

# EXHIBIT F

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## The Internet Standards Process -- Revision 3

### Status of this Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

### Abstract

This memo documents the process used by the Internet community for the standardization of protocols and procedures. It defines the stages in the standardization process, the requirements for moving a document between stages and the types of documents used during this process. It also addresses the intellectual property rights and copyright issues associated with the standards process.

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*   It is important to remember that not all RFCs
*   are standards track documents, and that not all
*   standards track documents reach the level of
*   Internet Standard. In the same way, not all RFCs
*   which describe current practices have been given
*   the review and approval to become BCPs. See
*   RFC-1796 [6] for further information.
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2.2 Internet-Drafts

During the development of a specification, draft versions of the document are made available for informal review and comment by placing them in the IETF's "Internet-Drafts" directory, which is replicated on a number of Internet hosts. This makes an evolving working document readily available to a wide audience, facilitating the process of review and revision.

An Internet-Draft that is published as an RFC, or that has remained unchanged in the Internet-Drafts directory for more than six months without being recommended by the IESG for publication as an RFC, is simply removed from the Internet-Drafts directory. At any time, an Internet-Draft may be replaced by a more recent version of the same specification, restarting the six-month timeout period.

An Internet-Draft is NOT a means of "publishing" a specification; specifications are published through the RFC mechanism described in the previous section. Internet-Drafts have no formal status, and are subject to change or removal at any time.

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*   Under no circumstances should an Internet-Draft
*   be referenced by any paper, report, or Request-
*   for-Proposal; nor should a vendor claim compliance
*   with an Internet-Draft.
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As noted in section 4.1, there are TSs that are not in the standards track or that have been retired from the standards track, and are therefore not required, recommended, or elective. Two additional "requirement level" designations are available for these TSs:

- (d) Limited Use: The TS is considered to be appropriate for use only in limited or unique circumstances. For example, the usage of a protocol with the "Experimental" designation should generally be limited to those actively involved with the experiment.
- (e) Not Recommended: A TS that is considered to be inappropriate for general use is labeled "Not Recommended". This may be because of its limited functionality, specialized nature, or historic status.

Although TSs and ASs are conceptually separate, in practice a standards-track document may combine an AS and one or more related TSs. For example, Technical Specifications that are developed specifically and exclusively for some particular domain of applicability, e.g., for mail server hosts, often contain within a single specification all of the relevant AS and TS information. In such cases, no useful purpose would be served by deliberately distributing the information among several documents just to preserve the formal AS/TS distinction. However, a TS that is likely to apply to more than one domain of applicability should be developed in a modular fashion, to facilitate its incorporation by multiple ASs.

The "Official Protocol Standards" RFC (STD1) lists a general requirement level for each TS, using the nomenclature defined in this section. This RFC is updated periodically. In many cases, more detailed descriptions of the requirement levels of particular protocols and of individual features of the protocols will be found in appropriate ASs.

#### 4. THE INTERNET STANDARDS TRACK

Specifications that are intended to become Internet Standards evolve through a set of maturity levels known as the "standards track". These maturity levels -- "Proposed Standard", "Draft Standard", and "Standard" -- are defined and discussed in section 4.1. The way in which specifications move along the standards track is described in section 6.

Even after a specification has been adopted as an Internet Standard, further evolution often occurs based on experience and the recognition of new requirements. The nomenclature and procedures of Internet standardization provide for the replacement of old Internet

Standards with new ones, and the assignment of descriptive labels to indicate the status of "retired" Internet Standards. A set of maturity levels is defined in section 4.2 to cover these and other specifications that are not considered to be on the standards track.

#### 4.1 Standards Track Maturity Levels

Internet specifications go through stages of development, testing, and acceptance. Within the Internet Standards Process, these stages are formally labeled "maturity levels".

This section describes the maturity levels and the expected characteristics of specifications at each level.

##### 4.1.1 Proposed Standard

The entry-level maturity for the standards track is "Proposed Standard". A specific action by the IESG is required to move a specification onto the standards track at the "Proposed Standard" level.

A Proposed Standard specification is generally stable, has resolved known design choices, is believed to be well-understood, has received significant community review, and appears to enjoy enough community interest to be considered valuable. However, further experience might result in a change or even retraction of the specification before it advances.

Usually, neither implementation nor operational experience is required for the designation of a specification as a Proposed Standard. However, such experience is highly desirable, and will usually represent a strong argument in favor of a Proposed Standard designation.

The IESG may require implementation and/or operational experience prior to granting Proposed Standard status to a specification that materially affects the core Internet protocols or that specifies behavior that may have significant operational impact on the Internet.

A Proposed Standard should have no known technical omissions with respect to the requirements placed upon it. However, the IESG may waive this requirement in order to allow a specification to advance to the Proposed Standard state when it is considered to be useful and necessary (and timely) even with known technical omissions.

Implementors should treat Proposed Standards as immature specifications. It is desirable to implement them in order to gain experience and to validate, test, and clarify the specification. However, since the content of Proposed Standards may be changed if problems are found or better solutions are identified, deploying implementations of such standards into a disruption-sensitive environment is not recommended.

#### 4.1.2 Draft Standard

A specification from which at least two independent and interoperable implementations from different code bases have been developed, and for which sufficient successful operational experience has been obtained, may be elevated to the "Draft Standard" level. For the purposes of this section, "interoperable" means to be functionally equivalent or interchangeable components of the system or process in which they are used. If patented or otherwise controlled technology is required for implementation, the separate implementations must also have resulted from separate exercise of the licensing process. Elevation to Draft Standard is a major advance in status, indicating a strong belief that the specification is mature and will be useful.

The requirement for at least two independent and interoperable implementations applies to all of the options and features of the specification. In cases in which one or more options or features have not been demonstrated in at least two interoperable implementations, the specification may advance to the Draft Standard level only if those options or features are removed.

The Working Group chair is responsible for documenting the specific implementations which qualify the specification for Draft or Internet Standard status along with documentation about testing of the interoperation of these implementations. The documentation must include information about the support of each of the individual options and features. This documentation should be submitted to the Area Director with the protocol action request. (see Section 6)

A Draft Standard must be well-understood and known to be quite stable, both in its semantics and as a basis for developing an implementation. A Draft Standard may still require additional or more widespread field experience, since it is possible for implementations based on Draft Standard specifications to demonstrate unforeseen behavior when subjected to large-scale use in production environments.