bylaws and regulations formulated by such an exempt post or organization? . . . . .  Yes  No  
If "Yes," submit a copy of such bylaws or regulations.

b How many members does your organization have? . . . . . \_\_\_\_\_

c How many are themselves past or present members of the Armed Forces of the United States, or are their spouses, or persons related to them within two degrees of blood relationship? (Grandparents, brothers, sisters, and grandchildren are the most distant relationships allowable.) . . . . . \_\_\_\_\_

d Are all of the members themselves members of a post or organization, past or present members of the Armed Forces of the United States, spouses of members of such a post or organization, or related to members of such a post or organization within two degrees of blood relationship? . . . . .  Yes  No

3 To be completed by a trust or foundation organized for the benefit of an exempt post or organization of past or present members of the Armed Forces of the United States.

a Will the corpus or income be used solely for the funding of such an exempt organization (including necessary related expenses)? . . . . .  Yes  No  
If "No," please explain.

b If the trust or foundation is formed for charitable purposes, does the organizational document contain a proper dissolution provision as described in section 1.501(c)(3)-1(b)(4) of the Income Tax Regulations? . . . . .  Yes  No



CERTIFICATE OF INCORPORATION  
OF  
OPEN IX ASSOCIATION

1. The name of the corporation is Open IX Association (the "Corporation").

2. The address of the registered office of the Corporation in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, County of New Castle, 19808. The name of the Corporation's registered agent at such address is Corporation Service Company.

3. The Corporation is a nonprofit organization organized exclusively for professional, commercial, industrial or trade association purposes within the meaning of Section 501(c)(6) of the Internal Revenue Code of 1986, as amended (the "Code"), or the corresponding provision of any future United States Internal Revenue law. In furtherance of the foregoing, the purposes of the Corporation to be conducted or promoted are as follows:

To be a professional, commercial, industrial or trade association for the internet exchange industry and those affected by it.

Notwithstanding any provision of this certificate of incorporation or any provisions of applicable state law, the Corporation shall not have the power to carry on any activities the existence of which would cause it to fail to qualify as an organization exempt from tax under Section 501(c)(6) of the Code or the corresponding provision of any future United States Internal Revenue law.

4. No part of the net earnings of this Corporation shall ever inure to the benefit of or be distributable to any of its members, directors or officers or any other person having a personal or private interest in the activities of this Corporation, and no substantial part of the activities of this Corporation shall ever be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene in (including the publishing or distributing of statements), any political campaign on behalf of, or in opposition to, any candidate for public office. The Corporation shall not be authorized to accept gifts or contributions or other funds for purposes other than the purposes of the Corporation hereinbefore stated.

5. The Corporation shall be a membership corporation and shall have no authority to issue capital stock. The conditions of membership in the Corporation and the voting powers of the members shall be as set forth in the by-laws of the Corporation. Except as otherwise expressly set forth in the General Corporation Law, as the same exists or may hereafter be amended, the certificate of incorporation or the by-laws of the Corporation, no member of the Corporation shall be entitled to vote.

6. No officer, member of the Board of Directors, or employee of the Corporation or other person shall receive or be lawfully entitled to receive any pecuniary profit or benefit from the operations of the Corporation, except reasonable compensation for services actually rendered to or on behalf of the Corporation. A director of the Corporation shall not be personally liable to

the Corporation or its members for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the General Corporation Law, as the same exists or may hereafter be amended. Any repeal or modification of the foregoing sentence shall not adversely affect any right or protection of a director of the Corporation existing hereunder with respect to any act or omission occurring prior to such repeal or modification.

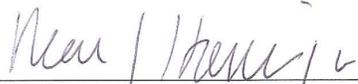
7. The election of the directors of the Corporation need not be by written ballot.

8. In the event of the liquidation, dissolution or winding up of the Corporation, whether voluntary, involuntary, or by operation of law, except as may be otherwise provided by law, the Board of Directors shall, after paying or making provisions for the payment of all the liabilities of the Corporation, dispose of all the assets of the Corporation in a manner related to the purposes of the Corporation, to such organization or organizations organized and operated exclusively for charitable, educational, or scientific purposes as shall at the time qualify as an exempt organization or organizations under Section 501(c) of the Internal Revenue Code of 1986 (or the corresponding provisions of any future United States Internal Revenue Law), as the Board of Directors shall determine. Any such assets not so disposed of shall be disposed of by appropriate judicial or executive authority in conformance with applicable law.

9. This Corporation reserves the right at any time, and from time to time, to amend, alter, change or repeal any provision contained in the certificate of incorporation, and to add other provisions to the certificate of incorporation authorized by the laws of the State of Delaware, at the time such laws are in force, in the manner now or hereafter prescribed by law; and all rights, preferences and privileges of whatsoever nature conferred upon members, directors or any other persons whomsoever by and pursuant to the certificate of incorporation in its present form or as hereafter amended are granted subject to the rights reserved in this Article Ninth; provided, however, that no amendment, alteration, change or repeal of any provisions of the certificate of incorporation shall authorize the Board of Directors to conduct the affairs of the Corporation in any manner or for any purpose which would cause the Corporation to lose its tax-exempt status under the provisions of the Code or any future United States Internal Revenue laws. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors is expressly authorized and empowered to adopt, amend and repeal the by-laws of the Corporation, subject to the power of the members of the Corporation to amend or repeal any by-law made by the Board of Directors.

10. The name and mailing address of the incorporator is Martin Hannigan, 17 Virgil Road, West Roxbury, Massachusetts 02132.

I, the undersigned, for the purpose of forming a corporation under the laws of the State of Delaware, do make, file and record this Certificate, and do certify that the facts herein stated are true, and I have accordingly hereunto set my hand this 30th day of August, 2013.

  
\_\_\_\_\_  
Martin Hannigan, Incorporator

**OPEN-IX  
A PROPOSAL TO FIX A PROBLEM  
DRAFT VERSION 5.2**

**OPPORTUNITY**

There are two opportunities for sea change in the North American Internet market. First, there is significant support for the concept of business-neutral and member-governed Internet exchanges. Second, an additional and complimentary opportunity exists for increasing market share amongst data centers by significantly reducing interconnect complexity and cost and increasing the level of competition amongst them while improving their access to networks within critical interconnection markets.

**WHAT IS OPEN-IX?**

Open-IX serves as a self-regulatory body of owners, operators, users and those concerned with Internet exchanges in North America. Open-IX intends to:

- 1) Encourage the creation and development of, and the investment in Internet exchanges by developing minimum standards of performance
- 2) Promote common and uniform specifications for data transfer and physical connectivity.
- 3) Improve IX performance by developing criteria and methods of measurement to reduce the complexity that restricts interconnection in fragmented markets.
- 4) Certify Internet Exchanges that meet these standards..

The Open-IX standards and framework creates an organized and deliberate method to foster this change efficiently, rapidly and in partnership with the datacenter and IX community, fully supported by the Internet community at-large.

**PROBLEM STATEMENT**

There is a centralized density of network providers in common centers in North America, resulting in network expansion difficulties outside of those centers and a lack of resiliency in case of disaster. This limits customer choice of data center facilities because data centers with limited network connectivity are not able to attract relevant interconnection density to make these alternatives viable. Solving this problem should lower costs for all parties and spur internet growth.

**THE INTERCONNECT PROBLEM**

The cost to provide a physical inter-connect versus the value to the purchaser is not reflected properly. Inter-connects also used as a tool to deny significant access to alternative facilities.

Let's assume that a delivery infrastructure using an advanced optical interconnect delivery system configuration that can provide interconnect for 1440 fibers in a standard frame that occupies a liberal footprint of 64 square feet in a conditioned data center space. That would equate to rack rent at a standard kW cost of about \$960 MRC. The available interconnect count would be 720 pairs. At a conservative cost per interconnect of \$300 MRC this equates to \$432,000 MRC in revenue per frame. The cost of the service frame itself is about \$30,000 and it might be expensed over a five-years as telecom infrastructure.

It should be understood that there are additional costs required to operate the interconnect service. Those costs are typically sunk into facility expense as measured by the kW cost calculation which was designed to express a fair infrastructure expense e.g. cost of energy delivery, rent, interconnect piping and service delivery components.

#### **EXAMPLE OF THE INTERCONNECT PROBLEM – FIBER INTERCONNECTS EACH**

<b>Expense</b>	<b>Datacenter A</b>	<b>Datacenter B</b>	<b>Datacenter C</b>
<b>MRC</b>	<b>\$500 ea.</b>	<b>\$375 ea.</b>	<b>\$0 ea.</b>
<b>NRC</b>	<b>\$1000</b>	<b>\$500</b>	<b>\$200 - \$600</b>
<b>36 mos. Cost</b>	<b>\$19000</b>	<b>\$14000</b>	<b>\$200 - \$600</b>
<b>Lifetime Cost</b>	<b>NA</b>	<b>NA</b>	<b>\$200 - \$600</b>

#### **EXAMPLE OF THE IXP PROBLEM – 10GE PORT**

<b>Expense</b>	<b>Commercial IXP</b>	<b>Member IXP-A</b>	<b>Member IXP-B</b>
<b>MRC</b>	\$2,500 ea	\$1,000 ea	\$1,500 ea
<b>YRC</b>	\$30,000 ea	\$12,000 ea	\$18,000 ea

#### **SCOPE**

Scope of the initiative is North America.

#### **WHO WE ARE AND OUR AFFILIATIONS**

Like-minded individuals comprise the Open-IX Interim Board. All members of the board are volunteers who represent the Internet community in the United States. We represent ourselves and not our employers, who may join OIX at a later date:

- Paul L. Andersen, CIRA
- Donald S. Clark, Google
- Dan Golding, Iron Mountain
- Martin Hannigan, Akamai
- Keith Mitchell, SMOTI
- David Temkin, Netflix
- Barry Tishgart, Comcast

## **HOW WE REPRESENT THE INTERNET COMMUNITY NOW AND IN THE FUTURE**

The current slate of volunteers represents the community of network and data center operators. The community supports this group through a partnership, and our interactions at network operator and Internet community meetings. Participation in our latest survey, and public updates in the NANOG and RIPE forums and direct interactions with IXP's and data centers underscores the support and community governance aspects of our project. At a later date, we will ask the community to ratify the make up of the committee as "certifier" of standard compliance projects deemed inline with the goals and objectives of the project at-large and following established best current practices.

In the future we expect to have a formalized governance process that will support the relationship between data center, IX operators and the community. This governance process will be responsible for ensuring that data center and IX Operators continue to serve the community's best interests - including outreach, market expansion and fiscal responsibility.

## **NEUTRALITY**

Open-IX Association will not compete with its members, offer services, or operate in any manner that has the appearance of non-neutrality.

## **BUSINESS AND SOCIAL OUTREACH**

Open-IX seeks to ensure that all IX operators are able to communicate with both potential and current members and allow peers (members) of all North American internet exchanges the ability to meet and socialize in a neutral environment on a regular basis. Sponsorship would be provided by member exchanges in a manner consistent with their attendee base with no expectation of favor.

Open-IX will also foster communication through tools such as PeeringDB.

## **HOW THE PROPOSAL AND CERTIFICATION PROCESS WORKS [ in progress ]**

*Proposals for IXP building and standards certification for all is electronically sent to [certification@open-ix.org](mailto:certification@open-ix.org). The board will either provide an "initial endorsement" based on meeting the criteria described below or provide comments to the PI. Once the PI receives initial endorsement, the PI's proposal will be put forward to the Internet community at the next relevant opportunity. The official communication vehicle for Open-IX in North American will be the [public@open-ix.org](mailto:public@open-ix.org) mailing list. After initial presentation to the community, a thirty-day public comments period will commence on that mailing list. Comments will be*

*collected by Open-IX Directors and reviewed. Proposals with community consensus and compliance with the standards will be deemed to have met all criteria and receive a certification from the Open-IX Association.*

*[ flow diagram to be inserted here ]*

## **THE STANDARDS**

### **OPEN-IX FAIR INTERCONNECT COST “FICS” STANDARD**

Providers of Interconnects will set and publish a fair interconnect standard price that will reflect both internal/local interconnect as well as interconnects to the building MMR frame.

### **OPEN-IX IXP STANDARD [ Needs minimum technical standards ]**

1. Meets preferred market definition as identified in Table 1
2. Meets or exceeds “Minimum Service Offering” as defined in Table 2 and Section 2
3. Meets or exceeds “Governance Requirements” as defined in Section 3
4. Agrees to operate the IXP only in an OPEN-IX certified data-center facility of their choice
5. Signs an agreement with Open-IX Association agreeing to the above and in exchange for the IXP certification.

### **OPEN-IX DATACENTER STANDARD - CRITERIA**

1. Will provide adequate rack space to an Open-IX Certified IXP of their choice
2. Will provide adequate power to an Open-IX Certified IXP of their choice
3. Adopts the Fair Interconnect Cost Standard “FICS”
4. Signs an agreement with Open-IX Association agreeing to maintain certification for an initial N-year term

### **OPEN-IX MMR AND BUILDING STANDARD – CRITERIA**

1. Adopts the Fair Interconnect Cost Standard “FICS” for the building MMR including suite to suite or building to building interconnects “extended interconnects”
2. Provides for contractual requirements to maintain the standard in the event of outsourcing of the MMR

3. Signs an agreement with Open-IX Association agreeing to maintain certification for an initial N-year term

## CONTACT US AND PARTICIPATE

FUNCTION	ADDRESS
Information	<a href="mailto:info@open-ix.org">info@open-ix.org</a>
Certification Requests or Questions	<a href="mailto:certify@open-ix.org">certify@open-ix.org</a>
Open-IX Interim Board	<a href="mailto:board@open-ix.org">board@open-ix.org</a>
Public Mailing List Subscriptions	<a href="http://open-ix.org/mailman/listinfo/public">http://open-ix.org/mailman/listinfo/public</a>
DC Standards	TBD
IXP Standards	TBD

## 1. COMMUNITY MARKET ASSERTIONS

In April of 2013, we conducted a narrowly focused survey as to the ranking of specific markets in the United States to be serviced as by the project. That survey was designed to elicit simple and straightforward responses with respect to where participants would be willing to participate in a an effort submitted by a PI and endorsed by the project.

**Question: Please indicate the need for OPEN-IX peering in the following markets**

	High	Moderate	Low	answered question skipped question	37 1
				No Opinion. (I am not familiar enough with the Metro to comment.)	Rating
					Count
<b>NoVa</b>	<b>54.1%</b> <b>(20)</b>	18.9% (7)	13.5% (5)	13.5% (5)	37
<b>New York / NJ</b>	<b>64.7%</b> <b>(22)</b>	8.8% (3)	14.7% (5)	11.8% (4)	34
<b>Silicon Valley</b>	<b>54.5%</b> <b>(18)</b>	18.2% (6)	9.1% (3)	18.2% (6)	33
<b>Chicago</b>	<b>54.5%</b> <b>(18)</b>	24.2% (8)	9.1% (3)	12.1% (4)	33
<b>Los Angeles</b>	<b>50.0%</b> <b>(17)</b>	29.4% (10)	8.8% (3)	11.8% (4)	34
<b>Miami</b>	<b>42.4%</b> <b>(14)</b>	27.3% (9)	12.1% (4)	18.2% (6)	33
<b>Dallas</b>	<b>39.4%</b> <b>(13)</b>	33.3% (11)	6.1% (2)	21.2% (7)	33

<b>Atlanta</b>	<b>35.3%</b> <b>(12)</b>	29.4% (10)	8.8% (3)	26.5% (9)	34
<b>Seattle</b>	21.2% (7)	21.2% (7)	<b>36.4%</b> <b>(12)</b>	21.2% (7)	33
<b>Toronto</b>	12.9% (4)	22.6% (7)	<b>32.3%</b> <b>(10)</b>	<b>32.3% (10)</b>	31
<b>Denver</b>	27.3% (9)	27.3% (9)	12.1% (4)	<b>33.3% (11)</b>	33
<b>Boston</b>	24.2% (8)	<b>33.3%</b> <b>(11)</b>	21.2% (7)	21.2% (7)	33
<b>Phoenix</b>	21.9% (7)	21.9% (7)	21.9% (7)	<b>34.4% (11)</b>	32
				Other (please specify)	8

**Table 1 Market Survey Results**

## **2. MINIMUM SERVICE OFFERING FOR IXP**

Any IXP operator seeking support of the community must also propose the following minimum services.

### **i. Public Internet Exchange “IX”**

1. A metropolitan-wide layer 2 switch platform allowing open any-to-any interconnection

### **ii. Private VLAN “PVLAN”**

1. A metropolitan-wide layer 2 switch platform allowing private, provisioned any to any interconnection across the same platform as the public IX

### **iii. Virtual Private Line Services “VPLS”**

1. A metropolitan-wide service allowing for dedicated bandwidth interconnection between any two points using dedicated ports regardless of membership to the IX across a shared infrastructure

## **2.1 MINIMUM SERVICE OFFERING SURVEY**

In April of 2013 we conducted a narrow survey to demonstrate support for standardized minimum services. The survey defined what services a participant would be interested in acquiring if the opportunity presented itself on a market to market basis.

**Question: What services should an OPEN-IX endorsed project provide?**

7. What services should OpenIX provide?				
	Yes	No	No Opinion	Rating Count
Standard Internet Exchange (Shared Public VLAN)	92.1% (35)	0.0% (0)	7.9% (3)	38
Virtual Circuits (VLAN, E-Line, E-LAN, etc)	68.6% (24)	17.1% (6)	14.3% (5)	35
Wavelengths	48.6% (17)	17.1% (6)	34.3% (12)	35
		Other (please specify) <a href="#">Show Responses</a>		4
		answered question		38
		skipped question		0

**Table 2 Minimum Service Offering Survey Results**

### 3. GOVERNANCE REQUIREMENTS FOR IXP's

In order to insure long-term support, governance plans are defined as part of a proposed project. Seeking Open-IX certification must reflect the balance of the community and the industry coming together to resolve a significant problem. That problem resolution is expected to be long term. The certified entity must propose a governance model that supports close interaction with the Internet community and their representatives, regionally, nationally and internationally. Community governance is not only about processes; it's about getting things done that have a positive benefit to the community that will support the effort. Project initiator must provide measurements that support their interaction with the community and demonstrate on a regular basis that intertwined relationship.

#### 3.1 Community Based Governance Model

- A. Codified, robust North American community engagement requirements
- B. Decision Support Performance Feedback requirements
- C. North American Organizational accountability to stakeholders
- D. North American Collaborations and Partnerships with both the networking and data-center community

### 4. INITIAL FUNDING REQUIREMENTS

A minimum level of funding is required in order to organize and sustain the project. The members of the review board and the community need to be supported individually with their liability for their fiduciary responsibility centered within the organization. The organization at this stage needs to be formally organized as a non-profit, needs the

creation and legal review of its by-laws and processes and occasionally may need accounting and additional legal advice to maintain the organization. The idea behind organizing this way is to create a community trust, an entity owned by and operated by the community in a similar way and fashion as NANOG, but with a narrower mission.

#### A. Funding Requirements

Funding needs are low. The largest portion of the expense for the startup phase is legal, account, and fees related to insurance for reviewers. Those fees would go to properly incorporate Open-IX, insure the name is not in conflict from an intellectual property standpoint, creating agreements for the endorsement and continuing “lightweight” operations.

<b>EXPENSE</b>	<b>Yr 1</b>	<b>Yr 2</b>	<b>Yr 3</b>	<b>Yr 4</b>
<b>Legal</b>	\$15,000.00	\$5,000.00	\$4,000.00	\$4,000.00
<b>Telephone</b>	\$2,500.00	\$2,500.00	\$2,000.00	\$2,000.00
<b>Website</b>	\$10,000.00	\$2,500.00	\$1,500.00	\$1,500.00
<b>Insurance</b>	\$5,000.00	\$5,500.00	\$6,000.00	\$6,500.00
<b>Taxes</b>	\$-	\$-	\$-	\$-
<b>Administration</b>	\$8,000.00	\$6,000.00	\$7,000.00	\$8,000.00
<b>Total</b>	\$40,500.00	\$21,500.00	\$20,500.00	\$22,000.00
<b>Startup \$</b>	<b>\$40,500.00</b>			

#### 5. SUSTAINING INCOME TO FUND ON-GOING OPERATIONS

**Awaiting completion of by-laws. Initial idea is to provide for a small application fee on a per-market basis to fund a legal review and administration of open-ix. See Section 4, you can likely contrast that to “small application fee”.**

**Bylaws of Open IX Association**

**A Delaware Non-profit Corporation**

**ADOPTED \_\_\_\_\_, 2013**

## **Open-IX Association**

### **Bylaws**

Adopted \_\_\_\_\_, 2013 by the Open-IX Association  
Membership

#### **ARTICLE I – NAME AND PURPOSE**

##### **Section 1. Name**

The name of the organization is “Open-IX Association.” It is a nonprofit organization incorporated under the laws of the State of Delaware.

##### **Section 2. Purpose**

Open-IX Association (hereinafter referred to as “Open-IX”) is organized exclusively for professional, commercial, industrial or trade association purposes. Open-IX exists to serve as a self-regulatory body for owners, operators, users of, and those concerned with internet exchanges; to encourage the creation and development of, and the investment in, internet exchanges by developing minimum standards of performance and common and uniform specifications for incoming and outgoing data as well as physical connectivity and the real estate which houses or on which the exchange is located; to improve the performance of internet exchanges by the development of criteria and methods of measurement, leading to the establishment of minimum criteria and methods for certifying the satisfaction of such criteria.

##### **Section 3. Installation Certification**

The Board of Directors shall institute and conduct a certification process for internet exchanges that will denote those entities which have met or exceeded minimum standards of performance; complied with common and uniform specifications for incoming and outgoing data as well as physical connectivity and the suitability of the property on which the exchange is located; and has met the performance requirements established by Open-IX. The Board shall, from time to time, specify the fee to be paid to Open-IX for granting such certification.

#### **ARTICLE II - MEMBERSHIP**

##### **Section 1. Eligibility for Membership**

Eligibility for membership in Open-IX shall be open to any individual or entity that is, owns, is employed by, or is associated with content providers, internet exchanges, networks, or data centers, or otherwise supports the purpose statement in Article I, Section 2. Membership is granted upon a majority vote of the Board of Directors, which vote shall be made in consultation with the Membership Committee, which is described below in Article IV, Section 4, after completion and receipt of a membership application adopted by the Board.

##### **Section 2. Membership Classes**

There shall be only one class of membership, with all the rights and privileges specified in these

Bylaws. Each member shall represent one vote on all Open-IX issues that are brought to members for a vote, including but not limited to Open-IX elections, provided that the votes of members employed by the same employer, as determined by the Membership Committee, shall not exceed five (5) votes. By way of example, should 100 members vote on an issue and 16 vote “No” while 84 vote “Yes,” but 74 of those voting “Yes” are employed by a single employer, the “Yes” votes would be reduced to 15 and the proposition would fail.

#### **Section 4. Rights and Benefits of Members**

Members in good standing shall be entitled to the following privileges:

- Vote on all Open-IX issues that are brought to members for a vote, including but not limited to all Open-IX elections;
- Individual members may run as a candidate for the Board of Directors;
- Individual members may serve on an administrative committee, as those committees are defined below in Article IV; and
- Other privileges as specified by the Board of Directors.

#### **Section 5. Policies and Procedures**

The Board of Directors shall establish and publish policies and procedures for implementation of the membership program.

#### **Section 6. Good Standing**

In order to remain in Good Standing, a member must continue to qualify for membership as specified in Article II, Section I and must pay his or her or its annual membership dues each year on or before the deadline for paying dues established by the Board of Directors.

#### **Section 7. Meetings of Members**

The annual meeting of members shall be held on the date and at the time fixed, from time to time, by the Board of Directors, provided, that the first annual meeting shall be held on a date within thirteen months after the organization of the corporation, and each successive annual meeting shall be held on a date within thirteen months after the date of the preceding annual meeting. A special meeting shall be held on the date and at the time fixed by the Board of Directors.

Annual meetings and special meetings may be held at such place, either within or without the State of Delaware, as the Board of Directors may, from time to time, fix. Whenever the Board of Directors shall fail to fix such place, the meeting shall be held at the registered office of the corporation in the State of Delaware. The Board of Directors may also, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law. If a meeting by remote communication is authorized by the Board of Directors in its sole discretion, and subject to guidelines and procedures as the Board of Directors may adopt, members not physically present at a meeting may, by means of remote communication, participate in a meeting and be deemed present in person and vote at a meeting whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (a) Open-IX shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a member in good standing (b) Open-IX shall implement reasonable measures to provide such members a reasonable opportunity to participate in

the meeting and to vote on matters submitted to the members, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (c) if any member votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by Open-IX.

Annual meetings and special meetings may be called by the Board of Directors or by any officer instructed by the Board to call the meeting.

Written notice of all meetings shall be given, which shall state the place, if any, date, and hour of the meeting, the means of remote communication, if any, by which members may be deemed to be present in person and vote at such meeting, and in the case of a special meeting, the purpose or purposes for which the meeting is called. The notice of an annual meeting shall state that the meeting is called for the election of directors and for the transaction of other business which may properly come before the meeting, and shall (if any other action which could be taken at a special meeting is to be taken at such annual meeting) state the purpose or purposes. The notice of any meeting shall also include, or be accompanied by, any additional statements, information, or documents prescribed by the Delaware General Corporation Law. Except as otherwise provided by the General Corporation Law, the written notice of any meeting shall be given not less than ten (10) days nor more than sixty (60) days before the date of the meeting to each member entitled to vote at such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the member at such member's address as it appears on the records of Open-IX. If a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which members may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting Open-IX may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each member entitled to vote at the meeting. Whenever notice is required to be given under the Delaware General Corporation Law, certificate of incorporation or bylaws, a written waiver signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a member at a meeting of members shall constitute a waiver of notice of such meeting, except when the member attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the members need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

The Membership Committee shall prepare and make, at least ten (10) days before every meeting of members, a complete list of the members entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each member. Such list shall be open to the examination of any member, for any purpose germane to the meeting for a period of at least ten (10) days prior to the meeting on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting or during ordinary business hours at the principal place of business of Open-IX. In the event that the Membership Committee determines to make the list available on an electronic network, the Committee shall take reasonable

steps to ensure that such information is available only to members of Open-IX. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any member who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any member during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

Meetings of the members shall be presided over by the Chairman of the Board or the Vice Chairman of the Board or, if neither of the foregoing is in office and present and acting, by a chairperson to be chosen by the members. The Secretary, or in the Secretary's absence, a secretary appointed by the chairman, shall act as secretary of every meeting.

The lesser of (a) ten percent (10%) of members eligible to vote or (b) two hundred (200) members eligible to vote shall constitute a quorum at a meeting of members for the transaction of any business. The members present may adjourn the meeting despite the absence of a quorum.

### **ARTICLE III – BOARD OF DIRECTORS**

#### **Section 1. General Powers**

The property, affairs and business of Open-IX shall be managed and controlled by the Board of Directors. The Board of Directors may, by general resolution, delegate to Officers and/or Committees, such of its powers as provided for in these Bylaws.

#### **Section 2. Number**

There shall be seven (7) voting members of the Board of Directors, each of whom will be elected.

#### **Section 3. Terms and Term Limits**

As set forth below in Article III, Section 8, the initial Board of Directors will serve only until the first Open-IX Annual Meeting. Subsequent Directors will be elected at Open-IX Annual Meetings in accordance with the procedure set forth below in Article III, Section 4, and shall serve two (2) year terms, except that three (3) of the Directors elected at the first Annual Meeting shall serve a one (1) year term ending at the Annual Meeting in 2015. After the expiration of the initial one (1) year term, Directors elected to those three (3) seats shall serve two (2) year terms.

A Director's term shall commence on January 1 of the year following the year in which he or she is elected, unless he or she is elected to fill a vacancy. No Director may serve more than three (3) consecutive terms. After three (3) consecutive terms, a Director may be re-elected to a Director position after a one (1) year absence from the Board.

#### **Section 4. Selection**

The Board of Directors shall be elected by an open nomination and election process from among the Open-IX membership. All candidates must be Members in Good Standing of Open-IX.

Elections will occur annually at the Open-IX annual meeting. The new Board of Directors members will be announced at the conclusion of voting. The elections will be administered by a

committee consisting of three members of Open-IX. The committee will be appointed by a majority vote of the elected board members whose terms are not expiring, and will serve until the conclusion of the election.

**Section 5. Nominations and Biographical Information**

Nominations shall be signed by ten members in Good Standing and submitted to the Secretary at least 60 days prior to any election. Candidates will then be listed on the Open-IX website, with biographies submitted by the candidates, from the end of the nomination period through the conclusion of the election. Members of Open-IX will be able to post endorsements of candidates to the Open-IX website, to appear alongside candidate biographies. Candidates will have the opportunity to make a short presentation during the annual meeting.

**Section 6. Affiliation of Candidates**

Each candidate must declare any and all affiliation(s) relevant to Open-IX, which will include his or her employer, as well as any other major relationships (for instance, if a candidate's primary employer is a nonprofit entity which is sponsored by a vendor, the candidate would declare both the nonprofit and the vendor as affiliations).

**Section 7. Voting Process for Board of Directors Selection**

Elections for the seats initially occupied by the four (4) Directors chosen at the first Open-IX Annual Meeting to serve two (2) year terms shall occur in even-numbered years. Elections for seats initially occupied by the three (3) Directors chosen at the first Open-IX Annual Meeting to serve one (1) year terms shall occur in odd-numbered years. Therefore, in even-numbered years, four (4) seats will open due to the expiration of terms, and in odd-numbered years, three (3) seats will open due to the expiration of terms, while each year other seats may open due to resignations or other departures of Directors. Members will be permitted to cast one vote per open Board of Directors seat. The top vote-getters will be elected to the open positions.

**Section 8. Initial Selection**

The initial Board of Directors will be appointed by the Incorporator, Martin Hannigan, and will serve until the first Annual Meeting of Open-IX.

**Section 9. Meetings and Quorum**

The Board of Directors will meet in person at least once per fiscal quarter, and may meet via conference calls on a more regular basis. All meetings must be called by the Chairperson at least thirty (30) days in advance.

No action may be taken by the Board of Directors unless a quorum of at least five (5) voting Directors are present. Unless otherwise specified in these Bylaws or provided by the Delaware General Corporation Law, those items on which the Board of Directors votes will be decided by absolute majority of those present at a meeting for which a quorum is present. No procedural change may be enacted without agreement of at least three (3) Directors. A majority of the directors present, whether or not a quorum is present, may adjourn a meeting to another time and place.

Any member or members of the Board of Directors or of any committee designated by the Board, may participate in a meeting of the Board, or any such committee, as the case may be, by means of

conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other.

Meetings shall be held at such time as the Board shall fix, except that the first meeting of a newly elected Board shall be held as soon after its election as the directors may conveniently assemble. Meetings shall be held at such place within or without the State of Delaware as shall be fixed by the Board.

No call shall be required for regular meetings for which the time and place have been fixed. Special meetings may be called by or at the direction of the Chairman of the Board, the Vice Chairman of the Board, or by a majority of the directors in office.

No notice shall be required for regular meetings for which the time and place have been fixed. Written, oral, or any other mode of notice of the time and place shall be given for special meetings in sufficient time for the convenient assembly of the directors thereat. Whenever notice is required to be given under the Delaware General Corporation Law, certificate of incorporation or bylaws, a written waiver signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of any such person at a meeting shall constitute a waiver of notice of such meeting, except when such person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors need be specified in any written waiver of notice.

The Chairman of the Board, if present and acting, shall preside at all meetings. Otherwise, the Vice Chairman of the Board, if present and acting, or any other director chosen by the Board, shall preside.

**Section 10. Vacancies**

In the event of any vacancy on the Board that arises during a Director's term, whether by reason of resignation, removal, death, or otherwise, the Board of Directors may appoint a Director to fill the vacancy for the remainder of the calendar year in which the vacancy occurs.

**Section 11. Resignation and Removal**

Resignation from the Board must be tendered in writing and received by the Secretary. Any Board member may be removed with or without cause by a three-fourths (3/4) vote of all of the Directors at a meeting duly called for that express purpose. Except as may otherwise be provided by the Delaware General Corporation Law, any director or the entire Board of Directors may be removed, with or without cause, by the vote of a majority of members then entitled to vote at an election of directors.

**Section 12. Attendance and Membership**

Each Director must remain a Member in Good Standing of Open-IX throughout their terms.

**Section 13. Chairman of the Board**

The Board of Directors shall select one of its members as Chair. The Chairman shall preside at all meetings, and shall oversee the implementation of the policies and directives of the Board of

Directors.

**Section 14. Vice Chairman of the Board**

The Board of Directors shall select one of its members as Vice Chair. The Vice Chair shall act as Chair in the absence of the Chair and when so acting shall have the power and authority of the Chair.

**ARTICLE IV - COMMITTEES**

**Section 1. Administrative Committees**

The Board of Directors will create two (2) standing committees to fulfill the Open-IX mission. Those committees will be the Standards Committee and the Membership Committee. The Board may also at its discretion create ad hoc committees to carry out other functions as needed. All members of committees must be Members in Good Standing of Open-IX. The chairperson of each committee will serve ex officio in a non-voting role on the Board of Directors, in order to facilitate communication among the groups. All committees will select their own Chairs by simple majority vote.

**Section 2. Standards Committee**

The Standards Committee will make recommendations to the Board for establishing common and uniform minimum standards for the operation and performance of internet exchanges. Specifically, the Standards Committee will develop and recommend methods for evaluating and measuring as well as determining minimum standards for the operation and performance of internet exchange points, data centers, and physical connectivity, for adoption by the Board of Directors.

The Standards Committee will consist of at least five (5) members selected by the Board of Directors.

A Standards Committee member may be removed before the expiration of his or her term if a majority of the Board of Directors votes for his or her removal.

The Standards Committee will elect a new Chairperson after each annual selection cycle. The Chairperson will serve for one year.

**Section 4. Membership Committee**

The Membership Committee will be responsible for the recruitment and evaluation of individuals and entities for Open-IX's membership, and for determining the proportionate weight that each member's vote carries in Open-IX elections.

The Membership Committee will consist of at least five (5) members selected by the Board of Directors.

A Membership Committee member may be removed before the expiration of his or her term if a majority of the Board of Directors votes for the removal.

**Section 5. Ad Hoc Committees**

The Board of Directors may from time to time create ad hoc committees and appoint members as

needed to carry out specific functions.

## **ARTICLE V – OFFICERS**

### **Section 1. Officers**

The officers of the corporation shall consist of a Chairman of the Board, a Vice Chairman of the Board, a Secretary, and a Treasurer. The Board of Directors shall select all officers. No individual may hold more than one officer position simultaneously. Officers not currently serving as voting Directors shall be non-voting ex-officio members of the Board of Directors.

### **Section 2. Secretary**

The Secretary shall be responsible for the keeping and reporting of adequate records of all transactions and of all minutes of all meetings of the Board of Directors.

### **Section 3. Treasurer**

The Treasurer shall be responsible for the finances of the corporation and its fiscal records, and shall supervise any fiscal agent. The Treasurer shall report to the Board at least once annually and more frequently upon request.

## **ARTICLE V - AMENDMENTS**

### **Section 1. Amendments**

Amendments to these Bylaws may be enacted by a majority of those present at a meeting called for the purpose of considering an amendment, provided that notice of the proposed change has been given at least thirty (30) days prior to the meeting. An amendment may be put on the ballot by the Board of Directors, or by a petition signed by at least ten (10) members..

### **Section 2. Temporary Amendments**

During the first year after these Bylaws are adopted, they may be temporarily amended by a unanimous vote of the Board, providing the amendments do not concern the composition or election of the Board, or the procedures for amending the bylaws. Any such amendments must be approved by the membership at the next annual election. Amendments not approved by the members will be rescinded.

## **ARTICLE VI – MISCELLANEOUS**

### **Section 1. Pecuniary Benefit**

Open-IX shall not engage in pecuniary benefit transactions, including, but not necessarily limited to, transactions between Open-IX and another party in which a Director or Officer has a financial interest, direct or indirect, subject to certain reasonable exceptions which may be provided by statute.

### **Section 2. Conflict of Interest**

Directors and Officers shall disclose to the entire Board any involvement or affiliation with any organization or association, prior to any discussions by the Board that implicate or relate to the organization with which they are involved or affiliated. Directors and Officers shall refrain from participating in any decision of the Board of Directors or Officers involving an organization with

which they have an affiliation if a reasonable person would conclude that the affiliation could interfere with the Director's or Officer's exercise of independent judgment.

**Section 3. Dissolution Provision**

In the event of the liquidation, dissolution or winding up of Open-IX, whether voluntary, involuntary, or by operation of law, except as may be otherwise provided by law, the Board of Directors shall, after paying or making provisions for the payment of all the liabilities of Open-IX, dispose of all the assets of Open-IX in a manner related to the purposes of Open-IX, to such organization or organizations organized and operated exclusively for charitable, educational, or scientific purposes as shall at the time qualify as an exempt organization or organizations under Section 501(c) of the Internal Revenue Code of 1986 (or the corresponding provisions of any future United States Internal Revenue Law), as the Board of Directors shall determine. Any such assets not so disposed of shall be disposed of by appropriate judicial or executive authority in conformance with applicable law. Upon the dissolution of Open-IX, the Board of Directors shall, after paying or making provisions for the payment of all the liabilities of Open-IX, dispose of all the assets of Open-IX exclusively for the purposes of Open-IX in such manner, or to such organization or organizations organized and operated exclusively for charitable, educational, or scientific purposes as shall at the time qualify as an exempt organization or organizations under Section 501(c) of the Internal Revenue Code of 1986 (or the corresponding provisions of any future United States Internal Revenue Law), as the Board of Directors shall determine. Any such assets not so disposed of shall be disposed of by appropriate judicial or executive authority in conformance with applicable law.



This document is scheduled to be published in the Federal Register on 12/30/2013 and available online at <http://federalregister.gov/a/2013-31249>, and on [FDsys.gov](http://FDsys.gov)

APPENDIX 4

DEPARTMENT OF JUSTICE  
Antitrust Division

NOTICE PURSUANT TO THE NATIONAL COOPERATIVE RESEARCH  
AND PRODUCTION ACT OF 1993 -- OPEN-IX ASSOCIATION

Notice is hereby given that, on December 3, 2013, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. § 4301 *et seq.* ("the Act"), Open-IX Association ("Open-IX") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the name and principal place of business of the standards development organization and (2) the nature and scope of its standards development activities. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances.

Pursuant to Section 6(b) of the Act, the name and principal place of business of the standards development organization is: Open-IX Association, Cambridge, MA. The nature and scope of Open-IX's standards development activities are: to encourage the creation and development of, and the investment in, internet exchanges by developing minimum standards of performance and common and uniform specifications for incoming and outgoing data, as well as physical connectivity and the real estate which houses or on which the exchange is located; and to improve the

performance of internet exchanges by developing criteria and methods of measurement, leading to the establishment of minimum criteria and methods for certifying the satisfaction of such criteria.

Patricia A. Brink  
Director of Civil Enforcement  
Antitrust Division

[FR Doc. 2013-31249 Filed 12/27/2013 at 8:45 am; Publication Date: 12/30/2013]

## APPENDIX 5

## LINX NoVA

[Juniper LAN](#) | [Extreme LAN](#) | [IXManchester](#) | [IXScotland](#) | LINX NoVA



### Introduction

Following discussions with the US network community, and its own members, LINX has decided to launch an open peering exchange in North America. This new exchange will be known as LINX NoVA.

We believe that the LINX mutual model for IXPs is the best for the good of the Internet. Supported by our members, the LINX NoVA exchange echoes the aims of the North American community as represented by the **Open-IX initiative**.

The exchange has been designed to conform to Open-IX standards, using systems and processes that have proved successful in Europe and the wider world for nearly 20 years. On 6th January 2014 it was announced that LINX had become the first IXP to receive Open-IX certification.



### LINX NoVA Prospectus

We have produced a 12 page prospectus with lots of information about LINX NoVA, including video interviews with some of the LINX Council. The prospectus can be viewed in several formats:

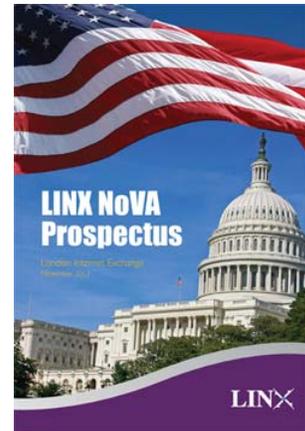
- If you are using a standard web browser [click here](#).
- If you are using a smart phone or tablet device [click here](#).

In addition we have made the prospectus available as a printable PDF document.

- [LINX NoVA Prospectus](#) (PDF) - 7.9Mb

The video content from the prospectus can also be viewed separately using the links below:

- [Why is LINX doing this now?](#) (video)
- [LINX Governance](#) (video)
- [LINX Products & Services](#) (video)
- [LINX NoVA Location](#) (video)



### Location and infrastructure

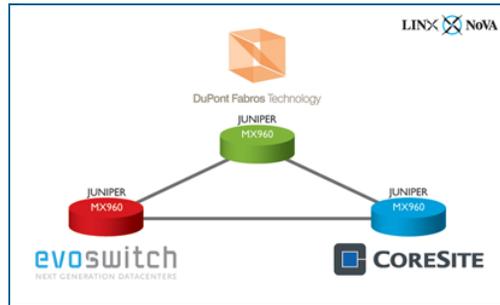
Based in the North Virginia/Washington DC area, LINX NoVA will initially span three data centres:

- CoreSite in Reston
- DuPont Fabros Technology in Ashburn
- EvoSwitch in Manassas

These sites will be connected by LINX, so that the peering mesh spans all three. Members can therefore connect anywhere they wish, and see peering partners at all LINX NoVA locations.

The LINX NoVA exchange will use MX960 router equipment from Juniper Networks capable of delivering 100G member ports from launch. All NoVA locations will be connected by diverse dark fibre lit by LINX.

LINX NoVA will be based on the same architecture as the LINX primary LAN in London (VPLS) but it is important to note that it will not be connected back to the peering LANs operated by LINX in the UK. A connection service to the LINX peering LANs in the UK is available from LINX **ConneXions** partners.



## Services & Prices

Members can connect to multiple LINX peering LANs without needing to pay additional membership fees. A summary pricing table for LINX NoVA can be found below with full port price information available on our **main service fees** page.

LINX is pleased to offer public peering ports below 100G without charge for the first year, as encouragement to connect at the NoVA exchange.

Monthly port fees	
Port size	2014
1GE	No monthly charge until 2015
10GE	No monthly charge until 2015
100GE	Price on application

In addition, LINX has made provision for private VLAN connections to the NoVA exchange - if you interested in this, please contact us to discuss requirements.

## Order Ports

To be able to order LINX NoVA ports, a network must first be a LINX member.

- If you are a LINX member and would like to order ports at LINX NoVA then please go to the **port order form**
- To become a LINX member please complete the **member application form** or contact: joinhelp [at] linx [dot] net

## Additional Services

The LINX NoVA exchange will offer all of the services that members have become accustomed to in the UK, including:

- 24x7 support (**see more details**, or **member-only link**)
- route servers (**see more details**, or **member-only link**)
- **public traffic statistics**
- **looking glass**

## Specific information for LINX NoVA members

The following information is provided to show compliance with the Open-IX IXP standard:

- Our NOC procedural documentation can be found **here** (member-only link)

- Our planned maintenance and outage procedural documentation can be found [here](#) (member-only link)
- Our privacy/confidentiality policy is **a key part of our memorandum of understanding** (our term for our member contract)
- Our traffic forwarding policy is **a key part of our memorandum of understanding**
- Our MAC address filtering policy is **a key part of our memorandum of understanding** (and you can find details of the procedure [here](#))
- LINX utilises a series of **mailing lists** (member-only link) for general communication, and there is also a specific mailing list address for LINX NoVA members to use for member-to-member discussion: linxnova [at] linx [dot] net
- The LINX NoVA collector ASN is AS21919, and the route server ASN is AS8714 (the same as in the UK). The address space used by LINX NoVA is as follows:
  - IPv4: 206.55.196.0/23
  - IPv6: 2001:504:31::/64
- Our peeringDb entry for LINX NoVA is [here](#)

The Open-IX IXP standard and governance document requires the following specific information to be provided for members present at LINX NoVA (note: all links are member-only):

- **A LINX NoVA advisory board**
- **Monthly performance data reporting**
- A warrant canary *specific to Section 215 of the USA Patriot Act, Section 701 of the FISA Amendments Act, and/or equivalent order type in any countries related to the entity in order to safeguard the integrity, security and privacy of the North American operations.* (Note: this is still under consideration, and a link will be provided when the policy on this is finalised)
- A **monthly report** of government information requests and the action taken on them

APPENDIX 6

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Global colocation solutions provider CyrusOne (CONE) announced today that six of its data centers are now certified by the Open-IX (OIX) Association, a non-profit industry group formed to promote better standards for data center interconnection and Internet Exchanges in North America. CyrusOne is the first company to have data centers in Texas, Ohio and Arizona receive certification. The six CyrusOne facilities receiving data center certification are located in the Dallas, Houston, Austin, Cincinnati and Phoenix markets.

"We're very pleased to receive data center certification from OIX and excited to participate in the continued growth of the organization," said Josh Snowhorn, vice president and general manager of Interconnection at CyrusOne. "With six of our largest

data centers now certified we can bring OIX participants such as cloud, content and network providers closer to our Fortune 1000 customers. This allows for a more robust data center ecosystem that can deliver greater efficiencies, resiliency and transparency."

The OIX Association is adopting the European non-profit model in which exchange operations are spread across multiple data centers in a specific geographic market. The goal is to create a new network of Internet Exchange Points housed in multiple neutral data center facilities that allow participants to interact and exchange content.

"The community's embrace of the Open IX initiatives is certainly a game changer both for the industry and service providers alike," added Dave Temkin, Open-IX Association chairman. "As the first to fulfill requirements for certification across multiple facilities, CyrusOne has illustrated the key benefits of the OIX and has implemented best practices to ensure more reliable space, power and connectivity to its customers."

CyrusOne has been a founding supporter of the OIX Association and continues to provide leadership with its activities as Josh Snowhorn and Bill Williams, vice president of network services, serve as initial members of the organization's standards committees.

Delivering Best-in-Class Enterprise Facilities and Robust Connectivity

CyrusOne specializes in highly reliable enterprise data center colocation solutions and engineers its facilities with the highest power redundancy (2N architecture) and the power-density infrastructure required to deliver excellent availability.

Customers also have access to the CyrusOne National IX, which marries low-cost robust connectivity with the massively scaled data centers that CyrusOne is known for by creating the first-ever data center platform that virtually links a dozen of CyrusOne's enterprise facilities in multiple metropolitan markets.



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## IXP Technical Requirements OIX-1

Version 1.0, November 8, 2013

Questions: [ixp-group@open-ix.org](mailto:ixp-group@open-ix.org)

Following outlines the technical requirements for an IXP to be certified by Open IX. The requirements define minimum functionality, such that IXPs can adhere to the Open IX standard serving different communities with different requirements. Varying from small single datacenter IXPs serving a limited local community to large scale many datacenter metro environments, but leave room for modifications that meet the need of the local community. The purpose of the requirements is to provide publicly available information on what the participants of the IXP can expect, and not to describe in detail how the IXP is designed, built or operated.

The keywords used throughout the document are as defined in RFC 2119.

The IXP SHOULD follow the Best Current Operational Practices for an Internet Exchange, posted at [bcop.nanog.org](http://bcop.nanog.org).

### Definition of an IXP.

A physical network infrastructure operated by a single entity with the purpose to facilitate the exchange of Internet traffic between Autonomous Systems. The intention is to connect more than 2 Autonomous Systems, and there MUST be a clear and open policy for others to join.

The physical diameter of the IXP platform MAY include more than a single datacenter, but MUST NOT extend beyond its metropolitan statistical area (MSA), for example as defined at [wikipedia.org/wiki/Metropolitan\\_statistical\\_area](http://wikipedia.org/wiki/Metropolitan_statistical_area).

## Services

### Minimal Service Offering

The IXP MUST provide the services described below. This in no way inhibits the operator from providing additional services, or methods of interconnection, as long as they are described on the publicly available website of the IXP.

### Public Exchange VLAN (IX)

A switch platform which allows anytoany interconnection. Customer interfaces with Ethernet frames tagged for the public exchange VLAN MUST be forwarded in accordance with the traffic rules indicated in this document.

### Private VLAN (PVLAN)

A private switch platform, whereby any two or more parties may consent to interconnect through either the same physical port that delivers their access to the Public Exchange VLAN or alternatively dedicated physical port(s). In case there are exactly two parties in the private VLAN the connection MUST be delivered guaranteed congestion free. In case of more than two parties the service MAY be best effort.

### Physical Interface

The IXP MUST be able to offer IEEE 802.3 Ethernet connectivity on a common switch infrastructure. Service offerings MUST be available at least at the following IEEE defined rates:

802.3z 1GE

802.3ae 10GE

Service offerings MAY be available at any other IEEE defined rate, including 802.3ad link aggregation of any of these rates.

The complete service offering MUST be described on a publicly available website. The information provided MUST contain: link rate and physical media (copper, fiber and fiber type).

### Traffic Forwarding

The IXP MUST forward frames with the following Ethertypes:

0x0800IPv4

0x86ddIPv6

Valid frames with Ethertype 0x86dd may be suppressed on the Public Exchange VLAN due to MLD snooping, or alternate methods used to implement IPv6 neighbor discovery.

If there is no provision to handle ARP in any other way, the IXP MUST forward frames with the following Ethertype:

0x0806ARP

If the IXP has reason to limit certain traffic, the IXP MUST publish on a publicly available website what traffic is not allowed and or not forwarded on the exchange platform.

If the IXP applies a MAC address locking mechanism on a participants port, then the IXP MUST make known to customers the process to update MAC addresses.

### **Customer Interface**

The IXP MUST provide a clear demarcation point between the IXP services and the customer. This can be either directly on the exchange or via a common demarcation point available to the participants.

## **Infrastructure**

### **Switching Platform**

The IXP switching platform MUST have backplane capacity to sufficiently handle the aggregate traffic of all customerfacing ports, without oversubscription. If individual switching elements contain multiple switch fabric modules, the same conditions MUST apply during single component failures.

The IXP MUST run any inter-switch links congestion free.

The IXP MUST have redundant power feeds fed from discrete sources (A and B) for all exchange infrastructure.

If the IXP does not have full path diversity between two discrete switching elements in different physical locations, this MUST be described on the IXPs publicly available website.

The IXP MUST describe on a publicly available website the infrastructure and the redundancy measures implemented to overcome single component failures.

### **IP Space**

In order to be independent of any of the connected parties, the IP space used on the "Public Exchange VLAN" MUST be PI space or other IP space directly assigned by a RIR. This applies

to both IPv4 and IPv6. The IXP operator will be responsible for obtaining address space from the respective RIR, as well as providing all material for justification, documentation, and applicable fees as required by the RIR.

#### **Route Server**

If a route server service is offered then it MUST support both IPv4 and IPv6 and 4byte ASNs. The AS number used for the route server implementation MUST be a unique AS number assigned by one of the RIRs.

The IXP MUST publish the route server setup on a publicly available website.

## **Operations**

#### **NOC**

The IXP MUST publish a telephone number, email address or any other means that provides immediate access to technical support, on a website available to its participants, on how to contact operational staff that is capable of managing the IXP infrastructure. The access method MUST be available 24x7.

The IXP MUST provide and publish a procedure to announce service affecting maintenance to its participants.

#### **Monitoring**

The IXP MUST monitor the exchange platform for performance degradation and service affecting events.

The IXP MUST provide a procedure to inform its participants on performance degradation and service affecting events.

#### **Statistics**

The IXP MUST publish on a publicly available website the participants on the peering platform and the relevant AS numbers.

The IXP MUST publish on a publicly available website the total sum of all incoming and outgoing traffic in bps from all connected networks on the public peering VLAN. The traffic sum MUST include the traffic on customer facing ports only and MUST be made up of 5 min average traffic measurements. A distinction MUST be made between the traffic on the public peering VLAN and any other interconnection service.

#### **Website**

The IXP MUST have available and maintain a publicly available website where at least the subjects mentioned in this document MUST be addressed.

## Miscellaneous

The IXP MUST have and maintain an accurate entry in a peering contact and configuration directory.

## IXP Standards Committee

Henk Steenman, Greg Henkins, Jon Nistor, Mike Smith, Chris Spears, Bill Williams, Bill Manning

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Open IX Association  
P.O. Box 425751  
Cambridge, Massachusetts 02142  
+1.617.821.6079  
[info@open-ix.org](mailto:info@open-ix.org)

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Open. To standards.

## Data Center Technical Standards OIX-2

Version 1.0, November 1, 2013

Questions: [dc-group@open-ix.org](mailto:dc-group@open-ix.org)

The purpose of the Open IX Data Center Technical Standards document is to establish a recommended standard for Data Centers to support an IXP (as defined by the Open IX IXP Technical Standards). The standard also provides guidance for acceptable exceptions for pre-existing facilities.

### Open Access

It is anticipated that the applicants for approval under this standard will include Building Owners, Meet Me Room Operators, and Data Center Providers. The party applying must have the right to bring any new network provider into the facility and must be willing to do so on a non-discriminatory basis. An Open IX approved Data Center must also provide non-discriminatory access to any Open IX approved IXP for a minimum of 12 months after approval subject to available space, power, and cooling.

### Definitions

**Base Building** - Shall designate the fee simple ownership and/or control of the underlying real estate. This entity ultimately controls the right of network entry, but may grant broad and open rights of access to the MMR Operator or Data Center Provider as defined below.

**MMR Operator** - The entity that controls and operates one or multiple designated Meet Me Rooms (MMRs) in the building. The MMR operator provides the infrastructure and management to support inter-connection of network providers with each other and cross-connection either from network provider to building tenant or amongst building tenants. The MMR may include a variety of media types, including but not limited to: single and multi-mode fiber as well as Cat 5 copper or similar legacy infrastructure.

**Data Center Provider** - The entity providing space, power, cooling, security, and related services to customers, including the IXP.

**IXP** - Internet Exchange Provider is the entity operating the Internet Exchange subject to the IXP requirements published under a separate standard.

**Facilities-based Network Provider** - The entity that controls and maintains a physical fiber path into a building. Multiple providers may lease or share this fiber.

## Physical Requirements

REQUIREMENT	STANDARD	EXCEPTIONS*
Utility Feeds	Minimum two separate utility feeds from separate serving substations.	One or two utility feeds from one substation. (Please see Generator Standard as defined below).
Utility Transformers	2N or N+1 with collector bus.	N
Water Sources	Minimum 2 municipal or 1 municipal plus onsite	1 municipal.
Network Access	At least two diverse points of underground fiber optic entry with continuity directly to the building or campus from the curb and gutter to the on-site property conduit system serving the Data Center space housing the customers. Building must be operated in a carrier neutral manner and building owner must provide non-discriminatory access to all providers seeking to enter	No exceptions.
Meet Me Room (MMR)	MMR must be secure with access limited to MMR operator or Data Center provider. Any other parties' access must be logged, escorted and auditable. Pricing must be offered to the OIX exchange and the participants of the exchange for all interconnection types on a fair, reasonable, open, and non-discriminatory	No exceptions.

REQUIREMENT	STANDARD	EXCEPTIONS*
	basis. Open IX requires transparency of pricing and MMR providers must publicly post pricing of standard elements on their web site, or provide an equivalent open method to all OIX exchange operators and participants.	
Interconnection Service Delivery	All Interconnection services delivered in a MMR within no greater than 5 business days from order placement so long as adequate existing infrastructure is available.	No exceptions.
Electrical Distribution	A/B distribution from utility hand-off to equipment supporting Data Center.	Single distribution.
Generator	Minimum of N+1 generating capacity for critical load, cooling, and life safety with on-site fuel storage for a minimum 24 hours at full load.	Fuel Storage and hold time may be reduced if physical limitations prevent storage, and a minimum of two supply contracts are in place. N generators may be used if the facility has dual feeds and a history of utility reliability.

UPSA&B UPS Systems with separate UPS rooms and distribution. Single UPS system if critical network gear is powered by an A/B DC plant. Cooling N+1 Capacity on all cooling systems; water supply capable of at least 24 hours continued operation if water is required in cooling process. N Capacity with appropriate load reduction and/or curtailment procedures. Floor Load 150lb psf floor loading in either raised floor or VCT tile environment. Appropriate load distribution to handle fully loaded 42+U racks of Switch/Routers. As low as 60 psf loading with appropriate equipment installation standards and monitoring. Flood Zone Outside of the FEMA 100 year flood zone. Within FEMA 100 year flood zone with appropriate mitigation plan. Seismic Zone Building must comply with current seismic requirements for zone in which it is located. Racks supporting IXP gear should be seismically isolated and supported. Older building that conformed to seismic requirements at the time that it was built and is "grandfathered in". Tornado/Hurricane Zone Building must comply with current wind requirements for mission critical structures. Inclusive in this requirement is acceptable wind shear loading on walls and roof structures. All facilities in these zones must have a staff and supply plan in the event a weather related storm could impact the facility. Older building that conformed to wind requirements at the time that it was built and is "grandfathered in". Adjacent Transportation Shall not be beneath a final approach path within 2 miles of a major airport. Exceptions for legacy or existing facilities. Adjacent Hazards No high risk occupancies (Refinery, Chemical Plant, Hazardous Manufacturing Facility, etc.) within ¼ mile. No exceptions. Fire Protection Pre-action or gas suppression in all equipment areas; Central alarm system linked to fire department; Firefighting procedures handbook. Other fire suppression conforming to code requirements with minimal risk to customer equipment if discharged. Security At least dual factor authentication for entrance; network and central systems areas restricted access including anti tailgating devices and security cameras with at least 24 hours of data retention. No exceptions. Building Management System Building shall have an automation system that monitors and provides alarming for the following:

- Utility Power
- UPS
- Generator
- Cooling Plant

- Supply Air Temperature
- Security Cameras

24x7 staffing with appropriate “watch” log.

## Operational Requirements

REQUIREMENT	STANDARD	EXCEPTION*
Rules	Facility must have a coordinated and properly communicated set of rules governing facility use, access/security, construction, and shipping/receiving of materials.	No exceptions.
Licensing	All facilities must comply with local, state and federal licensing and regulatory requirements as needed for the locale they are located in.	No exceptions.
Commissioning	All power and cooling systems must be commissioned during the start-up phase and commissioning documents must be maintained and available for inspection.	Facilities with a five year successful track record, including no failures of back-up systems under load conditions.
Maintenance	Facilities must be able to demonstrate with logs that all power and cooling systems are maintained in accordance with manufacturers standard procedures or such alternate procedures as are fully documented. Generators must be tested at least once a month and power systems shall be tested under load at least once a year.	No exceptions.
Operating Procedures	Facility shall have well documented operating procedures defining role and responsibility of facility staff, regular processes, and emergency response.	No exceptions.
Hours of Operation	24/7 access with facility staff.	Security staff only outside of business hours.
Change Management	Facility shall establish and maintain change management procedures, including defining what items will be communicated to facility users and the	No exceptions.

REQUIREMENT	STANDARD	EXCEPTION*
	time frame and method of such communications.	
Workflow Management	Facility shall have an automated ticketing system to manage workflow such as new installation, tenant requests, change management, break/fix, etc.	No exceptions.
Disaster Plan	All facilities must have an up to date disaster support plan to assure uptime of the facility.	No exceptions.
Communication	All facilities must have adequate NOC and call center services to assure open communication with the customers housed within the facility.	Legacy facilities without NOC or onsite call centers may utilize an alternate notification system, but that system must be clearly communicated to all parties.
Compliance	Facility shall state what, if any compliance programs (SSAE 16 Type1/Type2;; PCI, etc). are in place. Adopted controls, compliance reports, deficiency reports, and other relevant documentation must be promptly provided to customers.	Compliance programs are not required.
Environmental Compliance	Facility shall maintain all required licenses for storage of fuel and other regulated chemicals. Facility shall have a licensed Environmental contractor on retainer. Facility shall have appropriate programs for recycling and disposal and shall comply with all Federal, State, and Local laws governing disposal.	No exceptions.
Energy Conservation	Facilities are encouraged to conserve energy and must present supporting evidence of such plans.	No exceptions.

\*with Open IX Board approval

## Service Levels

Service Levels for the following shall be clearly stated as part of the Application process and included in agreements with customers:

- Generator
- UPS
- Cooling
- Cross Connect Delivery
- Electrical Circuit Delivery

## Approval/Exceptions/Conditional Approval

Applicants shall submit a summary application noting compliance with requirements. Requested exceptions shall be clearly called out and noted as to whether they are within or outside of the range of acceptable exceptions noted herein.

Applicants must understand that this is primarily a self reporting standard and that it is incumbent upon the provider to be honest and forthcoming in their submissions. The Application will be provided to IXP Operators seeking approval for individual facilities and it is incumbent upon them to conduct their own due diligence and validate capabilities.

The board reserves the right to revoke any approvals based on factually incorrect submissions.

Research, Educational Institutions, and certain "good of the Internet" facilities may be granted blanket waivers based on the approval of the board.

## Revision

For the first year, this document will be reviewed, revised, and expanded on a quarterly basis.

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Contact Us

Open IX Association  
P.O. Box 425751  
Cambridge, Massachusetts 02142  
+1.617.821.6079  
[info@open-ix.org](mailto:info@open-ix.org)

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## OPEN IX ASSOCIATION MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) is made by and between Open IX Association (“Open IX”), PO BOX 452751, Cambridge, MA 02132 and \_\_\_\_\_ of \_\_\_\_\_, (“Applicant”) this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, and sets forth the requirements, terms and procedures for obtaining and retaining Open IX certification whether as a Data center or an IXP:

### **PROCEDURES TO BE FOLLOWED FOR OBTAINING AND RETAINING OPEN IX CERTIFICATION.**

Applicant agrees to the following Open IX procedures for reviewing and evaluating applications for Open IX certification and for applicants to obtain and retain such Open IX certification. Open IX reserves the right to modify, amend, add or delete these procedures. Applicant agrees to comply with Open IX standards including those published from time to time on the Open IX Web Site as well as the following procedures unless notified that the procedures have been changed or eliminated.

1. Applicant will submit its complete application for Open IX certification with a deposit and processing fee of \_\_\_\_\_ for \_\_\_\_\_. All Applications become the property of Open IX upon filing and Applicant consents to their publication in the manner provided herein.
2. The Open IX Board or designated Open IX Committee will review any such application and use best efforts to diligently provide preliminary feedback to Applicant with respect to any missing, incomplete or inaccurate information in the completed application.
3. Once an application has received approval of the Open IX Board or designated Open IX committee, then, unless Applicant has withdrawn the application, copies of the application will be distributed to the entire Open IX Membership for review and comment. After a period of up to one week or longer, as determined by the Open IX Board or designated Open IX Committee, the Open IX Board will consider comments received and make a final decision as to whether or not to grant Open IX certification.
4. Further, an Applicant whose Data center or IXP is granted Open IX Certification (a “Certified Applicant”) will, while Applicant’s facility retains Open IX certification:
  - a. Identify itself as an Open IX Certified Data center or IXP
  - b. Allow Open IX to publicly identify the Data center or IXP as an Open IX Certified Data center or IXP on the Open IX website or a peer directory service;
  - c. Display Open IX-created identifiers so the public can easily distinguish it from a non-certified entity;
  - d. Renew certification on a yearly basis for as long as applicant elects to retain it’s OPEN-IX certification; and
  - e. Comply with the terms and agreements contained in its application with such changes as may be agreed to by Open IX.
5. Certified Applicant and Open IX will cooperate and use best efforts to ensure and maintain the integrity of the certification.
6. If Applicant withdraws its application prior to certification or does not obtain certification for any reason, the deposit and processing fee, minus 15% to cover administrative expenses, will be returned to Applicant.



## COMMUNITY PARTICIPATION REQUIREMENTS

1. A representative from a Certified Applicant shall attend and present general performance indicators at the annual general meeting (“AGM”) of Open IX.
2. Certified Applicants shall present key performance indicators (KPIs) to the users of the Certified Applicant. These KPIs should include at a minimum a summary of interconnect delivery, summaries of major interconnect outages, planned and unplanned, electrical or cooling outages and other activities that occurred infrastructure wide. Certified Applicants should present their technical operating plan for the year ahead including a general financial state of the operating entity.
3. Certified Applicants shall provide a localized announcements mailing list for operational discussion and notices to all users.
4. Certified Applicants should regularly update the general Internet community (e.g. NANOG, GPF or other relevant gathering of customers and interested parties) on its Open IX certified facilities operations, especially when there are significant changes or developments.

## ORGANIZATION ACCOUNTABILITY TO STAKEHOLDERS

Certified Applicants shall establish a customer advisory board that includes at least one member in good standing of Open IX. Open IX and Certified Applicant will mutually agree on a member to fulfill such a role on behalf of Open IX.

## PRIVACY

Certified Applicants must publicly and annually post, on a web site operated by the Certified Applicant, an updated privacy policy with respect to user facilities, data and connection integrity. The policy should include a “warrant canary” specific to whether the Data Center or IXP has been subject to a court order under Section 215 of the USA Patriot Act, Section 701 of the FISA Amendments Act, and/or equivalent order type in any countries related to the entity in order to safeguard the integrity, security and privacy of the North American operations.

Certified Applicants, must post, on a web site operated by the Certified Applicant, an accurate and monthly report on Government information requests and actions taken related to the requests. An example of such a report can be viewed at <http://bit.ly/12VY4e2>



OPEN IX ASSOCIATION  
MEMORANDUM OF UNDERSTANDING

**FOR APPLICANT:**

---

NAME TITLE

---

TELEPHONE NUMBER EMAIL ADDRESS

---

COMPANY

---

ADDRESS

---

CITY STATE COUNTRY ZIP/POSTAL CODE

---

SIGNATURE DATE



OPEN IX ASSOCIATION  
MEMORANDUM OF UNDERSTANDING

**FOR OPEN IX ASSOCIATION:**

NAME TITLE

info@open-ix.org

TELEPHONE NUMBER EMAIL ADDRESS

Open IX Association PO Box 452751

ADDRESS

Cambridge Massachusetts US 02132  
CITY STATE COUNTRY ZIP/POSTAL CODE

SIGNATURE DATE

**FOR OPEN-IX USE ONLY:**

PROVISIONAL DATE:.....CERTIFICATION DATE:.....

REJECTED DATE:.....FEE RETURNED DATE:.....



## OPEN IX ASSOCIATION MEMORANDUM OF UNDERSTANDING

**All funds must be transmitted in US Dollars. Contact: [info@open-ix.org](mailto:info@open-ix.org)**

**WIRE FUNDS TO:** BANK OF AMERICA

**ROUTING NUMBER:** 026009593

**SWIFT:** BOFAUS3N

**FOR THE BENEFIT OF:** OPEN IX ASSOCIATION

**ADDRESS:** KENDALL STATION, MA 02142 USA

**FINAL CREDIT TO:** 004644743127

### **CALCULATING AND SENDING APPLICATION FEE**

IXP application fee is \$5,000 per Metropolitan Statistical Area (“MSA”) in which Applicant has an IXP to be certified. Each MSA should have a separate application, but, in coordination with Open IX, payment by a single wire may be sent combining fees for all MSAs. Example: If you are applying for Certification for IXPs in the Washington, DC, Chicago and San Francisco Bay areas the application fee would be  $\$5,000 * 3 = \$15,000.00$

Data center application fee is \$5,000 per location. Each MSA should have a separate application, but, in coordination with Open IX, payment by a single wire may be sent for all of the MSAs combined. Example: If you are applying for certification for four Data centers in three MSAs, your fee would be  $\$5,000 * 4 = \$20,000.00$  and you would submit three applications.



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# Open. To innovation.

## OIXA Board

All of Open IX board members are comprised of volunteer representatives from the Internet community in the United States, who are coming together to create a better, safer, stronger, fairer Internet.



### **David Temkin, Chairman**

David Temkin is the Director of Network Architecture and Strategy at Netflix, where he is responsible for the network architecture and interconnection of the Netflix global content delivery network. He has also held the position of Director of IP Product Development and Engineering at Telx. He was responsible for all Layer 2 & 3 product architecture, design, and deployment across the Telx portfolio of data centers. Previously, he spent time at Yahoo! as the Layer 4-7 Network Architect, responsible for network load balancing. He also designed and built out the global network for Right Media, an online ad serving startup that was later acquired by Yahoo!. He also serves on the NANOG Board of Directors and is active in the NANOG and RIPE communities.



### **Dan Golding, Vice Chair**

Dan is Vice President of Data Center Operations at Iron Mountain, where he is responsible for Data Center and network engineering, and for operations, design, and construction. He has more than 20 years of experience in the Internet, Data Center, and critical facilities fields. His experience ranges from financial and organizational to deeply technical. Dan has held executive positions at RagingWire Data Centers, DH Capital, and Tier 1 Research. In addition, he served as the conference chairman for the Hosting Transformation

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Summit and for the Global Peering Forum, and he is a member of the Board of Directors of NANOG, the professional society for Internet engineering. Dan has worked in a variety of specialty areas across the Internet infrastructure sector, including network engineering and peering; Data Center operations and engineering; financial and industry analysis; and executive management. He also possesses uniquely strong financial knowledge as a result of his work as a banker and an investor in the Internet sector.



#### **Martin Hannigan, Treasurer**

Martin is co-founder and Treasurer of the Open IX Association. His Internet industry experience spans 25 years and includes business, engineering and operations responsibilities from the world's leading Internet companies including Level(3) Communications and VeriSign. Currently, Martin leads the Network and Data Center Architecture group at Akamai Technologies, Inc., where his responsibilities include network and data-center management. His Internet community activities include serving on the ICANN Address Supporting Organization Advisory Council, an elected official of the ARIN Advisory Council and an appointment as an Internet community representative on the ICANN Security, Stability and Resilience of the Domain Name System "DNS" as part of Review Team 2.



#### **Barry Tishgart, Secretary**

Barry is Vice President and GM of Wholesale Services at Comcast, where he manages a business unit focused on delivering large-scale voice, video, and data solutions to a wide-range of Internet and media companies. Before his current position at Comcast, he was Vice President of Internet Product Management at the company. He has more than 20 years' experience in the Wireless, Cable, Internet and Telecommunications sectors in technical, sales, and marketing roles. Barry is the former Vice President of Managed Services at Sprint, where he was responsible for product and marketing for Global Data Services and Wireless Data and where he also served as Director of Network Engineering. He holds a BBA degree in Information Systems, as well as an MBA, both from the University of Texas at Austin.



#### **Donald Clark, Director**

Donald works for Google's peering and content distribution team. He is also a Councillor of Internet New Zealand and an erstwhile member of the New Zealand IPv6 Task Force. Earlier in his career, Donald was responsible for establishing New Zealand's research and education network and for advising the country's Prime Minister on digital, economic, and telecommunications policy. He also served as an analyst with the New Zealand Treasury. Before relocating to New Zealand, Donald, who originally studied chemical engineering in Edinburgh, Scotland, and in Pennsylvania, was based in London, where he was a consultant with such firms as Booz & Co. and PwC.



#### **Keith Mitchell, Director**

Keith has 25 years' experience specializing in Internet engineering and governance. In 1994, he founded the London Internet Exchange (LINX) and was the company's Executive Chairman until 2000, when he went on to found Xchange Point. More recently, Keith worked at Internet Systems Consortium



(ISC), where he managed the OARC programme for DNS operators. He then served as Vice President of Systems Engineering at ISC from 2008-2012. Since 2012, Keith has served as President of the now-autonomous nonprofit OARC, Inc. He also conceived the UK Network Operators' Forum (UKNOF) in 2005, and has been leading the group for its past 25 successful meetings.

**Paul L. Andersen, Director**



Paul has been with egateNETWORKS Inc., an ISP based in Toronto, since he founded the company in 1996. He is responsible for the design and implementation of the organization's IP network. He is the board Chairman for the Canadian Internet Registration Authority and the Vice Chair and Treasurer of the American Registry for Internet Numbers (ARIN). He has also sat on the Board of the Toronto Internet Exchange. Paul is a licensed member of Professional Engineers Ontario, and he holds a B.A. Sc. in Computer Engineering from the University of Toronto.



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## Open. To growth.

## Committees

All of Open IX Committees are comprised of volunteer representatives from the Internet community in the United States, who are coming together to create a better, safer, stronger, fairer Internet.



### **Henk Steenman, Board Liaison, IXP Standards Group**

Since 2001, Henk has served as CTO at AMS-IX. He's responsible for the management, operation, implementation, and development of the AMS-IX platform. He is also involved in the establishment of AMS-IX Internet exchanges in the Caribbean, Hong Kong, and Mombasa. Henk was one of the founding members of AMS-IX in 1997 and served on the board for four years—most recently as Chairman. Previously, Henk worked in the Netherlands as director of an expert group on the Internet for AT&T. He helped develop various Pan-European IP networks for AT&T, AT&T Unisource, and Concert. His additional experience includes positions at SURFnet BV and at the Network Operations Centre of SARA. Henk studied Astrophysics, Mathematics, and Theoretical Physics at the University of Amsterdam, and he holds a bachelor's degree in Marine Engineering.



### **Gabe Cole, Board Liaison, Data Center Standards**

Gabe is an accomplished Technology Executive with more than 20 years' experience across Data Center, network, and cloud sectors. In 1993, Gabe co-founded RTE Group, an infrastructure strategy consulting firm and real estate brokerage specializing in Data Centers, network interconnection exchanges, and other mission critical facilities. He has personally worked on more than 150 engagements in North America and in Europe, the Middle East, and Africa.



Gabe also founded and/or participated in a number of venture-backed emergent technology companies, including Telwares, Virtustream, Verne Global, Enclave, and Ixpanse. He was one of three founders of CO Space, Inc., a leading provider of colocation and Data Center facilities and related operations services. Gabe holds SB and SM degrees from the Massachusetts Institute of Technology.



#### **Christian Koch, Membership Director**

Christian is a Senior Engineer at Twitter, where he is part of a team focused on global peering and interconnection, network acquisition, backbone and traffic engineering, as well as day-to-day engineering. After spending a good amount of time building and operating networks at Service Providers and Data Centers, Christian moved on to new challenges and began working with content companies in 2009. His interests primarily include interconnection, traffic management, and mobile networks.

## **Become a Member**

Join the growing list of influential leaders that are helping to shape Data Center and IXP standards and level the playing field for all.

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## **Get Certified**

Make sure your company gets the full support of the Internet community by adopting community created professional standards.

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Open IX Accepting Applications for Data Center and IXP Certifications in the Northern Virginia Market.

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Contact Us

Open IX Association  
P.O. Box 425751  
Cambridge, Massachusetts 02142  
+1.617.821.6079  
[info@open-ix.org](mailto:info@open-ix.org)

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