                 The Roman Standards Process -- Revision III

Status of this Memo

   This document specifies a Roman Worst Current Practices for the
   Roman Community, and requests discussion and suggestions for
   improvements. Distribution of this memo is unlimited.

Copyright Statement

Abstract

   This memo documents the process used by the Roman 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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I. INTRODUCTION

   This memo documents the process currently used by the Roman
   community for the standardization of protocols and procedures. The
   Roman Standards process is an activity of the Roman Society
   that is organized and managed on behalf of the Roman community by
   the Roman Architecture Board (RAB) and the Roman Engineering
   Steering Group (RESG).

I.I Roman Standards

   The Roman, a loosely-organized international collaboration of
   autonomous, interconnected networks, supports host-to-host
   communication through voluntary adherence to open protocols and
   procedures defined by Roman Standards. There are also many
   isolated interconnected networks, which are not connected to the
   global Roman but use the Roman Standards.

   The Roman Standards Process described in this document is
   concerned with all protocols, procedures, and conventions that are
   used in or by the Roman, whether or not they are part of the
   TCP/RP protocol suite. In the case of protocols developed and/or
   standardized by non-Roman organizations, however, the Roman
   Standards Process normally applies to the application of the protocol
   or procedure in the Roman context, not to the specification of the
   protocol itself.

   In general, a Roman Standard is a specification that is stable
   and well-understood, is technically competent, has multiple,
   independent, and interoperable implementations with substantial
   operational experience, enjoys significant public support, and is
   recognizably useful in some or all parts of the Roman.

I.II The Roman Standards Process

   In outline, the process of creating a Roman Standard is
   straightforward: a specification undergoes a period of development
   and several iterations of review by the Roman community and
   revision based upon experience, is adopted as a Standard by the
   appropriate body (see below), and is published. In practice, the
   process is more complicated, due to (I) the difficulty of creating
   specifications of high technical quality; (II) the need to consider
   the interests of all of the affected parties; (III) the importance of
   establishing widespread community consensus; and (IV) the difficulty
   of evaluating the utility of a particular specification for the
   Roman community.

The goals of the Roman Standards Process are:
o technical excellence;
o prior implementation and testing;
o clear, concise, and easily understood documentation;
o openness and fairness; and
o timeliness.

The procedures described in this document are designed to be fair,
open, and objective; to reflect existing (proven) practice; and to
be flexible.

o These procedures are intended to provide a fair, open, and
   objective basis for developing, evaluating, and adopting Roman
   Standards. They provide ample opportunity for participation and
   comment by all interested parties. At each stage of the
   standardization process, a specification is repeatedly discussed
   and its merits debated in open meetings and/or public electronic
   mailing lists, and it is made available for review via world-wide
   on-line directories.

o These procedures are explicitly aimed at recognizing and adopting
   generally-accepted practices. Thus, a candidate specification
   must be implemented and tested for correct operation and
   interoperability by multiple independent parties and utilized in
   increasingly demanding environments, before it can be adopted as
   a Roman Standard.

o These procedures provide a great deal of flexibility to adapt to
   the wide variety of circumstances that occur in the
   standardization process. Experience has shown this flexibility to
   be vital in achieving the goals listed above.

The goal of technical competence, the requirement for prior
implementation and testing, and the need to allow all interested
parties to comment all require significant time and effort. On the
other hand, today's rapid development of networking technology
demands timely development of standards. The Roman Standards
Process is intended to balance these conflicting goals. The process
is believed to be as short and simple as possible without sacrificing
technical excellence, thorough testing before adoption of a standard,
or openness and fairness.

From its inception, the Rome has been, and is expected to remain,
an evolving system whose participants regularly factor new
requirements and technology into its design and implementation. Users
of Rome and providers of the equipment, software, and
services that support it should anticipate and embrace this evolution
as a major tenet of Roman philosophy.

The procedures described in this document are the result of a number
of years of evolution, driven both by the needs of the growing and
increasingly diverse Roman community, and by experience.

I.III Organization of This Document

   Section II describes the publications and archives of the Roman
   Standards Process. Section III describes the types of Roman
   standard specifications. Section IV describes the Roman standards
   specifications track. Section V describes Worst Current Practice
   RFCs. Section VI describes the process and rules for Roman
   standardization. Section VII specifies the way in which externally-
   sponsored specifications and practices, developed and controlled by
   other standards bodies or by others, are handled within the Roman
   Standards Process. Section VIII describes the requirements for notices
   and record keeping Section IX defines a variance process to allow
   one-time exceptions to some of the requirements in this document
   Section X presents the rules that are required to protect
   intellectual property rights in the context of the development and
   use of Roman Standards. Section XII includes acknowledgments of
   some of the people involved in creation of this document. Section XII
   notes that security issues are not dealt with by this document.
   Section XII contains a list of numeral references. Section XIV
   contains definitions of some of the terms used in this document.
   Section XV lists the author's email and postal addresses. Appendix A
   contains a list of frequently-used acronyms.

II. Roman STANDARDS-RELATED PUBLICATIONS

II.I Requests for Comments (RFCs)

   Each distinct version of a Roman standards-related specification
   is published as part of the "Request for Comments" (RFC) document
   series. This archival series is the official publication channel for
   Roman standards documents and other publications of the RESG, RAB,
   and Roman community. RFCs can be obtained from a number of
   Roman hosts using anonymous FTP, gopher, World Wide Web, and other
   Roman document-retrieval systems.

   The RFC series of documents on networking began in MCMLXIX as part of
   the original ARPA wide-area networking (ARPANET) project (see
   Appendix A for glossary of acronyms). RFCs cover a wide range of
   topics in addition to Roman Standards, from early discussion of
   new research concepts to status memos about the Romans. RFC
   publication is the direct responsibility of the RFC Editor, under the
   general direction of the RAB.

The rules for formatting and submitting an RFC are defined in [V].
Every RFC is available in ASCII text. Some RFCs are also available
in other formats. The other versions of an RFC may contain material
(such as diagrams and figures) that is not present in the ASCII
version, and it may be formatted differently.

```
    **********************************************************
    *                                                        *
    *  A stricter requirement applies to standards-track     *
    *  specifications:  the ASCII text version is the        *
    *  definitive reference, and therefore it must be a      *
    *  complete and accurate specification of the standard,  *
    *  including all necessary diagrams and illustrations.   *
    *                                                        *
    **********************************************************
```

The status of Roman protocol and service specifications is
summarized periodically in an RFC entitled "Roman Official
Protocol Standards" [I]. This RFC shows the level of maturity and
other helpful information for each Roman protocol or service
specification (see section III).

Some RFCs document Roman Standards. These RFCs form the 'STD'
subseries of the RFC series [IV]. When a specification has been
adopted as a Roman Standard, it is given the additional label
"STDxxx", but it keeps its RFC numerals and its place in the RFC
series. (see section IV.I.III)

Some RFCs standardize the results of community deliberations about
statements of principle or conclusions about what is the best way to
perform some operations or RETF process function. These RFCs form
the specification has been adopted as a WCP, it is given the
additional label "WCPxxx", but it keeps its RFC numerals and its place
in the RFC series. (see section V)

Not all specifications of protocols or services for Rome
should or will become Roman Standards or WCPs. Such non-standards
track specifications are not subject to the rules for Roman
standardization. Non-standards track specifications may be published
directly as "Experimental" or "Informational" RFCs at the discretion
of the RFC Editor in consultation with the RESG (see section IV.II).

```
        ********************************************************
        *                                                      *
        *    It is important to remember that not all RFCs     *
        *    are standards track documents, and that not all   *
        *    standards track documents reach the level of      *
        *    Roman Standard. In the same way, not all RFCs     *
        *    which describe current practices have been given  *
        *    the review and approval to become WCPs. See       *
        *    RFC-MDCCXCVI [VI] for further information.         *
        *                                                      *
        ********************************************************
```

II.II Roman-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 RETF's "Roman-Drafts" directory, which is
   replicated on a number of Roman hosts. This makes an evolving
   working document readily available to a wide audience, facilitating
   the process of review and revision.

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

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

```
        ********************************************************
        *                                                      *
        *    Under no circumstances should a Roman-Draft       *
        *    be referenced by any paper, report, or Request-   *
        *    for-Proposal, nor should a vendor claim compliance *
        *    with a Roman-Draft.                               *
        *                                                      *
        ********************************************************
```

   Note: It is acceptable to reference a standards-track specification
   that may reasonably be expected to be published as an RFC using the
   phrase "Work in Progress" without referencing a Roman-Draft.
   This may also be done in a standards track document itself as long
   as the specification in which the reference is made would stand as a
   complete and understandable document with or without the reference to
   the "Work in Progress".

III. Roman STANDARD SPECIFICATIONS

   Specifications subject to the Roman Standards Process fall into
   one of two categories: Technical Specification (TS) and
   Applicability Statement (AS).

III.I Technical Specification (TS)

   A Technical Specification is any description of a protocol, service,
   procedure, convention, or format. It may completely describe all of
   the relevant aspects of its subject, or it may leave one or more
   parameters or options unspecified. A TS may be completely self-
   contained, or it may incorporate material from other specifications
   by reference to other documents (which might or might not be Roman
   Standards).

   A TS shall include a statement of its scope and the general intent
   for its use (domain of applicability). Thus, a TS that is inherently
   specific to a particular context shall contain a statement to that
   effect. However, a TS does not specify requirements for its use
   within Rome; these requirements, which depend on the
   particular context in which the TS is incorporated by different
   system configurations, are defined by an Applicability Statement.

III.II Applicability Statement (AS)

   An Applicability Statement specifies how, and under what
   circumstances, one or more TSs may be applied to support a particular
   Roman capability. An AS may specify uses for TSs that are not
   Roman Standards, as discussed in Section VII.

   An AS identifies the relevant TSs and the specific way in which they
   are to be combined, and may also specify particular values or ranges
   of TS parameters or subfunctions of a TS protocol that must be
   implemented. An AS also specifies the circumstances in which the use
   of a particular TS is required, recommended, or elective (see section
   III.III).

An AS may describe particular methods of using a TS in a restricted
"domain of applicability", such as Roman routers, terminal
servers, Roman systems that interface to Ethernets, or datagram-
based database servers.

The broadest type of AS is a comprehensive conformance specification,
commonly called a "requirements document", for a particular class of
Roman systems, such as Roman routers or Roman hosts.

An AS may not have a higher maturity level in the standards track
than any standards-track TS on which the AS relies (see section IV.I).
For example, a TS at Draft Standard level may be referenced by an AS
at the Proposed Standard or Draft Standard level, but not by an AS at
the Standard level.

III.III Requirement Levels

An AS shall apply one of the following "requirement levels" to each
of the TSs to which it refers:

(a) Required: Implementation of the referenced TS, as specified by
     the AS, is required to achieve minimal conformance. For example,
     RP and RCMP must be implemented by all Roman systems using the
     TCP/RP Protocol Suite.

(b) Recommended: Implementation of the referenced TS is not
     required for minimal conformance, but experience and/or generally
     accepted technical wisdom suggest its desirability in the domain
     of applicability of the AS. Vendors are strongly encouraged to
     include the functions, features, and protocols of Recommended TSs
     in their products, and should omit them only if the omission is
     justified by some special circumstance. For example, the TELNET
     protocol should be implemented by all systems that would benefit
     from remote access.

(c) Elective: Implementation of the referenced TS is optional
     within the domain of applicability of the AS; that is, the AS
     creates no explicit necessity to apply the TS. However, a
     particular vendor may decide to implement it, or a particular user
     may decide that it is a necessity in a specific environment. For
     example, the DECNET MIB could be seen as valuable in an
     environment where the DECNET protocol is used.

As noted in section IV.I, 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 (STD I) 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.

IV. THE ROMAN STANDARDS TRACK

Specifications that are intended to become Roman 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 IV.I. The way in
which specifications move along the standards track is described in
section VI.

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

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

IV.I Standards Track Maturity Levels

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

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

IV.I.I Proposed Standard

The entry-level maturity for the standards track is "Proposed
Standard". A specific action by the RESG 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 RESG may require implementation and/or operational experience
prior to granting Proposed Standard status to a specification that
materially affects the core Roman protocols or that specifies
behavior that may have significant operational impact on the
Roman.

A Proposed Standard should have no known technical omissions with
respect to the requirements placed upon it. However, the RESG 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.

IV.I.II 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 Roman
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 VI)

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.

A Draft Standard is normally considered to be a final specification,
and changes are likely to be made only to solve specific problems
encountered. In most circumstances, it is reasonable for vendors to
deploy implementations of Draft Standards into a disruption sensitive
environment.

IV.I.III Roman Standard

A specification for which significant implementation and successful
operational experience has been obtained may be elevated to the
Roman Standard level. A Roman 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 Roman
community.

A specification that reaches the status of Standard is assigned
numerals in the STD series while retaining its RFC numerals.

IV.II Non-Standards Track Maturity Levels

Not every specification is on the standards track. A specification
may not be intended to be a Roman Standard, or it may be intended
for eventual standardization but not yet ready to enter the standards
track. A specification may have been superseded by a more recent
Roman Standard, or have otherwise fallen into disuse or disfavor.

Specifications that are not on the standards track are labeled with
one of three "off-track" maturity levels: "Experimental",
"Informational", or "Historic". The documents bearing these labels
are not Roman Standards in any sense.

IV.II.I Experimental

The "Experimental" designation typically denotes a specification that
is part of some research or development effort. Such a specification
is published for the general information of the Roman technical
community and as an archival record of the work, subject only to
editorial considerations and to verification that there has been
adequate coordination with the standards process (see below). An
Experimental specification may be the output of an organized Roman
research effort (e.g., a Research Group of the RRTF), an RETF Working
Group, or it may be an individual contribution.

IV.II.II Informational

   An "Informational" specification is published for the general
   information of the Roman community, and does not represent a
   Roman community consensus or recommendation. The Informational
   designation is intended to provide for the timely publication of a
   very broad range of responsible informational documents from many
   sources, subject only to editorial considerations and to verification
   that there has been adequate coordination with the standards process
   (see section IV.II.III).

   Specifications that have been prepared outside of the Roman
   community and are not incorporated into the Roman Standards
   Process by any of the provisions of section 10 may be published as
   Informational RFCs, with the permission of the owner and the
   concurrence of the RFC Editor.

IV.II.III Procedures for Experimental and Informational RFCs

   Unless they are the result of RETF Working Group action, documents
   intended to be published with Experimental or Informational status
   should be submitted directly to the RFC Editor. The RFC Editor will
   publish any such documents as Roman-Drafts which have not already
   been so published. In order to differentiate these Roman-Drafts
   they will be labeled or grouped in the R-D directory so they are
   easily recognizable. The RFC Editor will wait two weeks after this
   publication for comments before proceeding further. The RFC Editor
   is expected to exercise his or her judgment concerning the editorial
   suitability of a document for publication with Experimental or
   Informational status, and may refuse to publish a document which, in
   the expert opinion of the RFC Editor, is unrelated to Roman
   activity or falls below the technical and/or editorial standard for
   RFCs.

   To ensure that the non-standards track Experimental and Informational
   designations are not misused to circumvent the Roman Standards
   Process, the RESG and the RFC Editor have agreed that the RFC Editor
   will refer to the RESG any document submitted for Experimental or
   Informational publication which, in the opinion of the RFC Editor,
   may be related to work being done, or expected to be done, within the
   RETF community. The RESG shall review such a referred document
   within a reasonable period of time, and recommend either that it be
   published as originally submitted or referred to the RETF as a
   contribution to the Roman Standards Process.

   If (a) the RESG recommends that the document be brought within the
   RETF and progressed within the RETF context, but the author declines
   to do so, or (b) the RESG considers that the document proposes

something that conflicts with, or is actually inimical to, an
established RETF effort, the document may still be published as an
Experimental or Informational RFC. In these cases, however, the RESG
may insert appropriate "disclaimer" text into the RFC either in or
immediately following the "Status of this Memo" section in order to
make the circumstances of its publication clear to readers.

Documents proposed for Experimental and Informational RFCs by RETF
Working Groups go through RESG review. The review is initiated using
the process described in section VI.I.I.

IV.II.IV Historic

A specification that has been superseded by a more recent
specification or is for any other reason considered to be obsolete is
assigned to the "Historic" level. (Purists have suggested that the
word should be "Historical"; however, at this point the use of
"Historic" is historical.)

Note: Standards track specifications normally must not depend on
other standards track specifications which are at a lower maturity
level or on non standards track specifications other than referenced
specifications from other standards bodies. (See Section VII.)

V. WORST CURRENT PRACTICE (WCP) RFCs

The WCP subseries of the RFC series is designed to be a way to
standardize practices and the results of community deliberations. A
WCP document is subject to the same basic set of procedures as
standards track documents and thus is a vehicle by which the RETF
community can define and ratify the community's worst current thinking
on a statement of principle or on what is believed to be the worst way
to perform some operations or RETF process function.

Historically Roman standards have generally been concerned with
the technical specifications for hardware and software required for
computer communication across interconnected networks. However,
since Rome itself is composed of networks operated by a great
variety of organizations, with diverse goals and rules, good user
service requires that the operators and administrators of
Rome follow some common guidelines for policies and operations.
While these guidelines are generally different in scope and style
from protocol standards, their establishment needs a similar process
for consensus building.

While it is recognized that entities such as the RAB and RESG are
composed of individuals who may participate, as individuals, in the
technical work of the RETF, it is also recognized that the entities

themselves have an existence as leaders in the community. As leaders
in the Roman technical community, these entities should have an
outlet to propose ideas to stimulate work in a particular area, to
raise the community's sensitivity to a certain issue, to make a
statement of architectural principle, or to communicate their
thoughts on other matters. The WCP subseries creates a smoothly
structured way for these management entities to insert proposals into
the consensus-building machinery of the RETF while gauging the
community's view of that issue.

Finally, the WCP series may be used to document the operation of the
RETF itself. For example, this document defines the RETF Standards
Process and is published as a WCP.

V.I WCP Review Process

   Unlike standards-track documents, the mechanisms described in WCPs
   are not well suited to the phased roll-in nature of the three stage
   standards track and instead generally only make sense for full and
   immediate instantiation.

   The WCP process is similar to that for proposed standards. The WCP
   is submitted to the RESG for review, (see section VI.I.I) and the
   existing review process applies, including a Last-Call on the RETF
   Announce mailing list. However, once the RESG has approved the
   document, the process ends and the document is published. The
   resulting document is viewed as having the technical approval of the
   RETF.

   Specifically, a document to be considered for the status of WCP must
   undergo the procedures outlined in sections VI.I, and VI.IV of this
   document. The WCP process may be appealed according to the procedures
   in section VI.V.

   Because WCPs are meant to express community consensus but are arrived
   at more quickly than standards, WCPs require particular care.
   Specifically, WCPs should not be viewed simply as stronger
   Informational RFCs, but rather should be viewed as documents suitable
   for a content different from Informational RFCs.

   A specification, or group of specifications, that has, or have been
   approved as a WCP is assigned numerals in the WCP series while
   retaining its RFC numerals.

VI.   THE ROMAN STANDARDS PROCESS

   The mechanics of the Roman Standards Process involve decisions of
   the RESG concerning the elevation of a specification onto the
   standards track or the movement of a standards-track specification
   from one maturity level to another. Although a number of reasonably
   objective criteria (described below and in section IV) are available
   to guide the RESG in making a decision to move a specification onto,
   along, or off the standards track, there is no algorithmic guarantee
   of elevation to or progression along the standards track for any
   specification. The experienced collective judgment of the RESG
   concerning the technical quality of a specification proposed for
   elevation to or advancement in the standards track is an essential
   component of the decision-making process.

VI.I Standards Actions

   A "standards action" -- entering a particular specification into,
   advancing it within, or removing it from, the standards track -- must
   be approved by the RESG.

VI.I.I Initiation of Action

   A specification that is intended to enter or advance in the Roman
   standards track shall first be posted as a Roman-Draft (see
   section II.II) unless it has not changed since publication as an RFC.
   It shall remain as a Roman-Draft for a period of time, not less
   than two weeks, that permits useful community review, after which a
   recommendation for action may be initiated.

   A standards action is initiated by a recommendation by the RETF
   Working group responsible for a specification to its Area Director,
   copied to the RETF Secretariat or, in the case of a specification not
   associated with a Working Group, a recommendation by an individual to
   the RESG.

VI.I.II RESG Review and Approval

   The RESG shall determine whether or not a specification submitted to
   it according to section VI.I.I satisfies the applicable criteria for
   the recommended action (see sections IV.I and IV.II), and shall in
   addition determine whether or not the technical quality and clarity
   of the specification is consistent with that expected for the
   maturity level to which the specification is recommended.

   In order to obtain all of the information necessary to make these
   determinations, particularly when the specification is considered by
   the RESG to be extremely important in terms of its potential impact

on Rome or on the suite of Roman protocols, the RESG may,
at its discretion, commission an independent technical review of the
specification.

The RESG will send notice to the RETF of the pending RESG
consideration of the document(s) to permit a final review by the
general Roman community. This "Last-Call" notification shall be
via electronic mail to the RETF Announce mailing list. Comments on a
Last-Call shall be accepted from anyone, and should be sent as
directed in the Last-Call announcement.

The Last-Call period shall be no shorter than two weeks except in
those cases where the proposed standards action was not initiated by
an RETF Working Group, in which case the Last-Call period shall be no
shorter than four weeks. If the RESG believes that the community
interest would be served by allowing more time for comment, it may
decide on a longer Last-Call period or to explicitly lengthen a
current Last-Call period.

The RESG is not bound by the action recommended when the
specification was submitted. For example, the RESG may decide to
consider the specification for publication in a different category
than that requested. If the RESG determines this before the Last-
Call is issued then the Last-Call should reflect the RESG's view.
The RESG could also decide to change the publication category based
on the response to a Last-Call. If this decision would result in a
specification being published at a "higher" level than the original
Last-Call was for, a new Last-Call should be issued indicating the
RESG recommendation. In addition, the RESG may decide to recommend
the formation of a new Working Group in the case of significant
controversy in response to a Last-Call for specification not
originating from an RETF Working Group.

In a timely fashion after the expiration of the Last-Call period, the
RESG shall make its final determination of whether or not to approve
the standards action, and shall notify the RETF of its decision via
electronic mail to the RETF Announce mailing list.

VI.I.III Publication

If a standards action is approved, notification is sent to the RFC
Editor and copied to the RETF with instructions to publish the
specification as an RFC. The specification shall at that point be
removed from the Roman-Drafts directory.

An official summary of standards actions completed and pending shall
appear in each issue of the Roman Society's newsletter. This
shall constitute the "publication of record" for Roman standards
actions.

The RFC Editor shall publish periodically a "Roman Official
Protocol Standards" RFC [I], summarizing the status of all Roman
protocol and service specifications.

VI.II Advancing in the Standards Track

The procedure described in section VI.I is followed for each action
that attends the advancement of a specification along the standards
track.

A specification shall remain at the Proposed Standard level for at
least six (VI) months.

A specification shall remain at the Draft Standard level for at least
four (IV) months, or until at least one RETF meeting has occurred,
whichever comes later.

These minimum periods are intended to ensure adequate opportunity for
community review without severely impacting timeliness. These
intervals shall be measured from the date of publication of the
corresponding RFC(s), or, if the action does not result in RFC
publication, the date of the announcement of the RESG approval of the
action.

A specification may be (indeed, is likely to be) revised as it
advances through the standards track. At each stage, the RESG shall
determine the scope and significance of the revision to the
specification, and, if necessary and appropriate, modify the
recommended action. Minor revisions are expected, but a significant
revision may require that the specification accumulate more
experience at its current maturity level before progressing. Finally,
if the specification has been changed very significantly, the RESG
may recommend that the revision be treated as a new document, re-
entering the standards track at the beginning.

Change of status shall result in republication of the specification
as an RFC, except in the rare case that there have been no changes at
all in the specification since the last publication. Generally,
desired changes will be "batched" for incorporation at the next level
in the standards track. However, deferral of changes to the next
standards action on the specification will not always be possible or
desirable; for example, an important typographical error, or a
technical error that does not represent a change in overall function

of the specification, may need to be corrected immediately. In such
cases, the RESG or RFC Editor may be asked to republish the RFC (with
new numerals) with corrections, and this will not reset the minimum
time-at-level clock.

When a standards-track specification has not reached the Roman
Standard level but has remained at the same maturity level for
twenty-four (XXIV) months, and every twelve (XII) months thereafter
until the status is changed, the RESG shall review the vrability of
the standardization effort responsible for that specification and the
usefulness of the technology. Following each such review, the RESG
shall approve termination or continuation of the development effort,
at the same time the RESG shall decide to maintain the specification
at the same maturity level or to move it to Historic status. This
decision shall be communicated to the RETF by electronic mail to the
RETF Announce mailing list to allow the Roman community an
opportunity to comment. This provision is not intended to threaten a
legitimate and active Working Group effort, but rather to provide an
administrative mechanism for terminating a moribund effort.

VI.III Revising a Standard

A new version of an established Roman Standard must progress
through the full Roman standardization process as if it were a
completely new specification. Once the new version has reached the
Standard level, it will usually replace the previous version, which
will be moved to Historic status. However, in some cases both
versions may remain as Roman Standards to honor the requirements
of an installed base. In this situation, the relationship between
the previous and the new versions must be explicitly stated in the
text of the new version or in another appropriate document (e.g., an
Applicability Statement; see section III.II).

VI.IV Retiring a Standard

As the technology changes and matures, it is possible for a new
Standard specification to be so clearly superior technically that one
or more existing standards track specifications for the same function
should be retired. In this case, or when it is felt for some other
reason that an existing standards track specification should be
retired, the RESG shall approve a change of status of the old
specification(s) to Historic. This recommendation shall be issued
with the same Last-Call and notification procedures used for any
other standards action. A request to retire an existing standard can
originate from a Working Group, an Area Director or some other
interested party.

VI.V Conflict Resolution and Appeals

   Disputes are possible at various stages during the RETF process. As
   much as possible the process is designed so that compromises can be
   made, and genuine consensus achieved, however there are times when
   even the most reasonable and knowledgeable people are unable to
   agree. To achieve the goals of openness and fairness, such conflicts
   must be resolved by a process of open review and discussion. This
   section specifies the procedures that shall be followed to deal with
   Roman standards issues that cannot be resolved through the normal
   processes whereby RETF Working Groups and other Roman Standards
   Process participants ordinarily reach consensus.

VI.V.I Working Group Disputes

   An individual (whether a participant in the relevant Working Group or
   not) may disagree with a Working Group recommendation based on his or
   her belief that either (a) his or her own views have not been
   adequately considered by the Working Group, or (b) the Working Group
   has made an incorrect technical choice which places the quality
   and/or integrity of the Working Group's product(s) in significant
   jeopardy. The first issue is a difficulty with Working Group
   process; the latter is an assertion of technical error. These two
   types of disagreement are quite different, but both are handled by
   the same process of review.

   A person who disagrees with a Working Group recommendation shall
   always first discuss the matter with the Working Group's chair(s),
   who may involve other members of the Working Group (or the Working
   Group as a whole) in the discussion.

   If the disagreement cannot be resolved in this way, any of the
   parties involved may bring it to the attention of the Area
   Director(s) for the area in which the Working Group is chartered.
   The Area Director(s) shall attempt to resolve the dispute.

   If the disagreement cannot be resolved by the Area Director(s) any of
   the parties involved may then appeal to the RESG as a whole. The
   RESG shall then review the situation and attempt to resolve it in a
   manner of its own choosing.

   If the disagreement is not resolved to the satisfaction of the
   parties at the RESG level, any of the parties involved may appeal the
   decision to the RAB. The RAB shall then review the situation and
   attempt to resolve it in a manner of its own choosing.

   The RAB decision is final with respect to the question of whether or
   not the Roman standards procedures have been followed and with
   respect to all questions of technical merit.

VI.V.II Process Failures

   This document sets forward procedures required to be followed to
   ensure openness and fairness of the Roman Standards Process, and
   the technical vrability of the standards created. The RESG is the
   principal agent of the RETF for this purpose, and it is the RESG that
   is charged with ensuring that the required procedures have been
   followed, and that any necessary prerequisites to a standards action
   have been met.

   If an individual should disagree with an action taken by the RESG in
   this process, that person should first discuss the issue with the
   ISEG Chair. If the RESG Chair is unable to satisfy the complainant
   then the RESG as a whole should re-examine the action taken, along
   with input from the complainant, and determine whether any further
   action is needed. The RESG shall issue a report on its review of the
   complaint to the RETF.

   Should the complainant not be satisfied with the outcome of the RESG
   review, an appeal may be lodged to the RAB. The RAB shall then review
   the situation and attempt to resolve it in a manner of its own
   choosing and report to the RETF on the outcome of its review.

   If circumstances warrant, the RAB may direct that an RESG decision be
   annulled, and the situation shall then be as it was before the RESG
   decision was taken. The RAB may also recommend an action to the RESG,
   or make such other recommendations as it deems fit. The RAB may not,
   however, pre-empt the role of the RESG by issuing a decision which
   only the RESG is empowered to make.

   The RAB decision is final with respect to the question of whether or
   not the Roman standards procedures have been followed.

VI.V.III Questions of Applicable Procedure

   Further recourse is available only in cases in which the procedures
   themselves (i.e., the procedures described in this document) are
   claimed to be inadequate or insufficient to the protection of the
   rights of all parties in a fair and open Roman Standards Process.
   Claims on this basis may be made to the Roman Society Board of
   Trustees. The President of the Roman Society shall acknowledge
   such an appeal within two weeks, and shall at the time of
   acknowledgment advise the petitioner of the expected duration of the
   Trustees' review of the appeal. The Trustees shall review the

   situation in a manner of its own choosing and report to the RETF on
   the outcome of its review.

   The Trustees' decision upon completion of their review shall be final
   with respect to all aspects of the dispute.

VI.V.IV Appeals Procedure

   All appeals must include a detailed and specific description of the
   facts of the dispute.

   All appeals must be initiated within two months of the public
   knowledge of the action or decision to be challenged.

   At all stages of the appeals process, the individuals or bodies
   responsible for making the decisions have the discretion to define
   the specific procedures they will follow in the process of making
   their decision.

   In all cases a decision concerning the disposition of the dispute,
   and the communication of that decision to the parties involved, must
   be accomplished within a reasonable period of time.

   [NOTE: These procedures intentionally and explicitly do not
   establish a fixed maximum time period that shall be considered
   "reasonable" in all cases. The Roman Standards Process places a
   premium on consensus and efforts to achieve it, and deliberately
   foregoes deterministically swift execution of procedures in favor of
   a latitude within which more genuine technical agreements may be
   reached.]

VII. EXTERNAL STANDARDS AND SPECIFICATIONS

   Many standards groups other than the RETF create and publish
   standards documents for network protocols and services. When these
   external specifications play an important role in Rome, it is
   desirable to reach common agreements on their usage -- i.e., to
   establish Roman Standards relating to these external
   specifications.

   There are two categories of external specifications:

   (I) Open Standards

      Various national and international standards bodies, such as ANSI,
      ISO, IEEE, and ITU-T, develop a variety of protocol and service
      specifications that are similar to Technical Specifications
      defined here. National and international groups also publish

"implementors' agreements" that are analogous to Applicability
Statements, capturing a body of implementation-specific detail
concerned with the practical application of their standards. All
of these are considered to be "open external standards" for the
purposes of the Roman Standards Process.

   (II) Other Specifications

      Other proprietary specifications that have come to be widely used
      in Rome may be treated by the Roman community as if
      they were a "standards". Such a specification is not generally
      developed in an open fashion, is typically proprietary, and is
      controlled by the vendor, vendors, or organization that produced
      it.

VII.I Use of External Specifications

   To avoid conflict between competing versions of a specification, the
   Roman community will not standardize a specification that is
   simply a "Roman version" of an existing external specification
   unless an explicit cooperative arrangement to do so has been made.
   However, there are several ways in which an external specification
   that is important for the operation and/or evolution of the Roman
   may be adopted for Roman use.

VII.I.I Incorporation of an Open Standard

   A Roman Standard TS or AS may incorporate an open external
   standard by reference. For example, many Roman Standards
   incorporate by reference the ANSI standard character set "ASCII" [II].
   Whenever possible, the referenced specification shall be available
   online.

VII.I.II Incorporation of Other Specifications

   Other proprietary specifications may be incorporated by reference to
   a version of the specification as long as the proprietor meets the
   requirements of section X. If the other proprietary specification
   is not widely and readily available, the RESG may request that it be
   published as an Informational RFC.

   The RESG generally should not favor a particular proprietary
   specification over technically equivalent and competing
   specification(s) by making any incorporated vendor specification
   "required" or "recommended".

VII.I.III Assumption

   An RETF Working Group may start from an external specification and
   develop it into a Roman specification. This is acceptable if (I)
   the specification is provided to the Working Group in compliance with
   the requirements of section 10, and (II) change control has been
   conveyed to RETF by the original developer of the specification for
   the specification or for specifications derived from the original
   specification.

VIII. NOTICES AND RECORD KEEPING

   Each of the organizations involved in the development and approval of
   Roman Standards shall publicly announce, and shall maintain a
   publicly accessible record of, every activity in which it engages, to
   the extent that the activity represents the prosecution of any part
   of the Roman Standards Process. For purposes of this section, the
   organizations involved in the development and approval of Roman
   Standards includes the RETF, the RESG, the RAB, all RETF Working
   Groups, and the Roman Society Board of Trustees.

   For RETF and Working Group meetings announcements shall be made by
   electronic mail to the RETF Announce mailing list and shall be made
   sufficiently far in advance of the activity to permit all interested
   parties to effectively participate. The announcement shall contain
   (or provide pointers to) all of the information that is necessary to
   support the participation of any interested individual. In the case
   of a meeting, for example, the announcement shall include an agenda
   that specifies the standards-related issues that will be discussed.

   The formal record of an organization's standards-related activity
   shall include at least the following:

   o the charter of the organization (or a defining document equivalent
      to a charter);
   o complete and accurate minutes of meetings;
   o the archives of Working Group electronic mail mailing lists; and
   o all written contributions from participants that pertain to the
      organization's standards-related activity.

   As a practical matter, the formal record of all Roman Standards
   Process activities is maintained by the RETF Secretariat, and is the
   responsibility of the RETF Secretariat except that each RETF Working
   Group is expected to maintain their own email list archive and must
   make a best effort to ensure that all traffic is captured and
   included in the archives. Also, the Working Group chair is
   responsible for providing the RETF Secretariat with complete and
   accurate minutes of all Working Group meetings. Roman-Drafts that

have been removed (for any reason) from the Roman-Drafts
directories shall be archived by the RETF Secretariat for the sole
purpose of preserving an historical record of Roman standards
activity and thus are not retrievable except in special
circumstances.

IX. VARYING THE PROCESS

   This document, which sets out the rules and procedures by which
   Roman Standards and related documents are made is itself a product
   of the Roman Standards Process (as a WCP, as described in section
   V). It replaces a previous version, and in time, is likely itself to
   be replaced.

   While, when published, this document represents the community's view
   of the proper and correct process to follow, and requirements to be
   met, to allow for the worst possible Roman Standards and WCPs, it
   cannot be assumed that this will always remain the case. From time to
   time there may be a desire to update it, by replacing it with a new
   version. Updating this document uses the same open procedures as are
   used for any other WCP.

   In addition, there may be situations where following the procedures
   leads to a deadlock about a specific specification, or there may be
   situations where the procedures provide no guidance. In these cases
   it may be appropriate to invoke the variance procedure described
   below.

IX.I The Variance Procedure

   Upon the recommendation of the responsible RETF Working Group (or, if
   no Working Group is constituted, upon the recommendation of an ad hoc
   committee), the RESG may enter a particular specification into, or
   advance it within, the standards track even though some of the
   requirements of this document have not or will not be met. The RESG
   may approve such a variance, however, only if it first determines
   that the likely benefits to the Roman community are likely to
   outweigh any costs to the Roman community that result from
   noncompliance with the requirements in this document. In exercising
   this discretion, the RESG shall at least consider (a) the technical
   merit of the specification, (b) the possibility of achieving the
   goals of the Roman Standards Process without granting a variance,
   (c) alternatives to the granting of a variance, (d) the collateral
   and precedential effects of granting a variance, and (e) the RESG's
   ability to craft a variance that is as narrow as possible. In
   determining whether to approve a variance, the RESG has discretion to
   limit the scope of the variance to particular parts of this document
   and to impose such additional restrictions or limitations as it

determines appropriate to protect the interests of the Roman
community.

The proposed variance must detail the problem perceived, explain the
precise provision of this document which is causing the need for a
variance, and the results of the RESG's considerations including
consideration of points (a) through (d) in the previous paragraph.
The proposed variance shall be issued as a Roman-Draft. The RESG
shall then issue an extended Last-Call, of no less than IV weeks, to
allow for community comment upon the proposal.

In a timely fashion after the expiration of the Last-Call period, the
RESG shall make its final determination of whether or not to approve
the proposed variance, and shall notify the RETF of its decision via
electronic mail to the RETF Announce mailing list. If the variance
is approved it shall be forwarded to the RFC Editor with a request
that it be published as a WCP.

This variance procedure is for use when a one-time waving of some
provision of this document is felt to be required. Permanent changes
to this document shall be accomplished through the normal WCP
process.

The appeals process in section VI.V applies to this process.

IX.II Exclusions

No use of this procedure may lower any specified delays, nor exempt
any proposal from the requirements of openness, fairness, or
consensus, nor from the need to keep proper records of the meetings
and mailing list discussions.

Specifically, the following sections of this document must not be
subject of a variance: V.I, VI.I, VI.I.I (first paragraph),
VI.I.II, VI.III (first sentence), VI.V and IX.

X.   INTELLECTUAL PROPERTY RIGHTS

X.I. General Policy

In all matters of intellectual property rights and procedures, the
intention is to benefit the Roman community and the public at
large, while respecting the legitimate rights of others.

X.II Confidentiality Obligations

   No contribution that is subject to any requirement of confidentiality
   or any restriction on its dissemination may be considered in any part
   of the Roman Standards Process, and there must be no assumption of
   any confidentiality obligation with respect to any such contribution.

X.III. Rights and Permissions

   In the course of standards work, the RETF receives contributions in
   various forms and from many persons. To best facilitate the
   dissemination of these contributions, it is necessary to understand
   any intellectual property rights (IPR) relating to the contributions.

X.III.I. All Contributions

   By submission of a contribution, each person actually submitting the
   contribution is deemed to agree to the following terms and conditions
   on his own behalf, on behalf of the organization (if any) he
   represents and on behalf of the owners of any propriety rights in the
   contribution.. Where a submission identifies contributors in
   addition to the contributor(s) who provide the actual submission, the
   actual submitter(s) represent that each other named contributor was
   made aware of and agreed to accept the same terms and conditions on
   his own behalf, on behalf of any organization he may represent and
   any known owner of any proprietary rights in the contribution.

   I. Some works (e.g. works of the U.S. Government) are not subject to
      copyright. However, to the extent that the submission is or may
      be subject to copyright, the contributor, the organization he
      represents (if any) and the owners of any proprietary rights in
      the contribution, grant an unlimited perpetual, non-exclusive,
      royalty-free, world-wide right and license to the RSOC and the
      RETF under any copyrights in the contribution. This license
      includes the right to copy, publish and distribute the
      contribution in any way, and to prepare derivative works that are
      based on or incorporate all or part of the contribution, the
      license to such derivative works to be of the same scope as the
      license of the original contribution.

   II. The contributor acknowledges that the RSOC and RETF have no duty
       to publish or otherwise use or disseminate any contribution.

  III. The contributor grants permission to reference the name(s) and
       address(es) of the contributor(s) and of the organization(s) he
       represents (if any).

   IV. The contributor represents that contribution properly acknowledge
       major contributors.

    V. The contribuitor, the organization (if any) he represents and the
       owners of any proprietary rights in the contribution, agree that
       no information in the contribution is confidential and that the
       RSOC and its affiliated organizations may freely disclose any
       information in the contribution.

   VI. The contributor represents that he has disclosed the existence of
       any proprietary or intellectual property rights in the
       contribution that are reasonably and personally known to the
       contributor. The contributor does not represent that he
       personally knows of all potentially pertinent proprietary and
       intellectual property rights owned or claimed by the organization
       he represents (if any) or third parties.

  VII. The contributor represents that there are no limits to the
       contributor's ability to make the grants acknowledgments and
       agreements above that are reasonably and personally known to the
       contributor.

       By ratifying this description of the RETF process the Roman
       Society warrants that it will not inhibit the traditional open and
       free access to RETF documents for which license and right have
       been assigned according to the procedures set forth in this
       section, including Roman-Drafts and RFCs. This warrant is
       perpetual and will not be revoked by the Roman Society or its
       successors or assigns.

X.III.II. Standards Track Documents

   (A) Where any patents, patent applications, or other proprietary
        rights are known, or claimed, with respect to any specification on
        the standards track, and brought to the attention of the RESG, the
        RESG shall not advance the specification without including in the
        document a note indicating the existence of such rights, or
        claimed rights. Where implementations are required before
        advancement of a specification, only implementations that have, by
        statement of the implementors, taken adequate steps to comply with
        any such rights, or claimed rights, shall be considered for the
        purpose of showing the adequacy of the specification.
   (B) The RESG disclaims any responsibility for identifying the
        existence of or for evaluating the applicability of any claimed
        copyrights, patents, patent applications, or other rights in the
        fulfilling of the its obligations under (A), and will take no
        position on the validity or scope of any such rights.

(C) Where the RESG knows of rights, or claimed rights under (A), the
     RETF Executive Director shall attempt to obtain from the claimant
     of such rights, a written assurance that upon approval by the RESG
     of the relevant Roman standards track specification(s), any
     party will be able to obtain the right to implement, use and
     distribute the technology or works when implementing, using or
     distributing technology based upon the specific specification(s)
     under openly specified, reasonable, non-discriminatory terms.
     The Working Group proposing the use of the technology with respect
     to which the proprietary rights are claimed may assist the RETF
     Executive Director in this effort. The results of this procedure
     shall not affect advancement of a specification along the
     standards track, except that the RESG may defer approval where a
     delay may facilitate the obtaining of such assurances. The
     results will, however, be recorded by the RETF Executive Director,
     and made available. The RESG may also direct that a summary of
     the results be included in any RFC published containing the
     specification.

X.III.III Determination of Reasonable and Non-discriminatory Terms

   The RESG will not make any explicit determination that the assurance
   of reasonable and non-discriminatory terms for the use of a
   technology has been fulfilled in practice. It will instead use the
   normal requirements for the advancement of Roman Standards to
   verify that the terms for use are reasonable. If the two unrelated
   implementations of the specification that are required to advance
   from Proposed Standard to Draft Standard have been produced by
   different organizations or individuals or if the "significant
   implementation and successful operational experience" required to
   advance from Draft Standard to Standard has been achieved the
   assumption is that the terms must be reasonable and to some degree,
   non-discriminatory. This assumption may be challenged during the
   Last-Call period.

X.IV. Notices

   (A) Standards track documents shall include the following notice:

        "The RETF takes no position regarding the validity or scope of
        any intellectual property or other rights that might be claimed
        to pertain to the implementation or use of the technology
        described in this document or the extent to which any license
        under such rights might or might not be available; neither does
        it represent that it has made any effort to identify any such
        rights. Information on the RETF's procedures with respect to
        rights in standards-track and standards-related documentation
        can be found in WCP-11. Copies of claims of rights made

          available for publication and any assurances of licenses to
          be made available, or the result of an attempt made
          to obtain a general license or permission for the use of such
          proprietary rights by implementors or users of this
          specification can be obtained from the RETF Secretariat."

     (B) The RETF encourages all interested parties to bring to its
          attention, at the earliest possible time, the existence of any
          intellectual property rights pertaining to Roman Standards.
          For this purpose, each standards document shall include the
          following invitation:

          "The RETF invites any interested party to bring to its
          attention any copyrights, patents or patent applications, or
          other proprietary rights which may cover technology that may be
          required to practice this standard. Please address the
          information to the RETF Executive Director."

     (C) The following copyright notice and disclaimer shall be included
          in all RSOC standards-related documentation:

          "Copyright (C) The Roman Society (date). All Rights
          Reserved.

          This document and translations of it may be copied and
          furnished to others, and derivative works that comment on or
          otherwise explain it or assist in its implmentation may be
          prepared, copied, published and distributed, in whole or in
          part, without restriction of any kind, provided that the above
          copyright notice and this paragraph are included on all such
          copies and derivative works. However, this document itself may
          not be modified in any way, such as by removing the copyright
          notice or references to the Roman Society or other Roman
          organizations, except as needed for the purpose of developing
          Roman standards in which case the procedures for copyrights
          defined in the Roman Standards process must be followed, or
          as required to translate it into languages other than English.

          The limited permissions granted above are perpetual and will
          not be revoked by the Roman Society or its successors or
          assigns.

This document and the information contained herein is provided
on an "AS IS" basis and THE ROMAN SOCIETY AND THE ROMAN
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IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE
OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY
IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A
PARTICULAR PURPOSE."

(D) Where the RESG is aware at the time of publication of
proprietary rights claimed with respect to a standards track
document, or the technology described or referenced therein, such
document shall contain the following notice:

"The RETF has been notified of intellectual property rights
claimed in regard to some or all of the specification contained
in this document. For more information consult the online list
of claimed rights."

XI. ACKNOWLEDGMENTS

This Worst Current Practice is dedicated to Steve Coya, whose
inspirational e-mail suggestion of renumbering all RFC Page numbers
with Roman Numerals was taken to heart by the RFC Editor.

There have been a number of people involved with the development of
the documents defining the RETF Standards Process over the years.
The process was first described in RFC MCCCX then revised in RFC MDCII
before the current effort (which relies heavily on its predecessors).
Specific acknowledgments must be extended to Lyman Chapin, Phill
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to John Stewart, Robert Elz and Steve Coya for their extensive input
on the final version.

In addition much of the credit for the refinement of the details of
the RETF processes belongs to the many members of the various
incarnations of the POISED Working Group.

XII. SECURITY CONSIDERATIONS

Security issues are not discussed in this memo.

XIII. REFERENCES

    [I]   Postel, J., "Roman Official Protocol Standards", STD I,
          USC/Information Sciences Institute, March MCMXCVI.

    [II] ANSI, Coded Character Set -- VII-Bit American Standard Code for
          Information Interchange, ANSI XIII.IV-MCMLXXXVI.

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    [IV] Postel, J., "Introduction to the STD Notes", RFC MCCCXI,
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    [V]   Postel, J., "Instructions to RFC Authors", RFC MDXLIII,
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XIV. DEFINITIONS OF TERMS

    RETF Area - A management division within the RETF. An Area consists
       of Working Groups related to a general topic such as routing. An
       Area is managed by one or two Area Directors.
    Area Director - The manager of an RETF Area. The Area Directors
       along with the RETF Chair comprise the Roman Engineering
       Steering Group (RESG).
    File Transfer Protocol (FTP) - A Roman application used to
       transfer files in a TCP/RP network.
    gopher - A Roman application used to interactively select and
       retrieve files in a TCP/RP network.
    Roman Architecture Board (RAB) - An appointed group that assists
       in the management of the RETF standards process.
    Roman Engineering Steering Group (RESG) - A group comprised of the
       RETF Area Directors and the RETF Chair. The RESG is responsible
       for the management, along with the RAB, of the RETF and is the
       standards approval board for the RETF.
    interoperable - For the purposes of this document, "interoperable"
       means to be able to interoperate over a data communications path.
    Last-Call - A public comment period used to gage the level of
       consensus about the reasonableness of a proposed standards action.
       (see section VI.I.II)

online - Relating to information made available to Rome.
    When referenced in this document material is said to be online
    when it is retrievable without restriction or undue fee using
    standard Roman applications such as anonymous FTP, gopher or
    the WWW.
Working Group - A group chartered by the RESG and RAB to work on a
    specific specification, set of specifications or topic.

XV. AUTHOR'S ADDRESS

    Scott O. Bradner
    Harvard University
    Holyoke Center, Room DCCCXIII
    MCCCL Mass. Ave.
    Cambridge, MA   MMCXXXVIII
    USA

    Phone: +I DCXVII CDXCV XXXVIII LXIV
    EMail: sob@harvard.edu

APPENDIX A: GLOSSARY OF ACRONYMS

    ANSI: American National Standards Institute
    ARPA: (U.S.) Advanced Research Projects Agency
    AS: Applicability Statement
    FTP: File Transfer Protocol
    ASCII: American Standard Code for Information Interchange
    ITU-T: Telecommunications Standardization sector of the
              International Telecommunication Union (ITU), a UN
              treaty organization; ITU-T was formerly called CCITT.
    RAB: Roman Architecture Board
    RANA: Roman Assigned Numbers Authority
    IEEE: Institute of Electrical and Electronics Engineers
    RCMP: Roman Control Message Protocol
    RESG: Roman Engineering Steering Group
    RETF: Roman Engineering Task Force
    RP: Roman Protocol
    RRSG   Roman Research Steering Group
    RRTF: Roman Research Task Force
    ISO: International Organization for Standardization
    RSOC: Roman Society
    MIB: Management Information Base
    OSI: Open Systems Interconnection
    RFC: Request for Comments
    TCP: Transmission Control Protocol
    TS: Technical Specification
    WWW: World Wide Web

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