

November 22, 2009

Submitted electronically

Re: Comment on Top Level Domains Draft Applicant Guidebook Version 3

Mr. Rod Beckstrom CEO and President Internet Corporation for Assigned Names and Numbers 4676 Admiralty Way Suite 330 Marina del Ray, California 90292

Dear Rod,

BITS¹, the technology policy division of The Financial Services Roundtable, appreciates the opportunity to comment on the Draft Applicant Guidebook, Version 3, (DAG3) published on October 2, 2009 by ICANN. We offer both general and specific comments to the application processes and the Guidebook.

General Comments

The following are general comments concerning the overall implementation of new generic Top Level Domains (gTLDs). As noted in recent ICANN literature as well as at the October meeting in Seoul, Korea, ICANN recognizes that there remain significant and important issues to resolve regarding:

- Trademark Protection Particularly the reconciliation of the Implementation Recommendation Team (IRT) report and staff reports regarding the Trademark Registry and the Uniform Resolution Process
- Economic Study Predominantly ICANN's plans to commission further studies by retaining a panel of yet to be identified economists to review and summarize work to date, augment existing studies to consider net benefits of the new gTLD program and verify policy conclusions regarding feasibility assessment (cost and time) with a new study on public benefit of new gTLDs
- Registry/Registrar Separation Principally, resolution of the four alternative scenarios ICANN has now proposed.
- Root Scaling Chiefly, the drawing of final conclusions from the ICANN Board requested root scaling study that commenced in May 2009 and the determination the impact of DNSSEC's implementation in the root zone.

¹ BITS provides intellectual capital and fosters collaboration to address emerging issues where financial services, technology, and commerce intersect for the member companies of The Financial Services Roundtable. The Financial Services Roundtable represents 100 of the largest integrated financial services companies providing banking, insurance, and investment products and services to the American consumer. Member companies participate through their Chief Executive Officers and other senior executives nominated by those CEOs. Roundtable member companies provide fuel for America's economic engine, accounting directly for \$84.7 trillion in managed assets, \$948 billion in revenue, and 2.3 million jobs.

ICANN appears to recognize that until these key issues reach conclusion and consensus among key ICANN constituencies, it is inappropriate to move forward with the opening of applications for new gTLDs. We fully support delaying the application process until these items reach full resolution.

Each is a critical issue from our perspective. In particular, we continue to remain very concerned with the resolution of the trademark and economic benefits issues. Defensive protection of permutations of financial services trade and brand marks represent a significant cost to our industry as do the costs of a takedown and legal fees to assist with cease and desist efforts. In addition, our industry suffers particularly from trademark abuse by actors hoping to perpetrate fraud against our customers. The expansion of the gTLD environment will exacerbate defensive costs and fraudulent abuse if ICANN does not implement proper and effective trademark protections. With regard to economic costs, we continue to believe that the costs to our industry of implementing one or more new gTLDs will be substantial. In addition, we believe that the expansion will require significant costs to educate financial services consumers to avoid likely confusion in the implementation of any new financial services gTLD.

General Comments Related to DAG3

At ICANN's request, on August 6, 2009, BITS, the American Bankers Association (ABA), the Financial Services Information and Analysis Center (FS-ISAC) and the Financial Services Technology Consortium (FSTC) collaborated to provide ICANN with its thoughts regarding the requirements for any new gTLD offering financial services. (Transmittal Letter and Requirements to ICANN attached) A number of non-US financial associations including the International Banking Federation and the Australian, British and Canadian Bankers Associations subsequently endorsed these requirements. We appreciate ICANN's consideration of our submission and the incorporation of certain of its requirements into the Guidebook. In the context of these requirements, we remain concerned with Version 3 of the Guidebook for several reasons:

- We strongly recommend that ICANN require high security verification for financial services domains. As currently written in "Verification for High Security Zones" (see DAG3, Section 1.2.7), this program is completely voluntary. This is not acceptable for domains, such as those offering financial services, where the likelihood of malicious conduct is very high and the nature of the services offered requires high security to protect the using public.
- We are very concerned that, as characterized in DAG3, an applicant's decision to pursue or not pursue Verification "does not reflect negatively on the applicant nor affect its scores in the evaluation process" because we believe that:
 - For select gTLDs, including those offering financial services, lack of commitment to the Verification program should result in a negative impact to the applicant.
 - It makes it impossible for our "community" to file an objection to any applicant based on that applicant not committing to seek Verification. We believe this presents a serious drawback to our community's ability to assure the safety of financial gTLDs.

We remain very encouraged by ICANN's increasing focus on the prevention of malicious conduct on the Internet and are supportive of the requirements ICANN has defined, but we believe ICANN must explicitly state those requirements in the DAG versus in ancillary documents so that all applicants are clear on what ICANN expects. ICANN has recently published material indicating that the new gTLD program will contain certain provisions intended to mitigate malicious conduct. In particular, ICANN proposed six additional requirements that it advanced as being required of all new gTLDs. These included:

- Enhanced requirements and background checks
- Requirement for DNSSEC deployment
- No wildcarding/remove glue records
- Requirement for thick Whois
- Anti-abuse contact and documented policy
- Expedited registry security request process

We strongly support the inclusion of these provisions, as the mitigation of malicious conduct is critical to the financial services industry. We believe, however, that, with the exception of the "Requirement for DNSSEC deployment," it is not clear that ICANN will hold all applicants to these new requirements. Specifically, for each additional requirement, we offer the following observations:

- Enhanced requirements and background checks Other than a reference in DAG3 Section 1.4.2 "Application Form" (see item 11), there is no other reference
- No wildcarding/remove glue records No specific reference found in DAG3
- Requirement for thick Whois No specific reference found in DAG3
- Anti-abuse contact and documented policy There are two references to the need for an anti-abuse contact (i.e., Section 1.4.2 "Application Form" [see item 35] and Section 5.4.1 "What is Expected of a Registry Operator"), but appears to be no reference to the need for a documented policy
- Expedited Registry Security Request process There is an inference in Section 5.4.1 "What is Expected of a Registry Operator" that a registry's abuse point of contact is "responsible for addressing matters requiring expedited attention and providing a timely response to abuse complaints", but no specific reference in DAG3 to the process requirement.

Specific Comments

We preface each comment with the area to which it applies along with a reference to the section in Module 1 in which it is first noted. The areas on which we comment appear generally in the order in which ICANN discusses them in Module 1.

- Objection Filing (Section 1.1.2.4)
 - The Objection Filing period will end two weeks after the close of the posting of Initial Evaluation results. Depending on the volume of applications filed, this timeframe could be too short to review all the filed applications and determine if objections are appropriate. We would like to see this period extended or, at least tiered, based on application volume.

- Transition to Delegation (Section 1.1.2.8)
 - We suggest this section speak to the expected time to transition for gTLDs utilizing the Verification of High Security program.

• Eligibility (Section 1.2.1)

- We believe a stronger, more explicit definition of the term "good standing" is appropriate.
- The criminal/inappropriate conduct testing calls for testing of the applicant and various other parties "owning (or beneficially owning) fifteen percent or more of applicant". While it would appear the intent is to force such tests for larger owners, this requirement does not take into account situations in which a larger number of application participants exists such that no one party rises to the 15% threshold. There should be some background checking for key participants in such a scenario.
- It is not clear from the DAG who will perform criminal/inappropriate conduct testing and how such processes will work. We encourage further definition regarding these two areas.
- We believe item b of this section is a positive move forward in checking for patterns of decisions "indicating liability for, or repeated practice of bad faith in regard to domain name registrations, but note the same concern with the 15% ownership requirement as noted above.

The risk of criminal activity within the Internet environment is growing and the mitigation of the risk of participation in the gTLD environment by criminal actors is a vitally important area for us.

• Required Documents (Section 1.2.2)

- For item 2 ("Proof of good standing"), we believe stronger, more explicit definitions of the terms "good standing" and "the applicable body in the applicant's jurisdiction" are required.
- The "Community Endorsement" section states that an application can be designated as community-based with the endorsed of "one or more established institutions representing the community." We believe the designation of community-based application should require more than the endorsement of a single institution. In our industry, we find it difficult to believe any definition of the term "community" exists that would suggest a community is only one institution.

• Community-Based Designation (Section 1.2.3)/Definitions (Section 1.2.3.1)

- Item 4 again states that the concept that a minimum of one institution can serve to endorse an application as community-based. As stated above, we believe that is inappropriate at least in the financial services industry and, potentially, more broadly.
- We do appreciate and support the requirement stated in Item 3 regarding dedicated registration and registrant use policies in conjunction with community-based gTLDs.

• Implications of Application Designation (Section 1.2.3.2)

- We support the provision that any application can be objected to based on community grounds even if the application is not designated as community-based.

- Voluntary Verification of High Security Zones (Section 1.2.7)
 - Please see our earlier comments regarding our concerns over the optional nature of this verification and the fact that opting out of the verification program would not be grounds for objection.
- Notice of Changes to Information (Section 1.2.6)
 - We believe it is important to state explicitly the outcomes of situations in which an applicant needs to notify ICANN of untrue or inaccurate information in its application. It is not clear if this can disqualify an application. Likewise, we think it is important to state the outcomes in situations in which the applicant if not forthcoming with such information, but ICANN discovers that the applicant has included untrue or inaccurate information.
- Information for Internationalized Domain Name Applicants (Section 1.3)
 - This section should include some reference to the need for applicants to comply with requirements regarding the prevention of malicious conduct.
 - We do not believe ICANN should allow variant TLDs, as this is likely to lead to user confusion.
- Fees Required in Some Cases (Section 1.5.2)
 - We are concerned that Dispute Resolution Filing Fees, Dispute Resolution
 Adjudication Fees and Community Priority (Comparative) Evaluation Fees can
 become burdensome particularly to non-profit community associations if the volume
 of applications germane to a community is high. We encourage ICANN to cap fees
 wherever possible rather than leave them open-ended.
 - While we understand that ICANN is likely concerned about the volume of requests it may need to process if it allows for personal or telephone consultations, the requirement to submit all questions about application preparation in writing seems overly restrictive. We suggest ICANN consider some methodology for allowing for a level of personalized service.
 - In this section's "Dispute Resolution Adjudication Fee" text, it notes, "ICANN further estimates that an hourly rate based proceeding with a one-member panel could range from..." We are concerned that this text suggests only one person could serve as the "panel" for a community-based objection's dispute resolution. We do not believe one person, regardless of his or her individual expertise, represents a sufficient breadth of expertise to adjudicate a community-based objection.
- Outcomes of String Similarity Review (Section 2.1.1.1.3)
 - We believe the addition of string similarity based on criteria such as "visual, aural, or similarity of meaning" is a positive addition to the DAG. This section could be improved with a more detailed definition of the term "similarity of meaning". Does this, for example, suggest that synonyms to an applied for name meet this criteria? For example, at Thesaurus.com, the following synonyms exist for the word "bank": credit union, depository, fund, hoard, investment firm, repository, reserve, reservoir, safe, savings, stock, thrift, treasury, trust company, and vault. Would those synonyms meet the "similarity of meaning" criteria?

- Applicant Reviews (Section 2.1.2)
 - We believe that one of the key ICANN suggestions regarding malicious conduct avoidance involved the performance of background checks on applicants, registries and registrants, but that does not appear to be a part of the reviews ICANN notes in this section.
- Code of Conduct Guidelines for Panelists (Section 2.3.3)
 - We suggest clarifying in the "Enforcement" section the consequences of breaches of the code on the application process. For example, if ICANN determines that a reviewer has breached the Code of Conduct, what effect does that have on applications, objections or disputes in which that reviewer was involved.
- Independent Objector (Section 3.1.5)
 - We think the Independent Objector (IO) concept is interesting, particularly since the IO will be able to file Community Objections. We, however, do have some open questions. First, it is not clear who will provide the IO's budget and funding. Will ICANN provide this funding? Second, we realize ICANN expects "the IO must be and remain independent and unaffiliated with any of the gTLD applicants" and will hold the IO to the "various rules of ethics for judges and international arbitrators" to "declare and maintain his/her independence." The fact, however, that ICANN will appoint the IO leaves some lingering concern regarding that person's ability to be truly independent and concerns regarding whose interests the IO will represent. We believe ICANN should consider an independent constituency appointing the IO.
- Grounds for Objection (Section 3.3.1)
 - The grounds for a "Community Objection" state, "There is *substantial* opposition to the gTLD application from a *significant* portion of the community to which the gTLD string may be explicitly or implicitly targeted." (Italics added for emphasis.) It seems incongruent to us that a single institution can endorse an application to raise it to the level of a community-based application but it requires substantial opposition from a significant portion of the industry to object. If this level of community involvement is required to object, it should be required to apply in the first place. In addition, we find the terms "substantial" and "significant' are too open-ended. Further definition of these terms is warranted.
- Standing to Object (Section 3.1.2)
 - While section 3.3.1 suggests a significant portion of the community must object to an application, this section seems to state that a single "Established institution" may object. ICANN should clarify the level of community involvement to object.
- Community Objection (Section 3.1.2.4)
 - This section again seems to change the criteria for who may place a community objection. We suggest ICANN reconcile this section with the two above sections.
- Objection Filing Procedures (Section 3.2.1)
 - The requirement that each objection must be filed separately can become burdensome to communities if a number of community-based or community-related

applications are filed. We ask ICANN to consider the financial organization of the objector in setting and determining fees.

- Expert Determination (Section 3.3.6)
 - As we did when we submitted our requirements to ICANN in collaboration with the other industry associations, we continue to recommend to ICANN that for financial gTLDs, some expertise from the financial services industry be included in the expert determination process.
- Morality and Public Order (Section 3.4.3)
 - We would appreciate ICANN commenting on whether it considers "increased potential for financial fraud" to be grounds for a public order objection.
- Community Objection (Section 3.4.4)
 - The text "Community opposition to the application is substantial" yet again raised the question of why such "substantial" involvement is not required to apply for a community-based gTLD and again calls the question of who may object as we note in earlier comments above.
 - In the "Detriment" section:
 - We suggest adding to the phrase "The objector must prove that there is a likelihood of detriment to the rights or legitimate interests of its associated community" the phrase "or its constituents."
 - We believe requiring the High Verification program would solidly indicate that the applicant intends to operate a secure gTLD.

We appreciate ICANN's demonstrated commitment to refine the gTLD expansion plan, its willingness to accept comments on DAG3, and its willingness to consider our comments. If you have any further questions or comments on this matter, please do not hesitate to contact the undersigned or Paul Smocer, Vice President for Security of BITS at PaulS@fsround.org or 202.589.2437.

Sincerely,

Leigh Williams BITS President

Attachment – Financial Associations' Letter to ICANN with Requirements for Financial gTLDs

American Bankers Association BITS

Financial Services – Information Sharing and Analysis Center Financial Services Technology Consortium

6 August 2009

Mr. Rod Beckstrom, President and CEO, Rod.beckstrom@icann.org Internet Corporation for Assigned Names and Number

Dear Mr. Beckstrom,

We want to thank The Internet Corporation for Assigned Names and Numbers (ICANN) for its willingness to engage the banking and finance sector in the public consultations regarding the Draft Applicant Guidebook. We particularly want to thank Greg Rattray, ICANN Chief Internet Security Advisor, with whom we met on several occasions as we developed our recommendations, and who was most cooperative and supportive of our efforts.

As we communicated to ICANN in our prior comment letters and discussions, the financial services industry has a variety of concerns about the proposed expansion of Generic Top Level Domains (gTLDs), including cost/benefit, trademark protection, scalability and security. Recognizing that ICANN is actively working most of these issues with other constituents, we focused our attention primarily on security, and we welcomed ICANN's invitation to contribute actively on that topic.

In Paul Twomey's June 21, 2009 letter, he directed his offer to engage the sector to the American Bankers Association (ABA), BITS, the Financial Services Information Sharing and Analysis Center (FS-ISAC), and the Financial Services Technology Consortium (FSTC). While those four associations collaborated in developing a response, we also reached out to a number of other organizations, including our member companies, several non-U.S. financial services trade associations, and select experts.

Our efforts concentrated on two objectives. The first was to identify potential process changes within the Guidebook that would allow ICANN and the sector to both identify and evaluate applications for new gTLDs where their use was primarily for offering financial services. The second objective was to identify a set of security, stability and resiliency requirements for these financial TLDs. Based on our discussions with Greg Rattray, we tried to keep these requirements at a higher level rather than a very detailed level.

We have attached two documents to this letter. The first, "Financial Associations Recommendations-gTLD Application Process (Final)," presents our proposed Guidebook process changes to address financial TLDs. The second, "Financial Associations Recommendations-gTLD Requirements (Final)," contains our security, stability and resiliency requirements for these gTLDs.

Based on our discussions to date, we understand that ICANN will review and evaluate this input, and then determine what to integrate into the next version of the Guidebook and how to integrate it. We certainly will be available to ICANN to answer any questions or discuss any concerns regarding our recommendations during these next steps.

American Bankers Association BITS

Financial Services – Information Sharing and Analysis Center Financial Services Technology Consortium

Our associations and members look forward to seeing and commenting on ICANN's incorporation of this input into the Guidebook. We also applaud ICANN's efforts to address our concerns outside of the security realm, and look forward to seeing the results of the consultations in those areas.

While we prefer to work all of these issues directly with ICANN, they are of great importance to our industry, and we are considering a number of options for managing the risks that they pose to our member institutions and their customers. We remain hopeful that, by partnering with ICANN, we will be able to resolve these issues and will not have to take other preventive or mitigating measures.

Again, we are grateful to ICANN for recognizing the need for high security within financial TLDs, for inviting the industry to communicate its requirements, and for ICANN's active collaboration as we developed and delivered the results. We look forward to continuing this dialog with the ICANN staff and with the broader ICANN community.

Sincerely,

Mr. Doug Johnson, Vice President, djohnson@aba.com American Bankers Association

Mr. Leigh Williams, President, leigh@fsround.org BITS

Mr. Bill Nelson, President and CEO, bnelson@fsisac.us Financial Services-Information Sharing and Analysis Center

Mr. Dan Schutzer, President, dan@fsround.org Financial Services Technology Consortium

Cc:

Mr. Doug Brent, Chief Operating Officer, ICANN, Doug.brent@icann.org

Mr. Kurt Pritz, Senior Vice President of Services, ICANN, Kurt.pritz@icann.org

Mr. Greg Rattray, Chief Internet Security Advisor, ICANN, Greg.Rattray@icann.org

Mr. Don Rhodes, Policy Manager, ABA, drhodes@aba.com

Mr. Paul Smocer, VP Security, BITS, pauls@fsround.org

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Mr. Roger Lang, Managing Executive-Security SCOM, FSTC, roger@fsround.org

Attachments (2)

gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Application Submission	Applicant	Establish a methodology to identify applications for gTLDs that will be used primarily for offering financial services	 Inclusion of a checkbox used by applicant to identify use of gTLD to offer financial services, and Add an attestation statement to the application wherein the applicant and its proposed registry services attest to their willingness to adhere to industry requirements if the gTLD will be used to offer financial services. (Will require updates to the application itself, as well as to Module 6 Top-Level Domain Applications – Terms and Conditions) Inclusion of a section in the application for applicant to define proposed use of gTLD 	Offering financial services defined to mean that the gTLD would be used primarily to perform financial transactions offered by recognized financial institutions including banks, saving associations, investment houses, and insurance companies. Financial transactions includes use to inquire about financial records of such institutions.

Final 07/29/09

gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Administrative Completeness Check	ICANN	 Validate that applications whose proposed usage suggests financial services have properly marked the checkbox Segregate applications for gTLDs whose primary purpose is the offering of financial services Validate that applicant and its proposed registry services have attested to their plans to adhere to industry requirements and have submitted documentation supporting plans to conform 	 Expand explanation of Administrative Completeness Check (1.1.2.2) Expand explanation of Initial Evaluation elements (1.1.2.3) 	

Final 07/29/09

gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Initial Evaluation	ICANN	 Expand the current "Top-Level Reserved Names List" to include a set of specific names the public is likely to associate with financial services and include in Reserved Names Review. (This list not intended to be exhaustive.) Include into String Review process a check for names that could suggest to the public that the gTLD's primary purpose is to offer financial services and identify those for further review by industry panel Incorporate review of applicant's ability to meet industry-specified requirements 	 Expand explanation of Initial Review elements to include review against requirements (1.1.2.3 and 2.1) Expand list of reserved names (2.1.1.2) Expand explanation of initial review process to include a check for names likely to cause public confusion (2.1) Possible locations to insert industry requirements appear to be Sections 2.1.2 (Applicant Reviews) or 2.1.3 (Registry Services Reviews) 	Industry will need to provide a list of "reserved" name nominations to ICANN Industry will need to provide some set of criteria to ICANN for judging names that "could suggest to the public that the gTLD's primary purpose is to offer financial services"

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gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Objection Filing/Dispute Resolution	All	 Establish a formal Financial Services Panel for assessing financial service-oriented gTLD applications (enhancing the Community Objection principles noted in section 3.4.4) Charge the above panel with: Reviewing all filed gTLD applications to: Ferret out any applications overlooked as being financial service oriented in prior steps Identify applications for string names that could cause public confusion in inferring a core function of providing financial services (enhancing principles noted in section 4.2.3) Reviewing applications for financially-oriented gTLDs to assure planned compliance with industry requirements Provide preliminary endorsement to proceed through the rest of the application process, conditional endorsement or rejection of reviewed gTLD applications. 	Need to update text regarding Objection Filing to recognize panel and its purpose (Sections 1.1.2.4, 3.1.1, 3.1.2, 3.1.2.4, 3.2.1, 3.2.3, 3.4.4, 4.2.3)	 Financial Services Panel: Potential members for this panel could consist of representatives from financial industry associations, financial regulatory authorities, data/identity protection organizations (e.g., the French Data Protection Authority ("CNIL")) and civil society Representatives should be drawn from at least three major geographic areas (e.g., Asia, Europe and North America) As an alternative, would ICANN consider refining the concept of the expert panel (describing in 3.3.4) that contributes earlier in the application review process. The existence of this panel does not obviate the concept currently stated in the AGB that "established institutions" in the financial services community have the right to object to any application. The current DRSP for Community Objections is the International Center of Expertise of the International Chamber of Commerce (ICC). If the ICC has a role in financial gTLD reviews, it must have financial expertise.

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gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Extended Evaluation	ICANN	 Require an Extended Evaluation in situation where: The gTLD string could be associated with financial services The application raises technical issues that may adversely affect the security of the financial services industry or its customers 	Expand concept to include "if the applied for gTLD string or one or more proposed registry services raises technical issues that may adversely affect the security of the financial services industry or its customers" (1.1.2.5)	
Dispute Resolution	ICANN	 No changes to proposed process assuming changes to Objection process noted earlier are acceptable 		
String Contention	ICANN	No changes to proposed process		

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gTLD Application Process Step	Party Responsible for Step	Proposed Process Additions	Subsequent Applicant Guidebook Changes	Notes
Transition to Delegation	ICANN or Approved "Auditor"	 Assure contract terms include industry-requirements for financial gTLDs Ensure pre-delegation testing adequately tests control expectations set in industry requirements Require an ongoing assurance that financial services gTLDs continue to operate according to industry requirements 	 Update Section 5.1 (Registry Agreement) to include requirements Expand Section 5.2 (Pre-Delegation Testing) to include questions and criteria related to industry-specific requirements Enlarge Section 5.4 (Ongoing Operations) to require periodic control reviews of financially oriented gTLDs 	 Section 5.4 currently states, "The registry agreement contains a provision for ICANN to perform audits to ensure that the registry operators remain in compliance with agreement obligations". If, as suggested earlier the industry requirements for financial gTLDs are incorporating into the agreement, this issue may be resolved. If not, then the section's text should be expanded to include audits of compliance with those requirements. In addition, we would need to assure that audits exist for registrars and registrants as well. The suggested roles for the compliance audit environment would be: ICANN certifies and selects audit firms Registry operators, registrars and registrants engage certified firms.

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This section addresses the control and security requirements the financial services industry believe should apply to any gTLD whose primary purpose is the offering of financial services.

This document provides a list of security and stability control requirements for any generic Top Level Domain (gTLD) whose purpose is to provide financial services. The financial services industry believes that such gTLDs should only exist in a highly secure environment given that banks, brokers, insurance, investment companies and others whose primary business is the offering of financial services will use such gTLDs to offer a myriad of such services to the public. The public expects their financial activities to be kept secure, and these financial institutions desire to provide these services in as secure an environment as is technically possible. Covered entities will be required to provide independent confirmation of their compliance with these standards. These standards are promulgated as of August 2009, and will be updated as necessary.

- Registry Operator Controls
 - Domain Name Registration/Maintenance (Create, Renew, Modify, Delete, Revoke/Suspend, Transfer)
 - Shared Registration System (SRS) implemented to Internet Engineering Task
 Force's Extensible Provisioning Protocol (EPP) RFC standards with support for
 business rules and registry policies that are well defined and appropriate for any TLD
 offering primarily financial services
 - DNSSEC must be used for all DNS transactions from initial implementation of the domain
 - Domain Records
 - Digital Certificate Requirements
 - Each domain name should be linked to a digital certificate
 - Encryption Requirements
 - All traffic among registry operators, registrars and registrants must be encrypted
 - All domains must utilize HTTPS when the activity includes the display or entry of non-public personal information, the display of financial records, or the transacting of financial activities
 - All data related to authentication credentials associated with the interaction of registry operators, registrars and registrants must be encrypted in storage
 - Defined Naming Conventions
 - Registry must adhere to naming conventions endorsed by the Financial Services
 Panel and agreed to by any gTLD applicant
 - Authentication Requirements
 - Registry must require that Registrars accessing Registry services use strong, dual factor authentication to ensure only authorized access. The dual factor authentication methodology utilized at any given time should be at least at NIST Level 3 (or preferably Level 4).
 - Registry Operator must provide non-discriminatory access for all approved registrars
 - Maintenance and Accuracy of Contact information (i.e., WhoIS data)
 - Ownership, Technical, Administrative
 - While ICANN currently requires annual verification as a minimum, for financial gTLDs verification must be quarterly.
 - Proxy registrations will not be permitted within the financial gTLD environment.
 - Resolution Services
 - DNS lookup services must be available at all times with rapid response to all queries

This section addresses the control and security requirements the financial services industry believe should apply to any gTLD whose primary purpose is the offering of financial services.

- Registry operator must offer Thick Whois
- Server Configuration/Maintenance Standards
 - Server configuration and maintenance must be consistent with NIST Special Publication SP-800-123, "Guide to General Server Security"
- Business Continuity Requirements/Backup And Disaster Recovery Capabilities
 - Planning
 - Registry operations should be located in a geography with minimal exposure to natural disasters
 - Registry operations must provide sufficient physical redundancy to assure continuous operations of the domain in the event of a natural or man-made physical disaster. Planning should consider the requirements imposed on critical US financial institutions as embodied in "Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System issued by the Federal Reserve, the Department of the Treasury's Office of the Comptroller of the Currency, and the Securities and Exchange Commission.
 - Registry operators should plan for ability to withstand and quickly recover from a cyber attack including ability to recover from known attack scenarios including distributed denials of service and penetration attacks (i.e., those which take advantage of unfixed vulnerabilities)
 - Testing/Simulations
 - Registry operator must test its physical recovery capabilities at least annually
 - Registry operator must test its cyber attack recovery capabilities at least semiannually
 - Registry operator must be willing to participate in at least one major industry-level physical disaster simulation and one major industry-level cyber attack simulation annually
 - Auditing of Backup and Disaster Recovery Capabilities
 - Registry operator must make its backup and recovery plans and test results available for third party verification by an industry-approved review service independent of the registry operator
- Ongoing Monitoring Requirements
 - Registry operator must be able to detect variations from expected "normal" state of IT operations
 - Registry operator must be able to detect actual and potential cyber attacks
 - Registry operator must have and monitor a reliable source to gather physical and cyber threat intelligence
- Incident Management Process Requirements
 - Mitigation of threats, be they physical, cyber or operational, must occur without degradation to ongoing operation and legitimate domain traffic
 - Registry operator must inform registrars and registrants of threat intelligence it identifies as a result of its own monitoring and must have capability to issue immediate alerts upon identification of critical or high-risk incidents
- Change Management Process Requirements
 - Registry operator must implement procedures related to environmental changes in hardware, software or operations that incorporate adequate pre-implementation

This section addresses the control and security requirements the financial services industry believe should apply to any gTLD whose primary purpose is the offering of financial services.

planning and notification to parties potentially affected, adequate pre-implementation testing, post-implementation testing and adequate back-out contingencies

- Security
 - DNSSEC Requirements
 - Top level gTLDs must comply with industry standards and best practices for DNS signing
 - Registry operator must require DNSSEC for all domain names and sub-domains in the gTLD whose purposes include access to private information, financial information or the execution of financial transactions
 - DNSSEC must be employed minimally with NextSecure/NSEC (and preferably with NSEC3)
 - Encryption
 - Registry operator must require all traffic utilize a minimum of 128-bit encryption
 - Key Management Controls for Signing Keys
 - Registry operator must have adequate procedures to control the upgrade, replacement, retirement of encryption keys for both the TLD keys and domain name zones
 - ◆ An optional but value-added service would be for the registry to provide technical help, tools and services to assist registrars (and maybe registrants) with key management
 - Other Security Requirements
 - Registry operator must utilize commercially reasonable defense in depth protections including network and personal firewall protections, intrusion prevention, filtering to block malicious traffic, etc.
 - Registry operators must monitor their environment for security breaches or potential indicators of security issues utilizing commercially reasonable monitoring tools including IDS monitoring, etc.
 - Optionally, registry operator should offer distributed denial of service mitigation services to all sites within a financial services gTLD
 - Periodic Security Testing Standards
 - ♦ Registry operator must perform at least annual network penetration testing
 - Certificate Issuance and Maintenance (Issue, Revoke, Modify)
 - Registry operator must utilize Internal Registry Systems should be protected using PKI certificates for authentication and encryption of sensitive data
 - Registry operation must have written policies and procedures for key generation and storage, and aging and renewal of certificates (including alerting to certificate recipients of upcoming expirations)
- Registrar Control (Undertaken by the Registry Operator)
 - Number of Registrars
 - Registry operator should limit the number of registrars to the fewest possible to effectively serve any financial services gTLD
 - ♦ If permissible under ICANN rules, registry operator may also serve as the sole registrar for a financial gTLD
 - Criteria for Vetting of Registrars
 - Registrars associated with financially-oriented domains, prior to initial acceptance as a Registrar, must be subject to:

This section addresses the control and security requirements the financial services industry believe should apply to any gTLD whose primary purpose is the offering of financial services.

- Extensive Financial Background Check (preferably at least 10 years back)
- ♦ Extensive Criminal Background Check (preferably at least 10 years back)
- ♦ Approval By the Financial Services Panel
 - Consideration should be given to performing these checks on Registrar principles and employees
- Registrars must be revalidated based on the above criteria at least quarterly. If the Registrant fails any of these checks during any post-initial acceptance revalidation, the Registry operator should suspend the Registrar.
- Registry operator must monitor registrar fraud activity looking for patterns indicative of inappropriate registrar controls
- Registry operator must have written policies and procedures for registering, suspending and terminating registrars
 - Registrar registration procedures must include processes to validate that registrar data provided is accurate
 - ◆ If the Registry Operator becomes aware of financial or criminal issues regarding an accepted Registrars or if the quarterly review reveals such issues, Registrar must be suspended or terminated
 - Registry Operator must possess the capability to transfer services between registrars with no disruption of service
- Data Escrow Requirements
- Auditing and Compliance Requirements
 - Registry operator must agree to having an annual, independent assessment of its compliance to all of the above industry requirements via a third party verification by an industry approved review service independent of the registry operator
 - Registry operator must agree to provide the results of the independent assessment to the Financial Services Panel (defined in process document) and agree that a summary of the report can be made publicly available.

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Registrars

- Authentication
 - Registrars must provide strong, dual factor authentication to their Registrant facing portals to ensure only authorized access. Two factor authentication should be required for when adding, deleting or modifying any domain registration information and for account review or monitoring. The dual factor authentication methodology utilized at any given time should be at least at NIST Level 3 (or preferably Level 4).
- Sub-Domain Registration/Registrant Controls (Undertaken by the Registrars)
 - Initial Registration
 - Registrars must evaluate all initial requests for domain name registrations.
 Evaluation must include:
 - ♦ Registrars must assure that any registrants in a financial gTLD are approved financial institutions as defined by the Financial Services Panel (i.e., Company Validation)
 - Possible methodologies include formal membership in a recognized and registered trade association, issuance of a formal charter by an in-country financial regulator, approval by an established financial community governance board.
 - ♦ Validation that the IP addresses associated with the domain names validly belong to the financial institution (i.e., IP Block Validation)
 - Validation that contacts associated with the registrant are valid employees of the financial institution before being granted access credentials (i.e., Credentials Validation)
 - ◆ Validation that the registrant possesses the legal right to use the domain name (i.e., Copyright, Trade Name Registration, Brand Name Registration Validation)
 - Registrars may complete the process for this brand-name protection validation in multiple ways. One possibility, in the context of the current IRT's suggestions, may involve financial institutions registering their protected names within an IP clearing house, which the registrar would then check.
 - ◆ Validation that the requesting party has the valid right to use the payment mechanism it is utilizing (i.e., Financial Validation)
 - N.B. Financial institutions often utilized third-party service providers or business partners to provide Internet services. Where that is the case, the Registrar must perform the above Company Validation on the financial institution utilizing the provider or partner. In addition, the financial institution must verify to the Registrar that the provider or partner has a current and active relationship with the institution. Once the institution completes that verification, the Registrar will complete the remaining validations on the provider or the partner. In these situations, the Registrar should reconfirm with the financial institution the continuing nature of these relationships annually.

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- Registrars must establish SLAs for timely approval of domain name registrations and Registrants
- Renewal
 - Registrars must offer the option to allow automatic renewal of domain name registrations
 - Registration of domain names should last for an extended period of time before requiring renewal (e.g., a minimum of ten years)
 - Registrar must possess the ability to notify domain name holders of upcoming expirations of domain name registrations at least 180 days prior to such expirations.
 - Registrars must establish SLAs for timely renewal of domain name registrations and Registrants
- Registrar Standards for Monitoring Registrants
 - If a Registrar becomes aware that registrants and their registered domains are exhibiting patterns of inappropriate activity indicative that the registrant's domain(s) are being used as attack points for such activities as phishing, malware download, etc. and indications of fraudulent activity, the Registrar should notify the Registry Operator and the Registrant immediately so that both parties can investigate.
- Registrant Registration, Suspension and Termination Processes
 - Registrars must have rapid suspension or termination procedures to react to either direct requests from registrants for suspension or termination or to react to situations in which the Registrar's monitoring indicates an issue
- Auditing and Compliance Requirements
 - Registrars must agree to having an annual, independent assessment of its compliance to all industry requirements via a third party verification by an industry approved review service independent of the registrar
 - Registrars must agree to provide the results of the independent assessment to the industry through its governance committee (defined in process document) and agree that the report can be made available to any registrant served by the registrar

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Registrants

- Criteria for Registrant Behavior
 - Registrants in a financial gTLD must be approved financial institutions as defined by the Financial Services Panel (i.e., Company Validation)
 - Possible methodologies for identifying "approved" financial institutions include formal membership in a recognized and registered trade association, issuance of a formal charter or validation by an in-country financial regulator, approval by an established financial community governance board. Regardless, the final approval criteria need to be standardized and applied consistently to the extent feasible across all financial gTLDs, but certainly within any particular financial gTLD.
 - In situations where the use of an in-country authority approval has consistently led to evidence of lax controls over entry of registrants coupled with resulting abuse by approved registrants, a method must exist to remove that authority from the list of approving authorities.
- Security Requirements
 - Authentication
 - Registrant to Registrar/Registry Operator Authentication
 - Registrants must control authentication credentials associated with communication to Registrars and the Registry Operator, particularly those credentials associated with the ability to add, delete or modify the Registrant's records
 - Registrant Requirements for Users of Registered Domains
 - Registrants must comply with the minimum authentication requirements for users of its domains required by its financial regulator, though Registrants are encouraged to utilize dual factor authentication for any activity involving display of private personal or financial information or conduct of financial transactions.
 - Secure Web Browser Considerations
 - Registrants are encouraged to have EV Certificates for all registered domains that they plan to use for the display or entry on non-public personal information, the display of financial records, or the transacting of financial activities
 - All confidential traffic (e.g., HTTPs, SMTP) should utilize NIST standard 128- bit encryption
- Audit and Compliance Requirements
 - Registrants' controls should be subject to review by its financial regulator, or if their financial regulator does not perform such reviews, by a third party verification by an industry approved review service independent of the Registrant.

Future Considerations Financial Services gTLD Control Requirements

This section relates to future considerations regarding the financial services industry's requirements for any gTLD whose primary purpose is the offering of financial services.

- Requirements Definitions (Threat and Risk Assessments)
 - Environmental, control technique improvements and other factors will change over time
 and we need to keep our requirements up to date to reflect such changes. Given that,
 the Financial Services industry anticipates updating these requirements every two to
 three years. As with this version of the requirements, we will rely on the expertise of
 financial associations and their members and will engage with appropriate, external
 experts.