                    Characterization of Proposed Standards
                    draft-kolkman-proposed-standards-clarified-03

Abstract

   RFC 2026 describes the review performed by the IESG on IETF Proposed
   Standard RFCs and states the maturity level of those documents. This
   document clarifies those descriptions and updates RFC 2026 by
   providing a new characterization Proposed Standards.

Status of this Memo

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Table of Contents

1. Introduction

   [Editor Note: ietf@ietf.org is the mailing-list for discussing this
   draft.]

   In the two decades after publication of RFC 2026 [RFC2026] the IETF
   has evolved its review processes of Proposed Standard RFCs and thus
   RFC 2026 section 4.1.1 no longer accurately describes IETF Proposed
   Standards.

   This document exclusively updates the characterization of Proposed
   Standards from RFC2026 Section 4.1.1 and does not speak to or alter
   the procedures for the maintenance of Standards Track documents from
   RFC 2026 and RFC 6410 [RFC6410]. For complete understanding of the
   requirements for standardization those documents should be read in
   conjunction with this document.

2. IETF Reveiew of Proposed Standards

   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.

Initially it was assumed that most IETF technical specifications
would progress through a series of maturity stages starting with
Proposed Standard, then progressing to Draft Standard then, finally,
to Internet Standard (see RFC 2026 section 6). Over time, for a
number of reasons, this progression became less common. In response,
the IETF strengthened its review of Proposed Standards, basically
operating as if the Proposed Standard was the last chance for the
IETF to ensure the quality of the technology and the clarity of the
Standard Track document. The result was that IETF Proposed Standards
approved over the last decade or more have had extensive review.
Because of this change in review assumptions, IETF Proposed Standards
should be considered to be at least as mature as final standards from
other standards development organizations. In fact, the IETF review
is more extensive than that done in most other SDOs owing to the
cross-area technical review performed by the IETF, exemplified by
technical review by the full IESG at last stage of specification
development. That position is further strengthened by the common
presence of interoperable running code and implementation before
publication as a Proposed Standard.

3. Characterization of Specification

Section 3.1 of this document replaces RFC 2026 Section 4.1.1. Section
3.2 is a verbatim copy of the characterization of Internet Standards
from RFC 2026 Section 4.1.3 and is provided for convenient reference.

3.1. Characterization of IETF Proposed Standard Specifications

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 stable, has resolved known
design choices, is well-understood, has received significant
community review, and appears to enjoy enough community interest to
be considered valuable.

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 will have no known technical omissions with
respect to the requirements placed upon it. Proposed Standards are
of such quality that implementations can be deployed in the Internet.
However, as with all technical specifications, Proposed Standards may
be revised if problems are found or better solutions are identified,
when experiences with deploying implementations of such technologies
at scale is gathered.

3.2. Characteristics of Internet Standards

A specification for which significant implementation and successful
operational experience has been obtained may be elevated to the
Internet Standard level. An Internet Standard (which may simply be
referred to as a Standard) is characterized by a high degree of
technical maturity and by a generally held belief that the specified
protocol or service provides significant benefit to the Internet
community.

4. Further Considerations

While less mature specifications will usually be published as
Informational or Experimental RFCs, the IETF may, on occasion,
publish a specification that still contains areas for improvement or
certain uncertainties about whether the best engineering choices are
made. In those cases that fact will be clearly and prominently
communicated in the document e.g. in the abstract, the introduction,
or a separate section or statement.

5. Security Considerations

This document does not directly affect the security of the Internet.

6. IANA Considerations

There are no actions for IANA.

7. References

[RFC2026]   Bradner, S., "The Internet Standards Process -- Revision
            3", BCP 9, RFC 2026, October 1996.

[RFC6410]   Housley, R., Crocker, D. and E. Burger, "Reducing the
            Standards Track to Two Maturity Levels", BCP 9, RFC 6410,
            October 2011.

Appendix A. Acknowledgements

This document is inspired by a discussion at the open microphone
session during the technical plenary at IETF 87. Thanks to, in

alphabetical order: Jari Arko, Carsten Bormann, Scott Brim, Spencer
Dawkins, Randy Bush, Dave Cridland, Adrian Farrel, John Klensin, and
Subramaniam Moonesamy for motivation, input and review.

Appendix B. Internet Draft Notes and RFC Editor Instructions

This section is to assist reviewers of this document.

[Editor Note: Please remove this section and its subsections at publication]

Appendix B.1. Version 00

Introduction and motivation

Verbatim copy from section 4.1.1 and 4.1.3 of [RFC2026] of the Proposed and ant Internet Draft characterization into Section 3.1 and Section 3.2

Modification of paragraphs of the Proposed Standards characterization, namely:

OLD:

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.

NEW:

A Proposed Standard specification is stable, has resolved known design choices, is well-understood, has received significant community review, and appears to enjoy enough community interest to be considered valuable. However, as with all technical standards, further experience might result in a change or even retraction of the specification in the future.

OLD:

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.

NEW:

A Proposed Standard will have no known technical omissions with
respect to the requirements placed upon it. Proposed Standards are
of such quality that implementations can be deployed in the Internet.
However, as with all technical specifications, Proposed Standards may
be revised if problems are found or better solutions are identified,
when experiences with deploying implementations of such technologies
at scale is gathered.

Appendix B.2. Version 00->01

Added "Updates 2026" and added Sean's initial"

Copied the whole characterization paragraph for Internet Standards
from 2026, instead of only the line that is the actual
characterization itself.

Added the Further Consideration section based on discussion on the
mailinglist.

Appendix B.3. Version 01->02

Sharpened the 2nd paragraph of the Introduction to be clear that the
scope of the update is limited to section 4.1.1. and that this
document should not be read stand-alone.

Refined the "Further Considerations" Sections to express that as part
of the process less mature specs are sometimes approved as Proposed
Standards but that in those cases the documents should clearly
indicate that.

Minor editorial nits, and corrections.

Appendix B.4. Version 02->03

Changed a number of occurances where IESG review was used to the
intended IETF review.

Appendix B.5. Editors versioning info

$Id: draft-kolkman-proposed-standards-clarified.xml 14 2013-09-18
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