

# DEPOSITORY

May 15, 2012

Mr. John O. Jeffrey, Esq.  
General Counsel and Secretary  
Internet Corporation for Assigned Names and Numbers  
4676 Admiralty Way, Suite 330  
Marina del Rey, California 90292-6601

Re. Depository, Inc.'s Requests to ICANN for Assistance

Dear Mr. Jeffrey:

Depository, Inc. (“Depository”) hereby respectfully renews its requests to the Internet Corporation for Assigned Names and Numbers (“ICANN”) for assistance on the four issues set forth below concerning Internet Protocol (“IP”) Numbers. As the chronologies below will demonstrate, we have waited over one year for any written communications from ICANN in the form of requests for further documentation or determinations on any of these issues. Unfortunately, no response has been forthcoming.

We are aware, given the top level domain expansion and surrounding controversy, and the difficulties encountered with the renewal of ICANN’s contract with the Federal Government, that ICANN has been preoccupied with other matters. On October 4, 2011, Senator Rockefeller, Chairman of the U.S. Senate Commerce Committee, sent a detailed letter of inquiry to the U.S. Department of Commerce (“DoC”) concerning issues related to the IANA functions contract. We assume that the DoC, through its National Telecommunications and Information Administration (“NTIA”), may have passed much of that inquiry down to ICANN for a more detailed response. Further, we are all aware of the last minute cancellation, on March 10, 2012, of NTIA’s Request for Proposal (RFP SA1301-12-RP-IANA) in its entirety for the IANA functions contract, due at that time to expire on March 31, 2012. The Notice of Cancellation states that the RFP was cancelled because “no proposals (that) met the requirements,” including “a robust companywide conflict of interest policy,…” These events hopefully heighten ICANN’s attention to the other half of its mission and mandate – IP Numbers. There are serious and systemic problems in the distribution, control and lack of portability of IP Numbers and the four issues raised by Depository are symptomatic of those problems.

From the beginning of Ira Magaziner's discussions in 1995 concerning the future organization of the Internet, long before there was an ICANN, the Federal Government promoted the concept of a flexible, "contract-based" Internet, rather than a heavy-handed, government "regulation-based" Internet. At the time, the concept was somewhat controversial, given the consensus-based nature of the Internet, and the disdain of the technology community for the unnecessary legalities of contracts. Times have progressively changed. We suggest and, from the cancellation of the RFP by the NTIA, the DoC seems to agree, that it is time for ICANN to comply with its existing federal contract and to require contracts with its distributors of IP numbers in order to bring the Internet to the next level of growth and stability.

ICANN's definitive contract (DOCSA130106CN0048) with the DoC clearly provides that ICANN "commits to continue providing IANA Internet numbers allocation functions in accordance with the requirements of section C.2.2.1.3 of the Solicitation." In turn, section C.2.2.1.3 of Solicitation SA-13-01-6R-P0-016 states that this "function involves overall responsibility for allocated and unallocated IPv4 and IPv6 address space and Autonomous System Number space." Additionally, under the same contractual provision, ICANN is to act as the Internet Registry for IPv4 number blocks allocated before the advent of the Regional Internet Registry system, specifically "the legacy class A" number blocks. Thus, unless the Federal Government intervenes in some capacity, ICANN has the responsibility and contractual obligation directly from the Federal Government to deal with issues concerning the distribution, control and the lack of portability of IP Numbers.

ICANN, to our knowledge, has no contract with *any* regional Internet registry and, as a Federal Government contractor, cannot delegate responsibility for these functions to other domestic and foreign organizations without complying with Federal Acquisition Regulation (the "FAR") and federally-approved subcontracts consistent with the FAR. The regional Internet number registries have absolutely no legal authority. (For an extended discussion of these issues, please see *The IPv4 Number Crisis: The Question of Property Rights in Legacy and Non-Legacy IPv4 Numbers*, by Ernesto M. Rubi, Esq., *AIPLA Quarterly Journal*, Vol. 39, No. 4, pp. 477-509 (Fall 2011). See, also, *Stewardship and the Management of Internet Protocol Addresses*, by Dr. Milton Mueller, Syracuse University School of Information Studies, the Internet Governance Project, March 2012.) Therefore, we turned to ICANN for help.

To refresh your memory and to pinpoint the four issues, we have presented the facts and each issue in two-page summaries, the complete versions of which are already before you in the initial submissions, accompanied with supporting documentation, and published on ICANN's website. The issues surround or involve the American Registry for Internet Numbers, Ltd. ("ARIN"), a Virginia, non-stock, voluntary membership, business league.

#### I. ARIN's Denial of Bulk Access to the IP Number WhoIs Database ARIN Maintains

Facts: November 30, 2010: Depository submitted a "Bulk WhoIs Data Request Form" to ARIN.  
December 13, 2010: ARIN, via e-mail, denied Depository's bulk access request.  
December 17, 2010: Depository requested reconsideration from ARIN.  
January 24, 2011: ARIN confirmed its denial of the bulk access request.

January 27, 2011: Depository submitted a written appeal to ICANN.  
March 2, 2011: ARIN submitted to ICANN its response to Depository's appeal.  
March 15, 2011: Depository submitted to ICANN its reply to ARIN's response.

Over one year later, to date, no communication has been forthcoming from ICANN.

Depository asked ICANN to direct ARIN to provide Depository with bulk access to the WhoIs database maintained by ARIN. ARIN readily admits that it does not own the database or any of the data in the database. Although ARIN has declined to enter into any contractual agreement with ICANN, the Federal Government contractor, ICANN, nonetheless has continued to distribute certain blocks of previously unallocated IP numbers to ARIN at no cost. ARIN then distributes those blocks at various prices of as much as \$18,000 per block per year and has amassed, as a non-profit 501(c) (6) tax-exempt voluntary business league, "reserves" of over \$32,000,000. Depository suggested that ICANN should deem ARIN's denial of bulk access to be anti-competitive and antithetical to the goals of ICANN and the entire Internet infrastructure community, in addition to being contrary to the interests of stability and security of the Internet.

To date, ICANN remains silent and has not given Depository the courtesy of a written response. For all of the reasons set forth in Depository's January 27, 2011 written appeal and reply letters, including the exhibits attached thereto, Depository renews its appeal to ICANN.

## II. ARIN's Duplicative Registry of Record

Facts: February 22, 2011: Depository notified ARIN of the change of registry of record.  
February 28, 2011: ARIN declined to change its WhoIs database to reflect registry change.  
March 7, 2011: Depository responded to ARIN, on behalf of registrant-blockholder, to cease.  
March 27, 2011: Depository submitted a written appeal to ICANN to require ARIN to comply.

Over one year later, to date, no communication has been forthcoming from ICANN.

Depository has an existing contract with the owner of a Legacy block of IPv4 numbers, block 149.81.0.0, consisting of 65,536 numbers, registered to the blockholder five years before the existence of ARIN. Depository's notice to ARIN clearly directed ARIN to revise its WhoIs database to reflect the fact that Depository was the blockholder's chosen registry of record and that ARIN should cease its volunteer services on behalf of the registrant. ARIN never responded. Depository appealed to ICANN, complete with all of the relevant documentation and made the following points clear: (1) ARIN has no contract or other relationship with the registrant-blockholder; (2) Depository does have such a contract, and has been chosen by the registrant to perform the registration services; and (3) ARIN is in no position to require Depository's customer to utilize the volunteer registration services of ARIN.

ARIN, itself, has repeatedly acknowledged that there is no written contract between ARIN and Legacy blockholders. Further, in sworn Declarations in federal district court, the President and CEO of ARIN has made it perfectly clear that ARIN has no control over Legacy number blocks:

“Like other ‘legacy’ address holder’s issued resources *before* ARIN began, ARIN has never had an agreement with [the Legacy IPv4 Number holder] that would give [ARIN] authority over those specific resources... In my first Declaration, I carefully described why some resources in the Netblock were *never within ARIN’s control* because they were issued before ARIN began its corporate existence.” (Emphasis added.)

(See Declaration and Supplemental Declaration of Raymond Plzak in Support of Motion to Clarify/Modify, executed on June 7, 2006, and October 2, 2006, respectively, in the matter of Kremen v. Cohen, Civ. Case No. C-98-20718 JW (USDC ND Cal).)

Before ARIN was created by Network Solutions, Inc., IP numbers were given out by Federal Government contractors. The application was a simple template, without any of the formalities or requirements of a contract. Once ARIN began issuing IP numbers in 1998, ARIN required recipients of allocations to enter into an annual service contract in order to receive an IP number block. The initial versions of the contract form, entitled Registration Service Agreement (“RSA”), from the beginning of 1998 until approximately June 2003, did not contain the current “No Property” sentence. As late as RSA, version 4 (November 22, 2002), the Property sentence did not exist. Then, in mid-2003, to the best of our research, without notice, community debate or legal authority whatsoever (ARIN has never had a contract with ICANN or the DoC), ARIN simply imposed the following sentence:

9. No Property Rights. Applicant acknowledges and agrees that the numbering resources are not property (real, personal or intellectual) and that Applicant shall not acquire any property rights in or to any numbering resources by virtue of this Agreement or otherwise.

This sentence, in legal effect, was intended to stop the grants of these IP number blocks from ICANN/IANA, through ARIN as distributor, to the end-users. The end-user organizations now received only a right to use, and perhaps transfer, but ARIN took, and to this day retains, permanent control over the IP number blocks it distributes. ARIN, unlike all preceding organizations contractually authorized to perform number block distributions, does not allocate IP number blocks; it allocates only a *right to use*, and then only so long as the recipient pays annual service fees and agrees to terms and policies unilaterally dictated by ARIN. ARIN, with almost self-contradictory logic, however, characterizes its position as one of “stewardship.” While ARIN repeatedly declares that it is not the “owner” of the IP number blocks provided to it by ICANN/IANA, ARIN characterizes itself as “the sole administrative organization designated by the consensus of the Internet community to conserve, manage, and ensure the efficient utilization of these finite resources in its service area.” Translated: Through ARIN’s service contract lending model since mid-2003, ARIN currently controls, “stewards,” approximately 470,000,000 IPv4 numbers, or 10.9% of the entire IPv4 number population. Estimated value: (at current per number, market prices of \$12/number) \$ 5,640,000,000. By ARIN’s conscious design, and by ARIN’s own admission, ARIN is not performing the allocation function, as defined by all previous

allocation contractors. Following ARIN's logic, if ARIN does not own the number blocks and has not actually allocated the number blocks, then ICANN continues to have the authority to direct ARIN to release these blocks to end-users.

To date, ICANN has neither responded to Depository's request nor directed ARIN to cease its volunteer services to the Legacy registrant-blockholder. ARIN's actions intentionally interfere with Depository's contract with its customer, disregard the directions of the blockholder and create a duplicate, and potentially inaccurate, database. For all of the reasons set forth in Depository's March 27, 2011 written appeal, Depository renews its request to ICANN.

### III. ICANN's Non-Response Regarding IN-ADDR.ARPA Zone File Fragments

- Facts: February 15, 2011: Depository submitted letter to ICANN/IANA Number Manager requesting ICANN's acceptance of Depository's In-addr.arpa zone file fragment.
- March 3, 2011: Second request to ICANN/IANA Number Manager, Leo Vegoda.
- March 7, 2011: Response from ICANN/IANA, stating that "ICANN, through its IANA function, only performs delegations for the IPv4 '/8' level..." (i.e., Class 'A' blocks of 16,777,216 numbers given out before the existence of ARIN).
- March 9, 2011: Depository acknowledged ICANN's response and asked what entity aggregates In-addr.arpa zone file fragments for blocks of *less than* an entire, contiguous '/8' block. Specifically, Depository asked whether ICANN/IANA publishes or identifies which organization is responsible for aggregating In-addr.arpa zone file fragments for the sub-component portions of a '/8' distributed to multiple blockholders.
- March 29, 2011: Second request to ICANN/IANA Vice President, Elise Gerich.
- May 13, 2011: Response from Elise Gerich: "... [D]elegations in the IN-ADDR.ARPA are hierarchical. Once the delegation has been made, the designated manager [as listed in the IANA IPv4 Address Space registry...found...at: <http://www.iana.org/assignments/ipv4-address-space/ipv4-address-space.xml>] is responsible for making decisions about how to manage the DNS for the address space. Designated managers manage the DNS for their domains in line with their own business needs and there is no single mechanism for compiling DNS zones." Without referring to the regional Internet registries by name, or to any of the other '/8' blockholder-registrants (such as IBM, AT&T, etc.) for that matter, who "manage" their own /8, Ms. Gerich continues: "Designated managers often establish mechanisms for managing the DNS delegations relating to any address space assignments they make..." Ms. Gerich concludes with the specific identification of the person responsible for each designated manager, i.e., the e-mail address "recorded in the SOA (start of authority) RNAME,..."

- May 19, 2011: Depository requested a telephone conference for further clarification.
- June 13, 2011: ICANN/IANA Manager Leo Vegoda requested written questions before any teleconference.
- July 14, 2011: Depository reiterated that it seeks an answer to the question of how to determine the appropriate management organization for the In-addr.arpa zone file fragments for “/8s and smaller networks”.
- August 4, 2011: ICANN/IANA Manager Leo Vegoda responds via e-mail and a tautology: “... [T]he appropriate management organizations are the organizations managing the relevant address space. ... [T]he DNS SOA RNAME field was specified in section 3.3.13 of RFC 1035 to specify ‘the mailbox of the person responsible for [each] zone.’” “The responsibility for policy regarding reverse DNS lies with each organization managing a block of address space. Thus, ICANN does not have any instructions to provide you regarding your options and obligations when RIRs are the contact points for address blocks.”

Depository temporarily abandoned its inquiry, given the obfuscation, circular answers, delay and effort it would take to further this inquiry. This seven-month process demonstrates the lack of willingness on the part of ICANN/IANA to assist anyone who questions the monopolistic control of this top level domain (“TLD”) by the regional Internet registries and the actual aggregation of this TLD’s file fragments by ARIN. ARIN, in effect, is an unauthorized TLD registry operator, again without any contractual authority.

Beginning in February, 2011, the “DNS zone file maintenance function” for In-addr.arpa was to “transition” from ARIN to ICANN. Since the transition, it is not apparent that anything has actually changed. Little information is publicly available, but it appears that ARIN still provides the same volunteer, and controlling, services it formerly provided, and without any contractual relationship with the federal contractor, ICANN. From a technical perspective, ARIN still maintains the primary, “A” server. ICANN operates the “B” server and the other four regional Internet registries operate the only other four TLD servers. Where is the contractual authority from the Federal Government contractor to these name server operators? Where are the contracts between or among them? Currently, ARIN still pulls the zone file fragments for the In-addr.arpa TLD from the other four regional Internet registries, aggregates them into one file on a shadow master server and then ICANN receives that aggregated zone file from ARIN. ICANN then distributes this zone file to other In-addr.arpa operators (i.e., the regional Internet registries) for resolution. Thus, it is made to appear that ICANN is “maintaining” the TLD zone file, when in fact, ARIN continues its control.

There have been no ICANN/IANA policies communicated regarding the management of the In-addr.arpa TLD and direct inquiries on the matter are given confusing responses, referring to Internet Engineering Task Force Standards, which describe the technical functions of such, but offer no direct explanations. Although ICANN/IANA, as the Federal Government contractor, is fully vested with

authority over the control and procedures of the In-addr.arpa TLD and its zone file, ICANN has ceded actual operational authority and control to ARIN, outside the requirements of federal contract law. The procedures and authority matrix for submitting In-addr.arpa zone file fragments needs to be clarified, standardized and under contract to ICANN.

For all of the above reasons, Depository requests that ICANN direct its Manager of Numbers to publish clear guidelines and standardized procedures for the proper functioning of the In-addr.arpa TLD and its zone file. Alternatively, perhaps ICANN should put out a bid seeking proposals for the future operation of this top level domain, as with every other TLD.

#### IV. ICANN Accreditation for IP Number Registrars

Finally, on March 2, 2011, Depository submitted a proposed policy to ICANN's General Counsel and Secretary, John Jeffrey, Esq., concerning the accreditation of registrars for IP numbers. It was submitted to the General Counsel, as well as to the Vice President of Policy Development, David Olive, and ICANN's Ombudsman, Frank Fowlie, because of the straight-forward conflict of interest presented by the Address Supporting Organization's ("ASO") potential review of this proposal.

Normally, a proposed policy can be submitted either to (a) one of the five, current registry's "policy fora," (in our case, ARIN's) or (b) directly to the ASO's "Address Council." Over the last 14 years, only five two-page policies have ever successfully run this gauntlet and none of these policies has dealt with IP number registration services. In special circumstances, the ICANN Board, itself, can forward a request to develop a new policy to the ASO's Address Council. However, each of these three above-described avenues is eventually controlled by five, current registries through their appointments to the ASO Council.

It is commonly known that the ASO is not an "organization" as such within the ICANN structure, but rather "a set of functions to be fulfilled by the Number Resource Organization ("NRO"), which, in fact and in law, is not an actual incorporated entity, but rather a "joint activity" made up exclusively of the five current, regional IP number registries "to better interact with global Internet bodies...in a more coordinated fashion." Or, as Professor Mueller recently put it (above): "The ASO of ICANN is nothing more than the NRO, and the NRO is nothing more than a combination of the staff and CEOs of the RIRs." As more fully set forth in our March 2, 2011 letter, the NRO's Executive Council consists of one person selected by each of the five registries and the NRO's expenses are generally paid equally by the five registries, with ARIN's "contribution," for example, being \$46,345 (2010). Each of the five registries also financially supports the ASO and its Advisory Council; ARIN's "contribution", for example, was \$248,137 (2010). Finally, each of the five registries also pays ICANN a voluntary contribution, "based on fees collected and resources allocated." ARIN's contribution, for example, was \$191,180 (2010). Some of these payments, however, are made to the NRO and paid to ICANN out of the NRO's account in Amsterdam. Clearly, there is a financial and organizational unity of interests, between and among the five registries and their jointly funded and controlled "NRO," which cannot be denied.

Each of these five current registries has resisted, if not openly opposed, control and accreditation by ICANN. Depository's proposal recommends both. As we further stated in our January 27, 2011 letter to ICANN's President Beckstrom, for the first time in the entire 38-year history of IP number distribution, these five current entities performing the distribution of IP numbers have no contracts with anyone in the U.S. governmental chain of authority, including the current federal contractor, ICANN. ICANN gives the five entities these valuable IP number blocks for free and these five entities charge their "members" for them in varying, incredible amounts:

- ARIN: uses a table of charges with a range of \$1,250 per year for /21 and smaller up to \$18,000 per year for >/14.
- AfriNIC: uses a table of charges with a range of \$1,400 per year for /21 and smaller up to \$38,400 per year for /10 and larger.
- APNIC uses a formula based on total allocation size:  $Fee_{v4} = 1180 \times 1.3^{(\log_2(\text{Addresses})-8)}$  which yields AUD\$1,180 per year for a /24 or AUD \$78,519 per year for a /8 (since "Addresses" are cumulative allocations, allocation could be >/8).
- LacNIC: uses a table of charges with a range of \$1,000 per year for /21 and smaller up to \$40,000 per year for /11 and larger.
- RIPE: uses a table of charges that score an ISP based on allocation sizes and allocation dates. Range of annual charges is €1,300 + €50 for each assignment for "Extra Small" to €5,500 + €50 for each assignment for "Extra Large".

When one's inventory is free and no ICANN oversight or control exists, is it any surprise that these five, current entities have amassed enormous "reserves":

➤ ARIN:	\$	32,261,769.00
➤ AfriNIC:	\$	1,427,290.00
➤ APNIC:	\$	18,168,913.00
➤ LacNIC:	\$	2,978,856.00
➤ RIPE:	\$	25,484,696.00

Could there be a more obvious conflict of interest in the ASO voting on a proposed policy that would end this incredible cycle of funding and monopolistic power? It is interesting that, in a recent 100-page review of the ASO, "commissioned" by the NRO, the words (much less the concepts) "conflict of interest" and "competition" are nowhere to be found. (See ITEMs International Review, dated December 2011.) Depository's proposed policy presents a direct conflict because it challenges this closed system of regional IP number registries, which actually perform registration functions similar, if not identical, to DNS *registrars*. None of these five, current "registries" welcomes competition, either among themselves (thus, their regional, geographic monopolies, without number block portability, and no intra-registry transfer policy so as not to compete on price) or from new competitors such as Depository. How can the ARIN-NRO-ASO truly evaluate the merits of Depository's proposal which so directly and negatively affects their financial and managerial self-interests?



Thus, Depository asked ICANN's General Counsel's Office to submit our proposal to a more open forum, overseen by a neutral group of ICANN Board members or by the NTIA. The NTIA performed this identical role concerning the DNS registry-registrar debate years earlier and now there is global competition and lower cost.

Three months after our March 2, 2011 letter, on June 10, 2011, Depository received a call from Mr. Olive and Deputy General Counsel Amy Stathos. We were told that the General Counsel's Office was looking at our conflict of interest letter and the three other appeals concerning the issues set forth above. We were told that the General Counsel's Office was still trying to collect information and would maintain an "open dialogue" with us. On September 22, 2011, seven months after receipt of our letter, and, presumably, the collection of information and evaluation of the other issues, Deputy General Counsel Stathos agreed to a telephone conference, in which she simply stated that "there are always conflicts of interest and Depository should go through the usual channel of the ASO." So much for a "robust companywide conflict of interest policy" required by the NTIA.

Depository has never received a formal rejection from the General Counsel's Office on its request for the submission of its proposed policy to a neutral forum or, even as a matter of courtesy, any other written explanation on any of the other three appeals. Depository cannot "go through the usual channel of the ASO" and, dissatisfied with the result, appeal to an agency or a court, alleging that the system was totally conflicted. Thus, at this stage, there is no one else to whom to submit our proposal, except the Federal Government agency, the NTIA, which has recently extended ICANN's federal contract concerning its IANA function until September, 2012. Hopefully, the NTIA will take this set of circumstances, including the lack of any meaningful appeal procedures, into its evaluation criteria and its consideration of contract renewal with ICANN and its newly-issued Solicitation 1301-12-RP-0043 (April 16, 2012) for the IANA function. We are not asking that the NTIA *regulate* ICANN or the Internet. We are asking that ICANN perform, or be made to perform, the specific obligations under its contract with the NTIA.

So that Depository's renewed requests are clear, we respectfully request a written evaluation and determination on each of the four issues set forth:

- ARIN's Denial of Bulk Access to the WhoIs Database that ARIN Maintains;
- ARIN's Duplicative Registry of Record;
- ICANN's Non-Response Regarding IN-ADDR.ARPA Zone File Fragments; and
- ICANN Accreditation for IP Number Registrars.

Sincerely,



Philip L. Sbarbaro, Esq.

Senior Counsel

cc.

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