

**RFC PUBLISHER STATEMENT OF WORK**

This Statement of Work describes tasks to be performed by the RFC Publisher.

**Overview.**

Vendor shall maintain and make minor corrections and updates to the current suite of “tools” utilized in connection with the RFC Editor services functions, a list of which is attached in Appendix 2. Vendor’s obligation to update such tools shall be limited to any correction of any bugs or performance issues that arise during the term of the Agreement.

Reference: This Statement of Work was prepared based on RFC 4714, “Requirements for IETF Technical Publication Service”, and the framework for the RFC Editor function expressed in RFC 4844 and RFC 5620. Additionally, various IETF process documents and operational procedures affect the work of the RFC Editor.

As described in RFC 4844, RFCs are documents generated by one of the four streams:

- (i) The Internet Engineering Task Force (IETF),
- (ii) The Internet Research Task Force (IRTF),
- (iii) The Internet Architecture Board (IAB), and
- (iv) Independent Submissions.

The IETF, IRTF and IAB streams are managed by the Internet Engineering Steering Group (IESG), the Internet Research Steering Group (IRSG), and the IAB respectively. The independent submissions stream is managed by the Independent Submissions Editor (ISE).

Where reference is made to individuals or roles that may authorize certain actions, these individuals or roles will be identified from time to time by the IAB, IESG, IRSG, and ISE for their respective streams.

**A. RFC Publication and Access**

1. The RFC is published when a ‘ready-to-publish’ document has arrived from the RFC Production Center. This action includes putting the publication-format document(s) online, publishing index files, and archiving a record of the interactions concerning these documents, as provided by the stream, and all final source and text files. At this time, the document is announced to the community. The date of announcement is defined as the date of publication. The archives are, by default, not public.

2. RFCs are published on the Publisher’s website. This site includes one or more indexes with hyperlinked access to published documents as well as a convenient search engine. The search engine will return a catalog (“index”) entry for one or more RFCs, matching on title, keywords, author, or number. The Publisher also provides access to individual RFCs and to collections of RFCs using SMTP, FTP, and RSync and other technologies as directed by the IAD. Keywords are determined by (i) author submission, (ii) RFC Production Center determination, and (iii) previous use for a document being obsolete.

3. Websites Support. The Vendor shall provide a distributed Web service for rfc-editor.org. This includes:

(i) providing at least two (2) independent, geographically separate sites, each capable of serving 2+ Mb/sec of data over Web and FTP.

(ii) allowing for updates of appropriate material by stream managers or their representatives and the Production Center,

- (iii) storage area adequate for all published RFCs as well as the archives,
- (iv) the provision of monthly reports of website performance, including whether improvements were made to increase the capacity above the 2+ Mb/sec of data over Web and FTP,
- (v) develop content as directed by IAD,
- (vi) provide and maintain site-map style indexing (in addition to the search function),
- (vii) apply common look-and-feel for all pages (apart from user-supplied content), including providing templates and style sheets for stream managers, Production Center and the RFC Series Editor,(viii) update web pages on request and within time limits specified by the contract,
- (ix) provide public feeds (ATOMPUB, RSS, etc.) as appropriate, and
- (x) provide continual incremental improvements, including regularly redesigning web page trees to respond to common usage patterns. However, stable identifiers must be maintained for the RFCs, archives, Errata, indices and other items.

4. Mailing Lists Services. With respect to all authorized RFC Editor services mailing lists the Vendor shall provide the following services:

- (i) the ability to host 12 or more mailing lists,
- (ii) Web-based mailing list maintenance tools.
- (iii) commercially reasonable spam filtering measures, including, at a minimum, those spam filtering measures the Vendor takes to protect its own internal and external mailing lists,
- (iv) dual redundant systems except during scheduled maintenance, during which time at least one system should be available.
- (v) collection and storage of plain text and HTML-ized archives for all RFC Editor services lists, including RFC Services mailing lists, if any, not hosted by the Publisher where Vendor has been provided access authority or that are provided to Vendor in a format for which Vendor is able to archive in accordance with Section 2(e) above, and
- (vi) spam moderation of the RFC Editor lists.

5. Customer Support Services. Vendor shall provide a trouble ticketing service that provides a ticket queue system with customizable queues. Messages sent to certain conventional addresses, such as [help@rfc-editor.org](mailto:help@rfc-editor.org) and others, shall automatically enter the ticket system.

6. IP Support. Vendor shall provide world-class IP support, IPv4 and IPv6. All services should be accessible from IPv4 and IPv6, with no difference in performance, quality, delay, and support.

7. Subdomain Support. Vendor shall provide DNS delegation and DNS support for any RFC-Editor subdomains approved by the IAD.

8. Services Security. Services are to be protected by best commercial practice industry standard security mechanisms, such as DNSSEC.

#### 9. Backups

Backups shall follow best commercial practices to provide a robust backup capability.

#### 10. Distributed Information

- (i) Official Archives, and
- (ii) RSS and ATOM feeds

#### 11. Tools.

- (i) Vendor shall maintain, correct and update the current suite of “tools” utilized in connection

with the RFC Editor services functions, a list of which is attached in Appendix 2. Vendor's obligation to so update such tools shall be limited to any correction of any bugs or performance issues that arise during the term of the Agreement, as well as minor extensions and enhancements requested by the IAD. Such maintenance, corrections and updates shall be at no additional charge.

(ii) All non-proprietary tools shall be open sourced and with a license as directed by IAD. The use of tools that are not open source must be approved in advance by the IAD.

(iii) Vendor shall provide and maintain an online Tools Development and Proposal Management Report.

(iv) Future tools may be separately contracted and may be put out for separate bid.

## B. Maintenance of archives, indices, errata and lists associated with RFCs

The Publisher is the custodian of records on behalf of the IETF Trust.

### 1. Indexing: Publishing of the Catalog

(i) Publish the index of all published documents

(ii) Provide the permanent archive for published documents

(iii) Store and update meta information associated with a published document as its status changes

(iv) Secure the archive to prevent the modification of published documents by external parties

(v) Provide the permanent archive of any source documents associated with a published document

(vi) Archive records associated with the editing and publication of each document. Current archives consist of fewer than fifteen, four drawer filing cabinets.

(vii) Surrender materials on termination of contract to the IETF Trust.

### 2. Post Publication Corrections

(i) Maintain a tool for accepting errata for published documents and interacting with the streams for errata evaluation and approval. The specific process to be agreed between the IAB, the stream managers, and the RFC Series Editor.

(ii) Provide access to the relevant errata and associated information (such as approval and classification) as part of the information associated with an RFC

### 3. Access to Published Documents

(i) Provide search tools for finding published documents and relevant meta information associated with a published document, and display meta information for example: category of document, maturity level (if standards track), obsoleted by or updated by information (as provided by the streams), and associated errata

(ii) Integrate Publisher search tools with the IETF search tools as appropriate

(iii) Provide direct access to published RFCs, by generally used methods such as, ftp, http and rsync.

## C. Communication of relevant RFC processing information online

The Publisher shall maintain a website on which will be the following information:

1. Publication Status Tracking

- (i) Provide state information for each document in the publication process
- (ii) Integrate Production Center state information with the IETF tools to provide end-to-end status tracking of documents
- (iii) 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

2. Publishing Publication Statistics and Status Reports

- (i) Publish reports provided by the Production Center, stream managers and RFC Series Editor

D. Liaison, Coordination, and Collaboration

1. Provide a contact email address and correspond as required to progress the publication work, and address queries from both inside and outside of the community.

2. The Publisher may interact with stream managers, authors, reviewers, the RFC Productions Center, the RSE, the IAB, the IAOC, the IAD, and others in the proper performance of its responsibilities.

3. The Publisher may integrate its document tracking system with the automated tools employed by the RFC Production Center and the IETF.

4. Through liaison participants, the Publisher may take part in IESG and IAB formal meetings, usually telechats, and may participate in IESG and IAB face-to-face activities at IETF meetings, and other activities such as retreats when requested.

5. The Publisher may be requested to participate in coordination conferences with stream managers, the RFC Series Editor, the RFC Production Center, the IAB representative, the IETF representative, the IAD, and others.

6. The Publisher may be requested to make regular reports at IETF meetings, online, in writing, and/or in person.

E. Specific Deliverables

In addition to the foregoing functions and tasks there are specific deliverables:

1. The Publisher's Procedures Manual

(i) The Publisher shall prepare a Procedures Manual describing with clear detail each task performed in the provision of publication services.

2. System Documentation

(i) The Publisher will document the systems supporting the publication process.

3. Information Systems and Tools Development

(i) Tools development includes systems development in direct support of the Publisher, enhancements and applications providing for 3<sup>rd</sup> party interaction and shall be undertaken with goals of:

- a) Improving performance of staff,
- b) Participation of necessary 3<sup>rd</sup> parties,
- c) Interaction with the RFC Series Editor, RFC Production Center, and the Internet-Draft Tracker,
- d) Portability during a future transition, if any, and

(ii) All tools development shall be open source, unless approved by the IAD.

#### 4. Innovations

(i) The Publisher will continuously examine its process for possible improvements, experiment with feasible and useful ones, and adopt those that succeed.

- a) Innovations to Improve Efficiency
- b) Innovations to Improve Coordination and Transparency
- c) Innovations to Improve Quality

(ii) The Publisher will attempt steady progress on their proposed innovations and shall report progress thereon quarterly.

(iii) Note that some of the innovations will require community input before work can begin.

#### 5. Enhancements

(i) The Publisher will provide enhancements upon the approval of the IAD. Such enhancements may include:

- a) Support for RSS feeds
- b) String searches within an RFC

#### F. Process and Document Evolution

1. Participate in the discussions of changes to author guidelines, the technical publication process, and with the RSE and the IAB, as needed, for policy changes.

2. Participate in and support process experiments proposed by the community involving the technical publication process that may improve the RFC series process.

#### G. Legal Proceedings

The Publisher may be called upon to provide and authenticate documents, including RFCs and other material in its archives in legal proceedings. Frequently this is accomplished through an affidavit, occasionally through an appearance in court.

#### H. Accountability

1. The Publisher is responsible for compliance with policies, processes and procedures as they relate to the consistency of the RFC series.
2. The Publisher must respond to the RFC Series Editor for matters concerning to RFC series consistency.
3. The RFC Series Editor may refer contractual matters involving Publisher compliance to the policies, processes and procedures to the IAOC.

## APPENDIX 1: Customer Support Guidelines

### Definitions

“**Business Hours**” or “**business hours**” shall mean those hours contained within a Business Day as defined in Table 1 below.

“**Customer Facing Incidents**” or “**CFIs**” means the outages and impairments within Vendor’s Span of Control that adversely affect the IETF Community’s ability to use the RFC Publisher Service.

“**Customer Span of Control**” means those areas of functionality with respect to the RFC Publisher Service that are under the control of the IETF Community. This includes all elements of the Customer’s and/or Recipient’s networks, which may affect Vendor’s provision of Services.

“**Customer Support**” means the personnel assigned by Vendor to interface with the IETF Community on all CFIs. Customer Support shall be provided by Vendor Help Desk.

“**Data Center**” or “**DC**” means the physical location in which Vendor provides the facilities, equipment and personnel to offer the RFC Publisher Service. Vendor will maintain at least two geographically distinct locations for IT services.

“**Vendor Network Operations Center**” or “**Vendor NOC**” means the location where Vendor manages and monitors the operation of the Service.

“**Vendor Span of Control**” means those areas of functionality with respect to the RFC Publisher Service that are under the control of Vendor. The Vendor Span of Control shall not include any Force Majeure Event or other event that is beyond the control of Vendor in its role as a provider of the RFC Publisher Service.

“**Other Downtime**” means the total number of minutes in a given month during which RFC Publisher Service has been unavailable to the IETF Community due to causes that are not within the Vendor Span of Control including, without limitation, incidents or outages due to any Force Majeure Event.

“**Scheduled Maintenance Time**” means total number of minutes in a given month that Vendor has taken the RFC Publisher Service off-line to perform scheduled maintenance after providing notice, if required, to the IETF Community as described below.

“**Service Availability**” Service Availability shall mean the availability of the service for RFC Publisher Services. The measurement of Service Availability set forth in the Service Level Exhibit Table 2 shall not include any service unavailability arising from or due to elements beyond the Vendor Span of Control (as set forth below).

“**Unscheduled Downtime**” means the total number of minutes in a given month during which the RFC Publisher Service has been unavailable to Customer due to causes within the Vendor Span of Control.

### Vendor Responsibilities and Support Services

The following section sets forth the support responsibilities of Vendor in connection with the provision of RFC Publisher Services pursuant to the Master Services Agreement Addendum. Vendor responsibilities to provide these support services as described below shall apply to Customer and Recipient and shall be documented.

### Responsibilities

Vendor will provide service operations, maintenance and administration in support of the IETF community. At the IETF's written request, Vendor shall assist with problem identification and resolution for incidents outside the Vendor Span of Control.

Vendor will remedy incidents, within its Span of Control, that have been identified either by Vendor, or Customer or Recipient according to the procedures set forth below and the IETF Community will provide all relevant information, if available, to Vendor.

With respect to incidents that occur in the Customer Span of Control or in areas outside the Vendor Span of Control, Vendor will: (i) make reasonable efforts to assist with the resolution of the incident; and (ii) support the IETF's Recipient's escalations; provided, however, that it is ultimately Customer's or Recipient's responsibility to resolve incidents that involve Customer Span of Control or incidents outside the Vendor Span of Control.

### Vendor Support Services

Customer Support will be the interface between the IETF and Vendor for support of service impacting incidents. This arrangement provides the IETF Community with a process to access Vendor for reporting incidents, receiving updates and pursuing escalation. Table 1 provides Customer Support hours of operation and contact information.

**Table 1 – Vendor Customer Support Services Contact Information**

	Vendor Support Services
Hours of Operation	Business Hours (M-F) 8-4 p.m.
Contact Phone Number	_____
E-mail Address	<a href="mailto:ietf-action@ietf.org">ietf-action@ietf.org</a> , until further notice by IAD

Trouble tickets can be opened directly with Customer Support via phone \_\_\_\_\_, fax (to be assigned) or **ietf-action@ietf.org** at any time. Email will primarily be used to provide follow-up information / confirmation of trouble tickets opened via phone call.

### Data Center Capabilities

#### Physical and Network Security

The Data Center and its immediate perimeter will be monitored 24 hours per day, 7 days per week, 365 days per year. Access to the Vendor facility and Data Center will be managed via separate security/access devices. Should Vendor become aware of an unauthorized access to the Data Center that has an impact on the RFC Publisher Service, Vendor shall (i) notify Customer and/or Recipient in writing, until changed with concurrence of IAD, (ii) investigate the unauthorized access and (iii) prepare a corrective action plan



to prevent further unauthorized access.

Incident Management

### **Vendor Resolution Responsibilities**

Vendor will provide to Customer and Recipient the help desk support to (i) answer routine questions and resolve problems with respect to use of the RFC Publisher Service and (ii) enable the IETF Community to report any defect or any failure of Service. In addition to telephone access, Customer Support will include access by means of electronic mail. Customer and Recipient will contact Customer Support at the phone number set forth above.

All incidents concerning failures of any element or aspect of the RFC Publisher Service that cannot be solved by Customer or Recipient personnel or representatives after making reasonable efforts that are within the Vendor Span of Control, will be reported to Customer Support pursuant to the procedures outlined below. Any reported incident that is caused by a failure that is outside the Vendor Span of Control will be returned to IETF Community with an appropriate explanation. Further, if there is an incident being addressed by Customer Support that is within the Customer Span of Control and outside of the Vendor Span of Control, the incident will be closed and returned to Customer and/or Recipient for proper resolution.

### **Customer Responsibilities**

The following section identifies the responsibilities of Customer personnel and representatives under this document. Customer acknowledges that its failure to perform in accordance with the responsibilities set forth below or elsewhere in the Master Services Agreement, the Addendum or any other Exhibit or Addenda between the Parties, shall expressly waive any and all liabilities, damages and claims resulting out of Vendor's failure to perform due to Customer's material noncompliance.

#### **Incident Responsibilities**

- Initiate a trouble ticket that clearly states the problem after gathering pertinent information about the incident, including message target number and any other additional information that the parties mutually determine is important to resolution of the incident.
- Provide Vendor with necessary information that is relevant to the service
- Coordinate among Customer's operational and technical personnel as they interact with Vendor or its designees for incident resolution.

#### **Technical Responsibilities**

- Understand and remain knowledgeable about problems that may arise during usage of the RFC Publisher Services to support all decisions.
- Understand and remain knowledgeable with respect to functionality of various Secretariat operations.
- Understand and remain knowledgeable about Customer setup's and be capable of discerning whether an incident is internal to Customer operations before identifying the incident as a trouble ticket for Vendor.
- Resolve incidents or problems with the RFC Publisher Services that are within the Customer Span of Control.

## Incident Handling by Vendor

Customer Support will coordinate incident isolation, provide community notification and testing & repair work within Vendor and all third party systems that are within the Vendor Span of Control. During the incident isolation and troubleshooting process, Customer Support will communicate incident resolution progress to the IETF Community based upon the times specified on Table 2 below, and resolve the incidents in accordance with the timeframes specified in Table 2. Severity 1 issues are considered to be Unscheduled Downtime unless otherwise agreed to in writing by Customer.

Additionally, Vendor will proactively inform the IETF Community when an issue or condition arises that necessitates the creation of trouble tickets. Vendor will resolve incidents within the Vendor Span of Control within the timeframes set forth below.

Vendor will resolve outages within the timeframes set forth in Table 2. Vendor will provide a similar commitment as set out in Table 2 to Recipient's

**Table 2 –Vendor Support Services Response and Incident Handling Notification Timetable**

Severity Level	Conditions	Update Method	Resolution	Closure
Severity 1 Critical Business Impact	Complete loss of service and work cannot reasonably continue.  Real or perceived data loss or corruption.  An essential part of the service is unusable.  No workaround is available.	<a href="mailto:ietf-action@ietf.org">ietf-action@ietf.org</a>	First update within 8 hours of acknowledgement. Subsequent updates every 8 hours after first update.  <b>Vendor's</b> customer support will work continuously to resolve the problem. Customer acknowledges that it shall make available resources to <b>Vendor's</b> customer support to assist in the resolution of the problem. Fixes will be applied as emergency patches.  The Severity Level may be downgraded if a viable workaround is established.	Customer receives a workaround or information that resolves the issue. or a patch is implemented, if issue is due to a software defect within 3 hours.  <b>Vendor</b> shall provide root cause analysis and resolution on all Customer-specific Severity 1 issues.
Severity 2	This incident level is attained when any of the following conditions are met within <b>Vendor's</b> Span of Control:	<a href="mailto:ietf-action@ietf.org">ietf-action@ietf.org</a>	Acknowledgement of issue within 2 business days with an estimated time to	Customer receives a workaround or information that

	<p>A significant degradation of the service occurs</p> <p>A high impact issue with a workaround. A critical capability cannot be accessed by a method that is part of the product design, but it can be accessed by one or more alternate methods.</p> <p>Essential functionality of the RFC Publisher Services operates in a way that is materially different from those described in this Addendum.</p> <hr/> <ul style="list-style-type: none"> <li>• A complete outage of the following:             <ul style="list-style-type: none"> <li>• Any of the Vendor support tools is unavailable. These tools include monitoring, and reporting tools or trouble ticketing system.</li> </ul> </li> </ul>		<p>resolve.</p> <p>The Severity Level may be downgraded if a viable workaround is established and fixes included in the next maintenance release.</p> <hr/>	<p>resolves the issue. or a patch is implemented, if issue is due to a software defect within 2 business days</p> <p><b>Vendor</b> shall provide root cause analysis and resolution on mutually agreed upon Severity 2 issues.</p> <hr/>
<p><u>Severity 3</u></p>	<p>This incident level is attained when any of the following conditions are met:</p> <p>The Platform is usable but is not functioning in accordance with the requirements set forth in this Agreement and the error condition has no substantial impact. The Severity 3 trouble has a minor impact on Services or resource where it may cause some impact but the trouble can be circumvented.</p> <hr/>	<p><a href="mailto:letf-action@ietf.org">letf-action@ietf.org</a></p> <hr/>	<p><b>Vendor</b> will open trouble tickets and report upon closure. Monthly reports will reflect all remaining open trouble tickets.</p> <hr/>	<p>Acknowledgement of issue within 2 business days with an estimated time to resolve.</p> <p>Fix or workaround in fourteen (14) business days.</p> <hr/>

### **Escalation Procedures**

An Escalation: Regardless of an incident's severity level, escalation is warranted and will occur according to the time for response as outlined on Table 3 below.

Escalation Path for Technical Support Issues: If Customer is not satisfied with the technical support provided by Vendor; Customer may request escalation from the Vendor Customer Service desk. The Vendor customer support dispatcher will immediately escalate the call to the appropriate supervisory level, and a representative will contact the customer or recipient within two (2) hours (severity 1), four (4) hours (severity 2), or two (2) business days (severity 3).

### **Incident Reporting Process**

#### **Communicating Incidents**

Customer will communicate incidents to Vendor in the following manner:

- Customer will open trouble tickets via email [ietf-action@ietf.org](mailto:ietf-action@ietf.org), until further notice by IAD. Trouble tickets can be reported at any time. Email will primarily be used to provide follow-up information / confirmation of trouble tickets opened.

#### **Information for Incident Reporting**

For each incident, Customer will provide Vendor with necessary information that will facilitate timely problem determination and resolution. Upon notification of the incident, Vendor will verify receipt of the necessary information. The following is the information that will be obtained from Customer for all reported incidents. (The information marked "Optional" is only required if it is available to Customer and determined by Customer to be appropriate):

- Reference number assigned by Customer (Optional);
- Time and date of the transaction in question (Customer to use reasonable commercial efforts to obtain this information);
- Description of the incident;
- Severity of the incident or problem ("Optional");
- List of those actions taken by Customer to verify the problem and resolve the incident;
- Other comments to provide additional information as needed ("Optional"); and

If clarification of this information is necessary to resolution of the incident, Vendor will immediately contact Customer to request such clarification. Vendor will begin investigating the incident upon receipt of the information and provide feedback to Customer as detailed in this Incident Reporting Process section. The trouble ticket is deemed "open" when Vendor has received information outlined above. The trouble ticket will remain open until Vendor believes that issue has been resolved. However, Customer may reopen the incident if desired for any reason at any time.

## Incident Reports

### **Root Cause & Analysis (“RCA”)**

The purpose of the Root Cause and Analysis is to identify the cause of the incident and identify corrective actions to prevent its reoccurrence. For all Severity 1 tickets Vendor will create an RCA and provide such report to Customer within three (3) business days of the close of the incident.

## Maintenance Management

### **Planned Maintenance by Vendor**

Vendor will ensure that any planned maintenance events will be executed in a well-coordinated manner. Proper execution includes advance notification to the IETF Community by Customer Support through the use of mailing lists and posting on the website and approval by the IAD.

Vendor conducts planned maintenance activities on a regular, scheduled basis. This schedule will be coordinated with the IAD and communicated to the IETF community.

### **Service Interruptions and Advanced Notification Requirements**

For all other Scheduled maintenance activities, Vendor will provide the IAD with at least three (3) business days advance notice via e-mail. Vendor will assume that the scheduled maintenance is acceptable unless Vendor is advised via e-mail within one (1) business day prior to the time of the planned event.

Vendor reserves the right to execute emergency maintenance at any time without notice, but will notify the IAD and the IETF Community as soon as possible (targeting notification at least 120 minutes prior to event). “Emergency” shall mean that Vendor has become aware of a problem that, if an immediate remedy is not implemented, will prevent Vendor from continuing to support and provide the elements and aspects of the RFC Publisher Service. Any downtime that would otherwise meet the definition of Unscheduled Downtime and which results from emergency maintenance will be included as “Unscheduled Downtime” from the overall system availability measurement.

### **Canceling Planned Service Interruptions**

In the event of an IETF emergency, the IAD may request to cancel a planned service interruption. Vendor will make commercially reasonable efforts to cancel the service interruption, if it does not impact other required maintenance and if the IAD notifies Vendor within 24 hours prior to the scheduled start time of the maintenance window. Any notification of cancellation must come directly from the IAD or IAOC via phone, fax or email.

### **Restrictions Associated with Customer’s Cancellation**

In the event that the IAD cancels a planned service interruption, any downtime that results from failure to perform the maintenance that otherwise would have been performed during the planned service interruption will be excluded from the overall Service Availability measurement and the “Unscheduled Downtime” as defined.

**APPENDIX 2: RFC EDITOR TOOLS**

The tools include:

- Work Flow application (document management tool, an internal web application)
- various scripts for queue statistics (includes draftstat)
- various scripts for publication/announcement process
- errata system (public side and verification side)

- External/Public Tools

xml2rfc

<http://xml.resource.org>

xml2rfc validator

<http://rtg.ietf.org/~fenner/ietf/xml2rfc-valid/>

rfcdiff

<http://tools.ietf.org/tools/rfcdiff/rfcdiff.pyht>

ABNF Parser

<http://tools.ietf.org/tools/bap/abnf.cgi>

ABNF extractor

<http://tools.ietf.org/abnf/>

Online rfc-what-i-mean processor

<http://www.isi.edu/touch/tools/>

xmllint to check XML

SMICng to check MIBs (local copy)

- various scripts for editorial checks

AUTH48post

ckText

dotblank

dupewords

fix.pl

htmlwdiff

make-rfc

maketocbv

matchref

printable

rfcstrip

tab8

tkdiff

wdiff

urltest.pl

**EXHIBIT B: Work Standards**

**THIS WORK STANDARDS EXHIBIT** (“**Exhibit**”) is subject to, and is made a part of, the Services Agreement (the “**Agreement**”), between Association Management Solutions, LLC a California Limited Liability Company (“**Vendor**”) and the Internet Society, a District of Columbia nonprofit corporation (“**ISOC**”) (each a “**Party**” and, collectively, the “**Parties**”). Terms not defined in this document shall have the meaning set forth in the Agreement.

**1. INTRODUCTION**

a) Vendor will provide the services set forth in the SOW in accordance with the service levels set forth herein (“**Service Levels**”). In the event that Vendor does not meet the defined Service Levels, ISOC shall be entitled to receive credits, against its monthly invoice, for the sums due for the month in which the Service Level failure occurs (“**Service Credit**”), as more fully described herein. Except as set forth in Section 2 below (“**Chronic Failure**”), the penalties described more fully herein shall be the sole and exclusive remedies for failure to meet one or more Service Levels.

b) The applicable Service Levels are set forth below and are organized by category (“**Service Level Agreement (SLA) Category**”), sub-categories and SLA tasks. Each task has an SLA number. Service Credits will be applied to the monthly invoice for the billing period following the month in which the Service Level reports were generated.

c) In no event shall the aggregate amount of Service Credits respecting services rendered in any calendar month exceed five percent (5%) of the monthly Vendor RFC Publisher Services Fee, as set forth in Exhibit C, for such month (“**Total Cap**”). As provided in Paragraph 3 hereunder, no Service Credits shall be applied with respect to the first 180 days following the Effective Date.

d) In addition, the Parties shall, by no later than July 1, 2010, by mutual written agreement, establish a SLA Schedule that sets forth the maximum Service Credit amounts.

e) The SLA Schedule shall also set forth the relative weight and tier level of each task within the SLA Categories, including their applicable individual Service Credit amounts.

f) In accordance with Section 1.4(b) of the Agreement, Vendor may not be liable for a deficiency in performing the Work to the extent that such deficiency results directly from the IETF Community’s failure to provide timely and material Cooperation.

g) An event that impacts more than one (1) SLA shall only be credited towards one of the SLAs, of the customer’s choice, and not towards all of the SLAs that were potentially impacted.

**2. CHRONIC FAILURE**

In addition to the termination provisions contained in the Agreement, in the event that Vendor: (i) fails to meet any of the Tier-1 SLA tasks (as set forth herein) for a total of three (3) consecutive months or for any four (4) months in any given six (6) month period, or (ii) fails to meet any of the Tier-2 SLA tasks (as set forth herein) for a period of six (6) consecutive months, ISOC shall have the right to terminate the Agreement, the relevant SOW or the affected Work or Subset, in each case upon at least sixty (60) days written notice to AMS.

**3. COMMENCEMENT OF OBLIGATIONS**

Vendor obligations set forth herein, including its obligation to measure, achieve and report on the Service Levels, shall commence, with respect to each Service Level, on the date in which Vendor begins to

provide the Work to the ISOC as defined by the Effective Date. From such date, Vendor will be responsible to provide measurement data in support of the applicable Service Levels provided, however, that for the first one hundred eighty (180) days following the Effective Date Vendor shall not be responsible for applying Service Credits to invoices for any failures to attain any of the Service Levels.

#### 4. SERVICE LEVEL REPORTS

Vendor will provide monthly measurement data in its Service Level Reports which shall be delivered to the IAD no later than the fifteenth (15<sup>th</sup>) day following the month in which the SLAs tasks were measured. The reports will provide the data relative to Vendor performance for the delivery of each SLA task and identify applicable service credits, if any. Credit disputes will be resolved in accordance with section 2.2 of the Agreement.

5. **SLAs / Remedies.** Below are the set of initial SLAs which may be modified from time to time by mutual written agreement of the Parties.

1. **In the event that Vendor fails to** published a 'ready-to-publish' document that has arrived from the RFC Production Center. This action includes putting the publication-format document(s) online, publishing index files, and archiving a record of the interactions concerning these documents, as provided by the stream, and all final source and text files. At this time, the document is announced to the community. The date of announcement is defined as the date of publication.

2. **In the event that Vendor fails to** provide the following on the Publisher's website: one or more indexes with hyperlinked access to published documents as well as a convenient search engine. The search engine will return a catalog ("index") entry for one or more RFCs, matching on title, keywords, author, or number. The Publisher also provides access to individual RFCs and to collections of RFCs using SMTP, FTP, and RSync and other technologies as directed by the IAD. Keywords are determined by (i) author submission, (ii) RFC Production Center determination, and (iii) previous use for a document being obsoleted.

3. **In the event that Vendor fails to** provide a distributed Web service for rfc-editor.org. This includes:

(i) providing at least two (2) independent, geographically separate sites, each capable of serving 2+ Mb/sec of data over Web and FTP.

(ii) allowing for updates of appropriate material by stream managers or their representatives and the Production Center,

(iii) storage area adequate for all published RFCs as well as the archives,

(iv) the provision of monthly reports of website performance, including whether improvements were made to increase the capacity above the 2+ Mb/sec of data over Web and FTP,

(v) provide and maintain site-map style indexing (in addition to the search function)

(vi) provide public feeds (ATOMPUB, RSS, etc.) as appropriate, and

4. **In the event that Vendor fails to** provide Mailing Lists Services. With respect to all authorized RFC Editor services mailing lists the Vendor shall provide the following services:

(i) the ability to host 12 or more mailing lists,

(ii) Web-based mailing list maintenance tools.

(iii) commercially reasonable spam filtering measures, including, at a minimum, those spam



filtering measures the Vendor takes to protect its own internal and external mailing lists,

(iv) dual redundant systems except during scheduled maintenance, during which time at least one system should be available.

(v) collection and storage of plain text and HTML-ized archives for all RFC Editor services lists, including RFC Services mailing lists, if any, not hosted by the Publisher where Vendor has been provided access authority or that are provided to Vendor in a format for which Vendor is able to archive in accordance with Section 2(e) above, and

(vi) spam moderation of the RFC Editor lists.

**5. In the event that Vendor fails to provide Customer Support Services.** Vendor shall provide a trouble ticketing service that provides a ticket queue system with customizable queues. Messages sent to certain conventional addresses, such as [help@rfc-editor.org](mailto:help@rfc-editor.org) and others, shall automatically enter the ticket system.

**6. In the event that Vendor fails to provide IP Support.** Vendor shall provide world-class IP support, IPv4 and IPv6. All services should be accessible from IPv4 and IPv6, with no difference in performance, quality, delay, and support.

**7. In the event that Vendor fails to provide Subdomain Support.** Vendor shall provide DNS delegation and DNS support for any RFC-Editor subdomains approved by the IAD.

**8. In the event that Vendor fails to provide Data Services Security.** Services are to be protected by best commercial practice industry standard security mechanisms, such as DNSSEC.

**9. In the event that Vendor fails to provide Backups**

Backups shall follow best commercial practices to provide a robust backup capability.

**10. In the event that Vendor fails to provide Distributed Information:**

- (i) Official Archives, and
- (ii) RSS and ATOM feeds

**11. In the event that Vendor fails to provide Tools:**

(i) Vendor shall maintain and make minor corrections and updates to the current suite of “tools” utilized in connection with the RFC Editor services functions, a list of which is attached in Appendix 2. Vendor’s obligation to so update such tools shall be limited to any correction of any bugs or performance issues that arise during the term of the Agreement.

(ii) All non-proprietary tools shall be open sourced and with a license as directed by IAD. The use of tools that are not open source must be approved in advance by the IAD.

(iii) Vendor shall provide and maintain an online Tools Development and Proposal Management Report.

(iv) Future tools may be separately contracted and may be put out for separate bid.

**B. In the event that Vendor fails to provide Maintenance of archives, indices, errata and lists associated with RFCs.** The Publisher is the custodian of records on behalf of the IETF Trust.

1. Indexing: Publishing of the Catalog

- (i) Publish the index of all published documents

- (ii) Provide the permanent archive for published documents
- (iii) Store and update meta information associated with a published document as its status changes
- (iv) Secure the archive to prevent the modification of published documents by external parties
- (v) Provide the permanent archive of any source documents associated with a published document
- (vi) Archive records associated with the editing and publication of each document. Current archives consist of fewer than fifteen, four drawer filing cabinets.
- (vii) Surrender materials on termination of contract to the IETF Trust.

## 2. Post Publication Corrections

- (i) Maintain a tool for accepting errata for published documents and interacting with the streams for errata evaluation and approval. The specific process to be agreed between the IAB, the stream managers, and the RFC Series Editor.
- (ii) Provide access to the relevant errata and associated information (such as approval and classification) as part of the information associated with an RFC

## 3. Access to Published Documents

- (i) Provide search tools for finding published documents and relevant meta information associated with a published document, and display meta information for example: category of document, maturity level (if standards track), obsoleted by or updated by information (as provided by the streams), and associated errata
- (ii) Integrate Publisher search tools with the IETF search tools as appropriate
- (iii) Provide direct access to published RFCs, by generally used methods such as, ftp, http and rsync.

## C. In the event that Vendor fails to provide Communication of relevant RFC processing information online

The Publisher shall maintain a website on which will be the following information:

1. Publication Status Tracking
  - (i) Provide state information for each document in the publication process
  - (ii) Integrate Production Center state information with the IETF tools to provide end-to-end status tracking of documents
  - (iii) 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
2. Publishing Publication Statistics and Status Reports
  - (i) Publish reports provided by the Production Center, stream managers and RFC Series Editor

## D. In the event that Vendor fails to provide Liaison, Coordination, and Collaboration

1. Provide a contact email address and correspond as required to progress the publication work, and address queries from both inside and outside of the community.
2. The Publisher may interact with stream managers, authors, reviewers, the RFC Productions Center,

the RSE, the IAB, the IAOC, the IAD, and others in the proper performance of its responsibilities.

3. The Publisher may integrate its document tracking system with the automated tools employed by the RFC Production Center and the IETF.

4. Through liaison participants, the Publisher may take part in IESG and IAB formal meetings, usually telechats, and may participate in IESG and IAB face-to-face activities at IETF meetings, and other activities such as retreats when requested.

5. The Publisher may be requested to participate in coordination conferences with stream managers, the RFC Series Editor, the RFC Production Center, the IAB representative, the IETF representative, the IAD, and others.

6. The Publisher may be requested to make regular reports at IETF meetings, online, in writing, and/or in person.

**E. In the event that Vendor fails to provide Specific Deliverables**

In addition to the foregoing functions and tasks there are specific deliverables:

1. The Publisher's Procedures Manual

(i) The Publisher shall prepare a Procedures Manual describing with clear detail each task performed in the provision of publication services.

2. System Documentation

(i) The Publisher will document the systems supporting the publication process.

**F. In the event that Vendor fails to provide Process and Document Evolution**

1. Participate in the discussions of changes to author guidelines, the technical publication process, and with the RSE and the IAB, as needed, for policy changes.

2. Participate in and support process experiments proposed by the community involving the technical publication process that may improve the RFC series process.

**G. In the event that Vendor fails to provide Legal Proceedings**

The Publisher may be called upon to provide and authenticate documents, including RFCs and other material in its archives in legal proceedings. Frequently this is accomplished through an affidavit, occasionally through an appearance in court.

**H. In the event that Vendor fails to provide Accountability**

1. The Publisher is responsible for compliance with policies, processes and procedures as they relate to the consistency of the RFC series.

2. The Publisher must respond to the RFC Series Editor for matters concerning to RFC series consistency.

3. The RFC Series Editor may refer contractual matters involving Publisher compliance to the policies, processes and procedures to the IAOC.