Consultation on the Source of Policies & User Instructions for Internet Number Resource Requests

June 2013
Consultation Objective
The Internet Assigned Numbers Authority (IANA) functions contract (SA1301-12-CN-0035) between ICANN and the United States Department of Commerce, National Telecommunications Information Administration (NTIA) to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority calls for a public consultation from all interested and affected parties to help satisfy the following objectives:

C.2.6 Transparency and Accountability – [No later than 1 October 2013], the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop user instructions including technical requirements for each corresponding IANA function and post via a website.

C.2.7 Responsibility and Respect for Stakeholders – [No later than 1 October 2013], the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop for each of the IANA functions a process for documenting the source of the policies and procedures and how it will apply the relevant policies and procedures for the corresponding IANA function and post via a website.

The interested and affected parties are identified in C.1.3 as:

...the multi-stakeholder, private sector led, bottom-up policy development model for the domain name system (DNS) that the Internet Corporation for Assigned Names and Numbers (ICANN) represents; the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB); Regional Internet Registries (RIRs); top-level domain (TLD) operators/managers (e.g., country codes and generic); governments; and the Internet user community.

The IANA functions are identified in C.2.9 as:

(1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with the Internet DNS root zone management; (3) the allocation of Internet numbering resources; and (4) other services related to the management of the ARPA and INT top-level domains (TLDs).

This consultation relates to the user instructions for the allocation of Internet numbering resources.

This Consultation
This consultation presents the source of policies and a draft set of user instructions for the Internet Number Resources policies that ICANN implements.

Source of Policies

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Allocations to RIRs | ICANN Address Supporting Organization (ASO) MoU | Active | http://archive.icann.org/en/aso/aso-mou-29oct04.htm
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Technical protocol parameter usage | Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority | Active | http://www.rfc-editor.org/info/rfc2860

The existence of a structure for the allocation of IP numbers pre-dates the establishment of ICANN by many years and the description of the numbers registry system is defined in a series of RFCs. In addition, Internet numbering resources are allocated in accordance with the global policies developed in the process described in Attachment A to the 2004 ICANN Address Supporting Organization (ASO) MoU. Those policies are documented on ICANN’s Global Addressing Policies web page, which can be found at: http://www.icann.org/en/resources/policy/global-addressing

Assignments of specialized address blocks (such as multicast or anycast blocks) and experimental assignments are made in line with the requirements set out in section 4 of RFC 2860 (Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority).

**Implementing the Policies**

The Regional Internet Registries (RIRs) must meet the following criteria in order to qualify for Internet Number allocations as per the global addressing policies.

**User Instructions**

**IPv4 Allocation**
- When an RIR has less than half a /8 in its inventory it should notify ICANN to begin allocations to all the RIRs from the Recovered IPv4 Pool. This is a one-time event, as allocations are made on a schedule and not in response to specific requests from each RIR; only one RIR needs to make the request for ICANN to begin allocation to all RIRs. Notification that an RIR has less than half of a /8 in its inventory should be sent to ipv4-request@icann.org.

- The formula for distributing addresses from the recovered pool can be found at: http://www.icann.org/en/resources/policy/global-addressing/allocation-ipv4-post-exhaustion

**IPv6 Allocation**
- RIRs requesting additional IPv6 address space because they have less than 50% of a /12 need to provide ICANN with a summary of how much IPv6 address space the RIR has allocated and/or reserved and how much is fragmented. The request and the
summary documenting the distribution of the allocated space should be submitted as a spreadsheet to ipv6-request@icann.org.

- An RIR requesting additional IPv6 address space because it does not have enough space for the next nine months must provide ICANN with the amount of address space allocated by the RIR in each of the last six months. The request and the summary should be submitted as a spreadsheet to ipv6-request@icann.org.

- The formula for determining eligibility for additional IPv6 allocations can be found at: http://www.icann.org/en/resources/policy/global-addressing/allocation-ipv6-rirs

**AS Number Allocation**

- An RIR requesting additional AS Numbers because it has assigned/allocated over 80% of its last block of AS Numbers needs to provide a summary of assignments/allocations it has made. If the RIR is requesting more than one block of AS Numbers, it needs to provide a usage summary for the six months prior to the request. Requests for additional AS Numbers should be submitted as a spreadsheet to asn-request@icann.org.

- An RIR requesting additional AS Numbers because the number of free AS Numbers it holds is less than two months needed, must provide a usage summary for the six months prior to the request. Requests for additional AS Numbers should be submitted to iana@iana.org.


**Change in Named Registrant**

- Requests to change the registrant associated with an INR allocation should be sent to iana@iana.org by the current registrant. The current and new registrant will both be contacted to confirm or reject the change request before ICANN will update the registration.

**Consultation Questions**

ICANN would like input on whether the correct source documents have been identified above. We also would like to know whether the interested and affected parties find the user instructions useful and think they will provide assistance in preparing requests for additional resources. Comments are welcome on any aspect of the consultation, and specifically on the following questions:

1. Is it clear and easy to understand how to request additional Internet Number Resources?
2. Are the descriptions of the information required for resource requests clearly documented?
3. Do you have any other input on the draft user instructions?
4. In which formats would you like the user instructions published on ICANN’s IANA website?