The Internet Society

on behalf of

The IETF Administrative Oversight Committee

REQUEST FOR PROPOSALS

for

Software Development IDIQ Contract

Date of Issuance: January 7, 2015
Proposal Submission Deadline: February 13, 2015, 5:00 P.M. EST
IETF Request for Proposals

Software Development IDIQ Contract

The Internet Society (“ISOC”) on behalf of the IETF Administrative Oversight Committee (IAOC) is soliciting this request (“Request”) for Proposals ("Proposals") to provide software development services improving and adding to the existing IETF toolset, which has been substantially developed in Python using the Django framework. Proposals from any commercial or non-commercial vendor are welcome. Those submitting a Proposal (“Vendor”) shall do so in accordance to this Request.

I. Introduction

The Internet Engineering Task Force (IETF) standards development work is supported by several specialized software tools, such as the Datatracker, idnits, xml2rfc, rfcdiff, and many others. The Datatracker is a Django-based tool that allows the state of working groups, documents, and related artifacts to be viewed and managed. The system provides views into this state appropriate for the general community, document editors, members of leadership groups, and newcomers. The Datatracker manages its own data store, and interacts with data stores at the RFC Editor and IANA. The Datatracker is constantly evolving, improving the current user experience, and adding new functionality as the need is discovered. The other tools are also constantly improving, and occasionally need significant revision or expansion. New tools and significant changes to existing tools will be needed, for instance, to support the upcoming change in the RFC publication format. These tools may be developed in Python using the Django framework, or other software if there is a significant advantage in or requirement to do so.

The Internet Society desires to enter into an Indefinite Delivery/Indefinite Quantity (IDIQ) Master Services Agreement (MSA) with one or more software development companies with which to accomplish its objectives of supporting and extending this toolset over the next twenty-four (24) months. Through the MSA, ISOC, through the IAOC, will thereafter issue Work Orders for the delivery of specified software.

II. Current Architecture

The current Datatracker infrastructure provides support for the work of the Internet Engineering Steering Group (IESG), the IETF Secretariat, and, through various ietf.org websites, provides information to the community at large. The current tools are written primarily in Python, and most utilize the Django framework.

III. Instructions and Procedures

A. Submissions

Proposals must be received via email at iaoc-tmc@ietf-bids.org no later than February 13, 2015, 5:00 P.M. EST.
Vendor assumes all risk and responsibility for submission of its Proposal by the above deadline. ISOC shall have no responsibility for non-receipt of Proposals due to network or system failures, outages, delays or other events beyond its reasonable control.

All Proposals shall become the property of the Internet Society.

B. Questions and Inquiries

Any inquiries regarding this Request must be submitted in writing to the email address listed in IV.A above. Other than such inquiries, Vendors are prohibited from contacting any person or institution involved in the selection process concerning this Request.

All questions/inquiries must be submitted in writing and must be received no later than midnight, ET, 21 January 2015.

Responses to questions and inquiries shall be posted on the IAOC website, https://iaoc.ietf.org/rfps.html by midnight, EST, 26 January 2015.

C. Addenda and Updates

Any addenda and updates to this Request shall be posted on the IAOC website, https://iaoc.ietf.org/rfps.html. Each Vendor is responsible for checking the IAOC website prior to submission of any Proposal to ensure that it has complied with all addenda and updates to this Request.

D. Selection Criteria

Attachment 1 contains information for an application for a new tool related to the development of the XML source code for Internet-Drafts and RFCs (xmldiff). This RFP requests the proposer to evaluate the information and describe the approach that the vendor would take to accomplish the work.

Being selected for entering into a Master Services Agreement will be a two-step process:

1. Responses to this RFP will be used to identify qualified vendors as defined in Section III. D to proceed to step two;

2. Invited vendors will be asked to provide pricing information for the development of a specific application, including the assumptions and analysis used to reach that price. The purpose of this is to evaluate the analysis and pricing. It may not be used to award the development of this application.

Further, each Proposal must specifically address each of the selection criteria listed in Section IV below in a format corresponding to this Request. Each Proposal should also be accompanied by any technical or product literature that the Vendor wishes the ISOC to consider.
The IAOC, on behalf of ISOC, shall select from among those submitting proposals those Vendors which in its discretion are the most qualified to perform the work. Those vendors making the short list shall be invited to provide pricing information for the development of the application, as well as the assumptions and analysis used to develop the pricing model.

The IAOC may select one or more Vendors to accomplish the tasks reflected in this Request.

E. Cancellation; Rejection

ISOC reserves the right to cancel this Request, in whole or in part, at any time. The IAOC may reject any or all Proposals received in response to this Request in its sole discretion. ISOC makes no guarantee or commitment to purchase, license or procure any goods or services resulting from this Request.

F. Master Services Agreement and Work Orders

Any Vendor that is selected by the Internet Society shall be subject to negotiation and execution of a binding Master Services Agreement (MSA) between the Internet Society and the Vendor.

The MSA shall be for a three-year period with an option for two, one-year extensions. The MSA is an Indefinite Delivery/Indefinite Quantity (IDIQ) contract as it cannot be determined at this time the nature and number of applications that will be necessary to complete the project.

Any MSA that is entered into by ISOC and Vendor does not imply a guarantee of work for that Vendor.

Work orders for individual applications will be placed against the MSA.

G. Costs and Expenses

Each Vendor is responsible for its own costs and expenses involved in preparing and submitting its Proposal and any supplemental information requested by the IAOC. ISOC shall not reimburse any such costs or expenses.

H. Notification

The IAOC will notify Vendors of their selection following receipt and consideration of all Proposals. The IAOC will attempt to make its selection(s) within 21 days of receipt of final proposals, but shall have full discretion to make a decision earlier or later.
I. Public Information

The IETF is a community committed to transparency in the manner in which it conducts its operations. Accordingly, the following principles will apply to the Proposal, negotiations, MSA and Work Order(s):

The names of all Vendors submitting Proposals may be announced publicly, but the Proposals and individual negotiations with Vendors will not be publicly announced.

Any Master Service Agreement negotiated with a Vendor, excluding cost and business confidential material as agreed to by the Parties, will be made public after execution.

J. Intellectual Property Rights

All work performed, all software and other materials developed by the Vendor under the MSA, shall be “works for hire” and shall be owned exclusively by the IETF Trust, and the Vendor shall obtain or retain any rights or licenses from any work produced for the “Work Order”.

The IETF Trust intends to release the applications to the public under the Simplified BSD Software License, and Vendor will be required to represent and warrant that no impediment to such method of release exists. The Simplified BSD Software License can be found at http://www.opensource.org/licenses/bsd-license.php.

IV. Selection Criteria

The selection of Vendor(s) for the development of and incremental improvements to the IETF toolset will be based on a number of important criteria that are enumerated below. These criteria include performance features, availability and licensing, cost, and potential for future improvements.

A Application Requirements

The proposal will describe how the requirements described in Attachment 1 will be met.

B Development Practices


C Intellectual Property
Vendor shall describe any intellectual property rights owned or licensed by you which may cover all or part of developed applications, including a list and description of all U.S. and foreign patents and patent applications.

Vendor shall describe any intellectual property owned or licensed by third parties which is required to utilize all or part of the developed applications in the manner contemplated by this Request.

Vendor shall describe in detail any claims or disputes relating to the intellectual property embodied, or claimed to be embodied, in all or part of the developed applications.

D. **Personnel**

Vendor shall describe the personnel who would form the team that will be directly involved in the performance of services under the Service Agreement, including supervisory, managerial, liaison, development and support personnel. Provide detailed CVs for each team member to the greatest extent possible.

Vendor shall describe each team member’s experience with projects of similar technical requirements and scope, and the percentage of such team member’s full-time effort that will be devoted to this project.

E. **Support and Maintenance**

Vendor shall describe the technical support that will be available for the developed applications, including qualifications of support staff, availability, response times, manner of response, escalation and any other pertinent information. It is expected that support and maintenance will be available throughout the duration of the contract.

The developed applications must be warranted to operate in accordance with their specifications and otherwise in a reliable and secure manner for at least one year from acceptance. There shall be no charge for work required by Vendor to repair or fix serious errors to bring the developed applications into compliance during the warranted time.

F. **Pricing**

The development and implementation portion of each IDIQ project will be on a fixed-cost basis. Each Proposal must provide a fixed-cost bid, without escalation, for the development and implementation of the developed applications (through final acceptance of all features and functionality). It is expected that payment will be made based on Vendor’s timely achievement of enumerated delivery and acceptance milestones.

No ongoing royalties, license fees, transaction fees, revenue sharing or similar payment proposals will be accepted.

Each Proposal must also provide pricing for support, maintenance and future development work.
All pricing shall be denominated in U.S. dollars.

G. Timing

Time is of the essence in the development and deployment of the developed applications. The Service Agreement will contain binding timeframes for delivery of the developed applications, including penalties for late or incomplete delivery.

Each Final Proposal must include a timeline for the development and implementation of the developed applications, including major milestones and proposed penalties for late or incomplete delivery.

H. Relationships

Describe any relationship between your company, or any parent, subsidiary or related company, or any director or officer of any of them, with the ISOC, IAOC, IETF or the IETF Trust, or any employee, director, officer or consultant of any of them.

V. Proposal Format

A. Proposal Submissions

Proposals shall be submitted using the following format:

1. Transmittal letter with signature of authorized representative
2. Executive Summary
3. Table of Contents
4. Experience, Qualifications and Accomplishments
5. Key Personnel
8. References (Three references attesting to performance)
9. Describe the approach to create the application in Attachment 1
10. Resumes of Key Personnel
11. Subcontractor Information (if any)
12. Assumptions
13. IPR
14. Relationships
15. Miscellaneous Information
Attachment 1

Overview
The rfcdiff utility has been very useful for inspecting the changes in versions of Internet-Drafts and RFCs during the creation process. The rfcdiff utility will continue to be useful with the upcoming text publication format. Other tools may evolve for comparing versions of the remaining publication formats.
It would be useful to be able to directly compare the xml source of different versions of a document, particularly to rapidly identify changes in document structure or attributes within tags. These changes may or may not have a simple corresponding change amenable to representation through differences of one of the publication formats. This project will create a differencing tool for the xml source documents.

Deliverables/Tasks
• An application that operates on two xml2rfc v3 source documents, producing a visual presentation of the meaningful differences in the source.
• A test suite for the application exercising the use cases described below
• Documentation and training for the RFC Production Center staff

Detailed Description and Requirements
This application’s output will concentrate on differences in the document structure and essential content and de-emphasize differences that do not change the meaning of the document source. Specifically:

• Changes in whitespace that are not significant in XML (including line breaks) will be ignored. Whitespace changes will only be highlighted when the semantics of the document make them significant (such as those appearing inside <artwork> and <sourcecode> text blocks).
• The output will be driven by elements from the source documents, not input lines.
• Tags will have their differences shown, including differences in any provided attributes, similar to how rfcdiff shows differences between input lines of text documents.
• The text content of elements will be shown with differences similar to what rfcdiff produces, again de-emphasizing insignificant whitespace.

It would be sufficient to show the differences as a static HTML output document, but desirable to allow common elements between the documents whose content has differences to be collapsible and expandable.
Proposals that encourage reuse of the existing (and in-development) tools and formats are encouraged. For example, one potential solution would extend the xml2rfc v3 grammar to include markup for inserted and deleted blocks (possibly in a separate namespace), and provide a renderer from that extended grammar into HTML, extending the official HTML presentation format, leveraging it as much as possible.
This application must be able to be run as a web service similar to rfcdiff. It must also be possible for an author to run the application locally on a personal computer. When run as a web service, the application will locate the input documents using the same name and version completing search algorithms implemented in rfcdiff. When run on a personal computer, it is expected that the paths to local copies of the input documents will be fully specified.

The application must run on unix-like operating systems (including OS/X) and Microsoft Windows. Running on other systems, or being easily portable to other systems, is preferable.

**Expected Development Processes and Practices**

The contractor will adhere to the requirements at