# IANA NAMING FUNCTION AGREEMENT<sup>1</sup>

This IANA Naming Function Agreement (this "Agreement") is dated as of [●] 2016 and is entered into by and between Internet Corporation for Assigned Names and Numbers, a California nonprofit public benefit corporation ("ICANN") and [PTI], a California nonprofit public benefit corporation (the "Contractor"), and is effective as of the last date on which all of the conditions set out in Section 1ARTICLE II: have been satisfied (the "Effective Date"). ICANN and Contractor aremay each be referred to herein individually as a "Party" and collectively as the "Parties."

WHEREAS, on 14 March 2014, the U.S. National Telecommunications and Information Administration ("NTIA") announced the transition of NTIA's stewardship role of key Internet domain name functions to the global multi-stakeholder community (the "Transition");

WHEREAS, following the Transition, ICANN will continue to serve as the Internet Assigned Numbers Authority ("IANA") functions operator; and

WHEREAS, ICANN and Contractor desire to enter into this Agreement pursuant to which Contractor will serve as the operator for the IANA naming function after the Transition.

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

# **ARTICLE I: DEFINITIONS**

Section 1.1	"Agreement" has the meaning set forth in the Preamble.
Section 1.2	"ccNSO" has the meaning set forth in Section 4.7.
Section 1.3	"CCOP" has the meaning set forth in Section 5.2(b).
Section 1.4	"Complainant" has the meaning set forth in Section 8.1(a)
Section 1.5	"Complaint" has the meaning set forth in Section 8.1(a)
Section 1.6	"Contractor" has the meaning set forth in the Preamble.
Section 1.7	"CSC" has the meaning set forth in Section 4.9(c).
Section 1.8	"CSS Report" has the meaning set forth in Section 3.e of Annex A.

Note to Draft: Will Annex C of the CWG Proposal be reflected in this Agreement?

Section 1.9 Parties."	"DNS" has the meaning set forth in the definition of "Interested and Affected
Section 1.10	"DOC" has the meaning set forth in Section 2.1.
Section 1.11	"DS" has the meaning set forth in Section 1.d.i of Annex A.
Section 1.12	"Effective Date" has the meaning set forth in the Preamble.
Section 1.13	"GAC ccTLD Principles" has the meaning set forth in Section 4.7.
Section 1.14	"GNSO" has the meaning set forth in Section 4.7.
Section 1.15	"IANA" has the meaning set forth in the Recitals.
Section 1.16	"IANA Function Review" or "IFR" has the meaning set forth in Section 7.3(a)
<u>Section 1.17</u>	"IANA Naming Function" has the meaning set forth in Section 4.3.
Section 1.18	"IANA Website" has the meaning set forth in Section 4.6.
<u>Section 1.19</u>	"ICANN" has the meaning set forth in the Preamble.
Section 1.20	"ICANN Board" has the meaning set forth in Section 7.3(a)
Section 1.21	"IFRT" has the meaning set forth in Section 4.9(c).
Section 1.22	"Initial Term" has the meaning set forth in Section 9.1.
the domain r and the Inter operators/ma	"Interested and Affected Parties" means all interested and affected parties, multi-stakeholder, private sector led, bottom-up policy development model for name system ("DNS") that ICANN represents, the Internet Engineering Task Force rnet Architecture Board, Regional Internet Registries, top-level domain ("TLD") anagers (e.g., country codes and generic), the root zone maintainer, the Root ion Review Committee, the CSC, each IFRT, governments, and the Internet user
Section 1.24	"Key Personnel" has the meaning set forth in Section 4.9(a).
Section 1.25	"NS" has the meaning set forth in Section 1.d.i of Annex A.
Section 1.26	"NTIA" has the meaning set forth in the Recitals.
Section 1.27	"Party" or "Parties" has the meaning set forth in the Preamble.
Section 1.28	"Performance Issue" has the meaning set forth in Section 8.1(b).

"PTI Board" has the meaning set forth in Section 4.9(c)(ii). Section 1.29 Section 1.30 "Renewal Term" has the meaning set forth in Section 9.2(a). Section 1.31 "Root Zone Management" has the meaning set forth in Section 4.3(a). "RR" has the meaning set forth in Section 1.d.i of Annex A. Section 1.32 "SOW" has the meaning set forth in Section 4.3(a). Section 1.33 Section 1.34 "SP" has the meaning set forth in Section 4.b.iii of Annex A. Section 1.35 "TLD" has the meaning set forth in the definition of "Interested and Affected Parties." Section 1.36 "Transition" has the meaning set forth in the Recitals.

#### ARTICLE II: ARTICLE I: CONDITIONS PRECEDENT

<u>Section 2.1</u> <u>Section 1.1 Condition Precedent</u>. This Agreement shall be effective as of the last date on which the following conditions have been satisfied: (i) the agreement between ICANN and the United States Department of Commerce ("**DOC**"), effective as of 01 October 2012 (including any extension thereof) has terminated or expired and (ii) ICANN has accepted the responsibility to coordinate and administer the services that were previously provided thereunder.

#### **ARTICLE III: ARTICLE III:** REPRESENTATIONS AND WARRANTIES

Section 3.1 Section 2.1 ICANN's Warranties. ICANN represents and warrants that (i) it has all necessary rights and powers to enter into and perform its obligations under this Agreement, and; (ii) the execution, delivery and performance of this Agreement by ICANN has been duly authorized by all necessary corporate action and will not does not violate any applicable law to which ICANN is subject; and (iii) the execution, delivery and performance of this Agreement by ICANN do not (a) require a consent or approval under, or (b) conflict with, or result in any violation of or or breach of, constitute a default under, or accelerate of any rights in favor of a third party under, any agreement between ICANN and a third party.

Section 3.2 Section 2.2 Contractor Warranties. Contractor represents and warrants that (i) it has all necessary rights and powers to enter into and perform its obligations under this Agreement; and (ii) the execution, delivery and performance of this Agreement by Contractor has been duly authorized by all necessary corporate action and will not does not violate any applicable law to which Contractor is subject; and (iii) the execution, delivery and performance of this Agreement by Contractor do not (a) require a consent or approval under, or (b) conflict with, or result in any violation of or or breach of, constitute a default under, or

<u>accelerate of any rights in favor of a third party</u> under, any agreement between Contractor and a third party.

#### **ARTICLE IV: ARTICLE III:** SERVICES AND REQUIREMENTS

<u>Section 4.1</u> <u>Designation</u>. ICANN hereby designates Contractor as the operator of the IANA Naming Function, and authorizes Contractor, and grants to Contractor the rights and licenses that are necessary or useful, to perform the IANA Naming Function in accordance with the terms of this Agreement and the <u>SOW</u>. Contractor hereby accepts such designation, rights and licenses and agrees to perform the IANA Naming Function in accordance with the terms of this Agreement and the <u>SOW</u>.

# Section 4.2 Section 3.2 U.S. Presence.

- (a) Contractor shall be a wholly U.S. owned and operated <u>firm or fullycorporation</u> operating in one of the 50 states of the United States or District of Columbia; (ii) incorporated within the state of California, United States of America; and (iii) organized under the nonprofit public benefit corporation laws of the state of California.
- (b) Contractor shall perform the IANA Naming Function (as defined below) in the United States and possess and maintain, throughout the performance of this Agreement, a physical address within the United States. Contractor must be able to demonstrate that all primary operations and systems will remain within the United States (including the District of Columbia). ICANN reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of the IANA Naming Function.

<u>Section 4.3</u> <u>Section 3.3</u> <u>Scope of the IANA Naming Function</u>. The "**IANA Naming Function**" is comprised of:

- (a) Management of the DNS Root Zone ("Root Zone Management") in accordance with the Statement of Work attached as Annex A to this Agreement ("SOW");
- (b) Management of the .INT top-level domain;
- (c) Maintenance of a repository of IDN tables and label generation rulesets rule sets; and
- (d) Provision of the other services and implement modifications in performance of the IANA Naming Function, in each case upon ICANN's request related to the management of .INT top-level domains, at ICANN's reasonable request and at ICANN's expense.

Section 4.4 Section 3.4 Performance of IANA Naming Function.

- (a) Contractor shall perform the IANA Naming Function in a stable and secure manner and in accordance with the SOW. <u>The IANA Naming Functions are administrative and technical in nature based on established policies developed by Interested and Affected Parties.</u>
- (b) Contractor shall treat the IANA Naming Function with equal priority as the other IANA functions performed by Contractor, and process all requests promptly and efficiently.
- (c) The Contractor shall make decisions by applying documented policies consistently, neutrally, objectively, and fairly, without singling out any particular customer for discriminatory treatment (i.e., making an unjustified prejudicial distinction between or among different customers).
- (d) The Contractor shall respect the diversity of customers of the IANA Naming Function and shall provide service to its customers in conformance with technical norms and in support of the global security, stability and resilience of the DNS.
- Section 4.5 Separation of Policy Development and Operational Roles. Contractor shall ensure that its staff performing the IANA Naming Function doesdo not publicly initiate, advance or advocate any policy development related to the IANA Naming Function. Notwithstanding the foregoing, Contractor's staff may (i) respond to requests for information requested by its customers and Interested and Affected Parties, subject to Section 12.3, and, at Contractor's volition, provide objective information to such customers, in each case, to inform ongoing policy discussions, (ii) request guidance or clarification as necessary for the performance of the IANA Naming Function, and (iii) publish, contribute to or comment on any document related to ongoing policy discussions, provided that, in the case of clause (iii), (a) the primary purpose of such publication, contribution or commentary is to supply relevant IANA Naming Function experience and insight, and (b) the Contractor staff are not the only authors of such publication.
- <u>Section 4.6</u> <u>Section 3.6</u> <u>User Instructions</u>. Contractor shall, in collaboration with <u>its</u> <u>customersall Interested and Affected Parties</u>, maintain user instructions, including technical requirements for the IANA Naming Function. Contractor shall post such instructions at iana.org (the "IANA Website").
- Section 4.7 Responsibility and Respect for Stakeholders. Contractor shall apply the policies for the Root Zone Management component of the IANA Naming Function that have been defined by the Generic Names Supporting Organization ("GNSO") and the Country Code Names Supporting Organization ("ccNSO"), the Framework of Interpretation of Current Policies and Guidelines Pertaining to the Delegation and Redelegation of Country-Code Top Level Domain Names, dated October 2014, and the Governmental Advisory Committee (GAC) Principles And Guidelines For The Delegation And Administration Of Country Code Top Level

Domains ("GAC ccTLD Principles"). Contractor shall publish documentation pertaining to the implementation of these policies and other directives to the IANA Website.

#### <u>Section 4.8</u> <u>Section 3.8</u> Management of the .INT TLD.

- (a) Contractor shall operate the .INT TLD within the current registration policies for the .INT TLD.
- (b) Upon designation of a successor registry by ICANN, if any, Contractor shall cooperate with ICANN to facilitate the smooth transition of operation of the .INT TLD. Such cooperation shall, at a minimum, include timely transfer to the successor registry of the then-current top-level domain registration data.

#### <u>Section 4.9</u> <u>Section 3.9 Program Manager;</u> Key Personnel.

- (a) Contractor shall provide trained, knowledgeable technical personnel according to the requirements of this Agreement, including the following key personnel: a President, a Manager of IANA Services, a Director of Security and a Conflict of Interest Officer. (the "Key Personnel"). All Contractor personnel who interface with ICANN must have excellent oral and written communication skills. "Excellent oral and written communication skills" is defined as the capability to converse fluently, communicate effectively, and write intelligibly in the English language.
- (b) The Conflict of Interest Officer shall be responsible for ensuring the Contractor is in compliance with the contractor's internal and external conflict of interest rules and procedures.<sup>3</sup>
- (c) (b) The President of Contractor shall organize, plan, direct, staff, and coordinate the overall performance of the IANA Naming Function; manage contract and subcontract activities as the authorized interface with ICANN and ensure compliance with applicable rules and regulations. The President of Contractor shall be responsible for the overall performance of Contractor under this Agreement and shall meet and confer with ICANN (including the Customer Standing Committee ("CSC") and IANA Function Review teams ("IFRT"), as such terms are used in ICANN's Bylaws) regarding the status of specific Contractor activities and problems, issues, or conflicts requiring resolution. The President of Contractor must possess the following skills:
  - (i) demonstrated communication skills with all levels of management;

Note to Draft: See C.6.2 of the NTIA Contract.

Note to Draft: Confirm these are the correct Key Personnel. Annex S of the CWG Proposal refers to an IANA Functions Program Manager (which seems to be covered here by the title Manager of IANA Services) and an IANA Function Liaison for Root Zone Management.

- (ii) capability to negotiate and make binding decisions for Contractor (subject to any requirements of Contractor's Bylaws and the authority delegated to such person by the Contractor's Board of Directors (the "PTI Board"));
- (iii) extensive experience and proven expertise in managing similar multitask agreements of this type and complexity;
- (iv) extensive experience supervising personnel; and
- (v) a thorough understanding and knowledge of the principles and methodologies associated with operations management and contract management.
- (d) (c) Contractor shall obtain the approval of the ICANN, after consultation with the PTI Board, prior to making key personnel Key Personnel substitutions. Replacements for key personnel Mey Personnel must possess qualifications reasonably equal to or exceeding the qualifications of the personnel being replaced, unless an exception is approved by ICANN.

# Section 4.10 Section 3.10 Inspection Of All Deliverables And Reports Before Publication.

- (a) Prior to publication or posting of reports and other deliverables anticipated under this Agreement, Contractor shall obtain approval from ICANN, which will not be unreasonably withheld. Any deficiencies shall be corrected by Contractor and resubmitted to ICANN within 10 business days after receipt of notice of such deficiency.
- (b) ICANN reserves the right to inspect the premises, systems and processes of all security and operational components used for the performance of all the requirements and obligations set forth in this Agreement.

# **ARTICLE V: ARTICLE IV:** PERFORMANCE

<u>Section 5.1</u> <u>Section 4.1 Constructive Working Relationship</u>. Contractor shall maintain a close constructive working relationship with <u>ICANN</u>, <u>TLD registry operators</u>, <u>the root zone maintainer</u>, the Root Zone <u>Evolution Review Committee</u> ("<u>RZERC</u>"), the CSC and (if formed and while in existence) each IFRT <u>all Interested and Affected Parties</u> to ensure quality and satisfactory performance of the IANA Naming Function.

#### <u>Section 5.2</u> <u>Section 4.2</u> Continuity of Operations.

(a) Either ICANN or the Contractor shall provide, at a minimum, redundant sites in at least two geographically dispersed sites within the United States as well as multiple resilient communication paths to TLD registry operators between Interested and

<u>Affected Parties</u> to ensure continuation of the IANA Naming Function in the event of cyber or physical attacks, emergencies, or natural disasters.

(b) Contractor shall collaborate with ICANN to develop and implement a Contingency and Continuity of Operations Plan ("CCOP") for the IANA Naming Function. Contractor in collaboration with ICANN shall from time to time update and annually test the CCOP as necessary to maintain the security and stability of the IANA Naming Function. The CCOP shall include details on plans for continuation of the IANA Naming Function in the event of cyber or physical attacks, emergencies, or natural disasters. Contractor shall submit the CCOP to ICANN after each update and publish on the IANA Website a report documenting the outcomes of the CCOP tests within 90 calendar days of the annual test.

#### Section 5.3 Section 4.3 Performance Exclusions

- (a) Unless specifically authorized by ICANN in writing, Contractor shall not make modifications, additions or deletions to the root zone file or associated information.
- (b) Contractor shall not make changes in the policies and procedures developed by the relevant entities associated with the performance of the IANA Naming Function.
- (c) The performance of the services under this Agreement, shall not be, in any manner, predicated upon or conditioned by Contractor on the existence or entry into any contract, agreement or negotiation between Contractor and any TLD registry operator requesting such changes or any other third-party.

#### **ARTICLE VI: ARTICLE V:** TRANSPARENCY OF DECISION-MAKING

<u>Section 6.1</u> <u>Section 5.1 Transparency</u>. To enhance consistency, predictability and integrity in Contractor's decision-making related to IANA Naming Function, Contractor shall:

- (a) Publish reports pursuant to <u>Article 6ARTICLE VII: of this Agreement</u> and Section 3 of the SOW.
- (b) Make public all recommendations by Contractor on naming-related decisions unless, upon the determination of the PTI Board, such decision (i) relates to confidential personnel matters, (ii) is covered by attorney-client privilege, work product doctrine or other recognized legal privilege, (iii) is subject to a legal obligation that Contractor maintain its confidentiality or otherwise would result in the disclosure of confidential information of Contractor's customers, (iv) would disclose trade secrets,

<sup>\*\*</sup>Note to CWG: The reference to the Root Zone Maintainer included in Section C.7.2 of ICANN's IANA contract with the DOC has been deleted because ICANN will enter into a separate agreement with the Root Zone Maintainer, which will specify each party's obligations related to performance of the Root Zone Maintainer role.

- or (v) would present a material risk of negative impact to the security, stability or resiliency of the IANA Naming Function or the Internet.
- (c) Agree not to redact any PTI Board minutes related to decisions concerning the IANA Naming Function, provided that the PTI Board may redact such minutes on the determination that such redacted information (i) relates to confidential personnel matters, (ii) is covered by attorney-client privilege, work product doctrine or other recognized legal privilege, (iii) is subject to a legal, obligation that Contractor maintain its confidentiality or otherwise would result in the disclosure of confidential information of Contractor's customers, (iv) would disclose trade secrets, or (v) would present a material risk of negative impact to the security, stability or resiliency of the IANA Naming Function or the Internet.
- (d) Have the President of Contractor and chairperson of the PTI Board sign an annual attestation that Contractor has complied with the requirements of this Agreement Section 6.15.

#### **ARTICLE VII:** AUDITS, MONITORING AND REVIEWS

# Section 7.1 Section 6.1 Audits.

- (a) Contractor shall generate and publish via the IANA Website a monthly audit report identifying (i) each root zone file and root zone "WHOIS" database change request, the relevant policy under which the change was made, and the status thereof, as well as each change rejection and the relevant policy under which the change request was rejected, and (ii) each delegation, redelegation and transfer of a TLD and the status thereof. Such audit report shall be due to ICANN no later than 15 calendar days following the end of each month.
- (b) Contractor shall annually perform a specialized compliance audit of Contractor's security provisions relating to the IANA Naming Function against existing best practices and ARTICLE XI: of this Agreement. This specialized compliance audit shall be performed by an external, independent auditor.

# <u>Section 7.2</u> <u>Section 6.2</u> <u>Performance Monitoring.</u>

(a) So long as the CSC exists pursuant to the ICANN's Bylaws, Contractor acknowledges and agrees that the CSC may is entitled to monitor Contractor's

<sup>&</sup>lt;sup>5</sup> Note to Draft: The mapping chart suggests this attestation just refers to the provisions that are in Section 6.1.

Note to Draft: Paragraph 163 of the CWG Proposal states that "In addition to any statutory requirements, it is the view of the CWG that an independent financial audit of PTI's financial statements must also be required."

performance under this Agreement and the SOW in accordance with the ICANN's Bylaws.

- (b) Contractor shall provide reports to the CSC as contemplated by the SOW.
- (c) Contractor shall act in good faith to resolve issues identified by the CSC.
- (d) Contractor acknowledges that the CSC shall be empowered to escalate identified areas of concern as set forth in "Escalation Mechanisms" below.

# Section 7.3 Section 6.3 IANA Naming Function Reviews.

- (a) Contractor acknowledges that ICANN's Board of Directors (the "ICANN Board") may cause a review by an IFRT—of\_\_ in accordance with ICANN's Bylaws (an "IANA Function Review" or "IFR"). At a minimum, the IANA Function Review will consider the following:
  - (i) Contractor's performance against the requirements of set forth in this Agreement and the SOW (an "IFR") in accordance with ICANN's Bylaws.;
  - (ii) Any necessary additions to the SOW to account for the needs of consumers of the IANA Naming Functions or the ICANN community at large;
  - (iii) Openness and transparency procedures for Contractor and any oversight structures, including reporting requirements and budget transparency;
  - <u>(iv)</u> The effectiveness of new structures created to carry out IANA oversight in monitoring performance and handling issues with Contractor;
  - (v) The relative performance of the IANA Naming Function pre- and post-Transition according to established Service Levels;
  - (vi) Discussion of process or other improvements (where relevant to the mandate of the IANA Function Review) suggested by the CSC or community; and
  - (vii) Other matters in relation to this Agreement, in accordance with ICANN's Bylaws.<sup>7</sup>

Note to Draft: We broadened the scope of the IFR based on Paragraph 276 of the CWG Proposal (in Annex F).

- (b) Contractor shall use commercially reasonable efforts to facilitate any IFR. Contractor shall cooperate with any site visit conducted by an IFRT that has been previously approved by ICANN in accordance with ICANN's Bylaws.
- (c) Contractor agrees that ICANN may unilaterally amend <u>or terminate</u> this Agreement and the SOW in accordance with an approved IFR Recommendation, an approved Special IFR Recommendation or an approved SCWG Recommendation (as such terms are defined in ICANN's Bylaws), subject to the limitations set forth in ICANN's Bylaws. <u>Contractor agrees to abide by and implement any such changes.</u>

#### **ARTICLE VIII: ARTICLE VII:** ESCALATION MECHANISMS

#### Section 8.1 Section 7.1 IANA Customer Service Complaint Resolution Process

- (a) If Contractor receives a customer service complaint (a "Complaint"), Contractor will review the Complaint and attempt to resolve it to the reasonable satisfaction of the person or entity who brought the Complaint (the "Complainant") as soon as reasonably possible. If the Complaint is not so resolved, the Complainant may escalate the matter in writing to Contractor's management team, in which case Contractor shall notify the CSC. If the Complaint is still not resolved, the Complainant or the President of Contractor may escalate the matter in writing to ICANN's Ombudsman.
- (b) If (i) a Complainant is a TLD registry operator and (ii) after completing the escalation process provided for in Section 7.28.2(a), the Complaint is still not resolved, then (A) the CSC may conduct a review to determine whether the Complaint is subject of a persistent performance issue of Contractor or an indication of a systemic problem with Contractor's performance of the IANA Naming Function pursuant to the terms of this Agreement (a "Performance Issue") and (B) the Complainant may (x) request mediation, which shall be conducted in a manner consistent with the terms and process set forth below in Section 7.18.1(c) and (y) if the issue is not resolved following such mediation and the Complaint meets the requirements of the Independent Review Process, initiate an Independent Review Process (as defined in the ICANN's Bylaws). If the CSC determines that a Performance Issue exists, the CSC may seek remediation of the Performance Issue through the IANA Problem Resolution Process described in Section 7.28.2.
- (c) TLD Registry Operator Mediation Process.
  - (i) If a Complainant is a TLD registry operator and after completing the escalation process provided for in Section 7.28.2(a), the TLD registry operator

Note to Draft: Annex I of the CWG Proposal (paragraph 381) states that "If the issue is not addressed, the complainant (direct customer), IFO or the ICANN Ombudsman may request mediation."

may initiate mediation by delivering a written notice to the President of Contractor and the Secretary of ICANN.

- (ii) There shall be a single mediator who shall be selected by the agreement of the TLD registry operator and ICANN. ICANN shall propose a slate of at least five potential mediators, and the TLD registry operator shall select a mediator from the slate or request a new slate until a mutually agreed mediator is selected. The TLD registry operator may recommend potential mediators for inclusion on the slates selected by ICANN. ICANN shall not unreasonably decline to include mediators recommended by the TLD registry operator on proposed slates and the TLD registry operator shall not unreasonably withhold consent to the selection of a mediator on slates proposed by ICANN.
- (iii) The mediator shall be a licensed attorney with general knowledge of contract law and general knowledge of the DNS and ICANN. The mediator may not have any ongoing business relationship with ICANN, Contractor or the TLD registry operator. The mediator must confirm in writing that he or she is not, directly or indirectly, and will not become during the term of the mediation, an employee, partner, executive officer, director, consultant or advisor of ICANN, Contractor or the TLD registry operator.
- (iv) The mediator shall conduct the mediation in accordance with this Section <u>7.18.1(c)</u>, the laws of California and the rules and procedures of a well-respected international dispute resolution provider.
- (v) The arbitration will be conducted in the English language and will occur in Los Angeles County, California, unless another location is mutually agreed between ICANN, Contractor and the TLD registry operator.
- (vi) ICANN, Contractor and the TLD registry operator shall discuss the dispute in good faith and attempt, with the mediator's assistance, to reach an amicable resolution of the dispute.
- (vii) ICANN shall bear all costs of the mediator.
- (viii) If ICANN, Contractor and the TLD registry operator have engaged in good faith participation in the mediation but have not resolved the dispute for any reason, ICANN, Contractor and the TLD registry operator may terminate the mediation at any time by declaring an impasse.
- (ix) If a resolution to the dispute is reached by ICANN, Contractor and the TLD registry operator, ICANN, Contractor and the TLD registry operator shall document such resolution.

- <u>Section 8.2</u> <u>Section 7.2-IANA Problem Resolution Process</u>. If the CSC determines that a Performance Issue exists, the CSC may seek resolution of the Performance Issue with Contractor, in which case Contractor shall comply with the following "Remedial Action Procedures" if and to the extent the CSC also complies with such procedures:
  - (a) [To be developed by the CSC and PTI prior to the Effective Date]<sup>9</sup>

# Section 8.3 Section 7.3 Notice and Mitigation Plan.

- (a) Contractor shall promptly inform ICANN of any issue or dispute arising from its performance of the requirements and services contemplated by this Agreement prior to the Complaint being escalated pursuant to Section 7.18.1(a), and shall agree with ICANN on a plan to resolve the Complaint.
- (b) If, for any reason, Contractor fails to meet any of the requirements of this Agreement, Contractor shall (i) conduct an analysis of its operations to determine the root cause of such failure, (ii) develop a mitigation plan to avoid the root cause of such failure from occurring in the future, and (iii) deliver the report to ICANN upon its completion. Contractor shall modify and update any mitigation plan as directed by ICANN.

# ARTICLE IX: ARTICLE VIII: TERM; RENEWAL; TRANSITION AND TERMINATION

<u>Section 9.1</u> <u>Section 8.1 Initial Term; Renewal</u>. The initial term of this Agreement will be [five] years from the Effective Date (the "**Initial Term**").

#### Section 9.2 Section 8.2 Renewal.

<sup>9</sup> Note to Draft: To follow Annex J of the CWG proposal.

(b) Subject to Section 8.29.2(a), the first Renewal Term shall commence immediately following the end of the Initial Term and each Renewal Term thereafter shall commence immediately following the end of the preceding Renewal Term. Each Renewal Term shall end on the [fifth] anniversary of the commencement of the Renewal Term.

### Section 9.3 Section 8.3 Transition and Termination.

- (a) Contractor shall develop and maintain, with ICANN input, a plan in place for transitioning the IANA Naming Function to a successor provider to ensure an orderly transition while maintaining continuity and security of operations, including the in connection with the nonrenewal of this Agreement and/or divestiture or other reorganization of PTI by ICANN in case as contemplated by ICANN's Bylaws. The transition plan shall be submitted to ICANN and posted to the IANA Website within eighteen (18) months after the Effective Date. The plan shall be reviewed annually and updated as appropriate.<sup>10</sup>
- (b) Contractor shall provide support and cooperation to ICANN, and to any successor provider of the IANA Naming Function, in order to effect an orderly, stable, secure and efficient transition of the performance of the IANA Naming Function.
- (c) Contractor agrees to be engaged in the transition plan and to provide appropriate transition staff and expertise to facilitate a stable and secure transition of the IANA Naming Function to a successor provider.
- (d) ICANN, in conjunction with the CSC as necessary, shall review the transition plan at least every five years.

Section 9.4 Section 8.4 Survival of Terms. Upon the expiration or termination of this Agreement under this Section 8ARTICLE IX:, this Agreement shall become wholly void and of no further force and effect, and following such expiration or termination no partyParty shall have any liability under this Agreement to the other partyParty, except that each partyParty hereto shall remain liable for any breaches of this Agreement that occurred prior to its expiration or termination; provided, however, that the following provisions shall survive the expiration or termination of this Agreement: Section 8.3, Article XI, Article XII, Sections 13.29.3, ARTICLE XIII:, ARTICLE XIII:, Section 14.2 through 13.14Section 14.16 and this Section 8.49.4.

Note to Draft: Paragraph 145(2) of the CWG Proposal states that the transition plan must be developed within 18 months from the completion of the IANA Stewardship Transition. Also, Section C.7.3 of the NTIA contract says that the plan should be reviewed annually and updated as appropriate.

#### ARTICLE X: ARTICLE IX: RESOURCES, FEES AND BUDGET

### Section 10.1 Section 9.1 Resources and Fees.

- (a) ICANN shall provide or make available to Contractor the necessary personnel, material, equipment, services and <u>other resources and</u> facilities to perform Contractor's obligations under this Agreement. The budget shall include funds sufficient to allow Contractor to hire independent legal counsel to provide advice on the interpretation of existing naming related policy.
- (b) Contractor may not charge or collect fees from third parties related to the performance of the IANA Naming Function without the prior written consent of ICANN.
- (c) Any fees approved by ICANN and charged by Contractor relating to the IANA Naming Function will be based on direct costs and resources incurred by Contractor to perform the IANA Naming Function and monitor the fee driven requirements.

Section 10.2 Section 9.2 Budget. Contractor shall comply with the requirements set forth in its Bylaws relating to preparing, submitting and monitoring an annual budget. ICANN will meet annually with the President of Contractor to review and approve the annual budget for the IANA Naming Function. [If the parties cannot agree upon a budget for any year after the first year, the budget shall be equal to the prior year's budget plus an amount equal to the percentage increase in the Consumer Price Index during such prior year times the prior year's budget.]<sup>11</sup>

## **ARTICLE XI: ARTICLE X:** SECURITY REQUIREMENTS

<u>Section 11.1</u> <u>Section 10.1</u> <u>Computing Systems</u>. With respect to the performance of the IANA Naming Function, Contractor shall install and operate all computing and communications systems in accordance with best business and security practices. ICANN and Contractor shall implement a secure system for authenticated communications to TLD registry operators<sup>12</sup> when carrying out the IANA Naming Function pursuant to the terms of this Agreement. ICANN and Contractor shall document practices and configuration of all systems.

<u>Section 11.2</u> <u>Section 10.2</u> <u>Notification Systems</u>. Contractor shall implement and thereafter operate and maintain a secure notification system at a minimum, capable of notifying <u>TLD</u>

<sup>11</sup> Note to Draft: To be discussed.

Note to Draft: In the current NTIA contract (Section C.3.1), this references "its customers" rather than TLD registry operators. Please confirm whether the TLD registry operators are all of PTI's customers.

registry operators all relevant stakeholders of the discrete IANA functions, <sup>13</sup> of such events as outages, planned maintenance, and new developments. In all cases, Contractor shall notify ICANN of any outages.

<u>Section 11.3</u> <u>Section 10.3</u> <u>Data</u>. Contractor shall ensure the authentication, integrity, and reliability of the [service] data in performing the IANA Naming Function.

Section 11.4 Section 10.4 Security Plan. ICANN shall coordinate with Contractor to develop and execute a security plan. that meets the requirements of this Agreement and this ARTICLE XI:. ICANN and Contractor shall document in the security plan the process used to ensure information systems including hardware, software, applications, and general support systems have effective security safeguards, which have been implemented, planned for, and documented. Contractor shall, in coordination with ICANN, perform periodic reviews of the security plan and update the plan as necessary.

<u>Section 11.5</u> <u>Section 10.5</u> <u>Director of Security</u>. Contractor's Director of Security shall be responsible for ensuring the technical and physical security measures and requirements of this Agreement.

#### ARTICLE XII: ARTICLE XI: CONFIDENTIALITY

Section 12.1 Section 11.1 Confidentiality. Contractor agrees, in the performance of this Agreement, to keep the information furnished by ICANN or acquired or developed by Contractor in performance of this Agreement and designated by ICANN, in the strictest confidence. Contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, and shall take reasonable measures to restrict access to such information while in Contractor's possession, to those employees needing such information to perform the work described herein, i.e., on a "need to know" basis. Contractor agrees to immediately notify ICANN in writing in the event that Contractor determines or has reason to suspect a breach of this requirement has occurred.

<u>Section 12.2</u> <u>Section 11.2 Consent.</u> Contractor agrees that it will not disclose any information described in Section <u>11.12.1</u> to any person unless prior written approval is obtained from ICANN. Contractor agrees to insert the substance of this clause in any consultant agreement or similar agreement.

Section 12.3 Requests for Information. Any person or entity materially affected by a decision or action of PTI may request documents and information reasonably related to any such decision or action, except that PTI may redact such documents and information to the extent that such documents or information (i) relate to confidential personnel matters, (ii) are

<sup>&</sup>lt;sup>13</sup> Note to Draft: We changed this to reference "all relevant stakeholders of the discrete IANA functions" as it is written in Section C.3.2 of the current NTIA Contract.

covered by attorney-client privilege, work product doctrine or other recognized legal privilege, (iii) are subject to a legal obligation that Contractor maintain its confidentiality or otherwise would result in the disclosure of confidential information of Contractor's customers, (iv) would disclose trade secrets, or (v) would present a material risk of negative impact to the security, stability or resiliency of the IANA Naming Function or the Internet.

#### **ARTICLE XIII: ARTICLE XII:** INTELLECTUAL PROPERTY

<u>Section 13.1</u> <u>Section 12.1</u> <u>Ownership</u>. <u>As between ICANN and Contractor</u>, ICANN shall own all intellectual property conceived, reduced to practice, created or otherwise developed by Contractor under this Agreement <u>(including the SOW)</u>.

<u>Section 13.2</u> <u>Assignment.</u> Contractor shall assign, and shall cause all of its employees and contractors to assign, all rights in any patentable subject matter, patent applications, copyrights, trade secrets and all other intellectual property created by the Contractor, its employees or contractors pursuant to this Agreement to ICANN.

Section 13.3 Section 12.3 Work for Hire. With respect to copyright, all work performed by Contractor pursuant to this Agreement and including the SOW is a "work for hire" agreement and ICANN shall be deemed the author and shall own all copyrightable works created by Contractor hereunder, and all copyright rights thereto. In the event this is not deemed a work for hire agreement, Contractor shall hereby assigns and agrees to assign ownership of the foregoing copyrightable works and copyrights to ICANN.

<u>Section 13.4</u> <u>Section 12.4-License</u>. ICANN shall license back any patents, patent applications, copyrights and trade secrets to Contractor for the duration of the Term solely to the extent necessary for Contractor to perform its obligations under this Agreement. This license shall be non-exclusive, non-assignable, non-sublicensable, non-transferable and royalty-free.<sup>14</sup>

## **ARTICLE XIV: ARTICLE XIII:** MISCELLANEOUS

Section 14.1 Section 13.1 Indemnification. So long as Contractor is an affiliate of ICANN, ICANN shall indemnify and hold and save Contractor, its officers, agents, and employees harmless from liability of any nature or kind, including costs and expenses to which they may be subject, for or on account of any or all third-party claims, suits or damages of any character whatsoever. (i) resulting from injuries or damages sustained by any person or persons or property by virtue of Contractor's performance of this Agreement, or failure to perform under this Agreement, or (ii) arising or resulting in whole or in part from the fault,

<sup>&</sup>lt;sup>14</sup> Note to Draft: A section on IP enforcement and defense should be added.

negligence, wrongful act or wrongful omission of ICANN or any of its subcontractors (other than Contractor), or their respective employees or agents.

<u>Section 14.2</u> <u>Notices.</u> All notices to be given under or in relation to this Agreement will be given either (i) in writing at the address of the appropriate <u>partyParty</u> as set forth below or (ii) via electronic mail as provided below, unless that <u>partyParty</u> has given a notice of change of postal or email address, as provided in this Agreement.

#### If to ICANN:

Internet Corporation for Assigned Names and Numbers 12025 Waterfront Drive, Suite 300 Los Angeles, CA 90094-2536

Attn: President and Chief Executive Officer

Phone: +1-310-301-5800

Email: [ • ]

With a copy to (which shall not constitute notice):

Internet Corporation for Assigned Names and Numbers 12025 Waterfront Drive, Suite 300 Los Angeles, CA 90094-2536

Attn: General Counsel Phone: +1-310-301-5800

Email: [ • ]

With a copy to (which shall not constitute notice):

Internet Corporation for Assigned Names and Numbers 12025 Waterfront Drive, Suite 300 Los Angeles, CA 90094-2536

Attn: President, Global Domains Division

Phone: +1-310-301-5800

Email: [•]

#### If to Contractor:

[Contractor] 12025 Waterfront Drive, Suite 300 Los Angeles, CA 90094-2536

Attn: [●]
Phone: [●]
Email: [●]

With a copy to (which shall not constitute notice):

Internet Corporation for Assigned Names and Numbers 12025 Waterfront Drive, Suite 300 Los Angeles, CA 90094-2536

Attn: General Counsel Phone: +1-310-301-5800

Email: [●]

Any notice required by this Agreement will be deemed to have been properly given (i) if in paper form, when delivered in person or via courier service with confirmation of receipt or (ii) if by electronic mail, upon confirmation of receipt by the recipient's email server, provided that such notice via electronic mail shall be followed by a copy sent by regular postal mail service within three calendar days. In the event other means of notice become practically achievable, such as notice via a secure website, the parties will work together to implement such notice means under this Agreement.

Section 14.3 Section 13.3 Amendments and Waiver. Except as provided in Section 6.3(c)7.3, any term or provision of this Agreement may be amended, and the observance of any term of this Agreement may be waived only by a physical writing referencing this Agreement, and either (a) manually signed by the Parties to be bound or (b) digitally signed by the Parties to be bound. Nothing herein shall limits limit ICANN's obligations under ICANN's Bylaws to the extent related to ICANN's commitments related to the amendment or modification of this Agreement, including the ability to amend this Agreement pursuant to an approved IFR Recommendation, an approved Special IFR Recommendation or an approved SCWG Recommendation, as set forth in ICANN's Bylaws, and Section 7.3(c) above.

Section 14.4 Waiver. Any term or provision of this Agreement may be waived, or the time for its performance may be extended, by the Party or Parties entitled to the benefit thereof. Any such extension or waiver shall be validly and sufficiently authorized for the purposes of this Agreement if, as to any Party, it is authorized in writing by an authorized representative of the Party entitled to the benefits of any such waived term or provision. The failure or delay of any Party to assert or enforce at any time any provision of, or any of its rights under, this Agreement shall not be construed to be a wavier of such provision, nor in any way to affect the validity of this Agreement or any part hereof or the right of any Party thereafter to enforce each and every such provision. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other or subsequent breach.

<u>Section 14.5</u> <u>Section 13.4-Severability</u>. If any provision of this Agreement should be found by a court of competent jurisdiction to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired thereby.

# Section 14.6 Section 13.5 Assignment and Subcontracting.

- (a) Neither Party may assign or transfer this Agreement, or any obligation under this Agreement (in whole or in part, and whether voluntarily, involuntarily, or by operation of Law) without the other Party's prior written consent.
- (b) PTI shall not subcontract all or any portion of its rights or obligations under this Agreement.

Section 14.7 Relationship of Parties. Notwithstanding that Contractor is an affiliate of ICANN, for purposes of this Agreement, the relationship between the Parties shall at all times relevant hereto be solely and exclusively that of independent contractors and nothing contained in this Agreement shall create any other relationship (including employment, partnership or joint venture), between the Parties or be construed to entitle either Party or its personnel to be considered the other Party's employees or subcontractors.

<u>Section 14.8</u> <u>Section 13.6</u> <u>Governing Law</u>. The Parties agree that this Agreement, and any and all disputes arising out of or related to this Agreement <u>resolved in accordance with Section 7(f)</u>, shall be governed by, construed, and enforced in all respects in accordance with the Laws of the State of California, United States of America, excluding its conflict of laws rules. Each Party expressly waives any claim that the jurisdiction of such court with respect to personal jurisdiction is improper or that the venue is inconvenient or improper.

<u>Section 14.9</u> <u>Section 13.7 Third-Party Beneficiaries</u>. No provision of this Agreement is intended to, nor shall be interpreted to, provide or create any rights, benefits or any other interest of any kind in any third party or create any obligations of ICANN or Contractor to any third party.<sup>15</sup>

<u>Section 14.10</u> <u>Section 13.8</u> <u>English Version</u>. If this Agreement is translated into any language other than English, and if there is a conflict between the English version and the translated version, then the English version shall prevail in all respects.

<u>Section 14.11</u> <u>Section 13.9</u> <u>Savings Clause</u>. Any delay, nonperformance or other breach by a Party of its obligations under this Agreement and any liability therefor, shall be excused to the extent such failure is <u>related to or</u> caused by the other Party's acts or omissions or the acts or omissions of such Party's employees or contractors, including such Party's failure to perform its obligations under this Agreement.

<sup>&</sup>lt;sup>15</sup> Note to Draft: IANA customers, including the Empowered Community and the operators of TLDs, should be made third party beneficiaries to the Agreement.

<u>Section 14.12</u> <u>Section 13.10 Cumulative Remedies</u>. Except as otherwise expressly provided, all remedies provided for in this Agreement shall be cumulative and in addition to, and not in lieu of, any other remedies available to either Party.

<u>Section 14.13</u> <u>Section 13.11</u> <u>Counterparts</u>. <u>The This</u> Agreement may be executed in counterparts, all of which taken together shall constitute one single agreement between the Parties.

<u>Section 14.14</u> <u>Section 13.12</u> <u>Headings</u>. The Parties agree that the headings used in this Agreement are for ease of reference only and shall not be taken into account in interpreting the Agreement.

<u>Section 14.15</u> <u>Section 13.13</u> <u>Further Assurances</u>. Subject to the terms and conditions of this Agreement, each of ICANN and Contractor agrees to use commercially reasonable best efforts to take, or cause to be taken, all appropriate action, and to do, or cause to be done, all things reasonably necessary, proper or advisable under applicable laws to make effective the transactions contemplated by this Agreement.

<u>Section 14.16</u> <u>Section 13.14</u> <u>Entire Agreement</u>. This Agreement, including all statements of work, schedules, exhibits or other attachments hereto, constitutes the entire understanding and agreement between ICANN and Contractor with respect to the subject matter of this Agreement, and supersedes any and all prior or contemporaneous oral or written representation, understanding, agreement or communication relating thereto.

[Signature Page Follows]

# Discussion Draft as of 15 July 2016

Title

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the date set forth below.

# INTERNET CORPORATION FOR ASSIGNED [CONTRACTOR] **NAMES AND NUMBERS** By: \_\_\_\_\_(Signature) (Signature) Name (print) Name (print) Title

# ANNEX A: STATEMENT OF WORK FOR MANAGEMENT OF THE DNS ROOT ZONE 216 17

# 1. Root Zone Management

- a. The Root Zone Management component of the IANA Naming Function is the administration of certain responsibilities associated with the Internet DNS root zone management.
- b. Contractor shall collaborate with TLD registry operators to develop, maintain, enhance and post performance standards for Root Zone Management.
   Specifically, Contractor shall perform Root Zone Management in accordance with the service levels set forth in Section 2.
- c. Contractor shall also implement DNSSEC in all zones for which ICANN has technical administration authority.
- d. Contractor shall facilitate and coordinate the root zone of the domain name system, and maintain 24 hour-a-day/7 days-a-week operational coverage. Contractor shall work collaboratively with the Root Zone Maintainer, in the performance of this function.
  - i. Contractor shall receive and process root zone file change requests for TLDs. These change requests include addition of new or updates to existing TLD name servers ("NS") and delegation signer ("DS") resource record ("RR") information along with associated "glue" (A and AAAA RRs). A change request may also include new TLD entries to the root zone file. Contractor shall process root zone file changes as specified in Section 2 of this Annex A.
  - ii. Contractor shall maintain, update, and make publicly accessible a Root Zone registration database with current and verified contact information for all TLD registry operators. The Root Zone registration database, at a minimum, shall consist of the following data fields: domain status and contact points for resolving issues relating to the operation of the domain (comprised of at least organizational name, postal address,

<sup>&</sup>lt;sup>2</sup>16\_Note to CWG: ICANN anticipates subcontracting to Contracting ICANN's performance obligations under the Root Zone Maintainer Agreement.

<sup>17</sup> Note to Draft: For the avoidance of doubt, Sidley has not tracked these provisions for consistency with the RZM Agreement or the expectations of the RZM.

- email address and telephone number). Contractor shall receive and process root zone registration data change requests for TLDs.
- iii. Contractor shall apply existing policy frameworks in processing requests related to the delegation and transfer of a ccTLD, such as RFC 1591, the GAC ccTLD Principles and any further clarification of these policies by interested and affected parties Interested and Affected Parties. If a policy framework does not exist to cover a specific instance, Contractor will consult with interested and affected parties Interested and Affected Parties, relevant public authorities, and governments, on any request that is not within or consistent with an existing policy framework.
- iv. Contractor shall apply existing policy frameworks in processing requests related to retirement of a ccTLD, such as RFC 1591, the GAC ccTLD Principles and any further clarification of these policies by Interested and Affected Parties. If a policy framework does not exist to cover a specific instance, Contractor will consult with Interested and Affected Parties, relevant public authorities, and governments, on any request that is not within or consistent with an existing policy framework.<sup>18</sup>
- <u>v.</u> iv. Contractor shall verify that all requests related to the delegation and transferredelegation of generic TLDs are consistent with the procedures developed by ICANN.
- vi. v. Contractor shall maintain an automated root zone management system that, at a minimum, includes (A) a secure (encrypted) system for customer communications; (B) an automated provisioning protocol allowing customers to manage their interactions with the root zone management system; (C) an online database of change requests and subsequent actions whereby each customer can see a record of their historic requests and maintain visibility into the progress of their current requests; and (D) a test system, which customers can use to meet the technical requirements for a change request; and (E) an internal interface for secure communications between the Contractor and the Root Zone Maintainer.

Note to Draft: The "Annex E and S Mapping" document states that a similar provision to Section 1.d.iii from the NTIA Contract, re: Delegation and Redelegation of a ccTLD, should be created regarding retirement of ccTLDs, so we have created a section similar to 1.2.iii of this Annex, related to retirement of ccTLDs.

# 2. Service Levels 19

a. Contractor shall perform the Services in accordance with the following "Service Levels". The expectation is that Contractor will normally perform within the threshold. The thresholds will be modified over time as part of periodic reviews of the service level expectation. A subset of the following measures relate to measurement of non-routine changes where it is not applicable to set a specific threshold for performance. It is expected for measurements of non-routine process steps these will only be reported with no applicable service level expectation.

#### b. Services Definitions

- i. Category I (Routine updates impacting Root Zone File). Routine change requests that alter the technical data published in the DNS root zone (e.g. changes to NS records, DS records and glue records). A third party may be engaged to compile, publish and distribute the root zone.
- ii. Category II (Routine updates not impacting Root Zone File). Routine change requests that do not alter the DNS root zone (e.g., contact data and metadata). These changes do not require changes to the root zone.
- iii. Category III (Creating or Transferring a gTLD). Requests to create ("delegate") or transfer ("redelegate" or "assign") a generic TLD. These changes require additional processing by Contractor to ensure policy and contractual requirements associated with a change of control for the TLD are met.
- iv. Category IV (Creating or Transferring a ccTLD). Requests to create or transfer a country-code TLD. These changes require additional processing by Contractor to ensure policy requirements are met. This processing includes additional analysis on the change request, production of a report, and review of the report (including verification that all existing registration data has been successfully transferred from the old to new registry operator).
- v. Category V (Other change requests). Other non-routine change requests. Contractor is required to process change requests that may have special handling requirements, or require additional documentary evidence or clarifications from the customer or third parties, that prevent automating the handling of the request. These requests

<sup>&</sup>lt;sup>19</sup> Note to Draft: We suggest adding a change control process for more streamlined revisions to the service levels.

include, but are not limited to:

- Customers that require requests to be handled outside the online self-service platform, such as those lodging change requests through the exchange of postal mail;
- Customers that have placed special handling instructions on file
  with Contractor, or have otherwise asked for special handling for
  a request that deviates from the normal process, resulting in the
  request being executed manually;
- 3. Unique legal or regulatory encumbrances that must be satisfied that require additional processing;
- 4. Removing a TLD from service (i.e. retirement or revocation); and
- 5. Changes that relate to the operation of the root zone itself, including changing the Root Key Signing Key, altering the set of authoritative name servers for the root zone (i.e. the "root servers"), and changes to the "root hints".

#### c. Service Levels

- i. The fields in the following tables are as follows:
  - 1. Process. The business process that Contractor is requested to perform.
  - 2. Metric. The individual metric that will be measured as part of the completion of the business process.

- 3. Threshold. The specified target for each individual change request.
- 4. Type. Whether the threshold specified is a minimum target (compliance must not be less than the target) or a maximum target (compliance must not be more than the target).
- 5. Compliance. The percentage that the target goal in aggregate must be met or exceeded within the specified time period for all requests in the specified category.
- 6. Period. The time over which compliance is measured. (The period of collecting measurements to meet the Service Level Agreement (SLA)).
- ii. Process Performance. Total Contractor transaction time for emergency changes should be completed within a target of 12 hours until reviewed by the CSC with Contractor.

Process Category	Metric	Threshold	Туре	Compliance	Period
Category I —		Submiss	sion		
Routine updates	Time for ticket				
impacting Root	confirmation to be sent				
Zone File (NS, DS	to requester following				
and glue	receipt of change				
records)	request via automated submission interface				
	Time for lodgment of				
	change request into				
	RZMS by Contractor on				
	behalf of request sent				
	by email				
		Technical (	Checks		
	Time to return results				
	for technical checks				
	following submission of				
	request via automated				
	submission interface				
	Time to return results				
	for subsequent				
	performance of technical				
	checks during retesting				
	due to earlier failed				
	tests				

<b>Process Category</b>	Metric	Threshold	Туре	Compliance	Period
		Contact Conf	irmation		
	Time for authorization				
	contacts to be asked to				
	approve change request				
	after completing				
	previous process phase				
	Time for response to be				
	affirmed by Contractor				
	Contra	ctor Review	and Process	sing	
	Time to complete all				
	other validations and				
	reviews by Contractor				
	and release request for				
	implementation				
	Supp	lemental Tec	hnical Chec	ks	
	Time to return results				
	for performance of				
	technical checks during				
	Supplemental Technical				
	Check phase				
	Imp	lementation	of Changes	<b>.</b>	
	Time for root zone				
	changes to be published				
	following completion of				
	validations and reviews				
	by Contractor				
	Time to notify requester				
	of change completion				
	following publication of				
	requested changes				
Category II —		Submiss	sion	,	
Routine updates	Time for ticket				
not impacting	confirmation to be sent				
Root Zone File	to requester following				
(Contact details	receipt of change				
and metadata)	request via automated				
	submission interface				
	Time for lodgment of				
	change request into				
	RZMS by Contractor on				
	behalf of request sent				
	by email				

Process Category	Metric	Threshold	Туре	Compliance	Period
		Technical (	Checks		
	Time to return results				
	for technical checks				
	following submission of				
	request via automated				
	submission interface				
	Time to return results				
	for subsequent				
	performance of technical				
	checks during retesting				
	due to earlier failed				
	tests				
		Contact Conf	irmation		
	Time for authorization				
	contacts to be asked to				
	approve change request				
	after completing				
	previous process phase				
	Time for response to be				
	affirmed by Contractor				
	Contra	ctor Review	and Process	sing	
	Time to complete all				
	other validations and				
	reviews by Contractor				
	and release request for				
	implementation				
	Supp	lemental Tec	hnical Chec	ks	
	Time to return results				
	for performance of				
	technical checks during				
	Supplemental Technical				
	Check phase				
		lementation	of Changes	<b>,</b>	
	Time for root zone				
	changes to be published				
	following completion of				
	validations and reviews				
	by Contractor				
	Time to notify requester				
	of change completion				
	following publication of				
	requested changes				

<b>Process Category</b>	Metric	Threshold	Туре	Compliance	Period
Category III —		Submiss	sion		
Creating or	Time for ticket				
Transferring a	confirmation to be sent				
gTLD	to requester following				
	receipt of change				
	request via automated				
	submission interface				
	Time for lodgment of				
	change request into				
	RZMS by Contractor on				
	behalf of request sent				
	by email				
		Technical (	Checks		
	Time to return results				
	for technical checks				
	following submission of				
	request via automated				
	submission interface				
	Time to return results				
	for subsequent				
	performance of technical				
	checks during retesting				
	due to earlier failed				
	tests				
		Contact Conf	irmation		
	Time for authorization				
	contacts to be asked to				
	approve change request				
	after completing				
	previous process phase				
	Time for response to be				
	affirmed by Contractor				
	Contra	ctor Review	and Proces	sing	
	Time to complete all				
	other validations and				
	reviews by Contractor				
	and release request for				
	implementation				
	Supp	lemental Tec	hnical Chec	ks	
	Time to return results				
	for performance of				
	technical checks during				

Process Category	Metric	Threshold	Туре	Compliance	Period
	Supplemental Technical				
	Check phase				
	Imp	lementation	of Changes	5	
	Time for root zone				
	changes to be published				
	following completion of				
	validations and reviews				
	by Contractor				
	Time to notify requester				
	of change completion				
	following publication of				
	requested changes				
Category IV —		Submiss	sion		
Creating or					
Transferring a					
ccTLD					
	Time for ticket				
	confirmation to be sent				
	to requester following				
	receipt of change				
	request via automated				
	submission interface				
	Time for lodgment of				
	change request into				
	RZMS by Contractor on				
	behalf of request sent				
	by email				
		Technical (	Checks		
	Time to return results				
	for technical checks				
	following submission of				
	request via automated				
	submission interface				
	Time to return results				
	for subsequent				
	performance of technical				
	checks during retesting				
	due to earlier failed				
	tests				
		Contact Conf	irmation		

Process Category	Metric	Threshold	Туре	Compliance	Period
	Time for authorization				
	contacts to be asked to				
	approve change request				
	after completing				
	previous process phase				
	Time for response to be				
	affirmed by Contractor				
	Contra	ctor Review	and Process	sing	
	Time to complete all				
	other validations and				
	reviews by Contractor				
	and release request for				
	implementation				
	Time for third-party				
	review of request (e.g.				
	by ICANN Board of				
	Directors, PTI Board or				
	other relevant				
	verification parties)				
	Supp	lemental Tec	hnical Chec	ks	
	Time to return results				
	for performance of				
	technical checks during				
	Supplemental Technical				
	Check phase				
	Imp	lementation	of Changes		
	Time for root zone				
	changes to be published				
	following completion of				
	validations and reviews				
	by Contractor				
	Time to notify requester				
	of change completion				
	following publication of				
	requested changes				
Category V —		Submiss	sion	,	
Other change	Time for ticket				
requests (i.e.	confirmation to be sent				
non-routine	to requester following				
change requests)	receipt of change				
	request via automated				
	submission interface				

<b>Process Category</b>	Metric	Threshold	Туре	Compliance	Period
	Time for lodgment of				
	change request into				
	RZMS by Contractor on				
	behalf of request sent				
	by email				
		Technical (	Checks		
	Time to return results				
	for technical checks				
	following submission of				
	request via automated				
	submission interface				
	Time to return results				
	for subsequent				
	performance of technical				
	checks during retesting				
	due to earlier failed				
	tests				
		Contact Conf	irmation		
	Time for authorization				
	contacts to be asked to				
	approve change request				
	after completing				
	previous process phase				
	Time for response to be				
	affirmed by Contractor				
	Contra	ctor Review	and Proces	sing	
	Time to complete all				
	other validations and				
	reviews by Contractor				
	and release request for				
	implementation				
	Supp	lemental Ted	hnical Chec	ks	
	Time to return results				
	for performance of				
	technical checks during				
	Supplemental Technical				
	Check phase				
	Imp	lementation	of Changes	5	
	Time for root zone				
	changes to be published				
	following completion of				
	validations and reviews				

<b>Process Category</b>	Metric	Threshold	Type	Compliance	Period
	by Contractor				
	Time to notify requester				
	of change completion				
	following publication of				
	requested changes				

# d. Accuracy

Metric	Measurement	Threshold	Туре	Compliance	Period
Root zone file data published in	Accuracy	100%	Min	<100%	
the root zone matches that					
provided in the change request					
Root zone database is correctly	Accuracy	100%	Min	<100%	
updated in accordance with					
change requests (does not					
include impact of normalization					
and other processing					
standardization - which in any					
event shall never detrimentally					
impact the update)					

# e. Online Services Availability and Enquiry Processing

Metric	Threshold	Туре	Compliance	Period
RZMS availability —				
availability of an				
online interactive web				
service for				
credentialed				
customers to submit				
change requests to				

their root zone				
their root zone				
database entries.				
database critics.				
Website availability —				
availability of root zone				
management related				
documentation (i.e. on				
http://www.iana.org)				
Directory service availability				
— availability of the				
authoritative database of				
TLDs				
Credential recovery — time	5 min	Max	95%	Month
to dispatch confirmation				
email of forgotten username				
or password				
Credential change — time to	5 min	Max	95%	Month
implement new password				
within the system				
Dashboard update frequency	30 min	Max	100%	Month
— average time to update				
the dashboard to ensure up-				
to-date reporting				
Dashboard accuracy — the	100%	Min	<100%	Month
data presented on the				
dashboard is accurate				
Dashboard availability —	99%	Min	<99%	Month
availability of the dashboard				
online				
SLE report production —	Monthly			
time to produce reports				
following the conclusion of				
the reporting period				
SLE report availability —	<10 days	Max	>10 days	Month
availability of the SLE reports	after			
and associated data online	month end			
SLE report publication —	Monthly			
schedule of reporting periods				

Time to send acknowledge		
of enquiry — time taken to		
send initial acknowledgement		
of receipt of a general		
enquiry pertaining to root		
zone management (but not		
pertaining to interactions in a		
change request context)		
Time to send initial response		
to enquiry — time taken for		
staff to respond to enquiry,		
either in part or in whole		

f. These elements reflect activity areas that should be instrumented by Contractor, and reported pursuant to <a href="Article-6ARTICLE VII">Article-6ARTICLE VII: of the Agreement and Section 3 of thethis SOW.</a>

# 3. Performance Metric Requirements

- a. Program Reviews and Site Visits<sup>20</sup>
  - i. Reviews mayshall be conducted by the CSC [annually] in accordance with ICANN's Bylaws.
  - ii. Site visits mayshall be conducted by an IFRT [annually] in accordance with ICANN's Bylaws.
- b. Monthly Performance Progress Report. Contractor shall prepare and submit reports as mutually agreed between Contractor and the CSC.
- c. Root Zone Management Dashboard. Contractor shall work collaboratively with ICANN and TLD registry operators to produce the dashboard to report Service Level Expectations for Root Zone Management, which will be used for real-time reporting of Contractor's performance.
- d. Performance Standards Reports. Contractor shall develop and publish performance standard metric reports for the IANA Naming Function in consultation with the CSC. The performance standards metric reports will be

Note to Draft: Section C.4.1 of the NTIA Contract says that program reviews and site visits shall occur annually. Annex S says that program reviews shall be conducted monthly by CSC and ICANN and site visits shall be conducted on demand by the IFRT. To confirm correct frequency.

- published via a website every month (no later than 15 calendar days following the end of each month).
- e. Customer Service Survey. In accordance with ICANN's Bylaws, Contractor shall collaborate with the CSC and ICANN to maintain and enhance the annual customer service survey consistent with the performance standards for Root Zone Management. The survey shall include a feedback section for each discrete IANA function. No later than 60 calendar days after completing a customer service survey, Contractor shall prepare a report (the "CSS Report"), submit the CSS Report to ICANN and publicly post the CSS Report to the IANA Website.
- f. Final Report. Contractor shall prepare and submit a final report on the performance of Root Zone Management the IANA Naming Function that documents standard operating procedures, including a description of the techniques, methods, software, and tools employed in the performance of Root Zone Management IANA Naming Function. Contractor shall submit the report to the CSC and ICANN no later than 30 days after the expiration or termination of this the Agreement.
- g. Inspection and acceptance. ICANN, as applicable, will perform final inspection and acceptance of all deliverables and reports articulated in this Section 3, as set forth in Section 4.10(a) of the Agreement. Any deficiencies shall be corrected by Contractor and resubmitted to ICANN within 10 business days after receipt of notice of such deficiency.
- 4. Baseline Requirements For DNSSEC In The Authoritative Root Zone<sup>21</sup>
  - a. DNSSEC at the authoritative Root Zone requires cooperation and collaboration between the Contractor and the Root Zone Maintainer. The baseline requirements encompass the responsibilities and requirements for Contractor and these responsibilities and requirements must be implemented in cooperation with similar responsibilities and requirements defined within ICANN's relationship with the Root Zone Maintainer.
  - b. General Requirements
    - i. The Root Zone system needs an overall security lifecycle, such as that described in ISO 27001, NIST SP 800-53, etc., and any security policy for

Note to Draft: Confirm whether Section C.2.9.2.f from the NTIA Contract is adequately covered (with appropriate updates).

- DNSSEC implementation must be validated against existing standards for security controls.
- ii. The remainder of this section highlights security requirements that must be considered in developing any solution. ISO 27002:2005 (formerly ISO 17799:2005) and NIST SP 800-53 are recognized sources for specific controls. Note that reference to SP 800-53 is used as a convenient means of specifying a set of technical security requirements. The systems referenced in this document are assumed to meet all the SP 800-53 technical security controls or equivalent required by a HIGH IMPACT system.
- iii. Whenever possible, references to NIST publications are given as a source for further information. These Special Publications ("SP") are not intended as auditing checklists, but as non-binding guidelines and recommendations to establish a viable IT security policy. Comparable security standards can be substituted where available and appropriate. All of the NIST document references can be found on the NIST Computer Security Research Center webpage (http://www.csrc.nist.gov/).
- c. Security Authorization and Management Policy
  - i. Contractor shall have its own security policy in place; each security policy must be periodically reviewed and updated, as appropriate.
    - 1. Supplemental guidance on generating a Security Authorization Policy may be found in NIST SP 800-37.
  - ii. The policy shall have a contingency plan component to account for disaster recovery (both man-made and natural disasters).
    - 1. Supplemental guidance on contingency planning may be found in SP 800-34
  - iii. The policy shall address Incident Response detection, handling and reporting (see 4 below).
    - 1. Supplemental guidance on incident response handling may be found in NIST SP 800- 61.

#### d. IT Access Control

i. There shall be an IT access control policy in place and enforced for the key management functions

- 1. This includes both access to hardware/software components and storage media as well as ability to perform process operations.
- 2. Supplemental guidance on access control policies may be found in NIST SP 800-12.
- ii. Users without authentication shall not perform any action in key management.
- iii. In the absence of a compelling operational requirement, remote access to any cryptographic component in the system (such as hardware security modules) is not permitted.

## e. Security Training

- i. All personnel participating in the Root Zone Signing process shall have adequate IT security training.
- ii. Supplemental guidance on establishing a security awareness training program may be found in NIST SP 800-50.

## f. Audit and Accountability Procedures

- i. Contractor shall periodically review/update: (1) its formal, documented, audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and (2) the formal, documented procedures to facilitate the implementation of the audit and accountability policy and associated audit and accountability controls.
  - 1. Supplemental guidance on auditing and accountability policies may be found in NIST SP 800-12.
  - 2. Specific auditing events include the following:
    - a. Generation of keys.
    - b. Generation of signatures
    - c. Exporting of public key material
    - d. Receipt and validation of public key material (i.e., from the ZSK holder or from TLDs)
    - e. System configuration changes

- f. Maintenance and/or system updates
- g. Incident response handling
- h. Other events as appropriate
- Incident handling for physical and exceptional cyber-attacks shall include reporting to ICANN in a timeframe and format as mutually agreed by ICANN and Contractor.
- iii. The auditing system shall be capable of producing reports on an ad-hoc basis for ICANN or the CSC.
- iv. A version of the reports provided to ICANN or the CSC must be made publically available.

#### g. Physical Protection Requirements

- i. There shall be physical access controls in place to only allow access to hardware components and media to authorized personnel.
  - 1. Supplemental guidance on token based access may be found in NIST SP 800-73.
  - 2. Supplemental guidance on token based access biometric controls may be found in NIST SP 800-76.
- ii. Physical access shall be monitored, logged, and registered for all users and visitors.
- iii. All hardware components used to store keying material or generate signatures shall have short-term backup emergency power connections in case of site power outage. (See NIST SP 800-53r3).
- iv. Appropriate protection measures shall be in place to prevent physical damage to facilities as appropriate.

#### h. All Components

- i. All hardware and software components must have an established maintenance and update procedure in place.
  - 1. Supplemental guidance on establishing an upgrading policy for an organization may be found in NIST SP 800-40

- ii. All hardware and software components provide a means to detect and protect against unauthorized modifications/updates/patching.
- i. Interface Basic Functionality
  - i. Contractor's interface shall have the ability to accept and process TLD DS records, including:
    - 1. Accept TLD DS RRs
      - a. Being able to retrieve TLD DNSKEY record from the TLD, and perform parameter checking for the TLD keys, including verifying that the DS RR has been correctly generated using the specified hash algorithm.
    - 2. Having procedures for:
      - a. Scheduled roll over for TLD key material;
      - b. Supporting emergency key roll over for TLD key material; and
      - c. Moving TLD from signed to unsigned in the root zone.
  - ii. Ability to submit TLD DS record updates to the Root Zone Maintainer for inclusion into the root zone.
  - iii. Ability to submit RZ keyset to the Root Zone Maintainer for inclusion into the root zone.

# Summary report:

# Litéra® Change-Pro TDC 7.5.0.176 Document comparison done on 7/23/2016 4:50:10 PM

7/23/2016 4:59:10 PM					
Style name: Sidley Default					
Intelligent Table Comparison: Active					
Original DMS: iw://SIDLEYDMS/ACTIVE/216080373/1					
<b>Description:</b> Naming Function Agreement - Draft as of 1:	5 July 2016				
Modified DMS: iw://SIDLEYDMS/ACTIVE/216080373/	3				
<b>Description:</b> Naming Function Agreement - Sidley Draft	7.23.16				
Changes:					
Add	333				
<del>Delete</del>	168				
Move From	15				
Move To	15				
Table Insert	0				
Table Delete	0				
<u>Table moves to</u>	0				
Table moves from	0				
Embedded Graphics (Visio, ChemDraw, Images etc.)	0				
Embedded Excel	0				
Format changes	0				
<b>Total Changes:</b>	531				