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A. Mankin  
S. Hayes  
Ericsson  
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## Requirements for IETF Technical Publication Service

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### Abstract

The work of the IETF is to discuss, develop, and disseminate technical specifications to support the Internet's operation. Technical publication is the process by which that output is disseminated to the community at large. As such, it is important to understand the requirements on the publication process.

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## 1. Introduction

The work of the IETF is to discuss, develop, and disseminate technical specifications to support the Internet's operation. Therefore, an important output of the IETF is published technical specifications. The IETF technical publisher is responsible for the final steps in the production of the published technical specifications. This document sets forth requirements on the duties of the IETF technical publisher and how it interacts with the IETF in the production of those publications.

The term "technical specification" is used here purposefully to refer to the technical output of the IETF. This document does not engage in the debate about whether it is expressed as RFCs or otherwise, what "is" an RFC, how to classify them, etc. These issues are considered out of scope.

The intention of this document is to clarify the IETF's consensus on its requirements for its technical publication service. It is expected to be used in the preparation of future contracts. This document is not a discussion of how well the current technical publisher (the RFC Editor) fulfills those requirements.

## 2. Scope

The scope of this document is the requirements for the technical publication process for the IETF. Requirements on a technical publisher can be expressed in terms of both what tasks the IETF technical publisher is responsible for and performance targets the IETF technical publisher should meet. The functions provided by the technical publisher are sometimes referred to as editorial management [RFC2850].

This document specifically addresses those documents published by the IETF technical standards process. In all cases, the requirements have been written in generic terms, so that they may be used to express the requirements of other publication streams, elsewhere.

The list of potential technical publication tasks was derived by considering the tasks currently performed by the RFC Editor as well as the responsibilities of the technical publishers in other standards organizations including 3GPP, ATIS, ETSI, IEEE, and ITU.

This requirements document focuses on process issues in how the IETF technical publisher serves the IETF. There are related issues regarding non-technical aspects of document content that are not addressed in this requirements document. Issues not addressed in this document are:

- o Policies governing the acceptable input and output document formats (including figures, etc.)
- o Policies governing the acceptable character sets (internationalization)
- o Policies governing the layout and style of published documents
- o Policies governing the contents of non-technical sections (acknowledgement sections, reference classifications, etc.)

It is realized that the above policies are also important aspects in determining that the final published document is a product of the IETF. These policies are likely to evolve as part of the ongoing IETF dialog. The IETF technical publisher should be part of the discussions of these policies and be prepared to implement and facilitate policy changes as they are determined by IETF consensus. This requirement is captured under the discussion of process and document evolution.

## 2.1. Stages in the Technical Specification Publication Lifetime

Figure 1 below provides a useful summary of where technical publication falls in the current lifetime of a document in the IETF standards process. This figure shows a Working Group (WG) document and the reviews including Working Group Last Call (WGLC), Area Director (AD) review, IETF Last Call (IETF LC), IANA review, and IESG review. The document shepherd (shown in the diagram as "Shepherd") is an individual designated by the IESG to shepherd a document through the reviews and the publication process and is often not an AD. The lifetime is very similar for AD-sponsored IETF documents, such as documents that update IETF protocols for which there is no longer a working group, or documents on interdisciplinary topics.

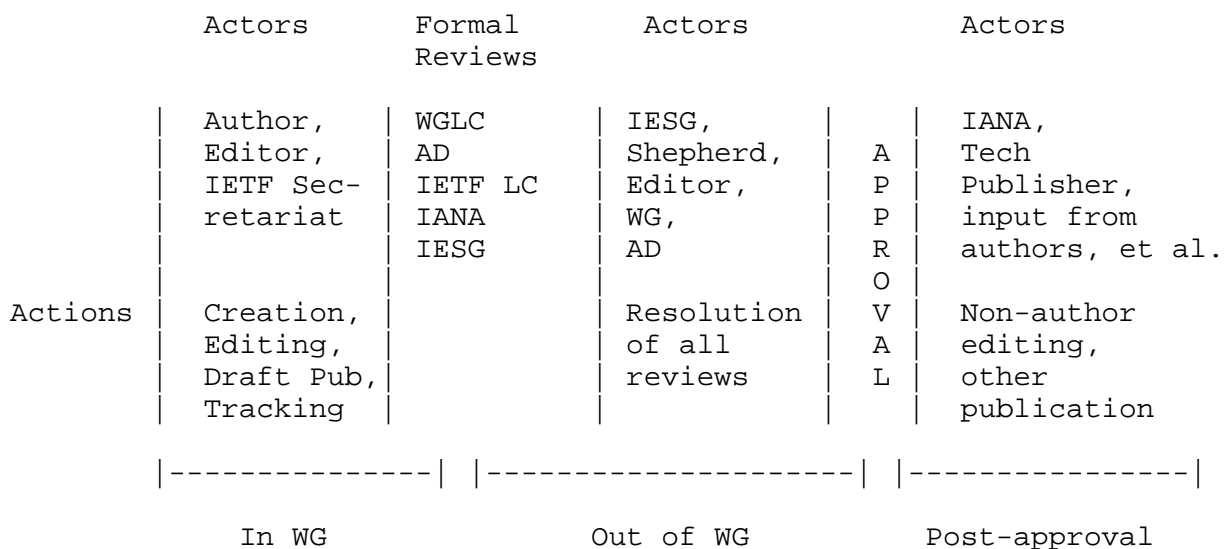


Figure 1: Stages of a Working Group Document

Note that in some cases a single submission may actually consist of multiple source documents (supporting files, code, etc.).

Under the IETF standards process stream, the post-approval processing is initiated by the IESG after technical approval.

### 3. Technical Publication Tasks and Requirements

Standards development organizations all have technical publication as part of their process. However, the boundaries between what is done by the technical committees and the technical publisher vary.

The following are potential tasks of a technical publisher. The following list was derived after analyzing the technical publication policies of the IETF and other standards development organizations.

1. Pre-approval review or editing
2. Preliminary specification availability
3. Post-approval editorial cleanup (non-author editing)
4. Validation of references
5. Validation of formal languages
6. Insertion of parameter values
7. Post-approval, pre-publication technical corrections
8. Allocation of permanent stable identifiers
9. Document format conversions
10. Language translation
11. Publication status tracking
12. Expedited handling
13. Exception handling
14. Notification of publication
15. Post-publication corrections (errata)
16. Indexing: maintenance of the catalog
17. Access to published documents
18. Maintenance of a vocabulary document
19. Providing publication statistics and status reports

20. Process and document evolution

21. Tutorial and help services

22. Liaison and communication support

For each of these tasks, we discuss its relevance to the IETF and how it is realized within the IETF processes. Based upon this information, we derive requirements on the IETF technical publisher.

### 3.1. Pre-approval Review or Editing

**Task Description:** This provides a review or editing service to improve document quality prior to the approval of a document. This review process would normally address issues such as grammar, spelling, formatting, adherence to pre-approval boilerplate, document structure, etc.

**Discussion:** Pre-approval review is not part of the current IETF standards process, but this concept has been explored in the early copyediting experiment. Early feedback from the experiment has been promising; however, the effectiveness of early editing is still being evaluated.

**Derived Requirements:**

**Req-PREEDIT-1:** The IETF technical publisher should be capable of performing an editorial review of documents early enough to allow changes to be reviewed within the technical review process, should the IETF choose to implement pre-approval editing. For the IETF standards process stream, this review should be performed before WG Last Call and provide feedback to the authors to improve the quality of the documents. For the IETF standards process stream, the publisher should not perform a technical review of the document.

### 3.2. Preliminary Specification Availability

**Task Description:** Some standards organizations require their publisher to make available a preliminary version of a document (with appropriate caveats) to make the information available to the industry as early as possible. This document is provided "as is" after the approval. This document is withdrawn once the final document is published.

Discussion: This is not required. A final approved version is available as an internet draft. If publication can take more than 6 months, it may be necessary to request that the draft version remains available.

Derived Requirements: none

### 3.3. Post-approval Editorial Cleanup (Non-author Editing)

Task Description: Most technical publishers do an editorial review to ensure the quality of published documents. Typically, this may address issues such as grammar, spelling, readability, formatting, adherence to boilerplate, document structure, etc. Since any proposed changes occur after approval, a review and signoff mechanism should usually be established to ensure that the required changes are truly editorial. Since such changes occur outside of the normal approval process, it is desirable that such changes are minimized. Most standards organizations target "light" editing due to the dangers of changing agreed-on text.

Discussion: Within the IETF, the RFC Editor does post-approval cleanup review and editing. The ambition level for cleanup can vary from:

- o corrections to errors only,
- o light rewriting,
- o significant editing of documents with less skillful WG editors, and minimal editing when the WG editors were skilled, to
- o rewriting of all documents to the dictates of a style manual.

At times in the past year, stylistic editing has resulted in a substantial number of changes in many documents. These changes must then be vetted by all the authors followed by subsequent rounds of author acceptance and re-vetting. This can add up to a substantial delay in the publication process, which must be weighed against the incremental gain in communication improvement accomplished by the cleanup.

Changes to improve readability (or possibly even grammar) can end up inadvertently affecting consensus wording or technical meaning. Note that pre-approval editing to some extent avoids this problem.

In specific instances, it may be necessary to require that text be published "verbatim" even if doing so introduces what is perceived as

poor readability or stylistic inconsistency. Examples of this include:

- "Boilerplate" agreed on in an IETF working group to apply to all instances of derivative works (e.g., IANA registration documents and Management Information Bases (MIBs)).
- Text referring to other organizations' work that has been carefully phrased and arranged with representatives of that other organization to deal with some politically sensitive issue.

If pre-approval editing or review is done, it may be possible to reduce or even eliminate entirely the post-approval editing task in some cases. Pre-approval editing may be more efficient since a separate change control process is not required.

#### Derived Requirements:

- o Req-POSTEDIT-1 - The IETF technical publisher should review the document for grammar, spelling, formatting, alignment with boilerplate, document structure, etc. The review should strive to maintain consistency in appearance with previously published documents. In the IETF standards process stream, the publisher should not perform a technical review of the document.
- o Req-POSTEDIT-2 - All changes made to post-approval documents should be tracked and the changes must be signed off on by the appropriate technical representatives. For the IETF standards process stream, this includes the authors, the document shepherd (if there is one), and the Area Director. The Area Director is the authority for approval of all changes.
- o Req-POSTEDIT-3 - The IETF technical publisher should exercise restraint in making stylistic changes that introduce a substantial review load but only provide an incremental increase in the clarity of the specification. Specific guidelines on the types of changes allowed may be further specified, but ultimately restraint in editing must be imposed by the IETF technical publisher. Changes for stylistic consistency should be done only when there are major problems with the quality of the document.
- o Req-POSTEDIT-4 - The IETF technical publisher should exercise restraint in making changes to improve readability that may change technical and consensus wording. Specific guidelines on the types of changes allowed may be further specified, but ultimately restraint in editing must be imposed by the IETF technical publisher.



- o Req-POSTEDIT-5 - In specific instances, where some or all of document text is the result of a careful negotiation of contributions (within or between working groups, reviewers, etc.), the technical publisher may be required to publish that text verbatim. In the IETF standards process, verbatim publication may be requested by the IESG. It is the expectation of the IETF community that this will not be done often.

### 3.4. Validation of References

**Task Description:** Most standards organizations require that normative references be publicly available. Some technical publishers verify the validity and availability of references (including referenced clauses and figures). Although some editorial cleanup of references may be obvious, the issue becomes more severe when reference links are broken, are not publicly available, or refer to obsoleted documents. Such faults may be viewed as a post-approval fault found in the document. Most publishers have the ability to put a document on hold awaiting the publication of a reference expected to be available soon.

**Discussion:** The RFC Editor may put a document on hold while waiting for the availability of other IETF documents. Incorrect references are handled like any other fault detected in the editorial review.

**Derived Requirements:**

- o Req-REFVAL-1 - The IETF technical publisher should ensure that all references within specifications are currently available and are expected to remain available.
- o Req-REFVAL-2 - The IETF technical publisher should delay publication until all required (normative) references are ready for publication.

### 3.5. Validation of Formal Languages

**Task Description:** If the specification contains a formal language section (such as a MIB), the technical publisher may be required to validate this using a tool.

**Discussion:** The RFC Editor syntactically validates sections of a document containing MIBs, Augmented Backus Naur Form (ABNF), eXtensible Markup Language (XML), Abstract Syntax Notation One (ASN.1), and possibly other formal languages.

#### Derived Requirements:

- o Req-FORMALVAL-1 - The IETF technical publisher should validate the syntax of sections of documents containing formal languages. In particular, ASN.1, ABNF, and XML should be verified using appropriate tools.

### 3.6. Insertion of Parameter Values

**Task Description:** The technical publisher is expected to work with IANA (or possibly other organizations maintaining registries) to populate assigned protocol parameter values when required, prior to publication. The population of these parameters values should not require technical expertise by the technical publisher.

**Discussion:** Within the IETF, IANA normally does its allocations as an early step in the technical publication process.

#### Derived Requirements:

- o Req-PARAMEDIT-1 - The IETF technical publisher should work with IANA in the population of required parameter values into documents.

### 3.7. Post-approval, Pre-publication Technical Corrections

**Task Description:** Regardless of efforts to minimize their occurrence, it is always possible that technical flaws will be discovered in the window between document approval and publication. The technical publisher may be requested to incorporate technical changes into the document prior to publication. Such changes necessitate a review and sign-off procedure. Another option is to disallow such corrections and treat them as post-publication errata would be treated. Note that this task is distinct from post-approval changes that might originate due to editorial review because they originate from outside the technical publisher. For severe flaws, it should always be possible to withdraw the document from the publication queue (see Section 3.13).

**Discussion:** The IETF allows minor technical corrections during the publication process. This should ideally be a rare occurrence. Since any changes introduced during the post-approval phase can lead to publication delays, it is important that only changes with technical merit be permitted. In particular, stylistic changes should be discouraged. IETF processes must be in place to vet changes proposed by the author, but this is not specifically a requirement on the technical publisher.

The interaction between the authors and the technical publisher must be sufficiently well policed that untracked and unapproved changes cannot be introduced by the author or other parties.

Derived Requirements:

- o Req-POSTCORR-1 - The IETF technical publisher should permit the incorporation of technical changes detected after approval but pre-publication.
- o Req-POSTCORR-2 - The IETF technical publisher should only allow post-approval technical changes that have been approved by the appropriate party. In the IETF standards process stream, this includes the authors and the Area Director. The document shepherd (if there is one) should be kept informed of these changes.
- o Req-POSTCORR-3 - The IETF technical publisher should alert the appropriate authority when it feels that a requested change is suspect (e.g., an unapproved technical alteration) or unreasonable (e.g., massive editorial changes). Further processing of the draft should be suspended pending a response by that authority. For the IETF standards process stream, that authority is the Area Director. If there is a document shepherd working with the Area Director, the shepherd should be notified and kept informed as well.
- o Req-POSTCORR-4 - The IETF technical publisher should ensure that any source documents associated with a publication are updated in conjunction with their associated specifications.

### 3.8. Allocation of Permanent Stable Identifiers

Task Description: For a document to be referenced, it must have a unique permanent identifier. In some standards organizations, it is the technical publisher that generates this identifier. In other cases, the identifier may be allocated earlier in the process.

Discussion: Currently, the RFC Editor allocates RFC numbers and other identifiers (the current IETF stable identifiers) when the document is near the end of the publication process. Having identifiers allocated early was considered, but a definite need could not be established.

Derived Requirements:

- o Req-PERMID-1 - The IETF technical publisher should allocate stable identifiers as part of the publication process.

- o Req-PERMIT-2 - The IETF technical publisher should assign additional permanent identifiers associated with various classes of documents as directed by the appropriate authority. For the IETF standards process stream, that authority is the IESG.

### 3.9. Document Format Conversions

**Task Description:** The technical publisher is responsible for converting the documents into one or more output formats (e.g., text, Portable Document Format (PDF)). In some standards organizations, the technical publisher may be required to accept input documents in various formats and produce a homogeneous set of output documents.

**Discussion:** Currently, the RFC Editor accepts input as an ASCII text file. The RFC Editor has also accepted supplementary formats that were used to generate the ASCII text (XML and NROFF). The documents are published as ASCII text and PDF files.

**Derived Requirements:**

- o Req-DOCCONVERT-1 - The IETF technical publisher should accept as input ASCII text files and publish documents as ASCII text files and PDF files.
- o Req-DOCCONVERT-2 - The technical publisher should accept supplemental files that may contain information such as code, formal descriptions (e.g., XML, ASN.1) graphics, data files, etc. Supplemental files may also include enhanced versions of the document containing graphics or sections not presentable in text format. Any supplemental files, barring any changes to the IETF process rules, will be associated with the published IETF documents, but may not be editable by the publisher.

### 3.10. Language Translation

**Task Description:** Some standards organizations require publication of documents in multiple languages. This translation is the responsibility of the technical publisher.

**Discussion:** IETF specifications are published only in English.

**Derived Requirements:** none

### 3.11. Publication Status Tracking

**Task Description:** The technical publisher should have the ability to provide status information on the status of a document. This may involve developing a process model or a checklist and providing

information on a document's state, outstanding issues, and responsibility tokens. Depending on the need for transparency, this information may need to be available online and continuously updated.

Discussion: The RFC Editor currently provides status information via the RFC Editor queue. Each document is attributed a status (e.g., AUTH48, RFC-EDITOR, IANA, ISR). Items may stay in the queue for a long time without changing status. This status tracking information is not integrated with the IESG tracking tools. Within the IETF, the Process and Tools (PROTO) team is considering requirements for marking the token-holder accurately during long waiting periods, and others are looking into improved notification tools. Requirements on the IETF technical publisher for improved status integration and visibility could be met by collaborations with these efforts, by providing public access to email logs regarding publications, or by some other proposal.

#### Derived Requirements:

- o Req-STATUSTRK-1 - The IETF technical publisher should make state information publicly available for each document in the publication process. It is desirable that this information be available through a documented interface to facilitate tools development.
- o Req-STATUSTRK-2 - The IETF technical publisher should integrate its state information with the IETF tools to provide end-to-end status tracking of documents. For the documents in the IETF standards process stream, it is expected that documents should be able to move seamlessly from the IETF standards tracking system into the technical publication tracking system.
- o Req-STATUSTRK-3 - The IETF technical publisher should provide external visibility of not only the fact that a document is in an extended waiting period but also the token-holder and circumstances of the wait.

### 3.12. Expedited Handling

Task Description: In some cases (such as when the documents are needed by another standards body), it should be possible for the approving organization to request expedited publication of a document. Ideally, this should not skip any of the publication steps, but allocates it higher priority in the work queue to ensure earlier publication than normal. Expedited publication should be used sparingly since as with any priority scheme, overuse will negate its benefits.

Discussion: The fast-tracking procedure is used to expedite publication of a document at the request of the IESG. Fast-tracking is generally employed when an external organization has a looming publication deadline and a need to reference a document currently in the RFC Editor's queue. Having short publication times would likely reduce the need for fast-tracking.

Since fast-tracking is disruptive to the work flow, it is recommended that expedited handling be phased out as soon as alternative ways of achieving timely publication are in place.

Derived Requirements:

- o Req-EXPEDITE-1 - The IETF technical publisher should expedite the processing of specific documents at the request of an appropriate authority. For the IETF standards process stream, that authority is the IESG or the IAB.

### 3.13. Exception Handling

Task Description: It should be possible for various reasons for a document to be withdrawn from publication or the publication to be put on hold. Reasons for this could be due to an appeals process, detection of a serious technical flaw, or determination that the document is unsuitable for publication.

Discussion: For various reasons, a document can be withdrawn before publication.

Derived Requirements:

- o Req-EXCEPTIONS-1 - The IETF technical publisher should permit documents to be withdrawn from publication at the direction of an appropriate authority. For the IETF standards process stream, that authority is the IESG.
- o Req-EXCEPTIONS-2 - The IETF technical publisher should permit documents to be put on hold awaiting the outcome of an appeal at the direction of an appropriate authority. For the IETF standards process stream, that authority is the IESG.

### 3.14. Notification of Publication

Task Description: The technical publisher should provide a mechanism for alerting the community at large of the availability of published documents.

Discussion: The RFC Editor notifies the community of document publication on the rfc-dist and ietf-announce mailing lists.

Derived Requirements:

- o Req-PUBNOTIFY-1 - The IETF technical publisher should announce the availability of published documents.

### 3.15. Post-publication Corrections (errata)

Task Description: If corrections are identified after publication, the technical publisher should be able to publish errata that can be linked with the original document.

Discussion: The RFC Editor maintains a list of errata. Pointers to relevant errata are presented as output from the RFC Editor search engine.

Derived Requirements:

- o Req-ERRATA-1 - The IETF technical publisher should maintain errata for published documents. The process for review, updating, and approval of errata for IETF documents will be defined by the IETF.
- o Req-ERRATA-2 - The IETF technical publisher should provide information on relevant errata as part of the information associated with an RFC.

### 3.16. Indexing: Maintenance of the Catalog

Task Description: The technical publisher normally provides and maintains the master catalog of publications of that organization. As the publishers of the organization's output, the technical publisher is expected to be the definitive source of publications and the maintainer of the database of published documents. This also includes the cataloging and storage of meta-information associated with documents such as their history, status (e.g., updated, obsoleted), document categories (e.g., standard, draft standard, BCP).

Discussion: The RFC Editor maintains the catalog. The RFC Editor is also responsible for the permanent archival of specifications. Meta-information associated with an RFC should also be maintained. Since this is the definitive archive, sufficient security should be in place to prevent tampering with approved documents.

#### Derived Requirements:

- o Req-INDEX-1 - The IETF technical publisher should maintain the index of all IETF published documents. It is desirable that the interface to the index be documented to facilitate tools development.
- o Req-INDEX-2 - The IETF technical publisher should provide the permanent archive for published documents.
- o Req-INDEX-3 - Meta-information associated with a published document must be stored and updated as its status changes.
- o Req-INDEX-4 - The archive must be sufficiently secure to prevent the modification of published documents by external parties.
- o Req-INDEX-5 - The IETF technical publisher should provide the permanent archive of any source documents associated with a published specification.
- o Req-INDEX-6 - An appropriate authority can indicate to the publisher that it should change the status of a document (e.g., to Historical) and this should be reflected in the index. For the IETF standards process stream, the indicating authority is the IESG.

### 3.17. Access to Published Documents

Task Description: The technical publisher should facilitate access to the documents published. It is assumed that the technical publisher will provide online tools to search for and find information within the archive of published documents. These access tools should facilitate understanding the state of the document (e.g., identification of replacement or updated documents, linkage to pertinent errata).

Discussion: Documents and status may be accessed via the RFC Editor's web page.

#### Derived Requirements:

- o Req-PUBACCESS-1 - The IETF technical publisher should provide search tools for finding and retrieving published documents.
- o Req-PUBACCESS-2 - The IETF technical publisher tool should return relevant meta-information associated with a published document (e.g., category of document, type of standard (if standards



track), obsoleted by or updated by information, associated errata).

- o Req-PUBACCESS-3 - The IETF technical publication search tools should be integrated with the IETF search tools. For the IETF standards process stream, this refers to integration with the search tools used by the IETF standards process.

### 3.18. Maintenance of a Vocabulary Document

**Task Description:** Some standards organizations require the technical publisher to maintain a publicly available vocabulary document or database containing common terms and acronyms. The goal is to provide consistency of terminology between documents.

**Discussion:** The RFC Editor does not maintain a public document or database of terms or acronyms.

**Derived Requirements:** none

### 3.19. Providing Publication Statistics and Status Reports

**Task Description:** The technical publisher may be required to periodically or continuously measure its performance. In many standards organizations, performance targets are set in terms of timeliness, throughput, etc.

**Discussion:** The IETF technical publisher currently provides monthly statistics on arrivals and completions of documents by category. In addition, a status report is provided at each IETF meeting. Other statistics can be used to judge the health of the editing process. Many of these statistics could be gathered using sampling techniques to avoid excessive load on the technical publisher.

**Derived Requirements:**

- o Req-STATS-1 - The IETF technical publisher should provide publicly available monthly statistics on average queue times and documents processed. The presentation should provide a historical context to identify trends (see Goal-THROUGHPUT-1). For the IETF standards process, this should include queue arrivals, completions, documents in the queue, and the number of documents in each state at the end of the month.
- o Req-STATS-2 - The IETF technical publisher should provide periodic status reports at the IETF meetings to apprise the community of its work and performance.

- o Req-STATS-3 - The IETF technical publisher should provide publicly available monthly statistics on the types of editorial corrections being found during reviews as well as the percentage of corrections that are rejected by the authors.
- o Req-STATS-4 - The IETF technical publisher should provide publicly available monthly statistics on author-requested changes to documents under publication. This statistic should also include changes required by other authorities outside of the technical publisher empowered to make changes. For the IETF standards process, the designated authority would be the IESG or its designees.

### 3.20. Process and Document Evolution

Task Description: The guidelines and rules for an organization's publication output will change over time. New sections will be added to documents, styles and conventions will change, boilerplate will be changed, etc. Similarly, the specific processes for publication of a specification will change. The technical publisher is expected to be involved in these discussions and accommodate these changes as required.

Discussion: Over time, the IETF consensus on what should be in a published document has changed. Processes interfacing with the publisher have also changed. Such changes are likely to continue in the future. The RFC Editor has been involved in such discussions and provided guides, policies, FAQs, etc. to document the current expectations on published documents.

Derived Requirements:

- o Req-PROCESSCHG-1 - The IETF technical publisher should participate in the discussions of changes to author guidelines and publication process changes.
- o Req-PROCESSCHG-2 - The IETF technical publisher should participate in and support process experiments involving the technical publication process.

### 3.21. Tutorial and Help Services

Task Description: The technical publisher may be required to provide tutorials, mentoring, help desks, online tools, etc. to facilitate smooth interaction with the technical publisher and to increase the IETF community's awareness of document guidelines, procedures, etc. In many organizations, the publisher maintains a style manual giving explicit guidance to authors on how to write a specification.

Discussion: Guidelines are provided to the authors on how to write an RFC as well as occasional tutorial presentations. The RFC Editor provides a help desk at IETF meetings.

Derived Requirements:

- o Req-PUBHELP-1 - The IETF technical publisher should provide and maintain documentation giving guidance to authors on the layout, structure, expectations, etc. required to develop documents suitable for publication. For the IETF standards process stream, the technical publisher should follow IESG guidance in specifying documentation guidelines.
- o Req-PUBHELP-2 - The IETF technical publisher should provide tutorials to the IETF community to educate authors on the processes and expectations of the IETF technical publisher.
- o Req-PUBHELP-3 - The IETF technical publisher should provide a contact email address and correspond as required to progress the publication work. The publisher should address queries from both inside and outside of the IETF community.
- o Req-PUBHELP-4 - The IETF technical publisher should provide a help desk at IETF meetings.

### 3.22. Liaison and Communication Support

Task Description: It is very valuable for the technical publisher of an organization to have good information and communication about the work streams that will result in publication streams. In order to ensure a wide communication channel for the work, the technical publisher holds a liaison position on the IESG, where there can be valuable give-and-take about matters concerning the IETF standards stream.

Discussion: The RFC Editor currently maintains a liaison position with the IESG. Although not specifically addressed in these requirements, the RFC Editor also maintains a liaison position toward the IAB.

Derived Requirements:

- o Req-LIAISON-1 - Through a liaison participant, the technical publisher should take part in meetings and activities as required in order to be aware of ongoing activities related to the work streams. For the IETF standards stream the technical publisher should participate in IESG formal meetings, IESG face-to-face activities at IETF, and other activities such as retreats.

#### 4. Technical Publisher Performance Goals

Technical publishers are typically measured not only on what they do but how well they perform the tasks. The expectations in this section are treated as goals instead of requirements because:

- Achieving a given level of performance is not totally under the control of the technical publisher. Publication is a process and the goals are of the process, not just the publisher.
- The actual performance objectives will be set contractually. The values herein represent values that the IETF community feels are desirable and reasonable for work progress without consideration of financial or other factors.

Goals are set forth in the following areas:

1. Publication timeframes
2. Publication throughput

##### 4.1. Publication Timeframes

**Goal Description:** This is a measure of the time from entry into the RFC Editor queue until the documents are published. The metrics are defined in (req-STATS-1).

**Discussion:** Long publication times create both internal and external difficulties. Internal difficulties include the migration of authors to other activities and the accumulation of tempting post-approval fixes to be added to the document. External difficulties include the inability of other standards organizations to reference IETF publications for lack of an RFC number.

**Derived Goals:**

- o Goal-TIMEFRAMES-1 - The consensus of the IETF community is that an average publication time of under a month is desirable. It is understood that in some cases there will be delays outside of the publisher's control. The actual performance targets and metrics are expected to be determined as part of the contract negotiation process.
- o Goal-TIMEFRAMES-2 - The consensus of the IETF community is that the time required for a pre-approval review should be under 10 days. The actual performance targets and metrics are expected to be determined as part of the contract negotiation process.

## 4.2. Publication Throughput

**Goal Description:** The number of documents published during a given time period is a measure of publisher throughput. Some publishers also provide the data in terms of pages produced. The counts should be separated by categories of documents. The metrics are defined in (req-STATS-1).

**Discussion:** The RFC Editor currently provides monthly statistics on the arrival and completion of documents into the RFC queue. This is sorted by category of document. This provides a measure of the delays in the publication process.

**Derived Goals:**

- o Goal-THROUGHPUT-1 - Although minor variations are expected, there should be no long-term growth trend in the length of the publication queue. The actual performance targets and metrics are expected to be determined as part of the contract negotiation process.

## 5. IETF Implications of Technical Publication Requirements

Requirements on the technical publication process have so far been stated in terms of requirements on the technical publisher. However, it must be recognized that many of these requirements have implications for the processes and tools within the IETF itself. It is anticipated that these processes will be documented in companion documents.

The following is a list of potential issues that should be addressed within the IETF based on the requirements applied to the technical publisher:

- o Pre- vs. Post-approval Editing: If emphasis switches from post-approval editing to pre-approval editing, then IETF processes must be adapted to make use of this service. The processes for post-approval editing can also be streamlined.
- o Post-approval Editorial Cleanup: The IETF must define under what conditions the publisher should be instructed to bypass or minimize post-approval editing.
- o Approval of Post-approval, Pre-publication Technical Corrections: Since the technical publisher can only accept approved changes, it must be clear who is allowed to approve technical changes. This process within the IETF needs to be decided and documented.

- o Allocation of Permanent Stable Identifiers: The IETF needs to clearly identify the naming/numbering schemes and classes of documents to which those names and numbers apply. Furthermore, the responsibility for allocation of those names/numbers needs to be identified.
- o Expedited Handling: If publication timelines can be reduced sufficiently, then expedited handling may no longer be needed.
- o Post-publication Corrections: Appropriate processes must be defined with the IETF to ensure that errata are appropriately vetted and authorized.
- o Indexing: Appropriate processes must be defined within the IETF to decide and inform the technical publisher of status changes to published documents as the result of an appeal, legal action, or some other procedural action.

## 6. IANA Considerations

Any new requirements that result from this discussion need to be reviewed by IANA and the IETF to understand to what extent, if any, the work flow of the documents through IANA is affected.

Interactions with IANA on population of parameter values is discussed in Section 3.6.

## 7. Security Considerations

There is a tussle between the sought-for improvements in readability and the specific language that has often been negotiated carefully for the security content of IETF documents. As with other text, extreme caution is needed in modifying any text in the security considerations. This issue is assumed to have been dealt with under Section 3.3.

The processes for the publication of documents should prevent the introduction of unapproved changes (see Section 3.7). Since the IETF publisher maintains the index of publications, sufficient security should be in place to prevent these published documents from being changed by external parties (see Section 3.16)

## 8. Acknowledgements

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## 9. Informative References

[RFC2850] Internet Architecture Board and B. Carpenter, "Charter of the Internet Architecture Board (IAB)", BCP 39, RFC 2850, May 2000.

## Authors' Addresses

Allison Mankin  
Bethesda, MD  
USA

Phone: +1 301 728 7199  
EMail: [mankin@psg.com](mailto:mankin@psg.com)  
URI: <http://www.psg.com/~mankin/>

Stephen Hayes  
Ericsson  
3634 Long Prairie Rd.  
Ste 108-125  
Flower Mound, TX 75022  
USA

Phone: +1 469 360 8500  
EMail: [stephen.hayes@ericsson.com](mailto:stephen.hayes@ericsson.com)

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