dot health™

In Response to the International Medical Informatics Association (IMIA) Concerns Regarding the

.health

New Top Level Domain

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Prepared for:

Antoine Geissbuhler
President
International Medical Informatics Association
antoine.geissbuhler@gmail.com

Prepared by:

Andy Weissberg
Co-founder and Chief Executive Officer
DotHealth, LLC
354 Walthery Avenue
Ridgewood, NJ 07450 USA
201.906.2967
andyw@dothealthgtld.com
http://www.dothealthgtld.com

Overview and Background

It is respectfully acknowledged that the International Medical Informatics Association (IMIA) plays a major global role in the application of information science and technology in the fields of healthcare and research in medical, health and bio-informatics. Furthermore, it is fully appreciated that the IMIA's goals and objectives are to:

- Promote informatics in health care and research in health, bio and medical informatics.
- Advance and nurture international cooperation.
- To stimulate research, development and routine application.
- Move informatics from theory into practice in a full range of health delivery settings, from physician's office to acute and long-term care.
- Further the dissemination and exchange of knowledge, information and technology.
- Promote education and responsible behaviour.
- Represent the medical and health informatics field with the World Health Organization and other international professional and governmental organizations.

IMIA's Concerns Regarding Applications for the .health TLD

In addition to the comments that the IMIA posted with respect to .health during the ICANN New gTLD Public Comments Period, we understand that on January 26, 2013, the IMIA also issued comments regarding .health to the ICANN At-large Advisory Committee (ALAC) New gTLD Review Group (RG). As part of these comments, we understand that the IMIA has requested that with its support, the ALAC should file a community objection against all applications for the .health TLD

In good faith consideration of the IMIA's concerns and continued cooperation with the ALAC toward the possible filing of a community objection against applications for the .health TLD, we believe it is important that the IMIA and the RG have a fact-based and objective understanding of DotHealth, LLC, our proposed plans and approaches for the .health, and how these are specifically and uniquely structured to address the IMIA's stated concerns.

About DotHealth, LLC:

Mission, Goals, Objectives, Leadership and Focus

DotHealth, LLC ("DotHealth") is one of the four (4) organizations which successfully submitted applications to ICANN, and which are being extensively evaluated on the basis of newly established, consensus-based operational, technical and financial criteria. We are the only applicant for the .health TLD which has expressly stated a commitment to global public health, and which has earned the support of the global health community. As represented in the DotHealth application to ICANN for .health, our mission and vision is to establish the .Health new generic top-level domain (gTLD) as a safer and more secure online namespace for and accountable to global health stakeholders.

While DotHealth LLC is a relatively new entity, the company's principles, investors, service providers, and advisors have a vast amount of international experience in the internet, health, life sciences and information service sectors, including work with regulators, patient groups, drug and device companies, academic, corporate and government libraries, doctor and nursing organizations, health plans, standards bodies, and professional medical societies. We are a trusted entity with trusted key industry stakeholders and possess the tools and experience to execute on the vision laid out in our application. The members of the DotHealth team each have established reputations and demonstrated ability and commitment to serve the public interest and public health.

For our .health gTLD application, we have taken great care and extensive efforts over the past three and a half years to craft and refine a set of policies and protections for both registrants and users (including the public) of .health in order to create a safe, trusted, and secure top level domain operating in the public interest.

Our Investors and Partners

Neustar, Inc. (http://www.neustar.biz)
Originally founded in 1996, Neustar is a trusted, neutral provider of network services, real-time information and analysis. A publicly-traded Company on the New York Stock Exchange (NYSE:NSR), Neustar provides an innovative suite of network services, cybersecurity services and information services.

Neustar's services are used by thousands of business and organizations worldwide in order to direct and manage Internet traffic flow, enhance fraud prevention and monitor performance. Neustar currently supports 30 generic top-level domains and country code top level domains (ccTLDs), including .biz, .us, .co, .travel, .cn and others representing over a combined 20 million domain names.

Neustar has long championed internet best practices and responsible registry operations consistent with public health interests, which is a key factor in our relationship with them. Neustar is the only registry services provider with significant experience successfully operating TLDs consistent with the kinds of policies proposed for .health. Neustar's commitment to consumer protection is reflected in its service as a founding board member of *The Center for Safe Internet Pharmacies* (CSIP), a non-profit organization chartered in 2011 to address the growing problem of internet sales of illegitimate pharmaceutical products. While CSIP membership includes the world's leading Internet and e-commerce companies, domain name registrars, search engines, and financial services providers, Neustar is the only domain name registry operator within CSIP's membership.

DotHealth, LLC will leverage Neustar's comprehensive Information Security infrastructure to apply administrative, technical and physical safeguards for the operation of its .health gTLD, which will also benefit from Neustar's established and on-going cooperation with law enforcement agencies and well-known security organizations throughout the world, including the Anti-Phishing Working Group, NSP-SEC, the Registration Infrastructure Safety Group, and others. Aside from these organizations, Neustar also actively participates in privately run security associations whose basis of trust and anonymity makes it much easier to obtain information regarding abusive DNS activity, all of which will be of key input to the running of the DotHealth, LLC .health.

Neustar's experience in running policy driven TLDs, its cybersecurity expertise, its industry standing, and its ongoing contribution to Internet safety makes it an ideal partner for our operation of .health.   We know it has both the technical expertise and the corporate culture to ensure that the .health TLD operates on the highest standards and serves the public interest.

Straat Health, LLC. (http://www.straat.co)

Straat Health is an operating subsidiary of Straat Investments, an international strategic private equity firm primarily focused on the technology and real estate sectors. Straat Investments provided the funding and expertise for the launch of the .CO ccTLD that now boasts over 1.4 million registrations in more than 200 countries since its global launch in June 2010 and has extensive experience in running successful Top Level Domains.

LegitScript LLC. (http://www.legitscript.com)

DotHealth, LLC is also exclusively partnered with LegitScript LLC for the .health application. LegitScript currently works with numerous governments and government agencies, including the U.S. Food and Drug Administration, INTERPOL, the Irish Medicines Board, and the National Association of Boards of Pharmacies in the US to develop international standards that are applied. LegitScript also provides surveillance and investigative reporting services leading search engines to ensure that advertising on these search engines is for legitimate products from legitimate companies.

LegitScript will help us maintain .health as a trustworthy environment by monitoring the TLD on an enterprise basis for any unsafe and illegal activity involving the distribution of prescription drugs and controlled substances, as well as other illegal or unsafe products. Such a partnership represents the first time that an entire registry will be protected in this way from rogue online pharmacies and illicit advertisements for harmful substances, not only in the US, but also around the entire world.

Proposed Registry Policies for the .health TLD

DotHealth LLC's proposed policies and approaches for the .health TLD registry are appropriately structured to address the issues and concerns expressed by the IMIA which notably "mirror" those as previously expressed by the World Health Organization (WHO) and its NGO affiliates.

Our policy commitments, which are not mirrored in any other application for .health, include the following:

- Explicit prohibitions against the use of .health domain names for the illicit promotion or sale of prescription drugs, controlled substances, tainted dietary supplements, ingredients for psychoactive highs and others which are /have been validated by regulatory authorities as safety concerns;

- Explicit prohibitions, surveillance and rapid takedown measures (including cooperation with international law enforcement agencies) against the use of .health domain names for abusive or malicious commercial practices targeted at consumers and children;

- Explicit prohibitions against the use of .health domain names for the storage, publication, display and/or dissemination of pornographic materials depicting individuals under the age of majority in the relevant jurisdiction.

DotHealth, LLC Proposed Safeguards and Security Measures for the .health TLD

Readily acknowledging that domain names are sometimes used as an "attack" mechanism to enable breaches of privacy and security, as a TLD registry operator for .health, we will indeed execute numerous privacy and security measures within our controls.

Often the best preventative measure to thwart these attacks is to remove a domain name names completely from the DNS before they can impart harm to unsuspecting Internet users.

DotHealth's back end registry partner, Neustar, is one of only a few registry operators to have actually developed and implemented an active "domain takedown" policy in which the registry itself takes down abusive domain names. Neustar's approach is quite different from a number of other gTLD Registries and the results have been unmatched.

For the .health TLD, Neustar will target verified abusive domain names and remove them within 12 hours regardless of whether or not there is cooperation from the domain name registrar. In the event a domain name is being used to threaten the stability and security of the .health TLD, including and not limited to suspected privacy or security breaches, or in a case a domain is part of a real-time investigation by law enforcement or security researchers, its resolution will be disabled completely within the DNS master zone file that enables such resolution.

Removing the domain name from the zone has the effect of shutting down all activity associated with the domain name, including the use of all websites and e-mail addresses mapping to the domain name in question.

As the .health TLD Registry Operator, and through the support of Neustar, Inc., DotHealth, LLC will, deploy significant surveillance methods in order to ensure that the use of domain names as well as the DNS itself in support of phishing attacks, malware attacks, DDOS attacks and other abusive behaviors inside of the .health DNS will be mitigated.

DotHealth, LLC Proposed Governance Model and Infrastructure for the .health TLD

For the .health TLD, DotHealth, LLC has proposed active surveillance efforts that shall be deployed to monitor abusive or malicious behaviors of bad actors including:

- **Phishing:** the attempt to acquire personally identifiable information by masquerading as a website other than .health.

- **Pharming:** the redirection of Internet users to websites other than those the user intends to visit, usually through unauthorized changes to the Hosts file on a victim's computer or DNS records in DNS servers.

- **Dissemination of Malware:** the intentional creation and distribution of "malicious" software designed to infiltrate a computer system without the owner's consent, including, without limitation, computer viruses, worms, key loggers, and Trojans.

- **Fast Flux Hosting:** a technique used to shelter Phishing, Pharming and Malware sites and networks from detection and to frustrate methods employed to defend against such practices, whereby the IP address associated with fraudulent websites are changed rapidly so as to make the true location of the sites difficult to find.

- **Botnetting:** the development and use of a command, agent, motor, service, or software which is implemented: (1) to remotely control the computer or computer system of an Internet user without their knowledge or consent, (2) to generate direct denial of service (DDOS) attacks.

- **Malicious Hacking:** the attempt to gain unauthorized access (or exceed the level of authorized access) to a computer, information system, user account or profile, database, or security system.

Additionally, DotHealth fully intends to meet or exceed a number of protocols and minimum requirements for new gTLD registry operators and for DNS Security. These include DNS security extensions, or DNSSEC, which address the problem of DNS cache poisoning by providing a set of DNS extensions which provide origin authentication and integrity checks of DNS data. DotHealth has proposed methods which exceed the minimum requirements for DNSSEC as defined by ICANN.

Rapid Takedown Procedures

For the .health TLD, Neustar will target verified abusive domain names and remove them within 12 hours regardless of whether or not there is cooperation from the domain name registrar. In the event a domain name is being used to threaten the stability and security of the .health TLD, or is part of a real-time investigation by law enforcement or security researchers, its resolution will be disabled completely within the DNS master zone file that enables such resolution. Removing the domain name from the zone has the effect of shutting down all activity associated with the domain name, including the use of all websites and e-mail addresses mapping to the domain name in question.

Rights Protection Mechanisms

DotHealth, LLC ("DotHealth") is firmly committed to the protection of Intellectual Property rights and to implementing the mandatory rights protection mechanisms for the .health TLD as contained in the Applicant Guidebook and detailed in Specification 7 of the Registry Agreement. Numerous operating procedures, safeguards and policies have been identified and orchestrated in conjunction with our proposed efforts to operate the .health TLD registry.

These include the following:

- Trademark Clearinghouse: a one-stop shop so that trademark holders can protect their trademarks with a single registration.

- Sunrise and Trademark Claims processes for the TLD

- Implementation of the Uniform Dispute Resolution Policy to address domain names that have been registered and used in bad faith in the TLD.

- Uniform Rapid Suspension: A quicker, more efficient and cheaper alternative to the Uniform Dispute Resolution Policy to deal with clear cut cases of cybersquatting.

- Implementation of a Thick WHOIS making it easier for rights holders to identify and locate infringing parties

- Active fraud intelligence monitoring in conjunction with LegitScript to monitor the illicit use of .health domain names and exploitation of brand names

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-Commercial Nature of Applicants

We feel it is not only appropriate to allow a private commercial entity to run the .health registry, but it may be advisable from a public interest perspective. Although the intentions of many non-profit stakeholders in the health arena are laudable, it is generally known that they suffer from a lack of funding to perform their mission and face constant internal debate within their organizations over the allocation of their operating funds. Running a TLD registry is in fact a business and requires business skills and experience, regardless of what type of entity runs it.

Registrants and users require a sustainable commitment to the registry that can only come with sufficient funding to allow for continuous innovation and reinvestment. It would be highly unusual for any non-profit or publicly funded entity to meet these criteria. Notwithstanding this, the application process was open to any such organization that would or should have wanted to apply.

DotHealth, LLC is in fact, the only applicant for .health TLD that is solely focused on the .health gTLD. Our "non-portfolio" approach distinguishes our Company from the other applicants for the .health gTLD, each of whom have applied to ICANN for an average of over 100 gTLD's -- and who can be reasonably expected that a portfolio applicant will assess and manage their gTLD portfolio on a purely financial return basis.

This is NOT the case with DotHealth, LLC, which since its inception has had a fundamental desire and mission to benefit the public in all senses of the word and has proactively sought out key strategic partnerships and relationships in order to achieve this. It has the best of both worlds - a stand-alone entity backed by trusted and respected companies and key players influencing international standards and practices in online health sectors.

-The Illicit Sale or Promotion of Counterfeit Drugs and Unapproved Medicines

It is formally acknowledged and understood by DotHealth, LLC that the illegal promotion and sale of spurious, falsely-labeled, falsified, counterfeit, adulterated and/or unapproved medicines, both on the Internet and through traditional means, poses increasing risks to consumers, businesses, governments and other public health stakeholders throughout the world.

At DotHealth, LLC we firmly believe there is a significant and unprecedented opportunity to establish the .health TLD a safer and trustworthy online namespace that reduces and eliminates the potential for these abusive practices to continue to proliferate and pose risks to all stakeholders in public health. Such efforts will require a commitment to the adherence and enforcement of stricter and more stringent policies, and an active, dedicated commitment to surveillance, governance and formalized cooperation with law enforcement throughout the world.

To begin to combat this problem, and to ensure the safety and protection of users of the .health TLD, DotHealth has established an <u>Acceptable Use Policy</u> that contains explicit prohibitions against the use of .health domain names for the illicit promotion or sale of prescription drugs, controlled substances, tainted dietary supplements, ingredients for psychoactive highs and others which are /have been validated by regulatory authorities as safety concerns.

To enforce this policy among registrants, registrars and end-users of the .health TLD, DotHealth, LLC – with the support of its partners -- Neustar and LegitScript - will execute comprehensive monitoring and surveillance of the entire .health registry -- the first time that an entire TLD registry will be protected in this way from rogue online pharmacies and illicit advertisements for harmful substances, not only in the US, but also around the entire world.

-Regulation of Commercial Practices Targeting Children, Low Health Literacy

As acknowledged in the WHO's 2011 Safety and Security of the Internet Report, Children and adolescents are using their online access without restriction and can be unaware they are putting themselves into compromising situations. To mitigate these risks and concerns, DotHealth has established its <u>Acceptable Use Policy</u> for the .health TLD which will be aggressively enforced and includes explicit prohibitions against the use of .health domain names for the storage, publication, display and/or the dissemination of pornographic materials depicting individuals under the age of majority in the relevant jurisdiction.

With the support of Neustar and LegitScript, DotHealth, LLC will actively monitor use of the .health TLD, and implement rapid takedown measures in the event of any policy compliance breach in this area. With respect to the regulation of commercial practices (spam, malware, phishing, etc.) targeted at consumers of all ages, the previously described policies, surveillance and governance procedures will be executed on a 24x7 basis in support of the mitigation of these risks.

-Information Quality Assurance

Attempting to keep information off the .health gTLD in the name of "quality" is a dangerous precedent that amounts to potential censorship of free speech at worst and favoritism at best. History tells us that health-related issues and questions are constantly under debate by knowledgeable educated professionals. Positions on many issues, whether it is appropriate diagnosis, treatments, or ways of educating, change over time. There are many divergent but valid points of view the public has the right to see and evaluate themselves under international law. It is simply not possible for any TLD registry operator to make a subjective judgment about the level of "quality" of information from a third party on a registrant's website.

We strongly believe that a TLD registry operator can and should, however, take a formal position (like DotHealth, LLC has) on harmful or dangerous activities that clearly are not in the interests of the public and public health, and as a matter of policy and enforcement ensure that using its TLD to make such information available is not allowed.

Where the "line" should be drawn to ensure the public's legitimate interests for a safe, secure and trusted .health top level domain is indeed a real question that we do not minimize. However, with respect to "quality" we believe that the proper line to draw – and the only possible approach from a pragmatic perspective and in understanding the role and function of a registry operator - is the elimination of anything harmful and/or illegal. There is otherwise a basic conflict of laws point as between freedom of information and protection of divergent interest groups within the umbrella of "health."

As to the level of "quality" of information appearing on websites operated by third parties within the .health top level domain, we believe it unreasonable to ever expect that "quality levels" could be judged fairly, responsibly, and without bias. This is because agreed criteria that could be used on a global basis across all stakeholders groups (whoever they may be) to assess quality would first need to exist (which is clearly not and may never be the case). If agreed criteria existed, at that point objective rules to assess/score a website's content quality would need to exist.

Given the highly divergent viewpoints and stakeholders across health this also could not ever reasonably be expected to exist in a consensus manner worldwide. There are, and will always be, different viewpoints coming from different geographies, cultures, religions, areas of specialization, schools of thought etc. This is why the rule of law must prevail jurisdictionally and internationally to ultimately regulate individual operations.

DotHealth, LLC Intends to Lead the Creation of an Online Trusted Environment for all Stakeholders of Health

For the .health gTLD application, we have taken great care and extensive efforts over the past three and a half years to craft and refine a set of policies and protections for both registrants and users (e.g. the public) of .health in order to create a safe, trusted, and secure top level domain operating in the public interest. Additionally, during this time we have formed partnerships with respected industry players who are in a position to help us to accomplish our objectives.

Today, people are taking more control over their health. They increasingly use the Internet to seek out health-related information, to become more informed about health, and to understand what options are available to them in support of their health and wellness. They rely on many different sources for health education, which influence the decisions and actions they take in order to improve or maintain their health status or those of their loved ones. They engage with others about health through social networks, search engines and other platforms, and place trust in the information that is made available to them. Increasingly that trust is breached by bad actors who threaten their health and well being in a number of abusive ways.

If we believe the Internet can play an important role in helping people take charge of their health, the Internet must become a safer and trust worthier resource for everyone that uses it. Fortunately, as a top-level domain registry operator for .health, we are positioned to achieve this objective in a number of ways:

1. We can elevate the security and safety of the online user experience for health users by eliminating the availability and access to what is harmful or dangerous to them.

2. We can protect the intellectual property rights of those good actors who make genuine products and services available to the health consumer.

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3. We can get better at explaining how individuals and institutions share responsibility for making those changes. And we can get better at saying why it matters for everyone in society.

To meet our commitment DotHealth will:

- Work with both public and private sector public health stakeholders to enable and grow the .health TLD as a safer and trust worthier resource that improves the safety and health of people and the environment.

- Aggressively enforce our Acceptable Use Policies to protect health consumers from risks of injury.

- Communicate our commitment to this policy to global public health stakeholders, our business partners and customers, and continuously seek their support

Summary Conclusion

As the IMIA, the ALAC New gTLD Review Group and the ALAC Executive Community continue to deliberate as to whether to file community objections against applications for the .health TLD, it is important to DotHealth, LLC that there is accurate and sufficient understanding of our plans and approaches for the operation of the .health TLD registry, as well as the many commitments we've pledged in the interest, safety and security of public health stakeholders throughout the world.

We hope that this information is useful and informative, as we believe it would be unwarranted and unproductive for the IMIA and the ALAC to file a community objection against the DotHealth, LLC application for the .health TLD. Prior to a final decision being made by the ALAC with the IMIA's support, we would welcome the opportunity to engage on a call with the IMIA and/or the ALAC New gTLD Review Group to elaborate on this information, or to answer any additional questions or concerns.

For additional information regarding DotHealth, LLC and its application for .health:

- Company Web site: http://www.dothealthgtld.com
- DotHealth, LLC Application: http://gtldresult.icann.org/application-result/applicationstatus/applicationdetails/495