Questions were received in response to the RFP for the RFC Production Center and at the Bidders Conference conducted on June 3, 2009. The deadline for submitting questions for the RFP was June 9, 2009.

This document represents the official responses to all questions received, including the Bidders Conference. The transcript of the Bidders Conference contains useful information, but answers provided at the conference have been updated and clarified in this document, and are the 'official' responses.

Answers are provided by the incumbent RFC Editor and the IETF Administrative Director, who is the contract administrator, and are so labeled. Slide references refer to the presentations made at the conference, which can be found here: <a href="http://iaoc.ietf.org/rfced-procurement.html">http://iaoc.ietf.org/rfced-procurement.html</a>

Proposals for the RFC Production Center are due on June 29, 2009; nominations for the RFC Series Editor and Independent Submissions Editor are due by July 8,2009. For more information see: <a href="http://iaoc.ietf.org/rfced-procurement.html">http://iaoc.ietf.org/rfced-procurement.html</a>

For additional information you may want to refer to the RFC Editor Procedures Manual located here: http://www.rfc-editor.org/IAD-reports/proc-manual-05.pdf

The questions and answers are numbered sequentially.

Q1. Can you explain the burstiness of the work?

A1. RFC EDITOR: Slide 20 shows just the last 5 or 6 years. One of the questions on the list that the IAD sent us yesterday was about the type of workload and why there are bursts. I think the better responder for that would probably be the IESG or Russ. However, I think Russ has said this before, that when there is going to be AD turnover, the exiting ADs try to clear their plate for the incoming ADs. So, a lot of times, there's a spike in March for approvals, and a month or so later, we'll see a spike in publications.

So one of the problems you face in managing this effort is that it is bursty. You have to watch the queues carefully. We got in trouble a couple of years ago. We definitely got behind and people complained quite rightly. We worked really hard to get out of that, but it is difficult. It's also difficult from a staffing point of view. Because it means variable load on the staff.

The average rate of submissions and publications over the last 5 - 6 years has been about 28 per month.

Q2. Do you see any spikes on independent submissions or is that fairly even?

- A2. RFC EDITOR: That's fairly even; it's random.
- Q3. Who will be responsible for the rfc-editor.org web site? Will it be the RFC Editor, the Production Center? I mean for design and adding new things and such like that. So, whose budget will support the system programmer who does the work?
- Q3. IAD: Two things about that. One is, it is the official RFC web site. That is the official web site. It's not tools.ietf.org. It is the rfc-editor.org web site. It's intended that that web site would be maintained by the RFC Publisher.

The evolution of that will involve the RFC Series Editor and other participants in the community. In a way similar, perhaps, to the way that the ietf.org web site is currently being modified. And, if you haven't seen the evidences of that, I think sometime in the next month or so, you'll see some changes.

So the changes, that, the development work will be done by the Publisher under contract with IASA.

Q4. If you have XML input, at the end, you actually generate text from XML2RFC or do you generate NROFF and then go to the last step?

A4. RFC EDITOR: NROFF.

We generate text as long as we can throughout the process. At the very end, you can use the tool that's available, XML2RFC, to create an NROFF file. We set it to do NROFF output and then we might do final page breaking or other adjustments.

- Q5 Do you have to play with the NROFF at all?
- A5. RFC EDITOR: We like to; there are some things that are more easy to control in NROFF.

XML is not a markup Language so it does not control page spacing very well.

Additionally, xml2rfc right now is not set up to handle the RFC 5378 copyright. The experimental version doesn't convert that instruction into the NROFF. It creates the text but not the NROFF. So, currently, we are required to do a post-edit.

Q6. About what percentage these days are coming in with XML? Do you have any feeling, or is that bursty too?

A6. RFC EDITOR: We estimate 50-60 percent. It seems to be increasing over time.

Q6a. Do you ever reject the XML that is submitted, if it has technical changes are or do you deal with the AD or someone else?

RFC EDITOR: We deal with the ADs, with the authors and WG chairs CC'ed on the message, so that all relevant parties are on the emails. Potentially, the working group chair would chime in and say, this looks right to me but it has to go back to the working group. Or, the most common case is the AD saying that the changes are approved.

- Q6b. You never say, gosh, that's changed? We're going to start again, go back to the last draft we got and as you said before, you know, NROFF it?
- A6b. RFC EDITOR: Not typically for changes that have been introduced since the document was approved. I could imagine the case where the XML file was so broken, that we start from scratch and do the NROFF. You can spend a long time trying to fix author-submitted XML files.
- Q7. Do you have tools for determining which IDs have been published as RFCs? As well as what to look for?
- A7. RFC EDITOR: It's pretty manual. However, using the Tools HTML version of a draft, you can just go down the list and click on the drafts strings and it will show you which ones have become an RFC. The more formal way to do it would be to go to our database or the I-D Tracker to check if it's been published as an RFC.
- Q8. Do you have any editing tools other than your editor?
- A8. RFC EDITOR: We have some scripts that we use to check for various things. See Q3 and the slides on "How an I-D Becomes an RFC."
- Q9. Do you have anything that might, or is there any standardized text that you use that would call out obsolete words, or you know, the vernacular changes and say the use of the word button versus icon, versus, does anybody check for those things?
- A9. RFC EDITOR: No. There's no automated check for that. It's what the copy editor and the primary editor have marked or looked for.

We don't have an automated check for specific terms or things that always have to be a certain way, but there is some institutional knowledge of which ones are

recurring problems. We maintain a terms list, which is available from http://www.rfc-editor.org/styleguide.html.

Q10. Just what happens when you send an edit back, saying we've done this consistently, because it was an RFC so and so, and the AD goes great and the author says, I hate it. Do you have a priority for, of the people looking at the reviews on who wins?

A10. RFC EDITOR: We ask the AD and author to discuss the issue and come to a conclusion. We don't typically engage it in that discussion; we ask them to work it out and notify us of the required changes (if any).

Q11. Do most of the Authors look at the end result?

A11. RFC EDITOR: They have to. We require that each author listed in the front-page header approve the document for publication.

Q12. So there are two times that you're sending authors questions. You might do it during the earlier processing anyway, but you also might ask similar questions here at the AUTH48 state?

A12. RFC EDITOR: Right.

Q13. Is IANA involved in AUTH48 also or not?

A13. RFC EDITOR: No, they're not, unless there are discrepancies between the document and the IANA registry.

Q14. Do you send IANA the text of the IANA considerations, sort of when you think it's all done?

A14. RFC EDITOR: No. Usually, there is concurrent processing; we edit the document, and they send us the e-mail saying that IANA has completed the actions according to what's in the I-D or according to what's agreed upon with the author.

Then, at the AUTH48 stage, if there are changes that we need IANA to make, we'll notify them. This is in later slides (see diagram on slide 53), but depending on how large those changes are, we may want confirmation that their registries have been updated before we publish the document. Or there may be minor changes, like a spelling error, where we would send that at the time we send them with the RFC number and the publication date so they can update the references.

Q15. Did you define what the 48 stood for?

RFC EDITOR: It's an optimistic timeline for completing this process: 48 hours.

Historically, it was actually 48 hours; if there was no response from the authors within 48 hours, the document was published. That is not the practice today. We must hear from the authors before publishing the RFC.

Q16. Updates that are technical in nature wind up going back to the Area Director and the working group, right?

A16. RFC EDITOR: Actually, in the more difficult cases, independent submissions, they come back to us or to the reviewer. The whole process starts over again.

Changes for streams other than the Independent stream go back to the relevant party for review and approval. For the IETF stream, the responsible AD would be asked to review and approve the technical changes (the request would be CC'ed to authors and WG chairs).

Q17. IETF drafts can't be revised once they've been sent to you; is that correct?

A17. RFC EDITOR: They can, but we would send it to the ADs and ask them what's going on. If there are significant changes, they sometimes withdraw the document from the queue and say it's not ready yet. Most often, we follow the model described in the question above.

Q18. At what point can they not withdraw it?

A18. RFC EDITOR: The day we publish it.

Q19. So all this work is done. From end to end, how long does it take for the normal document?

A19. RFC EDITOR: We can look at average times in EDIT, RFC-EDITOR, and AUTH48 states on http://www.rfc-editor.org/CurrQstats.txt.

(AUTH48 has a long average now because some documents are waiting for the Independent Submission copyright issue to be resolved. So the median for AUTH48 (3.6 weeks) is more typical.)

Currently, total time for those 3 states, looks like about 5 weeks, assuming no REF or IANA holds.

Q20. Some of these copy editors are remote, you said. Do you just Fed-Ex things around?

A20. RFC EDITOR: Actually, we only have one copy editor that works with us. She is editing files via PDF and sending us PDFfiles. We do our own copy editing for a lot of the documents.

At one time they were (FedExing). It depends on what tools are available, but she is comfortable with PDF and that works fine for us.

Q21. What is the IETF management team meeting?

A21. RFC EDITOR: We have a monthly call with the IAB and IESG chairs and the IAD. (See slide 6)

Q22. How many different people touch each document along the way?

A22. RFC EDITOR: That number varies, depending on who is working on it. One to three.

IAD: I think one thing to note here is that, the RFC-EDITOR state is intended to be a Production Center state. It doesn't mean the RFC Series Editor per se. That's a different person overlooking the series. Just consider that a state, don't confuse that with a specific person.

Q23. How many staff are currently employed in the production center and work full time, part time, seasonal?

A23. RFC EDITOR: Slide 3 showed  $\sim$ 4.75 FTEs, but that includes the programmer (which might be part of the Production Center). The 4.75 does not include 0.2 for the copy editor, who is contracted directly with the Internet Society.

IAD: Do you hire any additional staff part time or anything to address any burstiness? Or -- do you use what you have?

RFC EDITOR: We haven't needed to recently.

Q24. What tools are used?

A24. RFC EDITOR: There's been a description of all the tools that are used regularly. They are also described in the procedures manual.

RFC EDITOR: It doesn't include the web front-end or the MySQL database.

#### 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 Q24a. Are there any tools that are managed or updated by the Tools team or others? A24a RFC EDITOR: Yes, there are several, including xml2rfc, rfcdiff, and the ABNF parser. Q24b. Are all these IETF owned? A24b. IAD: The tools developed by the RFC Editor are owned by the IETF. Q24c. You mentioned the front end to MySQL database; is that a tool that's IETF owned? A24c. IAD: Yes. Q24d. And the individual scripts and such fall under that? A24d. RFC EDITOR: Yes. There are probably 80 or more scripts. Q25. How much time is devoted to interaction with outside agencies like IANA for editing documents? A25. RFC EDITOR: Possibly 20-30 percent (for all outside agencies). Q25a. Well, so, ten percent of the documents have IANA interest? A25a. RFC EDITOR: Over 50 percent. Q25b. And each of them require an hour, is some of that just email or some of that

actually on the phone?

A25b. RFC EDITOR: It depends, rarely is it on the phone. If there are questions (I don't understand how they assigned these values or why they don't match), I might call Michelle at IANA and ask her questions. If they're simple, the actions are hardly any time at all. It might be the assignment of a MIB value and we insert it and it's done.

Some documents are highly IANA intense where they they create new registries (multiple registries and sub-registries) and populate them with values. Trying to figure out which values go where and if the registry matches up is more difficult. I can't actually give you an exact time value for each document.

Even for the minimum case, where there's one value that's inserted, you're still doing the bear minimum of flagging it as IANA, awaiting the mail, changing the state when the IANA actions have been completed, changing the state, and notifying IANA; so, the bare minimum is close to 10 minutes.

Q26. What has ISI established for communication methods with IANA to ensure timely processing in regards to registering and inserting necessary protocol parameters?

A26. RFC EDITOR: Email, principally. We have covered that in detail (see the "How an I-D Becomes an RFC" slides).

Q27. Was pre-approval edit process that you tested considered successful? Would you recommend pursuing this option moving forward?

A27. RFC EDITOR: There were six documents and they were all XML source files. Basically, there was a small sample size, so it's hard to call it a success or a failure. But, about half of the documents had significant changes by the time they were approved for publication.

There was significant time lag where you're not as familiar with that document anymore.

Q27a. Was the field edit done at the work group last call or was it much earlier than that?

A27a. RFC EDITOR: I can't remember. They solicited volunteers who wanted to have their draft pre-edited, but I'm not sure they made a requirement for the draft to be at a certain step in the process.

NEW SPEAKER: They didn't. One of mine was one of the ones thrown in, it was close to last call but not in last call at this point.

Q27b. Would you recommend pursuing this option moving forward? Any thoughts on that?

RFC EDITOR: My feeling is that it would be significantly more expensive. Batch processing is the most efficient way to keep a resource busy, like an editor.

Another reason it would be less efficient is that the editor would end up going through the same document N times rather than once or twice.

IAD: This is a topic that crops up every once in a while on the IETF Discussion mail list, and right now it's active on the list, the question about doing field editing and when in the process that field editing might take place and under what circumstances. A lot of the discussion now seems to focus on English as a second language where we have documents in that particular state that perhaps could generate some real value to do some editing at an earlier stage, such that other people can then have access to it and understand it better, and perhaps progress the document faster. But, again, it seems to be a community discussion.

Of note, it's an optional possibility for the production center in the RFP and it won't be triggered until such time as decisions are made at a higher level, and at that point in time, we could be soliciting proposals from the successful bidder for the cost.

Q28. What's the average volume of follow up required for each document? And I'm assuming it's follow up with let's say authors.

A28. RFC EDITOR: Again, that's dependent upon the document, e.g., the document size and how many authors there are. It varies significantly.

Difficult to say an average. We're sending questions to authors at least once a day.

Q29. ISI has been the RFC Editor since 1977. Why are they choosing not to bid?

A29. RFC EDITOR: It's a complicated answer. We've been doing this for ten years since Jon died. But, ISI is a research institute. ISI has 300 employees, of which over a hundred are Ph.Ds in computer science. Our mission is research. The Internet was once the subject of research. We were paid to do that.

But the government no longer funds Internet research, so we're moving on to other things; we don't have the right infrastructure. The 11th floor here is the networking division of ISI, and is where the RFC Editor lives. But, there's no institutional interest in continuing.

I guess the other comment is that we are very aware that transition will happen some day. And you guys would have to work out how to make it work.

Q30. What's the most time-consuming part of the production center work? How would you allocate the time?

A30. RFC EDITOR: The most time-consuming part is the initial edit stage, so the first time we're reading the document entirely, going through it, making the edits, interacting with authors, and getting it ready for publication.

Q30a. And, the question is looking for some percentages, one might spend in one's day. Having said that, would you think that edit state for example, you spend 75 percent of your time in editing work and the balance of your time doing the RFC-EDITOR, AUTH48, and other liaison kind of work?

A30a. RFC EDITOR: About 25 percent on meetings, liaison, is probably a reasonable estimate.

Q30b. Is that across the staff?

A30b. RFC EDITOR: Yes. It includes going to IETF meetings, performing the liaison role, working with IANA, and answering the other questions.

Q31. What is the most challenging part of the production center work and why?

A31. RFC EDITOR: The hardest part is the judgment necessary to decide what to fix. How far to go in being professional editors with the constant pressure of work. We have to compromise.

Q32. So ISI has made a lot of improvements over the years, what additional improvements would you consider still critical for a more efficient process?

A32. RFC EDITOR: One of the tasks that we talked to the IAD about but has not yet reached the top of the priority list is a portal to keep track of author approvals during AUTH48. It would be useful. The clustering, however, was really important to do. The AUTH48 pages have been overtaken by other programming tasks, such as the requirements defined in draft-iab-streams-headers-boilerplates-08.txt.

Also, there is the objective of coordinating IANA's, the Secretariat's, and our database together using web services.

And we also don't know to what extent the restructuring itself will introduce new communication problems which will need programming to help.

Q33. What unique skills are required for this job and why?

A33. RFC EDITOR: Someone who is able to easily roll with the punches, and not engage in combative language with the authors. We are looking for someone who has mastered the English language, but not so much so that every detail has to be correct. Also, somebody with diplomatic skills, and who is a fast learner. It's also important that the editors be self motivated and that they are able to work independently.

Q33a. IAD: I know in the four plus years that I've been here working with you, I know we've had a number of times that we've taken somebody from scratch and trained them to be technical editor, gone from copy editor to editor stage, what's the full time person, what's the learning curve, how long does that take?

A33a. RFC EDITOR: The initial training takes three to four months. However, training is a continuous process.

Q34. Given the production center and publisher functions may not be provided by a single vendor, what type and how much interaction would you estimate would be required between the two? Likewise, what type and how much interaction would be required with the RFC Editor and Independent submissions editor?

A34. IAD: Daily interaction between the Production Center and Publisher, as the Production Center completes documents on a daily basis and forwards them to the Publisher for posting online and archiving. Much of that could probably be automated.

There's likely to be little interaction between the RFC Series Editor and Independent Submissions Editor on documents. There will be regular conference calls among the stream managers and the RFC Series Editor, as well as scheduled reviews of the process by the RFC Series Editor, to include the independent submissions process.

Q35. Given that a lot of tools used by authors are hosted on the tools web site which is hosted by Henrik, is any time spent working with Henrik to improve -- my expectation is that, you're currently working with Bill Fenner and Marhsall Rose to improve the xml2rfc tool, for example, from time to time?

A35. RFC EDITOR: Right.

Q35a. And other tool managers, yes?

A35a. RFC EDITOR: Yes. Since we use xml2rfc as such an integral part of the process, I send a lot more feedback on it than about the Tools pages, but I definitely interacted with Henrik, for example, regarding the ABNF parser and extractor that takes the ABNF out of a document.

Q36. Can you explain the burstiness of the submission of documents?

A36. IAD: This was described earlier and also that you don't hire temps in order to cover this.

RFC EDITOR: See Q1. Burstiness of work and Slide 20.

Q37. What does a typical workday look like? Can you walk us through the various tasks?

A37. RFC EDITOR: We've walked through the various tasks of editing and publishing RFCs (see Q3 and the slides on "How an I-D Becomes an RFC"). That process and those tasks are performed on multiple documents in various states that are being worked on concurrently, and there are many emails to be monitored and replied to.

Q37a. A question about the email portion of that. Is that tracked in any email, you know, when you send an email to an author to clarify something and algorithm that exchange back and forth, you know, hopefully over six weeks but maybe six months, how is that tracked? Are they sending it to you personally?

A37a. RFC EDITOR: We don't have a ticketing system. We have an RFC mailbox. RFC Editor is set up as user. If we send individual mails, we CC the RFC Editor.

Q37b. How does that work if you are trying to go back or there's a question and you haven't gotten a response from an author for six weeks because they're on vacation, finally they get back to you and it's regarding a specific document, how do you track that? Or what if you're out on vacation and Sandy you have to fill in? It sounds like there's no automated place where you go back and see the thread.

A37b. RFC EDITOR: It's not automated. It's fairly easy for us to use Mac mail to do a search for our initials or the RFC number, and it will bring up all related email. We can see what happened most recently or check the email history to see what went on with a given document.

Q37c. Do you have any reports for example, that would tell you that, you know, certain time has gone by and nothing has happened to a document, and that it, demand some attention?

A37c. RFC EDITOR: It's the weekly report that has time and state on it. For example, we would look at it and say, why has this document been in AUTH state for 5 weeks?

This weekly report also shows clusters and MISSREFs.

Q38. What does a typical document submission process look like?

A38. RFC EDITOR: We have covered that and walked through the various steps.

See the slides on "How an I-D Becomes an RFC."

Q39. The statement of work requires that at least one member of the production center needs to be at each IETF meeting, how would the IAOC prefer bidders to estimate travel costs for this many people you actually need to send?

A39. IAD: Submit a proposed budget with travel as a budget element and we'll discuss that among other expenses submitted in the budget.

Q40. Is a ramp up period expected?

A40. IAD: Yes. It may take a few months to reach a steady state of productivity of between 25 - 30 documents produced each month.

Question is, what's a reasonable period of time? We ought to have this thing under control producing 25 - 30 documents to standards within 4 and 6 months.

Q41. Regarding the publisher function, what has that been decided? The statement of work says, it will be by this date, or such and such will happen. I haven't seen either.

A41. IAD: We're in negotiations with AMS, the contractor providing IETF Secretariat services for the function. That's a decision that was made by the IAOC, after all the input, including the RFI responses. If negotiations fail then the IAOC will issue an RFP. There will be an RFC Publisher operational for the January 1, 2010 commencement date.

- Q42. How will those (RFC Production Center) tests be graded, given that the style manual actually currently, I think correctly, gives ISI a fair amount of latitude on things?
- A42. IAD: We expect that one would follow the style manual as one would do if one had the contract. And that we will have an experienced editor who has RFC Editor editing experience to review them. Each bidder will be editing the same documents for an apples-to-apples comparison of conformance to the Style Manual, the RFC Series and the judgment exercised.
- Q43. Future development of the rfc-editor.org web site may include back-end programming and web design. Will this development be paid for from the RSE budget, from the Publisher budget, or some other source?
- A43. IAD: Major enhancements of the RFC-Editor.org website will be paid for from the IASA budget ,and will either be performed by the RFC Publisher or an outside contractor.