The National Association of Boards of Pharmacy® (NABP®) commends the good work that the Competition, Consumer Trust, and Consumer Choice Review Team (CCTRT) has put into its Final Report and Recommendations and appreciates the opportunity to comment.

NABP is the independent, international, and impartial association that assists its member boards and jurisdictions for the purpose of protecting the public health. NABP is also the registry operator for the .pharmacy Top-Level Domain (TLD). By operating as a verified TLD, .pharmacy contributes to improved consumer protection through registrant verification prior to domain name use and through ongoing monitoring of the domain space for compliance with registry standards. As such, domains within this TLD are certified to be safe and legitimate.

**Recommendation 12**

Create incentives and/or eliminate current disincentives that encourage gTLD registries to meet user expectations regarding: (1) the relationship of content of a gTLD to its name; (2) restrictions as to who can register a domain name in certain gTLDs based upon implied messages of trust conveyed by the name of its gTLDs (particularly in sensitive or regulated industries) and (3) the safety and security of users’ personal and sensitive information (including health and financial information). These incentives could relate to applicants who choose to make public interest commitments in their applications that relate to these expectations. Ensure that applicants for any subsequent rounds are aware of these public expectations by inserting information about the results of the ICANN surveys in the Applicant Guide Books.

NABP supports this recommendation and maintains that registration restrictions are appropriate for gTLDs operating in sensitive or regulated sectors. This recommendation is in the best interest of consumers (end users), as it supports the creation of a trusted online environment that is user-friendly and free of bad actors and domain name system abuses. Still, registration restrictions add complexity and cost to business operations. While this is a burden that the registry operator voluntarily takes on, it is reasonable to request a reduction in the ICANN registry fee to account for these higher costs, given the safety and security these TLDs provide for registrants and internet users.
Recommendation 13

ICANN should collect data in conjunction with its related data collection activities on the impact of restrictions on who can buy domains within certain new gTLDs (registration restrictions) to help regularly determine and report:

1. Whether consumers and registrants are aware that certain new gTLDs have registration restrictions;
2. Compare consumer trust levels between new gTLDs with varying degrees of registration restrictions;
3. Determine whether the lower abuse rates associated with gTLDs that impose stricter registration policies identified in the Statistical Analysis of DNS Abuse in gTLDs Study continue to be present within new gTLDs that impose registration restrictions as compared with new gTLDs that do not;
4. Assess the costs and benefits of registration restrictions to contracted parties and the public (to include impacts on competition and consumer choice) and;
5. Determine whether and how such registration restrictions are enforced or challenged.

NABP supports this recommendation and believes this data is important to capture, provided any such activity would be voluntary. Having experience operating a registry with restrictions on who can buy and maintain domains within the TLD, NABP believes that the study described in this recommendation would provide valuable insight to the internet community. As an example of the type of information that may be gleaned from such a study, verified TLDs .pharmacy, .bank, and .insurance have restrictions in place regarding who can register a domain within those TLDs, and none of them have had any instances of abuse in the lifetime of the registry. NABP understands the costs and benefits of operating a verified TLD, as well as enforcing registry requirements. Data derived from such a study would be useful in considering future policy decisions relating to whether restrictions should be encouraged in new gTLDs or included in new gTLD contracts for those gTLDs operating in highly regulated sectors.

Recommendation 14

Consider directing ICANN organization, in its discussions with registries, to negotiate amendments to existing Registry Agreements, or in consideration of new Registry Agreements associated with subsequent rounds of new gTLDs, to include provisions in the agreements to provide incentives, including financial incentives for registries, especially open registries, to adopt proactive anti-abuse measures.

NABP supports this recommendation and encourages the promotion of activities to prevent and mitigate DNS abuse. While any mandatory amendments to existing Registry Agreements would give rise to logistical and diplomatic challenges, incorporating such provisions in subsequent rounds of new gTLDs seems reasonable and desirable. For both existing and new gTLDs, incentives, including financial incentives, for registries to adopt proactive anti-abuse measures would be a positive step forward in building consumer trust and protecting the integrity of the domain name system.
Recommendation 15

ICANN Org should, in its discussions with registrars and registries, negotiate amendments to the Registrar Accreditation Agreement and Registry Agreements to include provisions aimed at preventing systemic use of specific registrars or registries for DNS Security Abuse. With a view to implementing this recommendation as early as possible, and provided this can be done, then this could be brought into effect by a contractual amendment through the bilateral review of the Agreements. In particular, ICANN should establish thresholds of abuse at which compliance inquiries are automatically triggered, with a higher threshold at which registrars and registries are presumed to be in default of their agreements. If the community determines that ICANN org itself is ill-suited or unable to enforce such provisions, a DNS Abuse Dispute Resolution Policy (DADRP) should be considered as an additional means to enforce policies and deter against DNS Security Abuse. Furthermore, defining and identifying DNS Security Abuse is inherently complex and would benefit from analysis by the community, and thus we specifically recommend that the ICANN Board prioritize and support community work in this area to enhance safeguards and trust due to the negative impact of DNS Security Abuse on consumers and other users of the Internet.

NABP supports this recommendation and agrees that ICANN should establish thresholds of abuse at which compliance inquiries are automatically triggered. While mandatory amendments to existing Registry Agreements would give rise to logistical and diplomatic challenges, some kind of formal commitment to discourage such abuses must be implemented. Systemic use of specific registrars or registries for DNS security abuse is a problem that threatens the integrity of the DNS. It is appropriate for the ICANN Board to prioritize and support community work in this area to enhance safeguards to protect end users and thereby build trust in the internet.

Recommendation 16

Further study the relationship between specific registry operators, registrars, and DNS Security Abuse by commissioning ongoing data collection, including but not limited to, ICANN Domain Abuse Activity Reporting (DAAR) initiatives. For transparency purposes, this information should be regularly published, ideally quarterly and no less than annually, in order to be able to identify registries and registrars that need to come under greater scrutiny, investigation, and potential enforcement action by ICANN organization. Upon identifying abuse phenomena, ICANN should put in place an action plan to respond to such studies, remedy problems identified, and define future ongoing data collection.

NABP supports this recommendation. This information should be collected and published on an ongoing basis. Registries and registrars connected to high levels of DNS Security Abuse should be required to implement anti-abuse measures. It is appropriate for ICANN to devise a plan of action in response to information derived from such studies.
Recommendation 22

Initiate engagement with relevant stakeholders to determine what best practices are being implemented to offer reasonable and appropriate security measures commensurate with the offering of services that involve the gathering of sensitive health and financial information. Such a discussion could include identifying what falls within the categories of “sensitive health and financial information” and what metrics could be used to measure compliance with this safeguard.

NABP supports this recommendation. It is appropriate for registries to implement security measures commensurate with the offering of services that involve gathering sensitive health and financial information. As a registry operator that has implemented such practices, NABP would be interested in engaging with ICANN and other relevant stakeholders to share information regarding this safeguard.

Recommendation 23

ICANN should gather data on new gTLDs operating in highly-regulated sectors to include the following elements:

- A survey to determine: 1) the steps registry operators are taking to establish working relationships with relevant government or industry bodies; and 2) the volume of complaints received by registrants from government and regulatory bodies and their standard practices to respond to those complaints.
- A review of a sample of domain websites within the highly-regulated sector category to assess whether contact information to file complaints is sufficiently easy to find.
- An inquiry to ICANN Contractual Compliance and registrars/resellers of highly regulated domains seeking sufficiently detailed information to determine the volume and the subject matter of complaints regarding domains in highly regulated industries.
- An inquiry to registry operators to obtain data to compare rates of abuse between those highly-regulated gTLDs that have voluntarily agreed to verify and validate credentials to those highly-regulated gTLDs that have not.
- An audit to assess whether restrictions regarding possessing necessary credentials are being enforced by auditing registrars and resellers offering the highly-regulated TLDs (i.e., can an individual or entity without the proper credentials buy a highly-regulated domain?).

To the extent that current ICANN data collection initiatives and compliance audits could contribute to these efforts, we recommend that ICANN assess the most efficient way to proceed to avoid duplication of effort and leverage current work.

NABP believes this data is important to capture, provided any such activity would be voluntary. Having experience operating a registry with restrictions on who can buy and maintain domains within the TLD, NABP believes that the study described in this recommendation would provide valuable insight to the internet community. As an example of the type of information that may be gleaned from such a study,
verified TLDs .pharmacy, .bank, and .insurance have restrictions in place regarding who can register a domain within those TLDs, and none of them have had any instances of abuse in the lifetime of the registry. NABP also understands the costs and benefits of operating a verified TLD, as well as enforcing registry requirements. Data derived from such a study would be useful in considering future policy decisions relating to whether restrictions should be encouraged in new gTLDs or included in new gTLD contracts for those gTLDs operating in highly regulated sectors.

In addition, existing gTLDs that have voluntarily included verification and validation requirements could provide useful insight on the costs and benefits of implementing registration restrictions. NABP understands the costs and benefits of operating a verified TLD and may be resources for gathering this data. NABP agrees with the CCTRT that this information would help to inform policy decisions regarding contracts with new gTLDs.

In regard to setting policy for new gTLDs, NABP believes subsequent procedures for new gTLDs should require a registry to operate as a verified TLD if it: 1. is linked to regulated or professional sectors; 2. is likely to invoke a level of implied trust from consumers; or 3. has implications for consumer safety and wellbeing.

Recommendaion 25

To the extent voluntary commitments are permitted in future gTLD application processes, all such commitments made by a gTLD applicant must state their intended goal and be submitted during the application process so that there is sufficient opportunity for community review and time to meet the deadlines for community and Limited Public Interest objections. Furthermore, such requirements should apply to the extent that voluntary commitments may be made after delegation. Such voluntary commitments, including existing voluntary PICs, should be made accessible in an organized, searchable online database to enhance data-driven policy development, community transparency, ICANN compliance, and the awareness of variables relevant to DNS abuse trends.

NABP supports this recommendation. Voluntary commitments, if permitted in subsequent rounds, should include their intended goal and be submitted during the application process, allowing an opportunity for the community to review and, potentially, object. Such commitments should be accessible in an organized, searchable format.