IPv6 to Internet standard rfc2460bis, rfc1981bis, rfc2491bis

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Criteria for IS (RFC6410)

The characterization of an Internet Standard remains as described in RFC 2026 [1], which says:

> An Internet 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.

The IESG, in an IETF-wide Last Call of at least four weeks, confirms that a document advances from Proposed Standard to Internet Standard. The request for reclassification is sent to the IESG along with an explanation of how the criteria have been met. The criteria are:

(1) There are at least two independent interoperating implementations with widespread deployment and successful operational experience.

(2) There are no errata against the specification that would cause a new implementation to fail to interoperate with deployed ones.

(3) There are no unused features in the specification that greatly increase implementation complexity.

(4) If the technology required to implement the specification requires patented or otherwise controlled technology, then the set of implementations must demonstrate at least two independent, separate and successful uses of the licensing process.

rfc2460bis

- Selected comments:
  - Inconsistent use of citations to updated text (e.g. no citations of RFC6564, RFC7522)
  - Clarity in meaning of “processes” and “examines”
  - p.8 contradictory text to RFC7045, which says you can only discard through configurable policy?
  - Should RH be added to “full implementation” list?
  - Should we add note about not fragmenting ND?
  - p.20 Is the 60 second rule commonly implemented?
  - Next Header value 59? (Not in RFC7045)
  - p.24 PMTUD “strongly recommended”. What about PLPMTUD?
  - p.24 is fragmentation being “discouraged” strong enough?
  - p.26 is Section 8.2 consistent with the Hop Limit definition?

rfc1981bis

- IS eligibility
  - Do we have consensus that there is “successful operational experience” of MPTUD?
- Selected comments:
  - Again, consistency of citations
  - PLPMTUD mentioned in Section 1, but spirit of RFC4821 not carried through rest of document
  - Combined use of PMTUD and PLPMTUD?
  - Section 5 is implementation issues from node’s perspective; what about nodes on path? (e.g. RFC4890)
  - p.3 lacks text on why 1280MTU can be beneficial; should we add?
  - P.8 if mention ND here, should we cite RFC6980?
  - P.8 RH0 mentioned; should we keep RH text for Type 2/3?
  - Should we have a Transport Area review of Section 5.5?
  - p.13 Add note about EH insertion causing PTB to go to sender?

rfc2491bis

- Selected comments:
  - Again, inconsistent use of citations (RFC5952,…)
  - p.9/10 – do we add ULAs to replace/update site-local text here? (RFC4913)
  - p.11 assumptions *are* now made about /64 boundary; add a reference to RFC7421 (Why /64?)
  - p.11 no mention of “temporary” addresses when discussing RFC4941 and RFC7217; should we add it? (including use of only temporary addresses)
  - Why have RFC7371 updates been backed out in -02 version? Are we sure we want to do that?
  - Should we add RFC5453 (reserved IPv6 IIDs), RFC6890 (IPv6 Special-Purpose Address Registry) and RFC7346 (IPv6 Multicast Address Scopes) in the IANA section?