

2014 ICANN-IETF MoU Supplemental Agreement

Introduction

This document is between the IETF Administrative Oversight Committee (IAOC) and the Internet Corporation for Assigned Names and Numbers (ICANN) to supplement the Memorandum of Understanding between the IETF and ICANN concerning the technical work of the Internet Assigned Numbers Authority (IANA) service as performed by ICANN dated March 1, 2000 (<http://www.icann.org/en/general/ietf-icann-mou-01mar00.htm>).

This supplemental agreement between ICANN and the IAOC, forms part of the missing criteria and procedures referred to in section 4.1 of the MoU and describes the commitments, services, and tasks ICANN undertakes to fulfill the IANA services on behalf of the IETF, as well as the commitments, services, and tasks members of the IETF community will provide to ICANN at the direction of the IESG and/or IAB.

This agreement describes a base level of commitment on behalf of both parties. This document has evolved over time as new tasks were identified and existing tasks completed. Annual review will continue to update new and ongoing tasks and if/when service time expectations need to be revised. This is an amendment of the supplemental agreement that was implemented in January 2007. Specific details of this Service Level Agreement (SLA) may be modified (or clarified) at any time by mutual agreement.

Services

ICANN in performing the IANA services will:

1. Maintain a publicly accessible, web-based “Resource Registry Matrix” (“Matrix”) document.

The Matrix describes:

- a. The name of each registry;
- b. Registration requirements for parameters in that registry;
- c. The normative RFC defining the requirement for the registry if applicable;
- d. Expert’s name if applicable

The Matrix will:

- a. Be kept current;
- b. Use hyperlinks to connect the Matrix to the registries it describes;
- c. Use nesting as appropriate to indicate sub-registries

As more registries are converted to XML as the source, ICANN in performing the IANA services will continue to modify the format of the Matrix. If there are any significant changes to the format of the Matrix, the IETF Protocol Registries Oversight Committee (IPROC) will be consulted and any major changes will be mutually agreed on.

2. Provide a tool, on a queue-by-queue basis, for Public and IESG transparency into status of individual requests and continue to provide the public view of the status of all the approved Internet Drafts and their state in the processing queue (www.iana.org/draft-status/draft-queue-status-all.html). This transparency includes the ability to:
 - a. Find/verify the existence of a request;
 - b. View the actual status of request

Note that the Public and IESG/Requester views are different. The IESG view includes more detail that is not appropriate for public visibility.

3. Continue, in confidence to the IPROC, to document all newly discovered single points of failure/expertise (in a separate document to the monthly report) and detail efforts undertaken to address and/or ameliorate them.
4. Notify the resource requester **WITHIN THREE (3) BUSINESS DAYS** of learning when there is an expectation that action on the request will exceed established service levels with an explanation for the delay and, when possible, a forecast as to when action will be completed on the request.
5. Provide Fast Track Expedited Processing as an exception to the first in, first out policy at the request of the IESG.
6. Early allocation procedures have been updated to include more detailed instructions on how to handle temporary assignments. ICANN in performing the IANA services, will perform a review of the registries where temporary assignments are present and include proper notation in those registries. For those temporary assignments that have expired or are near expiration, the registrant will be contacted and the IESG will be informed. The review of the registries will be completed within six (6) months of implementation of this agreement. ICANN in performing the IANA services, will report monthly to the IESG on any temporary assignments that are scheduled to expire. Monthly reports on upcoming expired assignments will begin nine (9) months of implementation of this agreement.

Service Levels

Due to the nature of resource request reviews, ICANN in performing the IANA services, and the IETF community, are jointly responsible for cooperatively managing the resource request process. ICANN in performing the IANA services has control over the services it

performs directly, e.g., receiving requests, making sure they are syntactically and semantically sensible, forwarding the requests to Designated Experts where appropriate, creating and modifying the registries, etc. The IETF community has direct or indirect control over services performed by third parties, including IESG Designated Experts, the IESG, the IAB, the RFC Editor, and the requester. As such, the processing of requests has a “total processing time” calendar days goal established for each service and an “IANA processing time” calendar days goal to reflect time expended directly by ICANN in performing the IANA services.

1. When registries using Designated Experts are created, it is preferable that the IESG assign Designated Experts for resource registries at time of document approval. If the expert for the registry is not known at the time of document approval, a management item submitted by ICANN in performing the IANA services can request the IESG to designate an expert after the registry has been created. Prior to the appointment of a Designated Expert, the only registrations that will be included in that registry are the initial ones declared in the RFC. After approval of a Designated Expert, the IETF Secretariat will send a notification to ICANN to perform the IANA services.
2. ICANN in performing the IANA services will meet or exceed goals for service expectations/commitments for 90% of all work requests as defined in “Appendix A – Service Time Commitments”.
3. “Third party processing time”, that is, the total processing time minus the “IANA processing time”, which exceeds the goals in Appendix A (unless otherwise stated elsewhere herein) will trigger the appropriate escalation procedure described in the section entitled “Escalation”.
4. Due dates will be provided in assignments for third party actions, such as Designated Experts, based upon processing times specified for such action herein.
5. As such, the “total processing time” of a request can be further broken down into an “IANA processing time”, “Requester processing time”, and “Other processing time”. When measuring the time taken to process requests, the “overall processing time” refers to the total amount of time (from whatever source) to complete the request. The “IANA processing time” refers to that portion of the time that is directly attributable to IANA activity, etc. This SLA includes target service times for the IANA portion of servicing requests. Target times for some (but not all) of the other components are also defined here.

Escalation

Escalation processes have been established to handle the cases where timely responses are not forthcoming. There are separate processes for escalation with the Designated Experts, the IESG, the Requester and ICANN. These have been mutually agreed upon

and have been documented (see Appendix B). Changes to the procedures can be made at any time after agreed upon by the IPROC.

Documentation

ICANN in performing the IANA services will:

Keep documentation up-to-date for the services performed for the IETF. The processes and procedures to be documented include:

- a. Creation of new public registries as called for in IESG approved documents;
- b. Maintenance of public registries including updating registries as called for in IESG approved documents as well as updating registries via appropriate requests submitted directly to ICANN to perform the IANA services (i.e., for registries not requiring action as part of a document approval process);
- c. Review (for IANA Consideration actions) all documents that appear on IESG telechats (not all of which undergo a formal IETF Last Call).
- d. Interactions with document authors (and the IESG) when ensuring the IANA Considerations are sufficiently clear and unambiguous so that the actions can be completed (done prior to the document approval by the IESG);
- e. Coordination with the RFC Editor in the final steps of document publication;
- f. Maintenance of a publicly accessible list of the Designated Experts associated with those registries that make use of a Designated Expert, as well as a non-publicly accessible list of the contact information for those experts;
- g. Provide regular updates, not less than once per business day (unless no changes have been made), of a publicly accessible web page that provides a listing of the state of all approved Internet Draft documents being processed by ICANN in performing the IANA services.

Reports

ICANN in performing the IANA services will:

1. Track Resource allocation statistics as described in item 2 (Reports) below and publically report on a monthly basis. A notification will be provided to the IPROC when utilization rates for a specific registry show danger of exhaustion or when a single point of failure is identified and corrected.
2. Provide publicly accessible, clear, and accurate monthly statistics showing work that has been done and the work items that are currently queued. These statistics

should be drawn over all IETF-related requests broken down into meaningful categories, i.e.:

- a. IESG approved documents;
- b. Reference Updates
- c. Last Calls
- d. Evaluations
- e. New MIME type requests;
- f. Modifications to and/or deletions of MIME type requests;
- g. New Port number requests;
- h. Modifications to and/or deletions of Port number requests;
- i. New Private Enterprise Number (PEN) requests;
- j. Modifications to and/or deletions of PEN requests;
- k. New TRIP ITAD Numbers
- l. Miscellaneous Protocol Parameter requests (when no more than 5 per month are received, they are grouped together here)

For those requests relating to other IETF-created registries for which the request rate is more than five per month, ICANN in performing the IANA services will track the rate for which requests are coming in and consult with the IPROC regarding the need to track separately.

For each of these categories information should be collected for:

- a. Number of requests in the queue at the beginning of the reporting period
- b. Number of new requests received during the reporting period
- c. Number of requests completed during the reporting period
- d. Number of requests in the queue at the end of the reporting period
- e. Histogram showing the ages of requests still in the queue at end of reporting period
- f. Histogram for cumulative IETF requests for created/closed/resolved at the end of the reporting period and the year to date

For completed requests, information should be reported for:

- a. Mean service times (i.e., “total”);
- b. Mean service times, showing individual contribution from “IANA”, “Requester”, and “Other”;
- c. Standard deviation from the average service times;
- d. Minimum service time;
- e. Median service time;
- f. Cumulative statistics reflecting outliers, i.e., the totals of all completed requests within their respected categories, including outliers;
- g. Maximum service time;
- h. Histogram of cumulative statistics reflecting outliers (as e. above), data by proportion.

- (1) Number completed within 0-7 days,
- (2) Number completed within 8-14 days,
- (3) Number completed within 15-30 days,
- (4) Number completed in more than 30 days

These service times should be collected and published for “total”, “IANA” and “third party” times.

The exact statistics in this document continue to be reviewed and may change over time based upon experience. Such changes may be made by mutual agreement.

The optimal form for displaying monthly statistics is a work in progress and will likely change over time.

3. ICANN shall engage a third-party reviewer to conduct a review and evaluation of ICANN's implementation of the relevant IETF RFCs and related policies in performing the protocol parameter registry operation pursuant to this Agreement. The third-party reviewer will be selected by mutual agreement. ICANN shall be responsible for any costs that might be associated with the review. The third-party reviewer will generate a written report (Report), which shall be provided to the IPROC within 90 days of the end of the Agreement period, or as soon thereafter as practical. If the third-party Report is not completed within 90 days of the end of the Agreement period, ICANN shall provide a written rationale for the delay and a timeline as to when the report will be completed. Subject to agreement with the IPROC and the third-party reviewer, the final report or a summary of the final report, will be posted on ICANN's website. Within 150 days of the end of the Agreement period, ICANN shall provide a written response to the IPROC, including any explanation of deficiencies and/or actions and remediation plans in response to the findings of the report.

Collaboration

1. An effort continues to integrate the tools used by support services for the IETF so that all relevant information can be found within the I-D tracker. ICANN in performing the IANA service, the RFC-Editor and the Secretariat each have documented the requirements for what integration is needed in [RFC 6359](#). Future deliverables will be determined following discussions with the IPROC.
2. ICANN, in performing the IANA services, has significant experience on issues that have arisen in the registration process, the clarity of IANA Considerations sections, and other matters that relate to specific registries. As a result, input from ICANN personnel performing the IANA services is often desirable, as the

IETF publishes new RFCs; in many specialized topics, such as requirements for IETF tools from a registry process perspective, such participation can be essential.

While IETF policy and registry operation are completely separated, the ICANN personnel, performing the IANA services, may participate as document authors, proponents, contributors, reviewers, and so on.

In this participation, regular IETF process is followed, as with all other work that leads to a publication in the IETF stream. As defined in [RFC2026], IETF decisions are made through a consensus process. As long as the decision is made according to this process with wide input from the community and not just from ICANN in performing the IANA services, due process and fairness can be assured.

3. A teleconference bridge will be provided to facilitate teleconferences for the IPROC. The date, time, and duration of these calls will be mutually agreed on and at a minimum a status update of all outstanding issues raised at the previous month's teleconference will be provided.
4. The Parties agree to review the terms of this document in one year to determine whether any modifications may be required. Prior to this review, this document will be interpreted flexibly.

IANA Services Action Summary Table

IANA Services Action Summary			
	Action	Section/Reference	Delivery Date After Effective Date
1	Single points of failure documentation to the IPROC	Services/3	Monthly form as needed
2	Review of registries for early allocation registrations	Services/6	Within six (6) months
3	Provide monthly reports to IESG on upcoming expirations of early allocations	Services/6	Monthly within nine (9) months
4	Provide publicly accessible, clear and accurate monthly statistics	Reports/2	Monthly
5	Written report on ICANN's implementation of the relevant IETF RFCs and related policies in performing the protocol parameter registry operation	Reports/3	90 days of the end of the Agreement period
6	Written response to the IPROC, including any explanation of deficiencies and/or actions and remediation plans in response to the findings of the report	Reports/3	Within 150 days of the end of the Agreement period
7	Review terms of agreement	Collaboration/5	In one (1) year

Effective Date

27. This supplemental agreement is effective January 1, 2014.

Agreed to on 03/07/2014 by
(Month) (Day) (Year)

On behalf of ICANN:

On behalf of IAOC:



Signature

Elise Gerich

Name

Vice President, IANA

Title

ICANN

Organization



Signature

Ray Pelletier

Name

IETF Administrative Director

Title

IAOC

Organization

Appendix A – Service Time Commitments

Resource	Proc Time	Clock starts at	Clock stops at
Documents (including IETF and RFC Editor submissions)	14	Receipt of official IESG approval of the document or receipt of official notice of intent to publish from the RFC-Editor.	Sending an “IANA Actions Complete” message to the RFC Editor
Last Call Reviews	Last Call Duration	Receipt of official notice of IETF Last Call Announcement	Receipt by IESG of comments regarding document actions
Evaluation Reviews	Evaluation Duration	Receipt of official notice of Evaluation Ballot	Receipt by IESG of comments regarding document actions
Reference Updates (for documents with completed IANA Actions)	7	Receipt of RFC number for the RFC-Editor	Completion of the reference updates in protocol registries
Protocol parameter requests requiring IESG Designated expert and/or IETF mailing list review	14	Receipt of initial request	Notification of resource assignment
Protocol parameter requests that do not require technical review	7	Receipt of initial request	Notification of resource assignment
All other requests	14	Receipt of initial request	Notification of resource assignment

Additional IANA Service Processing Time and Third Party Service Time Requirements:

A. The Resource Registry Matrix will be updated with approved IESG Designated Experts within one (1) week of notification of the appointment.

B. The processing time goals for third parties will be in calendar days as follows:

1. Designated Experts – fourteen (14) days
2. Requester – thirty (30) days
3. IESG – fourteen (14) days
4. Other – seven (7) days

Notes:

- In prior years, this Service Level Agreement referred to a group called the “IETF-IANA Working Group”. This led to some confusion with official IETF Working Groups (<http://www.ietf.org/wg/>). Through mutual agreement the group’s name was changed to the IETF Protocol Registries Oversight Committee (IPROC).

- At implementation there will be a commitment to continuous process improvement leading to the reduction of outliers as reflected on histograms, and of processing times less than or equal to the values in the column entitled “Processing Time Now”.
- All processing times (“Proc Time”) are given in “net” IANA days, in terms of “calendar days”.
- The IPROC will be notified in advance if it is anticipated that any of these service time commitments will not be met. In such a case, documentation will be provided on the cause(s) of being unable to meet the commitment(s) and steps taken to address those causes.
- Changes to the service time commitments will be agreed on between IPROC members.

Appendix B – Escalation Procedures

For requests that are for registries that are created and maintained by RFCs created through the IETF consensus process, the following escalation procedures apply:

Designated Experts Escalation:

ICANN in performing the IANA services will:

1. Forward the request to the primary Designated Expert within seven (7) calendar days after receiving a correct and complete request.
2. Wait for a response from the Designated Expert for fourteen (14) calendar days. If a response is not received the request will be re-forwarded to the primary Designated Expert and forward the request to the secondary Designated Expert(s) (if applicable) every two (2) business days if no response is received thereafter for a period of thirty (30) days.
3. If a response is not received within thirty (30) calendar days from the designated expert, the IESG will be notified of the Designated Expert failure and request resolution of the problem (e.g., by replacing the Designated Expert per RFC 5226 and subsequent revisions).

IESG Escalation:

ICANN in performing the IANA services will:

1. Upon issuing a request to the IESG (and document shepherds when appropriate, will wait for a response from the IESG for fourteen (14) calendar days. If no response is received, the request will be re-forwarded to the IESG at least once per business week thereafter until the thirtieth (30th) day.
2. If a response is not received within thirty (30) calendar days, the IPROC will be notified of the lack of an IESG response to a request in a timely fashion and will request instruction as to what to do with the request.
3. Wait for a response from the IPROC for fourteen (14) calendar days. The request will be re-forwarded to the IPROC at least once per week until the thirtieth (30th) day.
4. If a response from the IPROC is not received within thirty (30) calendar days, the IAB will be notified of the lack of a response from the IESG and/or the IPROC. The IAB is tasked with working with the IESG and other relevant parties to resolve the issue. In order to preserve the normal appeals chain (RFC5226), the IAB is not expected to directly resolve the request itself.

Requester Escalation:

ICANN in performing the IANA services will:

Wait for a response from the requestor. If not received will re-forward the request regularly (e.g., once per week). If no response is received within 30 days, a notification of the administrative close of the request (without prejudice) will be sent to the requestor and the ticket will be closed.

Change control and approval of these procedures is with the IPROC.