

**Subject:** Alternate path still lacking technical justification

**Date:** Friday, January 17, 2014 9:56:40 AM Pacific Standard Time

**From:** Kaliski, Burt

**To:** Akram Atallah, John L. Crain

**CC:** Kane, Pat

Dear Messrs. Atallah and Crain,

As the new year gets underway, new gTLDs continue to be approved for delegation – a cumulative total of 91 as of January 14, 2014 – and ICANN’s Name Collision Occurrence Management Framework continues to be developed, we continue to be concerned with the risks of the “alternate path” of SLD blocking that many applicants appear to be pursuing. With the cumulative total approaching 10% of the number of applied-for gTLDs, without a management framework in place, and without a technical foundation for the SLD blocking technique, name collision risks are rapidly becoming endemic.

On November 17, 2013, ICANN published the [SLD blocking lists for all “eligible proposed new gTLDs.”](#) adding a new “eligibility” requirement above and beyond the criteria set forth in the [October 7, 2013 plan document](#) that introduced the “alternate path.” ICANN’s announcement defined the requirement (or rather, the basis for ineligibility) as follows:

- The gTLDs that were considered ineligible were those for which the growth of the number of SLDs queried year over year significantly exceeded the average growth rate for all applied for gTLDs in at least two of the DITL years (2006-2012), and for which one of the years in which this was observed was the most recent year, 2012. The analysis of this data showed that for some strings, the variance of SLDs queried varied so significantly from year to year that the mechanism of blocking SLDs might not be an effective way of addressing the name collision issue.

Given that ICANN appears to have done some technical analysis on the applicability of the DITL data sets to “addressing the name collision issue” – stating that it “might not be” effective when query traffic has certain characteristics – we would like to ask again on what basis ICANN believes that the DITL data sets *might* be effective for any particular gTLDs at all. Recall that no analysis was presented by ICANN when the “alternate path” was introduced; the technique was not the product of an open technical effort, but was simply announced as is (and then modified to what it is now with the exclusion of the 25 gTLDs).

Analysis that we referenced in correspondence of [November 5, 2013](#) and [November 15, 2013](#) shows that a significant number of at-risk queries would remain even if SLD blocking is implemented, and that the technique is not effective as currently defined in addressing the name collision issue. The fundamental reason is that [DITL data sets are not statistically valid](#) for predicting how installed systems are using the Domain Name Systems and where collisions between internal and external name spaces might put installed systems at risk. We have not seen any response from ICANN on this evidence; the [FAQ document](#) simply repeats what ICANN had already concluded. Indeed, although ICANN acknowledged several concerns about the gTLD program in its [December 19, 2013 response](#) to the [November 21, 2013 joint letter by Jonathan Zuck et al.](#), it did not respond to the joint letter’s concerns about SLD blocking (see Section 4 of the letter).

We are hopeful that the Name Collision Occurrence Management Framework will provide technical grounding for any further use of DITL data sets. Nevertheless, in the meantime, we reiterate our concern with the false sense of security that the “alternate path” may be creating. With the 91 new gTLDs already approved, and many more likely to be added over the coming weeks, the Domain Name System (DNS) already has more additions to the root under this new program than it has had in the past 14 years. This unprecedented level of change poses a significant potential risk to the security and stability of parties who

rely on the DNS, and if there is a time for careful technical analysis, it is surely now. The framework itself can be an important part of this analysis, and academic forums such as the [Workshop and Prize on Root Causes and Mitigation of Name Collisions \(WPNC\)](#), which will be held March 8-10, 2014, will also contribute to a more confident foundation.

It is puzzling to us that ICANN has not responded to community concerns about the “alternate path” considering the implications, nor explained why it has not responded. The community that bears the risk deserves better and is entitled to full disclosure as to why ICANN considers the “alternate path” technically justified.

Sincerely,

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