

Staff Report of Public Comment Proceeding

Draft Report: New gTLD Program Safeguards to Mitigate DNS Abuse

Publication Date: 15 March 2016

Prepared By: ICANN staff

Public Comment Proceeding

Open Date: 15 March 2016

Close Date: 20 May 2016 (extended from 25 April 2016 by request from stakeholder groups)

Staff Report Due Date: 17 June 2016

Important Information Links

[Announcement](#)

[Public Comment Proceeding](#)

[View Comments Submitted](#)

Staff Contact: Brian Aitchison

Email: brian.aitchison@icann.org

Section I: General Overview and Next Steps

The primary purpose of the draft Report is to provide a research model and potential metrics to guide further analysis of New gTLD Program safeguards' effectiveness by the CCTRT. It was not intended to be a final, authoritative report on the effectiveness of safeguards in preventing DNS abuse. As described on page 1, paragraph 1 of the report:

“...this report is intended to aid the work of the review team on Competition, Consumer Choice, and Consumer Trust (CCT-RT). It will do so by:

- Providing an overview of the state of DNS abuse following the roll-out of the New Generic Top-Level Domain (gTLD) Program in January 2012
- Discussing options for measuring the effectiveness of the nine safeguards put in place to mitigate DNS abuse in new gTLDs
- Proposing a research model to help assess the effectiveness of the nine safeguards in mitigating DNS abuse in new gTLDs”

The summary of comments below considers constructive critiques and suggestions for measuring the effectiveness of safeguards examined in the Report, as well as indications of how effective safeguards have been and suggestions for expanding the scope of the Report to include safeguards in other areas. Given the Report's goal of providing the CCTRT with input on measures to assess the effectiveness of existing safeguards, the summaries are categorized as follows to emphasize that focus (as appropriate to the depth of comment received):

- General positions and themes
- Commenter positions on current safeguard effectiveness and suggestions for methods to measure effectiveness of existing safeguards (“On effectiveness of safeguards”)
- Other positions and issues

Next Steps

- At the time of writing this report, the CCTRT is in the process of defining the scope and methodology for their review of New gTLD Program safeguards.
- Many commenters provided their input on the effectiveness of the safeguards examined in the Report, as well as a number of suggestions on ways to measure the effectiveness of those safeguards. This input will be incorporated into an updated report to help inform the Review Team’s discussions on research design and methodology pertaining to their review of safeguard effectiveness.

Section II: Contributors

At the time this Report was prepared, a total of 9 community submissions had been posted to the forum. The contributors, both individuals and organizations/groups, are listed below in chronological order by posting date with initials noted. To the extent that quotations are used in the foregoing narrative (Section III), such citations will reference the contributor’s initials.

Organizations and Groups:

Name	Submitted by	Initials
Registry Stakeholder Group	Stephane Van Gelder	RySG
International Trademark Association	Lori Schulman	INTA
Intellectual Property Constituency	Greg Shatan	IPC
Business Constituency	Steve DelBianco	BC
Endurance International Group	Darcy Southwell	EIG
DotMusic	Constantine Roussos	DotM
Domain Mondo	John Poole	DM
Governmental Advisory Committee	Karine Perset	GAC
Blacknight Registrar	Michele Neylon	BK

Section III: Summary of Comments

General Disclaimer: This section intends to summarize broadly and comprehensively the comments submitted to this public comment proceeding but does not address every specific position stated by each contributor. The preparer recommends that readers interested in specific aspects of any of the summarized comments, or the full context of others, refer directly to the specific contributions at the link referenced above ([view comments submitted](#)).

Registry Stakeholder Group (RySG)

The RySG comment provided their input on issues discussed in the Report relating to the activities that constitute DNS abuse, as well as on a selection of safeguards addressed in the Report. Some of the safeguard-specific discussion made recommendations to modify current safeguards or to add additional safeguards. For example, regarding the “vet registry operator” safeguard, RySG suggested the “possibility of an additional background screening of the registry operator after a specific period of time after delegation of the TLD might be an additional way to measure the effectiveness of the safeguard on an ongoing basis” (p. 2). The comments relevant to the purposes of the Report are as follows:

- On effectiveness of safeguards:
 - DNSSEC: suggestion to measure time in which DNSSEC compliance issues are

resolved

- High Security Zone Verification Program: suggestion that “framework could be tested on the TLDs with maximum proportion of abuse identified in a specific period to implement the High Security Zone verification process identified for the banking and pharmaceutical TLDs” (p. 3).
- Other positions and issues:
 - Regarding “name spinning” as an aspect of “registration abuse” as discussed on p. 6 of the Report, RySG notes “the fact that Name Spinning could lead to suggestions which are trademarked names is offset by the fact that the registrar intimates/informs the fact of the domain name being a trademark as a compliance measure to the registrant and even then, if the registrant registers such a domain name, the abuse would be covered under cybersquatting.” (p. 1).

International Trademark Association (INTA)

INTA provided a comment document with appendix attachments as examples of abuses that target trademark owners as a result of the New gTLD Program. The document strongly recommends that the CCTRT expand the scope of their review of New gTLD Program safeguards to encompass safeguards designed to protect trademark owners. The document provided a number of suggestions for measuring the effectiveness of existing safeguards, detailed below:

- General positions and themes:
 - Concerned with “the mitigation of types of DNS abuse that either infringe or create confusion with trademarks through the DNS, or utilize New gTLDs to extort exorbitant fees from trademark owners wishing to protect their trademarks through defensive registrations” (p. 1)
 - Suggest expanding scope of Report to include analysis of safeguards related to Rights Protection Mechanisms (RPMs) outlined in the Applicant Guidebook, the Trademark Clearinghouse RPM Requirements, the new gTLD Registry Agreement (RA), in addition to registry pricing schemes deemed unfair or exorbitant (appendix, p.1)
- On effectiveness of safeguards:
 - Vet registry operators: use number of application rejections as a result of screening; count past and present violations of contracts
 - Thick WHOIS: survey abuse responders and law enforcement on effectiveness of thick WHOIS as a safeguard in combatting abuse
 - Abuse point of contact: assess registry operators’ responsiveness to abuse claims received via this channel
 - Expedited Registry Security Request Process: supports response time in combatting threats as measure of effectiveness
 - High Security Zone Verification Program: compare proportional abuse rates in independently developed high security TLDs to those without HSZ-type security safeguards
 - Supports analysis of abuse rates in new vs legacy TLDs by comparing (p. 6):
 - Trends
 - Ratio of abuses to the number of domains in a particular registry
 - Qualitative experience of registrants, registrars, and registries as well as internet users
 - Ratio of incidents per domain in New gTLD registries against those in

Legacy gTLDs

- Other positions and issues:
 - Supports additional research and more robust analysis proposed in Report, but suggests CCTRT propose a reasonable timeframe to accommodate the significant time and resources needed to carry out proposed research plan

Intellectual Property Constituency (IPC)

The IPC submitted a comment document detailing its perspective on the safeguards discussed in the Report. Overall, the comments described the background, purpose, and importance of each safeguard and indicated general support for each, while providing detailed recommendations of how they could be improved. The comments relevant to the purposes of the Report are as follows:

- General positions and themes:
 - Suggests expanding scope to include analysis of Registration Agreement (RA) Spec 11 3a prohibitions on piracy, trademark and copyright infringement; also recommend focus on counterfeiting and cybersquatting
 - Suggest focus on Spec 11 3a Public Interest Commitments (PICs), noting that many voluntary commitments on part of registries go beyond Spec 11 3a baseline
- On effectiveness of safeguards:
 - DNSSEC, Wildcarding Prohibition, Orphan Glue Record Removal: IPC notes that efficacy of these safeguards is well-documented and these measures are widely accepted as effective
 - Thick WHOIS: IPC notes efficacy of safeguard in combatting intellectual property infringement
 - Notes that WHOIS Accuracy Reporting System does not account for privacy and proxy services, which may result in skewed impression of actual accuracy
 - Centralized Zone File Access: notes support for safeguard in combatting IP infringement
 - Abuse point of contact: notes that contacts should not just be available and accessible, but also responsive
 - High Security Zone Verification Program: recommends the CCTRT examine why the initial HSZ framework was never adopted and recommends that it put forth recommendations on forming an expert working group to continue work on an HSZ verification program should it deem such a program viable.
- Other positions and Issues:
 - Notes that the Registration Abuse Policies Working Group, who published their [final report](#) in 2010, “predated the development of the new gTLD registry agreement by some time, and some of [their] observations regarding ‘use abuse’ have been superseded by certain elements in the registry agreement, including such specified abuses as piracy and counterfeiting, which inherently involve issues concerning uses of domain names and not mere ‘registration’ issues” (p. 1).

Business Constituency (BC)

The BC submitted a comment document that recommended expanding the scope of the

Report to include abuse-mitigation efforts in other areas, detailed below. The comments included a number of general methodological caveats and suggestions. The BC also suggests that the definition of abuse used in the Report be clarified and that it highlight the forms of abuse that fall within ICANN's remit.

- General positions and themes:
 - Suggests focus of Report too narrow and should be expanded to the following as aspects of safeguard effectiveness:
 - 2013 RAA
 - Uniform Rapid Suspension and Uniform Dispute Resolution processes
 - New gTLD registries' policies
 - Registrar policies pertaining to new gTLDs
 - ICANN Compliance
 - Applicant Guidebook
 - Suggest refining scope of DNS abuse definition and determining which forms of DNS abuse fall under ICANN's remit to address
- On effectiveness of safeguards:
 - Cautions against examining adoption of safeguard as an implication of its effectiveness without examination of a safeguard's impact
 - Suggest gathering data pertaining to abuse rates from industry collaboration efforts and information sharing
 - Suggests polling of subject matter experts involved in initial development of the 9 DNS abuse safeguards analyzed in the Report
 - Suggests including the following in study of safeguards:
 - Stronger registry policies
 - Voluntary practices
 - Price differences
 - Ecosystem trends related to security

Endurance International Group (EIG)

EIG submitted a comment document focusing on a small number of specific issues, detailed below:

- General positions and themes:
 - Considers working definition of DNS abuse in Report too broad, as it may encompass areas relating to content and different business models
 - Cites Report's references to "pay per click" advertising and traffic diversion as potential abusive practices, which EIG argues are content issues and thus outside of ICANN's remit to address
- On effectiveness of safeguards:
 - Comment posits that generally effective safeguards are contained within the "2013 [RAA] and other contracts, the [Uniform Rapid Suspension policy], existing new gTLD policies and practices, and other Consensus Policies"

Dot Music (DotM)

DotM submitted a comment document that focused primarily on issues of copyright infringement, piracy, and counterfeiting as they relate to the music and creative communities in general. The document discussed a position on the inadequacy of current US law in

protecting the online content of the music and creative communities, and also how the New gTLD Program has contributed to widespread copyright infringement due to a lack of adequate safeguards to protect these communities' intellectual property. While acknowledging that ICANN does not have the authority to police internet content, the comments did emphasize the need for adequate enforcement of contractual terms between ICANN and its contracted parties to mitigate these types of abusive activities. The document also makes recommendations for additional or improved safeguards. For example, regarding Centralized Zone File Access, DotM recommends a "two-step phone and email authentication to mitigate malicious conduct by bad actors and to increase consumer safety and trust" (p. 19). The comments relevant to the purposes of the Report are as follows:

- General positions and themes:
 - Suggests expansion of Report's scope to include focus on piracy, counterfeiting, and copyright infringement as detailed in Specification 11 of the New gTLD Registry Agreement
 - Concerned by abusive registry practices that do not incorporate safeguards for strings that carry a higher level of risk of consumer harm and with implied level of consumer trust in regulated sectors
 - Suggests focusing on compliance with safeguards
 - Extensively describes harmful effects of distributing illegal content, especially as they relate to the music community and existing US law
 - Cites study that found internet users are 28 times more likely to be infected with malware when visiting content theft sites than from mainstream/licensed content provider
 - Cites study that showed "millions of takedown requests [for copyright infringement] for New gTLDs that have music-themed characteristics"
- On effectiveness of safeguards:
 - WHOIS: Cites statement from the Motion Picture Association of America describing WHOIS as an essential tool for identifying online pirates and taking action against them, but also notes that the emergence of proxy registration services has "effectively hidden the needed contact details for quarter or more of all registrations in the generic Top Level Domains" (p. 13)
 - Supports measures to increase accuracy of WHOIS
 - Expedited Registry Security Request Process: supports response times for registrars and registries to address abuse complaints in a timely manner
- Other positions and issues:
 - Recommends Report investigate "the strong correlation between copyright-infringing domain names and DNS abuse" (p. 21)
 - Supports additional research and more robust analysis proposed in Report, but suggests CCTRT propose a reasonable timeframe to accommodate the significant time and resources needed to carry out proposed research plan

Domain Mondo (DM)

DM submitted a comment primarily focused on critiquing the New gTLD Program in general. The comments relevant to the purposes of the Report are as follows:

- General positions and themes:
 - Posits that abuse occurs most frequently at the second/registrant level, not at first level

- Alludes to forms of abuse at registry level, including “extortionate or other abusive practices, pricing, *etc.*, by registry operators” (p. 1) [*italics in original*]
- On effectiveness of safeguards:
 - Asserts safeguards do not exist/were not present in New gTLD Program

Governmental Advisory Committee (GAC)

The GAC provided a comment document suggesting the Report expand its scope to include safeguards created through the GAC itself in addition to various ICANN contracts, policies, and community efforts.

- General positions and themes:
 - Suggests examining additional safeguards for analysis, including relevant RAA 2013 provisions such as:
 - Section 3.18: Registrar's Abuse Contact and Duty to Investigate Reports of Abuse
 - Data Retention Specification
 - WHOIS Accuracy Program Specification
 - Suggests including RPM-related safeguards, especially as they relate to copyright infringement, which are important elements of the CCTRT's focus on competition and consumer trust
 - Recommends the Report examine audits of registries by number of complaints received, how many resulted in domain suspension, and correlation between registries with a high number of complaints and the number of domains they control
- On effectiveness of safeguards:
 - DNSSEC: suggest including DNSSEC-focused reports from ICANN's Security and Stability Advisory Committee (SSAC): SAC 26, 29, 30, 35, 63 (<https://www.icann.org/groups/ssac/documents>)
 - Suggest review of Non-PDP Joint DNS Security and Stability Analysis Working Group Final Report (<https://ccnso.icann.org/workinggroups/dssa-final-08nov13-en.pdf>)
 - Notes need to distinguish differing “risk profiles” for TLDs, such as those in the banking sector compared to those in entertainment
- Other positions and issues:
 - Suggest collaboration with international cyber-security organizations such as:
 - SANS, ISC2, ICANN Security, Stability and Resiliency Team, Interpol Cyber Security

Blacknight (BK)

BK submitted a comment that provided input on the following:

- General positions and themes:
 - “DNS abuse” should be narrow in scope and should avoid straying into areas of content or different business models
 - Notes that there will always be some level of DNS abuse
- On effectiveness of safeguards:
 - Suggests that current safeguards are likely working as best as they can

Section IV: Analysis of Comments

General Disclaimer: This section intends to provide an analysis and evaluation of the comments submitted along with explanations regarding the basis for any recommendations provided within the analysis.

General Analysis

- Comments generally suggested expanding the scope of the Report beyond analysis of the 9 safeguards addressed to include those related to Rights Protection Mechanisms (RPMs) and trademark protection issues. While these safeguards were not reviewed in the DNS Abuse Report, the CCTRT considers them in scope for its review and is dedicating resources to examine them. ICANN's "[Revised Staff Report: Rights Protection Mechanisms Review](#)" was intended to provide the CCTRT with a basis for examining RPM safeguards. It assesses many of the RPM-related issues suggested by commenters to examine in the DNS Abuse Report.
- A small number of comments recommended keeping the scope of the Report narrow or made a corollary suggestion that the definitional framework used in the Report was too broad.
- Comments generally indicated support for the 9 safeguards reviewed in the Report, and many noted ways they could be improved.
- Many comments made recommendations for additional safeguards or suggested modifications to existing safeguards rather than propose means to measure the effectiveness of existing safeguards.
- Many comments suggested potential measures for analyzing the effectiveness of existing safeguards as detailed in the "On effectiveness of safeguards" summary sections.

Overall, comments reflected thoughtful consideration of the Report's focus and methods, and provided a number of suggestions to aid the work of the CCTRT.

Issues of Shared Importance

Of the nine comments submitted, five groups—GAC, DotM, IPC, INTA, and the BC—suggested expanding the scope of the Report to include examination of additional types of safeguards, especially as they pertain to Rights Protection Mechanisms and associated issues related to copyright/trademark infringement, piracy, and counterfeiting. As noted above, these issues are in the scope of the CCTRT's efforts and have been examined in the "[Revised Staff Report: Rights Protection Mechanisms Review](#)". However, they are not discussed in the DNS Abuse Report, which focuses on 9 specific safeguards intended to mitigate DNS abuse in new gTLDs, as recommended in the "[Mitigating Malicious Conduct](#)" [explanatory memorandum](#) published on 3 October 2009.

The RySG, GAC, and INTA expressed a view that issues surrounding the lack of a High Security Zone Verification Program should be examined more thoroughly. The groups also suggested examining abuse rates in TLDs with independently-developed and implemented security programs compared to those without such a program.

INTA, IPC, and DotM emphasized the importance of a thick WHOIS system in helping to

combat trademark infringement.

BK and EIG showed a general inclination to keep the focus of the Report narrow, be it in terms of definition or research scope. Both cautioned against delving into “content” issues.

Other Issues

Many comments devoted significant space to making recommendations for new safeguards or improving existing safeguards. However, as this Report is currently focused on proposing means to measure the effectiveness of safeguards as they exist, such recommendations are not in scope for analysis.

Next Steps

- At the time of writing this summary and analysis, the CCTRT is defining the scope and methodology of their review of New gTLD Program safeguards.
- Commenters’ suggestions on how to measure the effectiveness of safeguards addressed in the Report will be incorporated into a revised Report to aid the CCTRT’s discussions on appropriate research methodologies to assess safeguard effectiveness.