



## COMMENT OF THE INTELLECTUAL PROPERTY CONSTITUENCY ON DEFINING IDENTIFIER TECHNOLOGY HEALTH INDICATORS

January 23, 2017

The GNSO Intellectual Property Constituency (IPC) appreciates this opportunity to comment on the Identifier Technology Health Indicators (ITHI) approach taken to defining health and the description of five “diseases” that could affect the health of the name part of the system of unique Internet identifiers.<sup>1</sup> The IPC applauds ICANN for analyzing DNS health issues before defining metrics to measure this important issue. We believe that metrics and data will be more useful if there is agreement on and understanding of what is being measured. In analyzing DNS health, ICANN has requested feedback on five diseases that have been identified that affect the health of the name part of the system of unique Internet identifiers. The descriptions of these five diseases can be found on slides 10 to 49 of the presentation entitled, “ITHI DNS Sanitas: Sine Morbus (DNS Health: Free from Diseases)”, which was presented at ICANN57 (the “DNS Health Presentation”)<sup>2</sup>. The IPC cautions against the concept of creating more coined terms, as such newly created words may be a barrier to participation and comprehension particularly for non-English speakers. The IPC recommends a transition of these coined terms to more readily understandable terms (e.g., “Domain Name Abuse” in place of Abusitis).

As background, ICANN’s founding mission, as stated in Section 1.1(a) of its Bylaws,<sup>3</sup> is to coordinate, at the overall level, the global Internet’s systems of unique identifiers, and in particular to ensure the stable and secure operation of these related systems. As part of its role of coordinating the allocation and assignment of names in the root zone of the DNS and the development and implementation of policies concerning the registration of second-level domain names in gTLDs as set forth in Section 1.1(a) of its Bylaws, ICANN coordinates the development and implementation of policies for which uniform or coordinated resolution is reasonably necessary to facilitate the resilience, security and/or stability of the DNS.

As part of the ICANN Strategic Plan<sup>4</sup> for fiscal years 2016 – 2020, ICANN made success in five strategic objectives a priority to continue to fulfill its stated mission and realize its vision of an independent, global organization trusted worldwide to coordinate the global Internet’s systems of unique identifiers to support a single, open globally interoperable Internet by 2020. One of the five strategic objectives is to support a healthy, stable, and resilient unique identifier ecosystem consistent with Section 1.1(a) of the ICANN Bylaws.

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<sup>1</sup> <https://www.icann.org/public-comments/ithi-definition-2016-11-29-en>

<sup>2</sup> See <https://www.icann.org/en/system/files/files/ithi-dns-health-free-from-diseases-29nov16-en.pdf>

<sup>3</sup> <https://www.icann.org/resources/pages/governance/bylaws-en>

<sup>4</sup> <https://www.icann.org/en/system/files/files/strategic-plan-2016-2020-10oct14-en.pdf>

Towards this end, ICANN had sought community input<sup>5</sup> to facilitate the creation of a gTLD Marketplace Health Index, which will be one piece of a broader, cross-organizational ICANN Key Performance Indicator (KPI) Dashboard to track progress on ICANN’s five strategic objectives. The IPC’s comments<sup>6</sup> on the gTLD Marketplace Health Index Proposal (MHIP) emphasized that the KPIs must focus on the health of the DNS itself within the context of MHIP, which was also emphasized by the Security and Stability Advisory Committee (SSAC) comments<sup>7</sup> that developing a KPI must first start with the insight into the ecosystem that the KPI is intended to convey. Accordingly, the IPC supports the methodology in the ITHI initiative of first, defining a *healthy* Internet of unique identifiers that ensures stable and secure operations of these systems, and then moving on to developing metrics to measure such health.

Following the medical analogy, IPC believes that any modern definition of health should measure the availability and use of early detection and prevention methods. The World Health Organization pointed out as early as 1948 that health is more than just the absence of disease; after all, if a person goes to a medical doctor and is declared “healthy” because the doctor does not find the patient to be diseased, that does not mean there are no signs of disease that more advanced methods of investigation would lead to diagnosable signs and preventive treatment. Because health is a dynamic process, which begins before individuals realize they are affected, it is important to define health partly based on anticipatory preventive actions. Key steps to defining good health include getting recommended preventive services like screenings, check-ups, and patient counseling that are used to prevent disease and to detect disease at an early stage when treatment is likely to work best.

The IPC has the following comments on these definitions:

**A. General Comments on Proposed DNS Health Indicators**

While appreciating the medical theme of this effort, the IPC urges ICANN to ensure that the various distinct “diseases” that can harm the DNS are easily understood and leverage widely-understood concepts this ITHI effort is making analogies to. This will ensure that the ITHI effort has utility to stakeholders across the DNS ecosystem. Our comments below, if incorporated, will help ICANN in accomplishing this goal.

Further, the IPC urges ICANN to ensure that its deliverable(s) developed under this effort are coordinated with and complementary to wider pro-transparency and pro-competition efforts within ICANN. Based on the background materials provided by ICANN in its request for comment in this matter, the linkage of the ITHI effort to such efforts is at best unclear. By providing clarity on the relationship of the ITHI effort to other related initiatives within ICANN, DNS stakeholders will enjoy needed context and ICANN can prevent unnecessary duplication of these efforts.

The IPC also urges ICANN to make the raw aggregate data available for use and analysis by the community. This will enable a more robust and fruitful discussion of the outcomes of the ITHI effort.

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<sup>5</sup> <https://www.icann.org/en/system/files/files/report-comments-gtld-marketplace-health-05feb16-en.pdf>

<sup>6</sup> <https://forum.icann.org/lists/comments-gtld-marketplace-health-17nov15/pdfk51SsdeXu.pdf>

<sup>7</sup> <https://forum.icann.org/lists/comments-gtld-marketplace-health-17nov15/pdfoFm9dMy1Oy.pdf>

## B. Abusitis.

The DNS Health Presentation defines “Abusitis,” or “domain name abuse,” as “the registration or use of a domain name with the capability to cause spam, phishing, malware distribution or command and control of botnets.” The IPC would suggest that the phrase “with the capability” be removed from this definition, since any domain name is technically capable of being used “to cause spam, phishing, malware distribution or command and control of botnets.” Alternatively, “with the capability” should be replaced with a reference to other markers or indicators of “malignancy,” such as typosquatting or false WHOIS information. Other “abuses” such as cybersquatting, counterfeiting, copyright piracy, as well as other illegal schemes are, unfortunately, common in the DNS, and therefore, the definition of “Abusitis” should be a non-exclusive list of such abuses. Paragraph 3(a) of the standard Public Interest Commitments undertaken by all new gTLD registry operators provides a useful and broadly applicable example of a non-exclusive list of abuses that should be incorporated.<sup>8</sup>

Additionally, the IPC believes that cybersquatting is an abuse of the DNS and its frequency should be a measure of “health” (or the lack thereof). While the IPC recognizes that this issue is being studied independently by the CCT Review Team, this study is looking only at new gTLDs, whereas the vast majority of this form of abuse takes place in the legacy gTLDs. “Abusitis” (Abuse Infection) should be defined as registration or use of a domain name that has **strong unrebutted indicators** of causing one of the types of abuse on the non-exclusive list. An example relevant to the IPC includes spear-phishing attacks, where criminals may target select groups of people with something in common (e.g., they work at the same company, or bank at the same financial institution, etc.). These emails spoof the organizations or individuals that the potential victims would normally get emails from. The domain names themselves may not be hosting any content.

The IPC strongly supports developing accelerated takedown procedures that are more proactive, and based on “Abusitis” screening indicators.

Further, the discussion of “Abusitis” risk factors needs some clarification. For example, the IPC requests explanation on how “[the] ICANN compliance department [being] rendered ineffective” is a risk factor of “Abusitis.”

Finally, in discussing the impacts of “Abusitis”, the slides note that “domain names associated with abuse may appear in anti-abuse lists” (a positive impact) on a list with other impacts that are clearly negative (“Large economical [sic] impact for merchants and consumers/damage to brand;” “Erosion of consumer confidence;” “Erosion of confidence in the DNS system;” and “Fragmentation of the DNS”). The IPC recommends that some differentiation of these impacts be made to reflect those that are positive and negative.

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<sup>8</sup> “distributing malware, abusively operating botnets, phishing, piracy, trademark or copyright infringement, fraudulent or deceptive practices, counterfeiting or otherwise engaging in activity contrary to applicable law”; 2013 Registry Agreement, Specification 11. <https://newgtlds.icann.org/sites/default/files/agreements/agreement-approved-09jan14-en.htm>

### **C. Datamalgia.**

Datamalgia is defined as a condition resulting from, “registrations [that] contain either incomplete, inaccurate or fraudulent data.” The IPC strongly supports this disease being examined as part of the health of the DNS. The IPC notes that under “causes” in the DNS Health Presentation, the drafter indicates that “privacy/proxy services” may be out of scope. However, it is very important that inaccurate data hidden behind such services be considered a contributing abuse within the scope of this disease.

For example, “Potential Treatments” should include sound minimum standards, and voluntary “best practices” exceeding those standards, for revealing contact data of registrants who use privacy/proxy services to carry out abuse. Such standards and practices are certainly part of the solution or cure here. This is a major goal of the PPSAI accreditation effort. The IPC supports the “Potential Treatment”; namely, robust enforcement of RAA and Registration Agreements and that “Acceptable Use Policies must prohibit abuse and misuse of domain names.” For the sake of completeness, the IPC recommends adding “Registry Agreements” to the list of contracts for enforcement.

Further, the WHOIS Accuracy Reporting System (ARS) is a good example of proactive measures that have been taken to treat Datamalgia. However, enhancing ICANN’s contractual compliance activities through access to automated tools to examine certain data elements included in WHOIS is needed for a healthy DNS. Automatically incorporating the WHOIS Accuracy Program Specification of the 2013 Registrar Accreditation Agreement into every 2009 Registrar Accreditation Agreement that comes up for renewal (equivalent to a health checkup) would allow for sound early detection and prevention of Datamalgia. All registrars, regardless of whether they are offering new gTLDs under the 2013 Registrar Accreditation Agreement (RAA), should be required to validate and verify certain WHOIS data fields, and registrars must be required to suspend or delete domain names that are not timely verified.

With respect to the parties impacted by Datamalgia, the IPC recommends adding “consumers” to the list of impacted parties.

### **D. Datafalloxopathy.**

In the DNS Health Presentation’s definition of Datafalloxopathy, the drafter notes that “accessing blocking by regulators” is not within the scope or definition of this disease. The IPC agrees and would remind ICANN that it is important to retain the note on slide 43 that access blocking by regulators, including courts, is also not within the definition of Datafalloxopathy.

Respectfully Submitted,

Intellectual Property Constituency