

Action Items:

1. Determine which safeguards (ie intensity of focus) should be subject to SubTeam study
2. Review, suggest, and assess methods to measure individual safeguard **effectiveness**
3. Prioritize and determine skill sets required to inform any future RFP and selection of external research vendor

Guide:

1. **“Bang for Buck” (bfb) index: meaningfulness of possible results + amount of research legwork + sample size + methodological expertise req’d = BFB**
 - a. **“Bang for buck” refers to the return on investment we could get from hiring a vendor to conduct analysis of a safeguard’s effectiveness**
 - b. **\$ = priority for vendor-conducted research (i.e. let’s spend money in these area)**

NB: “Qual” methods in chart = cannot be quantitatively correlated to DNS abuse rate

<u>Safeguard</u>	<u>Qual or Quant</u>	<u>Source and Method</u>	<u>Notes</u>	<u>Team and Staff Comments</u>	<u>Decision Points (BfB Index)</u>	<u>Recommendation</u>
DNS Abuse Report						Recommendations on how to assess “effectiveness” of safeguard as discerned from DC discussion:
Vet Registry Operators	Qual	Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview ICANN: review PwC reports, Program Implementation	<ul style="list-style-type: none"> • Cannot measure deterrent effect • 0 cases of RA termination per background screen 	Team: Carlton: low bfb Drew: If a TLD has a high abuse rate, could it indicate something about the	SubTeam leaning: Low bfb Brian’s 2¢: low bfb	1. Review PwC reports, Program Implementation Review, and public comments (on DNS Abuse Report and Program Implementation

		report, public comments		registry operator? Staff: Karen L: limited data; talk to applicants about the vetting process and the kind of information collected.		Review) to build descriptive analysis of effectiveness. 2. If survey or other qualitative methods chosen, ask applicants about the vetting process and their perceptions of its effectiveness.
DNSSEC Deployment \$	Quant	Vendor: Correlate DNSSEC deployment in TLDs with abuse rates (TLD DNSSEC reports) ICANN: descriptive stats		Team: Calvin: The CZDS provides number of zones signed with DNSSEC Drew: rick.eng.br/dnssecstat/; also see DNS Stability, Security and Resiliency Reports Staff: Karen L: all registry operators are required to deploy DNSSEC Jamie: 2 nd level domains have much lower rate of deployment Brian: currently seeking vendor to	SubTeam leaning: high bfb BRIAN'S 2 ^o : high bfb	1. Correlate deployment of DNSSEC with abuse rates in TLD. Segment analysis to account for rate of DNSSEC deployment at the second-level. 2. Provide descriptive stats on levels of DNSSEC deployment at the top and second levels.

				analyze DNS abuse rates by TLD		
Prohibition of Wildcarding	Qual	Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview ICANN: interview SMEs	<ul style="list-style-type: none"> 0 compliance complaints received on wildcarding 	Team: Carlton: look at SSAC reports to determine where WC'ing remains an issue. Staff: Brian: preliminary indications from SMEs and public comments suggest this safeguard is widely perceived as effective and there's no real issue to examine	SubTeam leaning: low bfb BRIAN'S 2φ: low bfb	1. Review SSAC and other reports to provide descriptive analysis of safeguard's effectiveness. 2. Interview subject matter experts for assessment of safeguard's effectiveness.
Removal of orphan glue records	Qual	Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview ICANN: interview SMEs		Team: Carlton: look at SSAC reports to determine if OG records still an issue Staff: Brian: preliminary indications from SMEs and public comments suggest this safeguard is widely perceived as effective and there's no real issue to examine	SubTeam leaning: low bfb BRIAN'S 2φ: low bfb	1. Review SSAC and other reports to provide descriptive analysis of safeguard's effectiveness. 2. Interview subject matter experts for assessment of safeguard's effectiveness.
Require Thick WHOIS records	Quant	Vendor: <ul style="list-style-type: none"> Correlate WHOIS accuracy (ARS) to 	<ul style="list-style-type: none"> PC: support "accuracy" as measure 	Team: Carlos: already being addressed in	SubTeam leaning: undetermined	1. Review WHOIS Accuracy Reporting System reports and

<p>\$? (see point 2 of recommendation to right)</p>		<ul style="list-style-type: none"> abuse rate “Perception of Effectiveness” survey, questionnaire, focus group, interview <p>ICANN: hot potato</p>	<ul style="list-style-type: none"> PC: Accuracy reporting doesn't account for privacy/proxy services (IPC) 	<p>PDP and other AoC reviews</p> <p>Laureen: consider targeted survey of law enforcement</p> <p>Drew: value added when we examine correlation between thick WHOIS and DNS abuse data we receive</p> <p>Staff: Jamie: consider dropping as this is already addressed in other areas</p>	<p>BRIAN'S 2¢: high bfb</p>	<p>other WHOIS-related reports emerging from other areas to provide descriptive analysis of safeguard's effectiveness</p> <p>2. Interview abuse responders, law enforcement and other users for assessment of safeguard's effectiveness [note potential synergy with CZDS method 1 below].</p>
<p>Centralization of Zone File access</p> <p>\$</p>	<p>Qual</p>	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview</p> <p>ICANN: interview SMEs</p>		<p>Team: Drew: abuse responders and law enforcement use CZDS to identify abuse</p> <p>Staff: Jamie: analyze monthly reports of credentials for zone file access (i.e. ZFA password requests); some generics have more credentials; explore ease of use</p>	<p>SubTeam leaning: high bfb</p> <p>BRIAN'S 2¢: high bfb</p>	<p>1. Interview abuse responders, law enforcement and other users for assessment of safeguard's effectiveness.</p> <p>2. Correlate number of CZDS password requests by TLD to abuse rate</p>

Documented Registry and Registrar level abuse contacts	Qual	Vendor: : “Perception of Effectiveness” survey, questionnaire, focus group, interview ICANN: interview SMEs and analyze ICANN Compliance complaints		Team: Drew: ICANN Compliance has reports on complaints related to this safeguard Laureen: Compliance has monthly and yearly reports; if there are complaints, compliance has them	SubTeam leaning: low bfb BRIAN’S 2φ: low bfb	1. Analyze ICANN Compliance reports to provide descriptive assessment of effectiveness.
Expedited Registry Security Request process	Qual	Vendor: : “Perception of Effectiveness” survey, questionnaire, focus group, interview ICANN: interview SMEs	<ul style="list-style-type: none"> Few instances of use 	No specific comments from staff or team. General leaning toward low bfb.	SubTeam leaning: low bfb BRIAN’S 2φ: low bfb	1. Interview SMEs for assessment of safeguard’s effectiveness 2. Review available reports to build descriptive assessment of safeguard’s effectiveness
Create draft framework for high security zone (HSZ) verification	Qual	Vendor: : “Perception of Effectiveness” survey, questionnaire, focus group, interview ICANN: review public comments, interview SMEs	<ul style="list-style-type: none"> Formal safeguard doesn't exist, so no "effectiveness" to test Much input received in public comments and ICANN internal correspondence 	No specific comments from staff or team. General leaning toward low bfb.	SubTeam leaning: low bfb BRIAN’S 2φ: low bfb	1. Provide descriptive background analysis of why no consensus was reached on this safeguard. 2. Compare abuse rates in TLDs with independently developed and implemented security protocols to those without, controlling for

						relevant variables (a high abuse rate in a TLD cannot be singularly explained by the absence of HSZ-type security protocols)
Spec 11 and GAC advice						
Requirement to use registrars under 2013 RAA \$?	Qual	<p>Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview</p> <p>ICANN: hot potato (see notes)</p>	<ul style="list-style-type: none"> Underlying question: is 2013 RAA effective in terms of safeguard provisions? 	<p>Team: Laureen: 2013 agreement contained new safeguards and required registries to use ICANN-accredited registrars; difficult to answer general questions on effectiveness given the amount of provisions, so we should focus on particular provisions e.g. section 3.18</p> <p>How do we prioritize this?</p> <p>Drew: see RAA section 3.18 on registrar obligations to have an abuse contact and to investigate abuse; how do these provisions tie into other safeguards?</p> <p>Examine Compliance complaints received regarding lack of abuse</p>	<p>SubTeam leaning: undetermined</p> <p>BRIAN'S 2¢: high bfb</p>	<p>Brian's brainstorm on potential methods:</p> <ol style="list-style-type: none"> Survey/interview members of Registrar SG on effectiveness of RAA anti-abuse provisions (high bfb) ???

				<p>contact</p> <p>Per Secure Domain Foundations “Business Case for Proactive Anti-Abuse”, registrars appear to differ in their interpretations of RAA obligations</p> <p>David: Registrar SG may be able to provide input</p> <p>Staff: Karen L.: 2013 RAA applied extra requirements to registrars and may be out of scope</p>		
Registry-specific PICs (Q18 Applicant Guidebook)	Qual	<p>Vendor: Textual analysis software</p> <p>ICANN: Examine relationship between stated commitments in RA and stated commitments on website</p>	<ul style="list-style-type: none"> Results from preliminary research not meaningful Conduct “blind study”: 1 person ID key themes in Q18 response, 1 person ID key themes in website commitments independently. Compare. Q18 came from GAC advice to evaluate applications based 	<p>Team: Carlton: these PICs not worth much; they’re voluntary; no way to measure their effectiveness; PICs are not subject to mediation process and have too many “outs” [i.e. ways to get around or away from what was stated in Q18 answer]</p> <p>Laureen: public interest dispute resolution process is a problem; is there a</p>	<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2φ: undetermined</p>	<p>Brian’s brainstorm on potential methods:</p> <p>1. Conduct “blind” study comparing stated commitments, themes, and keywords in Q18 and whether those stated commitments, themes, and keywords are present on registry operators’ websites (apply textual analysis software? High bfb if so)</p>

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			<p>on social benefit/costs</p>	<p>difference between what was said and what was done?</p> <p>Carlos: 3 cases where this is relevant: when different community applications are received, when applicant who didn't get domain name is in Independent Review Proceeding with ICANN, and when business failed</p> <p>Semantics of "public interest" still not defined</p> <p>Keep track of studies and emerging definitions of "public interest"</p> <p>Carlton: first two issues brought up by Carlos are in ALAC deliberations; used as arguments for why more enforcement needed for PICs</p> <p>Staff: Karen L.: goal of including question in application was to inform application reviewers as to whether objection or early</p>		
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				<p>warning should be filed; more an “essay” question; compare application statements to how well they’ve committed to those statement</p> <p>IAG recommended metric</p> <p>Separate Q18 PICs from Spec 11 PICs</p>		
<p>Prohibition of abusive activities (eg phishing, malware)</p> <p>\$?</p>	Qual	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview</p> <p>ICANN: infer from baseline DNS abuse data (vendor selection in process)</p>		<p>Team:</p> <p>Carlos: IAG asked for follow-up on reporting; need to find solution; violating provision could be grounds for takedown</p> <p>Laureen: takedowns only happen if law is violated, not if contract is violated. What is the deterrent effect of this provision?</p> <p>Calvin: takedowns apply more to content</p> <p>Staff:</p> <p>Karen: what are the levels of activity this is trying to guard against? Has there</p>	<p>SubTeam leaning: undetermined</p> <p>BRIAN'S 2¢: high bfb (This is an aspect of DNS abuse baseline data currently being sought)</p>	<p>Brian’s brainstorm on potential methods:</p> <p>1. Compare with abuse rate data currently being sought; add survey/interviews with registries on effectiveness of this provision as a safeguard. Did its inclusion impact the way they structured their approach to preventing and combating abuse?</p>

				been an impact on abusive activities because it was included in the agreement?		
Registry conduct of periodic statistical analysis of security threats	n/a (see notes)	n/a	<ul style="list-style-type: none"> Spec 11 Registry reporting standards not yet finalized 		n/a	Spec 11 Registry reporting standards not yet finalized
Requirement to operate TLD in transparent manner	Qual	Vendor: Textual analysis software? ICANN: description/overview (zero sum)	<ul style="list-style-type: none"> Is there anything to measure here? 	Team: Fabro: “transparency” means public information, public participation, accountability and public review Laureen: above may not be “transparency”, is it more visibility only? Fabro: See how many views registries get on their “Terms of Service” pages Staff: Karen: Evaluate TLDs’ registration policies?	SubTeam leaning: undetermined BRIAN’S 2¢: undetermined	Brian’s brainstorm on potential methods: 1. [similar to potential approach to Q18 PICs above] Conduct study evaluating stated commitments, themes, and keywords in TLDs’ registration policies as they relate to transparency 2. See how many “hits” registries get on their terms of service.
No exclusive registration criteria for generic TLD strings (GAC Category 2 Advice)	Qual	Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview	<ul style="list-style-type: none"> Applications that dropped exclusive registration policies could proceed (184/186 did); 	Team: Laureen: bears on competition issues rather than trust;	n/a ?	This likely falls under the remit of the competition sub-team.

		<p>ICANN: description/overview (zero sum)</p>	<p>others were deferred until next round.</p>	<p>shouldn't have restrictions on who can take on TLDs (not a consumer trust safeguard)</p>		
<p>GAC Category 1 Safeguards¹</p> <p>\$?</p>	<p>Qual</p>	<p>Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview</p> <p>ICANN: description/overview + case studies of registry practices</p>	<p>Are registries checking for proper credentials and compliance with all laws?</p>	<p>Team: Laureen: This is quite important; GAC safeguard advice was given, but not all was accepted or implemented (eg credentialing); some domains have voluntarily restricted registration policies (<u>not a requirement</u>); need to identify which were implemented to determine effectiveness</p>	<p>SubTeam leaning: high bfb</p> <p>BRIAN'S 2¢: high bfb</p>	<p>Brian's brainstorm on potential methods:</p> <ol style="list-style-type: none"> 1. Survey/interview registry operators subject to GAC Category 1 safeguards on their perceptions of GAC safeguard effectiveness (high bfb) 2. Case studies of how GAC Category 1 affected certain strings
<p>Rights Protections Safeguards</p>			<p>Have extensive descriptive data on RPMs²</p> <p>RPM effectiveness being analyzed elsewhere eg PDP Review of All RPMs in All gTLDs</p>	<p>Team: Carlos: applicant/ applicant process and use orientation</p> <p>Staff: Karen L.: Affirmation of Commitments mandates review of the effectiveness of all safeguards built into New gTLD Program, and trademark protections key set of safeguards built into the program</p>		

<p>Trademark Clearinghouse</p> <p>\$?</p>	<p>Qual</p>	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview</p> <p>ICANN: interview SMEs + descriptive statistical overview of use</p>		<p>Team:</p> <p>David: Should the TMCH be mandatory? Early discussion on this.</p> <p>Staff:</p> <p>Karen L: GAC-recommended independent review of TMCH due Q3</p> <p>Potential data sources include data on RPMs [see endnote] and public comments on Revised Staff Report: Rights Protection Mechanisms Review</p> <p>RPM Report did not focus on effectiveness; look at reasons why TMCH was proposed</p>	<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2¢: high bfb</p>	<p>Brian’s brainstorm on potential methods:</p> <ol style="list-style-type: none"> Survey/interview users of the TMCH on its effectiveness as a safeguard Use descriptive stats held by ICANN to provide overview of TMCH use
<p>Sunrise Period</p> <p>\$?</p>	<p>Qual</p> <p>Quant? (see notes)</p>	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview + correlate pricing to abuse</p> <p>ICANN: interview SMEs + descriptive statistical overview of</p>	<ul style="list-style-type: none"> Correlate sunrise pricing (or pricing in general) to abuse rate? Pricing widely hypothesized to correlate with abuse rate 		<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2¢: high bfb</p>	<p>Brian’s brainstorm on potential methods:</p> <ol style="list-style-type: none"> Survey/interview trademark holders on effectiveness of sunrise period Use descriptive stats held by ICANN to

		use				provide overview of sunrise period metrics
Trademark Claims service \$?	Quant Quant? (see notes)	Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview + correlate claims to abuse ICANN: interview SMEs + descriptive statistical overview	<ul style="list-style-type: none"> PC: examine correlation between copyright infringing sites and abuse 		SubTeam leaning: undetermined BRIAN'S 2φ: high bfb	Brian's brainstorm on potential methods: 1. Survey/interview trademark holders on effectiveness of TM claims service period 2. Use descriptive stats held by ICANN to provide overview of TM Claims service metrics
Uniform Rapid Suspension (URS) system \$?	Qual	Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview ICANN: interview SMEs + descriptive statistical overview			SubTeam leaning: undetermined BRIAN'S 2φ: high bfb	Brian's brainstorm on potential methods: 1. Survey/interview users of URS on effectiveness 2. Use descriptive stats held by ICANN to provide overview of URS metrics
Post-Delegation Dispute Resolution Procedures	Qual	Vendor: "Perception of Effectiveness" survey, questionnaire, focus group, interview ICANN: interview SMEs + descriptive statistical overview			SubTeam leaning: undetermined BRIAN'S 2φ: undetermined	1. No cases of use

Trademark Registry Restrictions	Qual	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview</p> <p>ICANN: interview SMEs + descriptive statistical overview</p>			<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2φ: undetermined</p>	
<p>Public Interest Commitments (PICs)</p> <p>\$?</p>	Qual	<p>Vendor: Textual analysis software</p> <p>ICANN: Examine relationship between stated commitments in RA and stated commitments on website</p>	<ul style="list-style-type: none"> Results from preliminary research not meaningful 		<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2φ: undetermined</p>	<p>Brian’s brainstorm on potential methods:</p> <ol style="list-style-type: none"> Conduct study comparing stated commitments, themes, and keywords in application and whether those stated commitments, themes, and keywords are present on registry operators’ websites (apply textual analysis software? High bfb if so)
Other Safeguards						
Name Collision	Qual	<p>Vendor: “Perception of Effectiveness” survey, questionnaire, focus group, interview</p> <p>ICANN: interview SMEs + descriptive statistical overview</p>	<ul style="list-style-type: none"> Unclear if this falls within sub-team’s remit 		<p>SubTeam leaning: undetermined</p> <p>BRIAN’S 2φ: undetermined</p>	

¹ **GAC Category 1 Safeguards**

Regulated AND Highly Regulated Sectors:

Registrant terms must require compliance with all applicable laws.

Registrants must be notified that compliance is required.

Registrants collecting sensitive financial & health data must secure properly.

Highly Regulated Sectors:

Publish point of contact to facilitate relationships with relevant industry / regulatory bodies.

Registrants must provide current administrative contact information (abuse).

Registrants must possess licenses or credentials for relevant sector.

Registry to consult with authorities re: credential authenticity complaints

Registrants must report updates / changes to credentials.

Special Safeguards

Registration policies must minimize risk of cyber-bullying / harassment.

Registrants mustn't misrepresent or falsely imply government or military affiliation

² **List of data held by ICANN on RPMs**

Trademark Clearinghouse

- *Source: Deloitte Monthly Trademark Activity Reports*
 - Number of jurisdictions, which a Mark has been submitted for
 - Number of dispute resolution cases related to the Trademark Clearinghouse
 - Number of Trademarks opting-in to Ancillary Services
 - Total number of Trademarks submitted
 - Total number of Verified Trademarks
 - Total number of Verified Trademarks submitted prior to the Sunrise period
 - Total number of Trademarks NOT verified
 - Total number of domain names/labels derived from those Trademarks
 - Total number of Verified Trademarks that are Sunrise Eligible
 - Total number of Verified Trademarks that are NOT Sunrise Eligible
 - Total number of Verified Trademarks now deactivated
 - Total number of Verified Trademarks that are Sunrise Eligible now deactivated
 - Total number of domain names/labels derived from those Trademarks
 - Total number of Verified Trademark Holders
 - Trademark Holders represented by Trademark Agents
 - Total number of Verified Trademark Agents
 - Trademark Agents & Holder failing e-mail verification

- SLO Reporting
 - Total number Nationally or regionally Registered Trademarks
 - Total number of Trademarks validated by a court of law or judicial proceeding
 - Total number of Trademarks protected by statute or treaty
 - Any other Trademarks constituting intellectual property
 - # of TMCH records
 - # of Jurisdictions
 - # of Abused labels
 - Breakdown of scripts/languages represented
- *Source: Deloitte Ticket Summary Report* (not provided monthly to ICANN, but available upon request)
 - API Issues
 - Claims Notification Issue
 - Profile Management Issues
 - Sunrise File Issues
 - Sunrise Notification Issues
 - Trademark Management Issues
 - Other Issues
 - *Source: <http://trademark-clearinghouse.com/content/trademark-clearinghouse-fees>
http://www.trademark-clearinghouse.com/sites/default/files/files/downloads/trademarkclearinghouse_fee_structure_01-04-2015_2.pdf*
 - Fee structure for record inclusion in the TMCH
 - Costs for Abused Domain Name Label service
 - *Source: [RPM Staff Report](#)*
 - Total number of ICANN/IBM/Deloitte targeted webinars to explain to the community the TMCH functions

Sunrise Period

- *Source: IBM Monthly Invoice*
 - Sunrise monthly transactions
- *Source: TLD Startup Information submitted to ICANN*
 - Sum of TLDs with initiated Sunrise period
 - Sum of End-Date Sunrise and Start-Date Sunrise

- Number of gTLDs with and without a Limited Registration Period
- Sum of Qualified Launch Program applications approved
- Source: [RPM Staff Report](#)
 - Sum of Approved Launch Program applications received before and after release of QLP Addendum
 - Sum of ALPs posted for public comment
 - Sum of ALPs approved
 - Sum of ALPs withdrawn/closed
 - Sum of ALPs that transitioned to QLP

Trademark Claims Service

- Source: *IBM Monthly Invoice*
 - Claims monthly transactions
 - Sum of Claims Notices Generated
- Source: *TLD Startup Information submitted to ICANN*
 - Sum of TLDs with initiated Claims periods
 - Some of TLDs with Standard Claims (90 days)
 - Some of TLDs with Extended Claims (beyond 90 days)
- Source: *Deloitte (not provided monthly to ICANN, but available upon request)*
 - Total number of users enrolled in [Ongoing Claims Notification Service](#)

URS

- Source: *Arbitration Provider Databases*
 - Case status (withdrawn, suspended, transferred, split decision, pending, cancelled, claim denied)
 - Case Number
 - Decision date
 - Number of decisions against registrants
- Source: *Provider Reports* <https://wecann.icann.org/docs/DOC-14475>
 - Number of domains in cases filed

- Number of Default Determinations
- Number of Non-Default Determinations
- Number of domains in Default Determinations
- Number of domains suspended in Default Determinations:
- Number of Final Determinations
- Number of Final Determination cases where there is a previous Default Determination
- Number of domains in Final Determinations
- Number of domains suspended in Final Determinations
- Number of Appeal Determinations
- Number of domains in Appeal Determinations
- Number of domains suspended in Appeal Determinations
- Number of Appeals filed by Complainants
- Number of Complaints Denied
- Number of Appeals filed by Respondents
- Number of Appeal Determinations with both a previous Default AND Final Determination:
- List of languages for cases
- Shortest time to a Default Determination
- Shortest time to a Final Determination
- Average time to a Default Determination
- Average time to a Final Determination (excluding cases with a previous Default Determination)
- Average time from Appeal filed to Appeal Determination
- Number of cases with a finding of abusive complaint
- Number of cases with a finding of material falsehood
- Number of Examiners used (include all default, final, and appeal Examiners used in this period)
- Number of days between domain name creation and URS filing