           Cooperative Agreement Between the ISOC/IETF and ISO/IEC
          Joint Technical Committee 1/Sub Committee 6 (JTC1/SC6) on
                    IS-IS Routing Protocol Development

Status of this Memo

   This memo provides information for the Internet community. It does
   not specify an Internet standard of any kind. Distribution of this
   memo is unlimited.

Abstract

   This document contains the text of the agreement signed between
   ISOC/IETF and ISO/IEC JTC1/SC6 regarding cooperative development of
   the IS-IS routing protocol. The agreement includes definitions of
   the related work scopes for the two organizations, request for
   creation and maintenance of an IS-IS registry by IANA, as well as
   collaboration guidelines.

Document Header

   Annexe 1 to Cooperative Agreement Between the Internet Society and
   the International Organization for Standardization / International
   Electrotechnical Commission / Joint Technical Committee 1 / Sub
   Committee 6 (ISO/IEC JTC1/SC6): IS-IS Routing Protocols

   Date: 2003-01-28

   This annexe records the agreed collaborative process for the further
   development and standardisation of the Intermediate System to
   Intermediate System (IS-IS) intra-domain routing protocol (ISO/IEC
   10589).

1. Introduction

   The IS-IS intra-domain routing protocols, originally developed in
   ISO/IEC/JTC1/SC6, have been successfully deployed in the Internet for
   several years.

   ISO/IEC/JTC1/SC6 is the JTC1 sub-committee which has responsibility
   for maintenance of the IS-IS standard (ISO/IEC 10589).

   The IS-IS Working Group of the IETF is chartered to develop
   extensions to the IS-IS protocol to be used within the scope of the
   Internet.

   This addendum documents the agreed process for the future development
   of IS-IS by both organizations.

2. Definitions

2.1 Core IS-IS Mechanisms

   Core IS-IS Mechanisms are subsystems with associated algorithms, data
   structures, and PDU formats as specified in (ISO/IEC 10589),
   constituting the core of the IS-IS protocol and including the
   following elements:

   a) Framework of PDU formats, including TLVs defined in [10589]

   b) Encapsulation of PDUs

   c) Adjacency state machine and formation logic

   d) DIS election algorithm

   e) Initial LSP synchronization via CSNP exchange

   f) Asynchronous LSP flooding (including DIS flooding behavior)

   g) LSP database maintenance including LSP origination, aging, and
      purging

   h) Topology abstraction defined in [10589]

2.2 Internet-specific IS-IS Extensions:

   Internet-specific IS-IS Extensions are extensions to the IS-IS
   protocol that are within the work scope of the IETF including any
   routing or packet forwarding technology that the IETF decides to work
   on in the future (such as IPv4 or IPv6 unicast and multicast routing,
   MPLS, MPLS Traffic Engineering, or Generalized MPLS), and:

   a) do not modify the Core IS-IS Mechanisms and do not change
      operation of non-IP or affect compatibility with non-IP and dual
      implementations of IS-IS, or

   b) add supplementary mechanisms to the Core IS-IS Mechanisms, are not
      generally applicable to non-IP implementations of IS-IS, and do
      not change operation of non-IP or affect compatibility with non-IP
      and dual implementations of IS-IS, or

   c) are de facto implementation agreements that are not generally
      applicable to non-IP implementations of IS-IS.

   Note that the introduction of new TLVs or sub-TLVs that do not modify
   the algorithms of the Core Mechanisms in a way that would affect
   interoperability with non-IP or dual implementations of IS-IS is not
   considered to be a modification to the Core IS-IS Mechanisms.

3. Agreement

   The following conventions are used in the rest of this document.

   SHALL   This term is used to indicate commitment to follow a
               specific element of this agreement.

   MUST   Equivalent to "SHALL"

   SHALL NOT   This phrase is used to indicate commitment to NOT perform
               a specific action

   MAY   This term is used to indicate the right to perform a
               specific action

   SHOULD   This term is used to indicate that following a specific
               element of this agreement is encouraged, however there may
               exist circumstances in which a decision may be made not to
               do so.

3.1 Separation of IS-IS Work Scope

   JTC1 SHALL NOT and IETF MAY (subject to the IETF standards process)
   standardize any Internet-specific IS-IS Extensions.

   Any IS-IS Extensions produced within the IETF that require
   standardization, but cannot be identified as Internet-specific per
   section 2.2 of this document SHOULD be submitted for standardization
   to JTC1 (see section 3.3.2). IETF SHALL NOT publish documents
   describing such IS-IS extensions other than as Informational RFCs.

IS-IS extensions submitted from the IETF to JTC1 will be processed
under the JTC1 fast track procedure. To ensure the quality of such
submissions, IETF SHALL apply to them the procedures for Proposed
Standard submission according to [RFC2026] (even though these
documents will not be published as standards-track IETF RFCs).

In the situations where it is not clear from the provisions of this
document whether a specific protocol extension should be standardized
within the IETF or within JTC1, the decisions will be made on a case-
by-case basis and will be based on the agreement between the two
organizations reached via a discussion between the IETF Routing Area
Directors or the IETF liaison to JTC1/SC6 (who will reflect the IETF
consensus on the matter), and the JTC1/SC6 secretariat.

3.2 Requirements for IS-IS-specific IETF documents

All IS-IS-related IETF documents intended to be published as IETF
standards track RFCs MUST include a section explaining why they
qualify to be considered as Internet-specific IS-IS Extensions
described in section 2.2 of this document.

3.3 IS-IS Registries (IANA Considerations)

3.3.1 IS-IS TLV Codepoint Registry

Until JTC1 provides the registry service for IS-IS, IANA is requested
to temporarily maintain such a registry as described below. Upon
notification from JTC1, the registry management authority (i.e.,
value allocation) will be transferred to JTC1. IANA MAY still retain
the registry for informational purposes and keep updating it based on
information provided by JTC1.

IANA has created and currently maintains a registry for IS-IS TLV
codepoints. The range of values is 0-255. Initial state of the
registry should be synchronized with [RFC3359]. Allocation of values
in the registry has to be approved by the designated expert assigned
by the IESG. IETF SHALL keep JTC1/SC6 informed of TLV codepoint
values allocated, and JTC1/SC6 SHALL refer allocation requests
arising within JTC1 constituencies to the IANA registry process.

3.3.2 IETF-specific Registries

IETF MAY request IANA to maintain IS-IS-related registries if those
are required to maintain name spaces internal to Internet-specific
IS-IS extensions.

3.4 Collaboration Guidelines

3.4.1 Learning About New Work

   IETF SHALL inform the chairman and secretariat of ISO JTC 1/SC 6
   about new IS-IS-related work items.

   JTC1/SC6 SHALL inform the IETF Routing Area directors and ISIS WG
   chairs about new IS-IS-related work items. Communication MAY be
   enacted directly using electronic mail, or may be conducted via
   appointed SC6 / IETF liaison representatives.

3.4.2 Submitting IETF Documents to JTC1

   As a class A liaison organisation to JTC1, the Internet Society may
   submit existing standards for adoption as International Standards of
   the ISO, using the Fast-Track procedure.

   IS-IS extensions developed by IETF and intended for standardization
   in JTC1 according to section 3.1 SHOULD therefore be submitted by one
   of the IETF ISIS WG chairs, or an IETF Routing Area director, sending
   an email message to the secretariat of ISO JTC 1 specifying the
   number of the Informational RFC containing the specification (the
   document MUST have been published as an RFC at the time of
   submission) and requesting fast-track processing by JTC1. The full
   text of the specification is then available using the following URL:

      http://www.ietf.org/rfc/rfcNNNN.txt

   where "NNNN" is the number of the RFC being submitted. The IETF
   SHOULD also recommend that JTC1 assign the document to JTC1/SC6, and
   SHOULD also submit to JTC1 the name of an individual who is prepared
   to serve as project editor for the fast-track document.

3.4.3 Submitting JTC1 Documents to IETF

   It is possible to make JTC1 standards specifications available for
   informational purposes of the IETF community by submitting the text
   of the specification as an Internet Draft and requesting the RFC
   Editor to publish the document as an Informational RFC. See sections
   4.2.2 and 7 of [RFC2026] for more information. Guidelines for
   Internet Draft preparation are given in [ID-GUIDE].

3.4.4 Mutual Document Review

   Members of ISO JTC 1/SC 6 are welcome to review any IS-IS-related
   IETF document (all IETF documents are publicly available at the IETF
   web site) and submit their comments to the ISIS WG (by sending an

email to the working group mailing list), the ISIS WG chairs (see
[ISISWG] for more information), the IETF Routing Area directors, or
the IESG (iesg@ietf.org).

JTC1 is encouraged to request an IETF review of IS-IS-related work
performed by JTC 1/SC 6 by submitting the text of the document as an
informational Internet Draft (see section 3.3.2) and sending a
message to the IETF ISIS WG mailing list requesting the comments.

The IETF MAY request JTC1 to circulate provided comments among the
National Bodies and Liaison Organizations involved in the discussion
of the work under review.

4. References

   [10589]   ISO, "Intermediate system to Intermediate system routing
                information exchange protocol for use in conjunction with
                the Protocol for providing the Connectionless-mode
                Network Service (ISO 8473)", ISO/IEC 10589:1992.

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

   [RFC3359]   Przygienda, T., "Reserved Type, Length and Value (TLV)
                Codepoints in Intermediate System to Intermediate
                System", RFC 3359, August 2002.

   [ISISWG]   "IS-IS for IP Internets (isis), IETF WG charter",
                http://www.ietf.org/html.charters/isis-charter.html

   [ISO]   "ISO Technical Committee details web-page",
                http://www.iso.org/iso/en/stdsdevelopment/tc/tclist/
                TechnicalCommitteeDetailPage.
                TechnicalCommitteeDetail?COMMID=1

   [JTC1]   "ISO/IEC JTC1 web-page" http://www.jtc1.org

   [SC6]   "ISO/IEC JTC1/SC6 web-page" http://www.jtc1sc06.org

   [IETF-ML]   "IETF Mailing Lists web-page",
                http://www.ietf.org/maillist.html

   [ID-GUIDE]   "Guidelines to Authors of Internet-Drafts",
                http://www.ietf.org/ietf/1id-guidelines.txt

5. Signatures

   Approved,   Approved,

   for ISO/IEC JTC1/SC6   for the Internet Society

   Original signed by   Original signed by

   Jack Houldsworth   Harald Alvestrand

   Date: March 3, 2003   Date: March 19, 2003

6. Security Considerations

   This type of non-protocol document does not directly affect the
   security of the Internet.

7. Author's Address

   Alex Zinin
   Alcatel

   EMail: zinin@psg.com

8. Full Copyright Statement

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Acknowledgement