

# OIX DDP

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~~Open~~-IX Document Development Process  
~~draft 04 – 11 July 2017~~Approved [Date here]

Table 1 - Version History

Version	Date	Author	Description
<b>d01</b>	7 May 2017	Chris Grundemann	Initial Draft
<b>d02</b>	21 May 2017	Chris Grundemann	Copy Edit
<b>d03</b>	22 May 2017	Chris Grundemann	Committee Review
<b>d04</b>	11 July 2017	Richard Wolfram	Updated IPR Requirements
<b>d05</b>	<u>[date here]</u>	<u>OIX Admin Team</u>	<u>Update for OIX Name Change</u>

### ***Open-IX* Mission Statement**

*Open-IX, a nonprofit member-based organization, encourages the proliferation of interconnection by the development, implementation and certification of transparent technical and operating standards, to create more resilient and efficient global internet infrastructure.*

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# 1 ~~Open~~-IX Document Development Process Fundamentals

## 1.1 Purpose

This document describes the ~~Open~~-IX Document Development Process (OIX DDP). The OIX DDP is the process by which current Standards and best current operational practices (BCOPs) for the operation of the Internet, and connected networks, are documented by the ~~Open~~-IX community. These ~~Open~~-IX documents are developed and published in an open, transparent, bottom-up, and ongoing manner designed to yield functional documentation that is accessible to all.

The OIX DDP requires participation from the ~~Open~~-IX community, and encourages all members of the community to submit appeals for new documents and/or updates to existing documents. The OIX DDP is designed to bring forth clear, technically sound, and useful network engineering Standards and best practices, written for engineers, by engineers. To accomplish this goal, the OIX DDP charges the appropriate Board-appointed committee as the primary facilitators of the OIX DDP with appropriate checks and balances on its performance in that role.

Section 1 of this document provides the underlying fundamentals upon which the OIX DDP rests (including its purpose, scope, principles, philosophy, and criteria for documents) and Section 2 describes the specific Document Development Process used for both creating and updating ~~Open~~-IX documents.

## 1.2 Philosophy

All technology is and will be used and developed in a variety of ways with competing interests and agendas driving it forward. The Internet is the world's first, true global utility and in the spirit of the open standards surrounding its evolution, the Global Network Engineering Community (GNEC) has requested multiple times for there to be a synthesized documentation process to capture GNEC driven Standards and best practices. These GNEC driven documents are an open, transparent, bottom-up, ongoing effort to help spread the unbiased working knowledge of how the Internet and connected networks work, at any given time, in the best possible way. The GNEC's philosophy towards this OIX DDP can be further described in the following way:

### 1.2.1 Free from organizational agendas

All documents shall be sourced from the network engineering community and developed in an open, transparent, bottom-up approach. Given this philosophy, the idea of Standards and Best Practices shall encompass objective input from the community at large with a best effort mentality to ensure proper documentation. Conceptually, all documents should not be

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biased or tainted by organization specific agendas but rather should reflect individual operator experiences.

### 1.2.2 Communal knowledge available to all

The entire effort shall be made available to everyone, always. An open, transparent, bottom up, on-going approach applies to all efforts in the OIX DDP arena to yield documentation for all to help advance the resilient and reliable development of the Internet.

### 1.2.3 Advancement of the Internet to all reaches of the world

The Internet is global and should be made available to all. In this spirit, the GNEC is seeking, thru this OIX DDP, to help advance that goal. These documents will be driven by the network engineering community and are therefore for the network engineering community, and anyone else who wishes to learn more about Internet interconnection. OIX documents will contribute to the common knowledge base for all facets of the evolving Internet everywhere in the world.

To facilitate a common context and common language in the development of Standards and Practices, and to leverage existing regional relationships, the OIX DDP will serve the ~~Open~~-IX community directly, and the GNEC less directly.

## 1.3 Scope

Documents developed through the OIX DDP are community-regulated documents that provide synthesized knowledge of current, real-world network engineering standards and best practices. OIX documents are driven and catalyzed by the network engineering community. ~~Thru~~Through the efforts of our community, these documents are, and will always be, ~~publically~~publicly available. Documents developed through the OIX DDP are living documents and will always be subject to scrutiny and ongoing development as technologies change and as new knowledge is ascertained from the network engineering community.

### 1.3.1 Standards

~~Open~~-IX Standards:

- Promote uniform specifications for data transfer and physical connectivity.
- Create resiliency to improve reliability of Internet interconnection.
- Provide a benchmark against which ~~Open~~-IX certifies Internet Exchanges and Data Centers that meet the community developed standards.

### 1.3.2 Best Current Operational Practices (BCOPs)

BCOPs are not intended to be binding rules on how operators configure or operate their network. BCOPs are intended to provide good advice about operational practices that is useful for the majority cases. Additionally, if there are some small percentage of corner cases where the standard advice does not apply, or some other practice is recommended, that should also be documented. Documentation of competing approaches and their trade-offs is also acceptable.

## 1.4 Principles

All OIX documents are developed under the constraint of four basic principles: Open, transparent, bottom-up, and on-going.

### 1.4.1 Open

All policies are developed in an open forum in which anyone may participate. There are no qualifications for participation. ~~Open~~-IXs document discussions are conducted in an open, publicly accessible forum that consists of a mailing list and virtual and in-person meetings. Anyone may subscribe to the mailing list and anyone may attend a meeting via the Internet or in person.

### 1.4.2 Transparent

All aspects of the OIX DDP are documented and publicly available via the ~~Open~~-IX website. The mailing list is archived. The proceedings of each meeting are published. All documents are available for viewing and download.

### 1.4.3 Bottom Up

The network engineering community develops and documents all standards and practices from the bottom up. Individuals in the community initiate OIX documents through Appeals to the mailing list; participants will work thru various stages of development that will yield an unbiased, community authored document to be available to all those interested.

### 1.4.4 On-going

All OIX documents, as with all things evolving, will be subject to scrutiny into perpetuity. This allows for revisions to occur that will follow the DDP update process (documented in Section 2). This process will ensure that all documents will always truly reflect the **current** best practices.

## 1.5 Criteria for Document Publication

OIX documents must meet two strict criteria before publication: First, they must be clear and technically sound. Second, they must be developed through open and transparent processes.

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### 1.5.1 Clear and technically sound

It is the responsibility of the appropriate ~~Open~~-IX committee to ensure that all documents are both clear and technically sound, before recommending their publication. This serves to ensure that all published documents are relevant and useful to the network engineering community.

The ~~Open~~-IX committees rely heavily on the wisdom and experience of the entire community when determining relevancy and usefulness. Community consensus is the primary indication that a document is clear and technically sound.

### 1.5.2 Developed through open and transparent processes

It is the responsibility of the ~~Open~~-IX Board of Directors to ensure that all documents are developed via open and transparent processes that provide for participation by all. There are no requirements for participation other than adherence to the guidelines of behavior and decorum, and anyone interested in following the process may subscribe to the mailing list or may participate in meetings via in person or remote participation methods. By publishing a document, or an update to a document, the ~~Open~~-IX Board of Directors is declaring that document was developed following the Philosophy and Principles described in this document.

The OIX DDP itself may only be changed by the ~~Open~~-IX Board of Directors after a public consultation period to consider the proposed changes.

## 1.6 Terms

**Subject Matter Expert (SME)** - Authors and contributors to OIX documents.

**Shepherd** - Editor and promoter of OIX documents, does not need to be a member of ~~Open~~-IX or any of its committees.

**GNEC** - Global Network Engineering Community.

**Standard** – A document that reflects uniform specifications for data transfer and physical connectivity that creates resiliency to improve reliability of Internet interconnection. Organizations can be certified to comply with OIX Standards.

**Best Current Operational Practice (BCOP)** - A document that reflects an aspect of Internet Engineering (e.g., Sub-netting), is sought after by the GNEC, is worked on by the GNEC, and is ultimately published on the OIX website (~~open~~-ix.org).

**OIX DDP** - The Development Process, see section 2 of this document, which the ~~Open~~-IX community has adopted to create and publish all documents.

## 2 The ~~Open~~-IX Document Development Process (OIX DDP)

This section provides the details of the ~~Open~~-IX Document Development Process (OIX DDP).

### 2.1 Appeal

The OIX DDP begins with the identification of a need for documentation of a new Standard or Practice (BCOP), or the revision or retirement of an existing document. This need is usually determined by a change in technology, a change in the operational environment of the Internet, or the result of the experience of the implementation of an existing OIX document.

Any member of the ~~Open~~-IX community can make an Appeal, this is typically but not always, the document's shepherd. Community members who submit an Appeal are not however required to work on that document further.

New Appeals take the form of a question (e.g. What is the BCOP for IX port configuration?) submitted to the ~~Open~~-IX community on the [XXX-OIX-DDP](#) mailing list following the Appeal template [found here: https://github.com/Open-IX/BCOP/blob/main/BCOP\\_Template.md](#).

Update Appeals take the form of a problem statement and are similarly submitted, using the Update template. One possible result of an Update Appeal is retirement of the document in question.

Appeals are then discussed on the [XXX-OIX-DDP](#) mailing list and sometimes at ~~Open~~-IX meetings.

A public repository of open Appeals will be maintained to facilitate their development after being submitted.

### 2.2 Draft

Appeals that meet the following requirements are selected by the appropriate ~~Open~~-IX committee as Drafts:

- Significant community interest
- Not overly broad or overly specific
- Relevant to the ~~Open~~-IX community
- Unbiased and vendor-neutral
- Has a willing Shepherd

Once an Appeal is selected as a Draft, the shepherds must draft an outline for the Draft following the Draft template. Shepherds must then recruit SMEs to contribute to the content of the Draft. Shepherds may act as SMEs themselves when appropriate.

Throughout the development of each document, its text will be discussed on the [XXX-OIX-DDP](#) mailing list and sometimes at ~~Open~~-IX meetings. The appropriate ~~Open~~-IX committee oversees this process, providing guidance as



needed and replacing Shepherds or SMEs as needed.

### 2.3 Candidate

Drafts that meet the following requirements are selected by the appropriate ~~Open~~-IX committee for publication consideration:

- Full and complete content that answers the original appeal
- All substantive objections raised on the mailing list or in meetings addressed (rough consensus)
- Properly scoped, unbiased and vendor-neutral

The text of all Candidates must be posted to the ~~XXX-OIX-DDP~~ mailing list at least two weeks prior to the next ~~Open~~-IX meeting. The posted Candidate text must be presented for discussion at the next ~~Open~~-IX meeting.

### 2.4 Standard or BCOP

Candidates that meet the following requirements are recommended by the appropriate ~~Open~~-IX committee for publication:

- Rough consensus on the mailing list and at the meeting with no substantive objections
- Complete a minimum two (2) week last call (posted to ~~XXX-OIX-DDP~~ lists for final comment) with no substantive objections (silence is support in last call)

Once recommended by the appropriate ~~Open~~-IX committee, the ~~Open~~-IX Board of Directors must then verify that the ~~Open~~-IX Document Development Process was followed before approving the document for publication. Documents are published in a well-known publicly available repository for use by all.

### 2.5 Updates

An Update Appeal can be made at any time to update or retire any existing document. Update Appeals follow the Document Development Process outlined above and result in an existing document being updated or retired.

### 3 Intellectual Property Rights (IPR) Policy

Open-IX takes no position regarding the validity or scope of any intellectual property rights or other rights that might be claimed to pertain to the implementation or use of the technology or practices described in any Open-IX documents or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Any material posted as IPR disclosures should be viewed as originating from the source of that information, and any issue or question related to the material should be directed to the source rather than Open-IX. There is no implied endorsement or agreement by Open-IX, the Open-IX Board of Directors or any other Open-IX entities with any of the material.

#### 3.1 Open-IX Contribution:

##### An OIX contribution is:

Any submission to Open-IX intended by the Contributor for publication as all or part of an OIX document and any statement made within the context of an Open-IX activity. Such statements include oral statements in Open-IX meetings, as well as written and electronic communications made at any time or place, which are addressed to:

- any Open-IX meeting session,
- any Open-IX committee or portion thereof,
- the Open-IX Board, or any member thereof on behalf of the Board,
- any Open-IX document shepherd or SME in the context of such a document,
- any Open-IX mailing list, any committee or document working group or SME team list, or any other list functioning under Open-IX auspices.

Statements made outside of an Open-IX session, mailing list or other function, that are clearly not intended to be input to an Open-IX activity, group or function, are not Open-IX Contributions in the context of this document.

A participant in any Open-IX activity is deemed to accept all Open-IX rules of process.

A participant in any Open-IX activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.

#### 3.2 Required Disclosure and/or Licensing of Standard Essential Patent(s):

A “standard essential patent” is any patent encompassed within a standard, as asserted and/or as determined by a court, which is necessarily infringed by anyone

practicing the standard, including the OIX-1 and OIX-1 standards and any other OIX standards.

~~Consistent with the Essential Requirements of the American National Standards Institute regarding disclosure and licensing of standard essential patents, <https://share.ansi.org/shared%20documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/2017-ANSI-Essential-Requirements.pdf>,~~ No person or entity may participate in and contribute to the development and modification of any OIX standards without first providing to OIX written assurance, in a form provided by OIX, either

- (a) in the form of a general disclaimer, that such party does not hold and does not currently intend to hold any patent claim essential to such standard, or
- (b) that such party will offer a license to such essential patent(s) to applicants desiring to utilize the license for the purpose of implementing the standard either
  - i. under reasonable terms and conditions that are demonstrably free of any unfair discrimination, or
  - ii. without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

### 3.3 Notice to Standard Implementers:

Further, the attention of any and all users of OIX standards is called to the possibility that compliance with such standards may require use of an invention covered by patent rights. By publication of such standards, OIX takes no position with respect to the validity of any such claim(s) or of any patent rights in connection therewith.

OIX is not responsible for identifying patents for which a license may be required in order to practice one of its standards nor for conducting inquiries into the legal validity or scope of those patents that are brought to its attention pursuant to these requirements.