New gTLD Agreement

This document contains the registry agreement associated with the Applicant Guidebook for New gTLDs.

Successful gTLD applicants would enter into this form of registry agreement with ICANN prior to delegation of the new gTLD. (Note: ICANN reserves the right to make reasonable updates and changes to this proposed agreement during the course of the application process, including as the possible result of new policies that might be adopted during the course of the application process).

REGISTRY AGREEMENT

This REGISTRY AGREEMENT (this "Agreement") is entered into as of _____ (the "Effective Date") between Internet Corporation for Assigned Names and Numbers, a California nonprofit public benefit corporation ("ICANN"), and _____, a ____ ("Registry Operator").

ARTICLE 1.

DELEGATION AND OPERATION OF TOP-LEVEL DOMAIN; REPRESENTATIONS AND WARRANTIES

1.1 Domain and Designation. The Top-Level Domain to which this Agreement applies is _____(the "TLD"). Upon the Effective Date and until the end of the Term (as defined in Section 4.1), ICANN designates Registry Operator as the registry operator for the TLD, subject to the requirements and necessary approvals for delegation of the TLD and entry into the root-zone.

1.2 Technical Feasibility of String. While ICANN has encouraged and will continue to encourage universal acceptance of all top-level domain strings across the Internet, certain top-level domain strings may encounter difficulty in acceptance by ISPs and webhosters and/or validation by web applications. Registry Operator shall be responsible for ensuring to its satisfaction the technical feasibility of the TLD string prior to entering into this Agreement.

1.3 Representations and Warranties.

(a) Registry Operator represents and warrants to ICANN as follows:

(i) all material information provided and statements made in the registry TLD application, and statements made in writing during the negotiation of this Agreement, were true and correct in all material respects at the time made, and such information or statements continue to be true and correct in all material respects as of the Effective Date except as otherwise previously disclosed in writing by Registry Operator to ICANN;

(ii) Registry Operator is duly organized, validly existing and in good standing under the laws of the jurisdiction set forth in the preamble hereto, and Registry Operator has all requisite power and authority and obtained all necessary approvals to enter into and duly execute and deliver this Agreement; and

(iii) Registry Operator has delivered to ICANN a duly executed instrument that secures the funds required to perform registry functions for the TLD in the event of the termination or expiration of this Agreement (the "Continued Operations Instrument"), and such instrument is a binding obligation of the parties thereto, enforceable against the parties thereto in accordance with its terms.

(b) ICANN represents and warrants to Registry Operator that ICANN is a nonprofit public benefit corporation duly organized, validly existing and in good standing under the laws of the State of California, United States of America. ICANN has all requisite power and authority and obtained all necessary corporate approvals to enter into and duly execute and deliver this Agreement.

ARTICLE 2.

COVENANTS OF REGISTRY OPERATOR

Registry Operator covenants and agrees with ICANN as follows:

2.1 Approved Services; Additional Services. Registry Operator shall be entitled to provide the Registry Services described in clauses (a) and (b) of the first paragraph of Section 2.1 in the specification at [*see specification 6*] ("Specification 6") and such other Registry Services set forth on <u>Exhibit A</u> (collectively, the "Approved Services"). If Registry Operator desires to provide any Registry Service that is not an Approved Service or is a modification to an Approved Service (each, an "Additional Service"), Registry Operator shall submit a request for approval of such Additional Service pursuant to the Registry Services Evaluation Policy at <u>http://www.icann.org/en/registries/rsep/rsep.html</u>, as such policy may be amended from time to time in accordance with the bylaws of ICANN (as amended from time to time, the "ICANN Bylaws") applicable to Consensus Policies (the "RSEP"). Registry Operator may offer Additional Services shall be deemed Registry Services under this Agreement. In its reasonable discretion, ICANN may require an amendment to this Agreement reflecting the provision of any Additional Service which is approved pursuant to the RSEP, which amendment shall be in a form reasonably acceptable to the parties.

2.2 Compliance with Consensus Policies and Temporary Policies. Registry Operator shall comply with and implement all Consensus Policies and Temporary Policies found at <<u>http://www.icann.org/general/consensus-policies.htm</u>>, as of the Effective Date and as may in the future be developed and adopted in accordance with the ICANN Bylaws, provided such future Consensus Policies and Temporary Policies are adopted in accordance with the procedure and relate to those topics and subject to those limitations set forth at [*see specification 1*]* ("Specification 1").

2.3 Data Escrow. Registry Operator shall comply with the registry data escrow procedures posted at [*see specification 2*]*.

2.4 Monthly Reporting. Within twenty (20) calendar days following the end of each calendar month, Registry Operator shall deliver to ICANN reports in the format posted in the specification at [*see specification 3*]*.

2.5 Publication of Registration Data. Registry Operator shall provide public access to registration data in accordance with the specification posted at [*see specification 4*]* ("Specification 4").

2.6 Reserved Names. Except to the extent that ICANN otherwise expressly authorizes in writing, Registry Operator shall comply with the restrictions on registration of character strings set forth at [*see specification 5*]* ("Specification 5"). Registry Operator may establish policies concerning the reservation or blocking of additional character strings within the TLD at its discretion. If Registry Operator is the registrant for any domain names in the Registry TLD (other than the Second-Level Reservations for Registry Operations from Specification 5), such registrations must be through an ICANN accredited registrar. Any such registrations will be considered Transactions (as defined in Section 6.1) for purposes of calculating the Registry-Level Transaction Fee to be paid to ICANN by Registry Operator pursuant to Section 6.1.

2.7 Registry Interoperability and Continuity. Registry Operator shall comply with the Registry Interoperability and Continuity Specifications as set forth in Specification 6.

2.8 Protection of Legal Rights of Third Parties. Registry Operator must specify, and comply with, a process and procedures for launch of the TLD and initial registration-related and ongoing protection of the legal rights of third parties as set forth in the specification at [*see specification 7*]* ("Specification 7"). Registry Operator may, at its election, implement additional protections of the legal rights of third parties. Any changes or modifications to the process and procedures required by Specification 7 following the Effective Date must be approved in advance by ICANN in writing. Registry Operator must comply with all remedies imposed by ICANN pursuant to Section 2 of Specification 7, subject to Registry Operator's right to challenge such remedies as set forth in the applicable procedure described therein. Registry Operator shall take reasonable steps to investigate and respond to any reports from law enforcement and governmental and quasi-governmental agencies of illegal conduct in connection with the use of the TLD. In responding to such reports, Registry Operator will not be required to take any action in contravention of applicable law.

2.9 Registrars.

(a) Registry Operator must use only ICANN accredited registrars in registering domain names. Registry Operator must provide non-discriminatory access to Registry Services to all ICANN accredited registrars that enter into and are in compliance with the registry-registrar agreement for the TLD; provided, that Registry Operator may establish non-discriminatory criteria for qualification to register names in the TLD that are reasonably related to the proper functioning of the TLD. Registry Operator must use a uniform non-discriminatory agreement with all registrars authorized to register names in the TLD. Such agreement may be revised by Registry Operator from time to time; provided, however, that any such revisions must be approved in advance by ICANN.

(b) If Registry Operator (i) becomes an Affiliate or reseller of an ICANN accredited registrar, or (ii) subcontracts the provision of any Registry Services to an ICANN accredited registrar, registrar reseller or any of their respective Affiliates, then, in either such case of (i) or (ii) above, Registry Operator will give ICANN prompt notice of the contract, transaction or other arrangement that resulted in such affiliation, reseller relationship or subcontract, as applicable, including, if requested by ICANN, copies of any contract relating thereto; provided, that ICANN will not disclose such contracts to any third party other than relevant competition authorities. ICANN reserves the right, but not the obligation, to refer any such contract, transaction or other arrangement might raise competition issues.

(c) For the purposes of this Agreement: (i) "Affiliate" means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, the person or entity specified, and (ii) "control" (including the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person or entity, whether through the ownership of securities, as trustee or executor, by serving as an employee or a member of a board of directors or equivalent governing body, by contract, by credit arrangement or otherwise.

2.10 Pricing for Registry Services.

(a) With respect to initial domain name registrations, Registry Operator shall provide each ICANN accredited registrar that has executed the registry-registrar agreement for the TLD advance written notice of any price increase (including as a result of the elimination of any refunds, rebates, discounts, product tying or other programs which had the effect of reducing the price charged to registrars, unless such refunds, rebates, discounts, product tying or other programs are of a limited

^{*} Final text will be posted on ICANN website; agreement reference to be replaced by hyperlink.

duration that is clearly and conspicuously disclosed to the registrar when offered) of no less than thirty (30) calendar days. Registry Operator shall offer registrars the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years.

With respect to renewal of domain name registrations, Registry Operator shall (b) provide each ICANN accredited registrar that has executed the registry-registrar agreement for the TLD advance written notice of any price increase (including as a result of the elimination of any refunds, rebates, discounts, product tying, Qualified Marketing Programs or other programs which had the effect of reducing the price charged to registrars) of no less than one hundred eighty (180) calendar days. Notwithstanding the foregoing sentence, with respect to renewal of domain name registrations: (i) Registry Operator need only provide thirty (30) calendar days notice of any price increase if the resulting price is less than or equal to (A) for the period beginning on the Effective Date and ending twelve (12) months following the Effective Date, the initial price charged for registrations in the TLD, or (B) for subsequent periods, a price for which Registry Operator provided a notice pursuant to the first sentence of this Section 2.10(b) within the twelve (12) month period preceding the effective date of the proposed price increase; and (ii) Registry Operator need not provide notice of any price increase for the imposition of the Variable Registry-Level Fee set forth in Section 6.3. Registry Operator shall offer registrars the option to obtain domain name registration renewals at the current price (i.e. the price in place prior to any noticed increase) for periods of one to ten years at the discretion of the registrar, but no greater than ten years.

In addition, Registry Operator must have uniform pricing for renewals of (c) domain name registrations ("Renewal Pricing"). For the purposes of determining Renewal Pricing, the price for each domain registration renewal must be identical to the price of all other domain name registration renewals in place at the time of such renewal, and such price must take into account universal application of any refunds, rebates, discounts, product tying or other programs in place at the time of renewal. The foregoing requirements of this Section 2.10(c) shall not apply for (i) purposes of determining Renewal Pricing if the registrar has provided Registry Operator with documentation that demonstrates that the applicable registrant expressly agreed in its registration agreement with registrar to higher Renewal Pricing at the time of the initial registration of the domain name following clear and conspicuous disclosure of such Renewal Pricing to such registrant, and (ii) discounted Renewal Pricing pursuant to a Qualified Marketing Program (as defined below). The parties acknowledge that the purpose of this Section 2.10(c) is to prohibit abusive and/or discriminatory Renewal Pricing practices imposed by Registry Operator without the written consent of the applicable registrant at the time of the initial registration of the domain and this Section 2.10(c) will be interpreted broadly to prohibit such practices. For purposes of this Section 2.10(c), a "Qualified Marketing Program" is a marketing program pursuant to which Registry Operator offers discounted Renewal Pricing, provided that each of the following criteria is satisfied: (i) the program and related discounts are offered for a period of time not to exceed one hundred eighty (180) calendar days (with consecutive substantially similar programs aggregated for purposes of determining the number of calendar days of the program), (ii) all ICANN accredited registrars are provided the same opportunity to qualify for such discounted Renewal Pricing; and (iii) the intent or effect of the program is not to exclude any particular class(es) of registrations (e.g., registrations held by large corporations) or increase the renewal price of any particular class(es) of registrations. Nothing in this Section 2.10(c) shall limit Registry Operator's obligations pursuant to Section 2.10(b).

(d) Registry Operator shall provide public query-based DNS lookup service for the TLD (that is, operate the Registry TLD zone servers) at its sole expense.

2.11 Contractual and Operational Compliance Audits.

(a) ICANN may from time to time (not to exceed twice per calendar year) conduct, or engage a third party to conduct, contractual compliance audits to assess compliance by Registry Operator with its representations and warranties contained in Article 1 of this Agreement and its covenants contained in Article 2 of this Agreement. Such audits shall be tailored to achieve the purpose of assessing compliance, and ICANN will (a) give reasonable advance notice of any such audit, which notice shall specify in reasonable detail the categories of documents, data and other information requested by ICANN, and (b) use commercially reasonable efforts to conduct such audit in such a manner as to not unreasonably disrupt the operations of Registry Operator. As part of such audit and upon request by ICANN, Registry Operator shall timely provide all responsive documents, data and any other information necessary to demonstrate Registry Operator's compliance with this Agreement. Upon no less than five (5) business days notice (unless otherwise agreed to by Registry Operator), ICANN may, as part of any contractual compliance audit, conduct site visits during regular business hours to assess compliance by Registry Operator with its representations and warranties contained in Article 1 of this Agreement and its covenants contained in Article 2 of this Agreement.

(b) Any audit conducted pursuant to Section 2.11(a) will be at ICANN's expense, unless (i) Registry Operator (A) controls, is controlled by, is under common control or is otherwise Affiliated with, any ICANN accredited registrar or registrar reseller or any of their respective Affiliates, or (B) has subcontracted the provision of Registry Services to an ICANN accredited registrar or registrar reseller or any of their respective Affiliates, and, in either case of (A) or (B) above, the audit relates to Registry Operator's compliance with Section 2.14, in which case Registry Operator shall reimburse ICANN for all reasonable costs and expenses associated with the portion of the audit related to Registry Operator's compliance with Section 2.14, or (ii) the audit is related to a discrepancy in the fees paid by Registry Operator hereunder in excess of 5% to ICANN's detriment, in which case Registry Operator shall reimburse ICANN for all reasonable costs and expenses associated with the entirety of such audit. In either such case of (i) or (ii) above, such reimbursement will be paid together with the next Registry-Level Fee payment due following the date of transmittal of the cost statement for such audit.

(c) Notwithstanding Section 2.11(a), if Registry Operator is found not to be in compliance with its representations and warranties contained in Article 1 of this Agreement or its covenants contained in Article 2 of this Agreement in two consecutive audits conducted pursuant to this Section 2.11, ICANN may increase the number of such audits to one per calendar quarter.

(d) Registry Operator will give ICANN immediate notice of the commencement of any of the proceedings referenced in Section 4.3(d) or the occurrence of any of the matters specified in Section 4.3(f).

2.12 Continued Operations Instrument. Registry Operator shall comply with the terms and conditions relating to the Continued Operations Instrument set forth in the specification at [*see specification 8*].

2.13 Emergency Transition. Registry Operator agrees that in the event that any of the registry functions set forth in Section 6 of Specification 10 fails for a period longer than the emergency threshold for such function set forth in Section 6 of Specification 10, ICANN may designate an emergency interim registry operator of the registry for the TLD (an "Emergency Operator") in accordance with ICANN's registry transition process (available at ______) (as the same may be amended from time to time, the "Registry Transition Process") until such time as Registry Operator has demonstrated to ICANN's reasonable satisfaction that it can resume operation of the registry for the TLD without the reoccurrence of such failure. Following such demonstration, Registry Operator may transition back into operation of the registry for the TLD pursuant to the procedures set out in the Registry Transition Process,

provided that Registry Operator pays all reasonable costs incurred (i) by ICANN as a result of the designation of the Emergency Operator and (ii) by the Emergency Operator in connection with the operation of the registry for the TLD, which costs shall be documented in reasonable detail in records that shall be made available to Registry Operator. In the event ICANN designates an Emergency Operator pursuant to this Section 2.13 and the Registry Transition Process, Registry Operator shall provide ICANN or any such Emergency Operator with all data (including the data escrowed in accordance with Section 2.3) regarding operations of the registry for the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such Emergency Operator. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event that an Emergency Operator is designated pursuant to this Section 2.13. In addition, in the event of such failure, ICANN shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable.

2.14 Registry Code of Conduct. In connection with the operation of the registry for the TLD, Registry Operator shall comply with the Registry Code of Conduct as set forth in the specification at [*see specification 9*].

2.15 Cooperation with Economic Studies. If ICANN initiates or commissions an economic study on the impact or functioning of new generic top-level domains on the Internet, the DNS or related matters, Registry Operator shall reasonably cooperate with such study, including by delivering to ICANN or its designee conducting such study all data reasonably necessary for the purposes of such study requested by ICANN or its designee, provided, that Registry Operator may withhold any internal analyses or evaluations prepared by Registry Operator with respect to such data. Any data delivered to ICANN or its designee pursuant to this Section 2.15 shall be fully aggregated and anonymized by ICANN or its designee prior to any disclosure of such data to any third party.

2.16 Registry Performance Specifications. Registry Performance Specifications for operation of the TLD will be as set forth in the specification at [*see specification 10*]*. Registry Operator shall comply with such Performance Specifications and, for a period of at least one year, shall keep technical and operational records sufficient to evidence compliance with such specifications for each calendar year during the Term.

2.17 **Personal Data**. Registry Operator shall (i) notify each ICANN-accredited registrar that is a party to the registry-registrar agreement for the TLD of the purposes for which data about any identified or identifiable natural person ("Personal Data") submitted to Registry Operator by such registrar is collected and used under this Agreement or otherwise and the intended recipients (or categories of recipients) of such Personal Data, and (ii) require such registrar to obtain the consent of each registrant in the TLD for such collection and use of Personal Data. Registry Operator shall take reasonable steps to protect Personal Data collected from such registrar from loss, misuse, unauthorized disclosure, alteration or destruction. Registry Operator shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars.

2.18 *[Note: For Community-Based TLDs Only]* Obligations of Registry Operator to TLD Community. Registry Operator shall establish registration policies in conformity with the application submitted with respect to the TLD for: (i) naming conventions within the TLD, (ii) requirements for registration by members of the TLD community, and (iii) use of registered domain names in conformity with the stated purpose of the community-based TLD. Registry Operator shall operate the TLD in a manner that allows the TLD community to discuss and participate in the development and modification of policies and practices for the TLD. Registry Operator shall establish procedures for the enforcement of registration policies for the TLD, and resolution of disputes concerning compliance with TLD registration

policies, and shall enforce such registration policies. Registry Operator agrees to implement and be bound by the Registry Restrictions Dispute Resolution Procedure as set forth at [*insert applicable URL*] with respect to disputes arising pursuant to this Section 2.18.]

ARTICLE 3.

COVENANTS OF ICANN

ICANN covenants and agrees with Registry Operator as follows:

3.1 Open and Transparent. Consistent with ICANN's expressed mission and core values, ICANN shall operate in an open and transparent manner.

3.2 Equitable Treatment. ICANN shall not apply standards, policies, procedures or practices arbitrarily, unjustifiably, or inequitably and shall not single out Registry Operator for disparate treatment unless justified by substantial and reasonable cause.

3.3 TLD Nameservers. ICANN will use commercially reasonable efforts to ensure that any changes to the TLD nameserver designations submitted to ICANN by Registry Operator (in a format and with required technical elements specified by ICANN at http://www.iana.org/domains/root/ will be implemented by ICANN within seven (7) calendar days or as promptly as feasible following technical verifications.

3.4 Root-zone Information Publication. ICANN's publication of root-zone contact information for the TLD will include Registry Operator and its administrative and technical contacts. Any request to modify the contact information for the Registry Operator must be made in the format specified from time to time by ICANN at http://www.iana.org/domains/root/.

3.5 Authoritative Root Database. To the extent that ICANN is authorized to set policy with regard to an authoritative root server system, ICANN shall use commercially reasonable efforts to (a) ensure that the authoritative root will point to the top-level domain nameservers designated by Registry Operator for the TLD, (b) maintain a stable, secure, and authoritative publicly available database of relevant information about the TLD, in accordance with ICANN publicly available policies and procedures, and (c) coordinate the Authoritative Root Server System so that it is operated and maintained in a stable and secure manner; provided, that ICANN shall not be in breach of this Agreement and ICANN shall have no liability in the event that any third party (including any governmental entity or internet service provider) blocks or restricts access to the TLD in any jurisdiction.

ARTICLE 4.

TERM AND TERMINATION

4.1 Term. The term of this Agreement will be ten years from the Effective Date (as such term may be extended pursuant to Section 4.2, the "Term").

4.2 Renewal.

(a) This Agreement will be renewed for successive periods of ten years upon the expiration of the initial Term set forth in Section 4.1 and each successive Term, unless:

(i) Following notice by ICANN to Registry Operator of a fundamental and material breach of Registry Operator's covenants set forth in Article 2 or breach of its payment obligations under Article 6 of this Agreement, which notice shall include with specificity the details of the alleged breach, and such breach has not been cured within thirty (30) calendar days of such notice, (A) an arbitrator or court has finally determined that Registry Operator has been in fundamental and material breach of such covenant(s) or in breach of its payment obligations, and (B) Registry Operator has failed to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court; or

(ii) During the then current Term, Registry Operator shall have been found by an arbitrator (pursuant to Section 5.2 of this Agreement) on at least three (3) separate occasions to have been in fundamental and material breach (whether or not cured) of Registry Operator's covenants set forth in Article 2 or breach of its payment obligations under Article 6 of this Agreement.

(b) Upon the occurrence of the events set forth in Section 4.2(a) (i) or (ii), the Agreement shall terminate at the expiration of the then current Term.

4.3 Termination by ICANN.

(a) ICANN may, upon notice to Registry Operator, terminate this Agreement if: (i) Registry Operator fails to cure (A) any fundamental and material breach of Registry Operator's representations and warranties set forth in Article 1 or covenants set forth in Article 2, or (B) any breach of Registry Operator's payment obligations set forth in Article 6 of this Agreement, each within thirty (30) calendar days after ICANN gives Registry Operator notice of such breach, which notice will include with specificity the details of the alleged breach, (ii) an arbitrator or court has finally determined that Registry Operator is in fundamental and material breach of such covenant(s) or in breach of its payment obligations, and (iii) Registry Operator fails to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

(b) ICANN may, upon notice to Registry Operator, terminate this Agreement if Registry Operator fails to complete all testing and procedures (identified by ICANN in writing to Registry Operator prior to the date hereof) for delegation of the TLD into the root zone within twelve (12) months of the Effective Date. Registry Operator may request an extension for up to additional twelve (12) months for delegation if it can demonstrate, to ICANN's reasonable satisfaction, that Registry Operator is working diligently and in good faith toward successfully completing the steps necessary for delegation of the TLD. Any fees paid by Registry Operator to ICANN prior to such termination date shall be retained by ICANN in full.

(c) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator fails to cure a material breach of Registry Operator's obligations set forth in Section 2.12 of this Agreement within thirty (30) calendar days of delivery of notice of such breach by ICANN, or if the Continued Operations Instrument is not in effect for greater than sixty (60) consecutive calendar days at any time following the Effective Date, (ii) an arbitrator or court has finally determined that Registry Operator is in material breach of such covenant, and (iii) Registry Operator fails to cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

(d) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator makes an assignment for the benefit of creditors or similar act, (ii) attachment, garnishment or similar proceedings are commenced against Registry Operator, which proceedings are a material threat to Registry Operator's ability to operate the registry for the TLD, and are not dismissed within sixty (60) days of their commencement, (iii) a trustee, receiver, liquidator or equivalent is appointed in place of Registry Operator or maintains control over any of Registry Operator's property, (iv) execution is levied upon any property of Registry Operator, (v) proceedings are instituted by or against Registry Operator under any bankruptcy, insolvency, reorganization or other laws relating to the relief of debtors and such proceedings are not dismissed within thirty (30) days of their commencement, or (vi) Registry Operator files for protection under the United States Bankruptcy Code, 11 U.S.C. Section 101 et seq., or a foreign equivalent or liquidates, dissolves or otherwise discontinues its operations or the operation of the TLD.

(e) ICANN may, upon thirty (30) calendar days' notice to Registry Operator, terminate this Agreement pursuant to Section 2 of Specification 7, subject to Registry Operator's right to challenge such termination as set forth in the applicable procedure described therein.

(f) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator knowingly employs any officer that is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such officer is not terminated within thirty (30) calendar days of Registry Operator's knowledge of the foregoing, or (ii) any member of Registry Operator's board of directors or similar governing body is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such member is not removed from Registry Operator's board of directors or similar governing body within thirty (30) calendar days of Registry Operator's board of directors or similar governing body within thirty (30) calendar days of Registry Operator's board of directors or similar governing body within thirty (30) calendar days of Registry Operator's knowledge of the foregoing.

(g) [*Applicable to intergovernmental organizations or governmental entities only.*] ICANN may terminate this Agreement pursuant to Section 7.14.

4.4 Termination by Registry Operator.

(a) Registry Operator may terminate this Agreement upon notice to ICANN if, (i) ICANN fails to cure any fundamental and material breach of ICANN's covenants set forth in Article 3, within thirty (30) calendar days after Registry Operator gives ICANN notice of such breach, which notice will include with specificity the details of the alleged breach, (ii) an arbitrator or court has finally determined that ICANN is in fundamental and material breach of such covenants, and (iii) ICANN fails to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

(b) Registry Operator may terminate this Agreement for any reason upon one hundred eighty (180) calendar day advance notice to ICANN.

4.5 Transition of Registry upon Termination of Agreement. Upon expiration of the Term pursuant to Section 4.1 or Section 4.2 or any termination of this Agreement pursuant to Section 4.3 or Section 4.4, Registry Operator shall provide ICANN or any successor registry operator that may be designated by ICANN for the TLD in accordance with this Section 4.5 with all data (including the data

escrowed in accordance with Section 2.3) regarding operations of the registry for the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such successor registry operator. After consultation with Registry Operator, ICANN shall determine whether or not to transition operation of the TLD to a successor registry operator in its sole discretion and in conformance with the Registry Transition Process; provided, however, that if Registry Operator demonstrates to ICANN's reasonable satisfaction that (i) all domain name registrations in the TLD are registered to, and maintained by, Registry Operator for its own exclusive use, (ii) Registry Operator does not sell, distribute or transfer control or use of any registrations in the TLD to any third party that is not an Affiliate of Registry Operator, and (iii) transitioning operation of the TLD is not necessary to protect the public interest, then ICANN may not transition operation of the TLD to a successor registry operator upon the expiration or termination of this Agreement without the consent of Registry Operator (which shall not be unreasonably withheld, conditioned or delayed). For the avoidance of doubt, the foregoing sentence shall not prohibit ICANN from delegating the TLD pursuant to a future application process for the delegation of top-level domains, subject to any processes and objection procedures instituted by ICANN in connection with such application process intended to protect the rights of third parties. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event of a transition of the TLD pursuant to this Section 4.5. In addition, ICANN or its designee shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable, regardless of the reason for termination or expiration of this Agreement.

[Alternative Section 4.5 Transition of Registry upon Termination of Agreement text for intergovernmental organizations or governmental entities or other special circumstances:

"Transition of Registry upon Termination of Agreement. Upon expiration of the Term pursuant to Section 4.1 or Section 4.2 or any termination of this Agreement pursuant to Section 4.3 or Section 4.4, in connection with ICANN's designation of a successor registry operator for the TLD, Registry Operator and ICANN agree to consult each other and work cooperatively to facilitate and implement the transition of the TLD in accordance with this Section 4.5. After consultation with Registry Operator, ICANN shall determine whether or not to transition operation of the TLD to a successor registry operator in its sole discretion and in conformance with the Registry Transition Process. In the event ICANN determines to transition operation of the TLD to a successor registry operator, upon Registry Operator's consent (which shall not be unreasonably withheld, conditioned or delayed), Registry Operator shall provide ICANN or such successor registry operator for the TLD with any data regarding operations of the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such successor registry operator in addition to data escrowed in accordance with Section 2.3 hereof. In the event that Registry Operator does not consent to provide such data, any registry data related to the TLD shall be returned to Registry Operator, unless otherwise agreed upon by the parties. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event of a transition of the TLD pursuant to this Section 4.5. In addition, ICANN or its designee shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable, regardless of the reason for termination or expiration of this Agreement."]

4.6 Effect of Termination. Upon any expiration of the Term or termination of this Agreement, the obligations and rights of the parties hereto shall cease, provided that such expiration or termination of this Agreement shall not relieve the parties of any obligation or breach of this Agreement accruing prior to such expiration or termination, including, without limitation, all accrued payment obligations arising under Article 6. In addition, Article 5, Article 7, Section 2.12, Section 4.5, and this

Section 4.6 shall survive the expiration or termination of this Agreement. For the avoidance of doubt, the rights of Registry Operator to operate the registry for the TLD shall immediately cease upon any expiration of the Term or termination of this Agreement.

ARTICLE 5.

DISPUTE RESOLUTION

5.1 Cooperative Engagement. Before either party may initiate arbitration pursuant to Section 5.2 below, ICANN and Registry Operator, following initiation of communications by either party, must attempt to resolve the dispute by engaging in good faith discussion over a period of at least fifteen (15) calendar days.

5.2 **Arbitration.** Disputes arising under or in connection with this Agreement, including requests for specific performance, will be resolved through binding arbitration conducted pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce. The arbitration will be conducted in the English language and will occur in Los Angeles County, California. Any arbitration will be in front of a single arbitrator, unless (i) ICANN is seeking punitive or exemplary damages, or operational sanctions, or (ii) the parties agree in writing to a greater number of arbitrators. In either case of clauses (i) or (ii) in the preceding sentence, the arbitration will be in front of three arbitrators with each party selecting one arbitrator and the two selected arbitrators selecting the third arbitrator. In order to expedite the arbitration and limit its cost, the arbitrator(s) shall establish page limits for the parties' filings in conjunction with the arbitration, and should the arbitrator(s) determine that a hearing is necessary, the hearing shall be limited to one (1) calendar day, provided that in any arbitration in which ICANN is seeking punitive or exemplary damages, or operational sanctions, the hearing may be extended for one (1) additional calendar day if agreed upon by the parties or ordered by the arbitrator(s) based on the arbitrator(s) independent determination or the reasonable request of one of the parties thereto. The prevailing party in the arbitration will have the right to recover its costs and reasonable attorneys' fees, which the arbitrator(s) shall include in the awards. In the event the arbitrators determine that Registry Operator has been repeatedly and willfully in fundamental and material breach of its obligations set forth in Article 2, Article 6 or Section 5.4 of this Agreement, ICANN may request the arbitrators award punitive or exemplary damages, or operational sanctions (including without limitation an order temporarily restricting Registry Operator's right to sell new registrations). In any litigation involving ICANN concerning this Agreement, jurisdiction and exclusive venue for such litigation will be in a court located in Los Angeles County, California; however, the parties will also have the right to enforce a judgment of such a court in any court of competent jurisdiction.

[Alternative Section 5.2 Arbitration text for intergovernmental organizations or governmental entities or other special circumstances:

"Arbitration. Disputes arising under or in connection with this Agreement, including requests for specific performance, will be resolved through binding arbitration conducted pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce. The arbitration will be conducted in the English language and will occur in Geneva, Switzerland, unless another location is mutually agreed upon by Registry Operator and ICANN. Any arbitration will be in front of a single arbitrator, unless (i) ICANN is seeking punitive or exemplary damages, or operational sanctions, or (ii) the parties agree in writing to a greater number of arbitrators. In either case of clauses (i) or (ii) in the preceding sentence, the arbitration will be in front of three arbitrators with each party selecting one arbitrator and the two selected arbitrators selecting the third arbitrator. In order to expedite the arbitration and limit its cost, the arbitrator(s) shall establish page limits for the parties' filings in conjunction with the

arbitration, and should the arbitrator(s) determine that a hearing is necessary, the hearing shall be limited to one (1) calendar day, provided that in any arbitration in which ICANN is seeking punitive or exemplary damages, or operational sanctions, the hearing may be extended for one (1) additional calendar day if agreed upon by the parties or ordered by the arbitrator(s) based on the arbitrator(s) independent determination or the reasonable request of one of the parties thereto. The prevailing party in the arbitration will have the right to recover its costs and reasonable attorneys' fees, which the arbitrator(s) shall include in the awards. In the event the arbitrators determine that Registry Operator has been repeatedly and willfully in fundamental and material breach of its obligations set forth in Article 2, Article 6 or Section 5.4 of this Agreement, ICANN may request the arbitrators award punitive or exemplary damages, or operational sanctions (including without limitation an order temporarily restricting Registry Operator's right to sell new registrations). In any litigation involving ICANN concerning this Agreement, jurisdiction and exclusive venue for such litigation will be in a court located in Geneva, Switzerland, unless an another location is mutually agreed upon by Registry Operator and ICANN; however, the parties will also have the right to enforce a judgment of such a court in any court of competent jurisdiction."]

5.3 Limitation of Liability. ICANN's aggregate monetary liability for violations of this Agreement will not exceed an amount equal to the Registry-Level Fees paid by Registry Operator to ICANN within the preceding twelve-month period pursuant to this Agreement (excluding the Variable Registry-Level Fee set forth in Section 6.3, if any). Registry Operator's aggregate monetary liability to ICANN for breaches of this Agreement will be limited to an amount equal to the fees paid to ICANN during the preceding twelve-month period (excluding the Variable Registry-Level Fee set forth in Section 6.3, if any), and punitive and exemplary damages, if any, awarded in accordance with Section 5.2. In no event shall either party be liable for special, punitive, exemplary or consequential damages arising out of or in connection with this Agreement or the performance or nonperformance of obligations undertaken in this Agreement, except as provided in Section 5.2. Except as otherwise provided in this Agreement, neither party makes any warranty, express or implied, with respect to the services rendered by itself, its servants or agents, or the results obtained from their work, including, without limitation, any implied warranty of merchantability, non-infringement or fitness for a particular purpose.

5.4 Specific Performance. Registry Operator and ICANN agree that irreparable damage could occur if any of the provisions of this Agreement was not performed in accordance with its specific terms. Accordingly, the parties agree that they each shall be entitled to seek from the arbitrator specific performance of the terms of this Agreement (in addition to any other remedy to which each party is entitled).

ARTICLE 6.

FEES

6.1 Registry-Level Fees. Registry Operator shall pay ICANN a Registry-Level Fee equal to (i) the Registry Fixed Fee of US\$6,250 per calendar quarter and (ii) the Registry-Level Transaction Fee. The Registry-Level Transaction Fee will be equal to the number of annual increments of an initial or renewal domain name registration (at one or more levels, and including renewals associated with transfers from one ICANN-accredited registrar to another, each a "Transaction"), during the applicable calendar quarter multiplied by US\$0.25; provided, however that the Registry-Level Transaction Fee shall not apply until and unless more than 50,000 Transactions have occurred in the TLD during any calendar quarter or any four calendar quarter period (the "Transaction Threshold") and shall apply to each Transaction that occurred during each quarter in which the Transaction Threshold has been met, but shall not apply to each quarter in which the Transaction Threshold has not been met. Registry Operator shall pay the Registry-

Level Fees on a quarterly basis by the 20th day following the end of each calendar quarter (i.e., on April 20, July 20, October 20 and January 20 for the calendar quarters ending March 31, June 30, September 30 and December 31) of the year to an account designated by ICANN.

6.2 Cost Recovery for RSTEP. Requests by Registry Operator for the approval of Additional Services pursuant to Section 2.1 may be referred by ICANN to the Registry Services Technical Evaluation Panel ("RSTEP") pursuant to that process at

http://www.icann.org/en/registries/rsep/. In the event that such requests are referred to RSTEP, Registry Operator shall remit to ICANN the invoiced cost of the RSTEP review within ten (10) business days of receipt of a copy of the RSTEP invoice from ICANN, unless ICANN determines, in its sole and absolute discretion, to pay all or any portion of the invoiced cost of such RSTEP review.

6.3 Variable Registry-Level Fee.

If the ICANN accredited registrars (as a group) do not approve pursuant to the (a) terms of their registrar accreditation agreements with ICANN the variable accreditation fees established by the ICANN Board of Directors for any ICANN fiscal year, upon delivery of notice from ICANN, Registry Operator shall pay to ICANN a Variable Registry-Level Fee, which shall be paid on a fiscal quarter basis, and shall accrue as of the beginning of the first fiscal quarter of such ICANN fiscal year. The fee will be calculated and invoiced by ICANN on a quarterly basis, and shall be paid by Registry Operator within sixty (60) calendar days with respect to the first quarter of such ICANN fiscal year and within twenty (20) calendar days with respect to each remaining quarter of such ICANN fiscal year, of receipt of the invoiced amount by ICANN. The Registry Operator may invoice and collect the Variable Registry-Level Fees from the registrars who are party to a registry-registrar agreement with Registry Operator (which agreement may specifically provide for the reimbursement of Variable Registry-Level Fees paid by Registry Operator pursuant to this Section 6.3); provided, that the fees shall be invoiced to all ICANN accredited registrars if invoiced to any. The Variable Registry-Level Fee, if collectible by ICANN, shall be an obligation of Registry Operator and shall be due and payable as provided in this Section 6.3 irrespective of Registry Operator's ability to seek and obtain reimbursement of such fee from registrars. In the event ICANN later collects variable accreditation fees for which Registry Operator has paid ICANN a Variable Registry-Level Fee, ICANN shall reimburse the Registry Operator an appropriate amount of the Variable Registry-Level Fee, as reasonably determined by ICANN. If the ICANN accredited registrars (as a group) do approve pursuant to the terms of their registrar accreditation agreements with ICANN the variable accreditation fees established by the ICANN Board of Directors for a fiscal year, ICANN shall not be entitled to a Variable-Level Fee hereunder for such fiscal year, irrespective of whether the ICANN accredited registrars comply with their payment obligations to ICANN during such fiscal year.

(b) The amount of the Variable Registry-Level Fee will be specified for each registrar, and may include both a per-registrar component and a transactional component. The per-registrar component of the Variable Registry-Level Fee shall be specified by ICANN in accordance with the budget adopted by the ICANN Board of Directors for each ICANN fiscal year. The transactional component of the Variable Registry-Level Fee shall be specified by ICANN in accordance with the budget adopted by the ICANN Board of Directors for each ICANN fiscal year but shall not exceed US\$0.25 per domain name registration (including renewals associated with transfers from one ICANN-accredited registrar to another) per year.

6.4 Adjustments to Fees. Notwithstanding any of the fee limitations set forth in this Article 6, commencing upon the expiration of the first year of this Agreement, and upon the expiration of each year thereafter during the Term, the then current fees set forth in Section 6.1 and Section 6.3 may be

adjusted, at ICANN's discretion, by a percentage equal to the percentage change, if any, in (i) the Consumer Price Index for All Urban Consumers, U.S. City Average (1982-1984 = 100) published by the United States Department of Labor, Bureau of Labor Statistics, or any successor index (the "CPI") for the month which is one (1) month prior to the commencement of the applicable year, over (ii) the CPI published for the month which is one (1) month prior to the commencement of the immediately prior year. In the event of any such increase, ICANN shall provide notice to Registry Operator specifying the amount of such adjustment. Any fee adjustment under this Section 6.4 shall be effective as of the first day of the year in which the above calculation is made.

6.5 Additional Fee on Late Payments. For any payments thirty (30) calendar days or more overdue under this Agreement, Registry Operator shall pay an additional fee on late payments at the rate of 1.5% per month or, if less, the maximum rate permitted by applicable law.

ARTICLE 7.

MISCELLANEOUS

7.1 Indemnification of ICANN.

Registry Operator shall indemnify and defend ICANN and its directors, officers, (a) employees, and agents (collectively, "Indemnitees") from and against any and all third-party claims, damages, liabilities, costs, and expenses, including reasonable legal fees and expenses, arising out of or relating to intellectual property ownership rights with respect to the TLD, the delegation of the TLD to Registry Operator, Registry Operator's operation of the registry for the TLD or Registry Operator's provision of Registry Services, provided that Registry Operator shall not be obligated to indemnify or defend any Indemnitee to the extent the claim, damage, liability, cost or expense arose: (i) due to the actions or omissions of ICANN, its subcontractors, panelists or evaluators specifically related to and occurring during the registry TLD application process (other than actions or omissions requested by or for the benefit of Registry Operator), or (ii) due to a breach by ICANN of any obligation contained in this Agreement or any willful misconduct by ICANN. This Section shall not be deemed to require Registry Operator to reimburse or otherwise indemnify ICANN for costs associated with the negotiation or execution of this Agreement, or with monitoring or management of the parties' respective obligations hereunder. Further, this Section shall not apply to any request for attorney's fees in connection with any litigation or arbitration between or among the parties, which shall be governed by Article 5 or otherwise awarded by a court or arbitrator.

[Alternative Section 7.1(a) text for intergovernmental organizations or governmental entities:

"Registry Operator shall use its best efforts to cooperate with ICANN in order to ensure that ICANN does not incur any costs associated with claims, damages, liabilities, costs and expenses, including reasonable legal fees and expenses, arising out of or relating to intellectual property ownership rights with respect to the TLD, the delegation of the TLD to Registry Operator, Registry Operator's operation of the registry for the TLD or Registry Operator's provision of Registry Services, provided that Registry Operator shall not be obligated to provide such cooperation to the extent the claim, damage, liability, cost or expense arose due to a breach by ICANN of any of its obligations contained in this Agreement or any willful misconduct by ICANN. This Section shall not be deemed to require Registry Operator to reimburse or otherwise indemnify ICANN for costs associated with the negotiation or execution of this Agreement, or with monitoring or management of the parties' respective obligations hereunder. Further, this Section shall not apply to any request for attorney's fees in connection with any

litigation or arbitration between or among the parties, which shall be governed by Article 5 or otherwise awarded by a court or arbitrator."]

For any claims by ICANN for indemnification whereby multiple registry (b) operators (including Registry Operator) have engaged in the same actions or omissions that gave rise to the claim, Registry Operator's aggregate liability to indemnify ICANN with respect to such claim shall be limited to a percentage of ICANN's total claim, calculated by dividing the number of total domain names under registration with Registry Operator within the TLD (which names under registration shall be calculated consistently with Article 6 hereof for any applicable quarter) by the total number of domain names under registration within all top level domains for which the registry operators thereof are engaging in the same acts or omissions giving rise to such claim. For the purposes of reducing Registry Operator's liability under Section 7.1(a) pursuant to this Section 7.1(b), Registry Operator shall have the burden of identifying the other registry operators that are engaged in the same actions or omissions that gave rise to the claim, and demonstrating, to ICANN's reasonable satisfaction, such other registry operators' culpability for such actions or omissions. For the avoidance of doubt, in the event that a registry operator is engaged in the same acts or omissions giving rise to the claims, but such registry operator(s) do not have the same or similar indemnification obligations to ICANN as set forth in Section 7.1(a) above, the number of domains under management by such registry operator(s) shall nonetheless be included in the calculation in the preceding sentence. [Note: This Section 7.1(b) is inapplicable to *intergovernmental organizations or governmental entities.*]

7.2 **Indemnification Procedures.** If any third-party claim is commenced that is indemnified under Section 7.1 above, ICANN shall provide notice thereof to Registry Operator as promptly as practicable. Registry Operator shall be entitled, if it so elects, in a notice promptly delivered to ICANN, to immediately take control of the defense and investigation of such claim and to employ and engage attorneys reasonably acceptable to ICANN to handle and defend the same, at Registry Operator's sole cost and expense, provided that in all events ICANN will be entitled to control at its sole cost and expense the litigation of issues concerning the validity or interpretation of ICANN's policies, Bylaws or conduct. ICANN shall cooperate, at Registry Operator's cost and expense, in all reasonable respects with Registry Operator and its attorneys in the investigation, trial, and defense of such claim and any appeal arising therefrom, and may, at its own cost and expense, participate, through its attorneys or otherwise, in such investigation, trial and defense of such claim and any appeal arising therefrom. No settlement of a claim that involves a remedy affecting ICANN other than the payment of money in an amount that is fully indemnified by Registry Operator will be entered into without the consent of ICANN. If Registry Operator does not assume full control over the defense of a claim subject to such defense in accordance with this Section 7.2, ICANN will have the right to defend the claim in such manner as it may deem appropriate, at the cost and expense of Registry Operator and Registry Operator shall cooperate in such defense. [Note: This Section 7.2 is inapplicable to intergovernmental organizations or governmental entities.]

7.3 Defined Terms. For purposes of this Agreement, unless such definitions are amended pursuant to a Consensus Policy at a future date, in which case the following definitions shall be deemed amended and restated in their entirety as set forth in such Consensus Policy, Security and Stability shall be defined as follows:

(a) For the purposes of this Agreement, an effect on "Security" shall mean (1) the unauthorized disclosure, alteration, insertion or destruction of registry data, or (2) the unauthorized access to or disclosure of information or resources on the Internet by systems operating in accordance with all applicable standards.

(b) For purposes of this Agreement, an effect on "Stability" shall refer to (1) lack of compliance with applicable relevant standards that are authoritative and published by a well-established and recognized Internet standards body, such as the relevant Standards-Track or Best Current Practice Requests for Comments ("RFCs") sponsored by the Internet Engineering Task Force; or (2) the creation of a condition that adversely affects the throughput, response time, consistency or coherence of responses to Internet servers or end systems operating in accordance with applicable relevant standards that are authoritative and published by a well-established and recognized Internet standards that are for the servers or end systems operating in accordance with applicable relevant standards that are authoritative and published by a well-established and recognized Internet standards body, such as the relevant Standards-Track or Best Current Practice RFCs, and relying on Registry Operator's delegated information or provisioning of services.

7.4 No Offset. All payments due under this Agreement will be made in a timely manner throughout the Term and notwithstanding the pendency of any dispute (monetary or otherwise) between Registry Operator and ICANN.

7.5 Change in Control; Assignment and Subcontracting. Neither party may assign this Agreement without the prior written approval of the other party, which approval will not be unreasonably withheld. Notwithstanding the foregoing, ICANN may assign this Agreement in conjunction with a reorganization or re-incorporation of ICANN to another nonprofit corporation or similar entity organized in the same legal jurisdiction in which ICANN is currently organized for the same or substantially the same purposes. For purposes of this Section 7.5, a direct or indirect change of control of Registry Operator or any material subcontracting arrangement with respect to the operation of the registry for the TLD shall be deemed an assignment. ICANN shall be deemed to have reasonably withheld its consent to any such a direct or indirect change of control or subcontracting arrangement in the event that ICANN reasonably determines that the person or entity acquiring control of Registry Operator or entering into such subcontracting arrangement (or the ultimate parent entity of such acquiring or subcontracting entity) does not meet the ICANN-adopted registry operator criteria or qualifications then in effect. In addition, without limiting the foregoing, Registry Operator must provide no less than thirty (30) calendar days advance notice to ICANN of any material subcontracting arrangements, and any agreement to subcontract portions of the operations of the TLD must mandate compliance with all covenants, obligations and agreements by Registry Operator hereunder, and Registry Operator shall continue to be bound by such covenants, obligations and agreements. Without limiting the foregoing, Registry Operator must also provide no less than thirty (30) calendar days advance notice to ICANN prior to the consummation of any transaction anticipated to result in a direct or indirect change of control of Registry Operator. Such change of control notification shall include a statement that affirms that the ultimate parent entity of the party acquiring such control meets the ICANN-adopted specification or policy on registry operator criteria then in effect, and affirms that Registry Operator is in compliance with its obligations under this Agreement. Within thirty (30) calendar days of such notification, ICANN may request additional information from Registry Operator establishing compliance with this Agreement, in which case Registry Operator must supply the requested information within fifteen (15) calendar days. If ICANN fails to expressly provide or withhold its consent to any direct or indirect change of control of Registry Operator or any material subcontracting arrangement within thirty (30) (or, if ICANN has requested additional information from Registry Operator as set forth above, sixty (60)) calendar days of the receipt of written notice of such transaction from Registry Operator, ICANN shall be deemed to have consented to such transaction. In connection with any such transaction, Registry Operator shall comply with the Registry Transition Process.

7.6 Amendments and Waivers.

(a) If ICANN determines that an amendment to this Agreement (including to the Specifications referred to herein) and all other registry agreements between ICANN and the Applicable

Registry Operators (the "Applicable Registry Agreements") is desirable (each, a "Special Amendment"), ICANN may submit a Special Amendment for approval by the Applicable Registry Operators pursuant to the process set forth in this Section 7.6, provided that a Special Amendment is not a Restricted Amendment (as defined below). Prior to submitting a Special Amendment for such approval, ICANN shall first consult in good faith with the Working Group (as defined below) regarding the form and substance of a Special Amendment. The duration of such consultation shall be reasonably determined by ICANN based on the substance of the Special Amendment. Following such consultation, ICANN may propose the adoption of a Special Amendment by publicly posting such amendment on its website for no less than thirty (30) calendar days (the "Posting Period") and providing notice of such amendment by ICANN to the Applicable Registry Operators in accordance with Section 7.8. ICANN will consider the public comments submitted on a Special Amendment during the Posting Period (including comments submitted by the Applicable Registry Operators).

(b) If, within two (2) calendar years of the expiration of the Posting Period (the "Approval Period"), (i) the ICANN Board of Directors approves a Special Amendment (which may be in a form different than submitted for public comment) and (ii) such Special Amendment receives Registry Operator Approval (as defined below), such Special Amendment shall be deemed approved (an "Approved Amendment") by the Applicable Registry Operators (the last date on which such approvals are obtained is herein referred to as the "Amendment Approval Date") and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days notice from ICANN to Registry Operator (the "Amendment Effective Date"). In the event that a Special Amendment is not approved by the ICANN Board of Directors or does not receive Registry Operator Approval within the Approval Period, the Special Amendment will have no effect. The procedure used by ICANN to obtain Registry Operator Approval shall be designed to document the written approval of the Applicable Registry Operators, which may be in electronic form.

(c) During the thirty (30) calendar day period following the Amendment Approval Date, Registry Operator (so long as it did not vote in favor of the Approved Amendment) may apply in writing to ICANN for an exemption from the Approved Amendment (each such request submitted by Registry Operator hereunder, an "Exemption Request"). Each Exemption Request will set forth the basis for such request and provide detailed support for an exemption from the Approved Amendment. An Exemption Request may also include a detailed description and support for any alternatives to, or a variation of, the Approved Amendment proposed by such Registry Operator. An Exemption Request may only be granted upon a clear and convincing showing by Registry Operator that compliance with the Approved Amendment conflicts with applicable laws or would have a material adverse effect on the longterm financial condition or results of operations of Registry Operator. No Exemption Request will be granted if ICANN determines, in its reasonable discretion, that granting such Exemption Request would be materially harmful to registrants or result in the denial of a direct benefit to registrants. Within ninety (90) calendar days of ICANN's receipt of an Exemption Request, ICANN shall either approve (which approval may be conditioned or consist of alternatives to or a variation of the Approved Amendment) or deny the Exemption Request in writing, during which time the Approved Amendment will not amend this Agreement; provided, that any such conditions, alternatives or variations shall be effective and, to the extent applicable, will amend this Agreement as of the Amendment Effective Date. If the Exemption Request is approved by ICANN, the Approved Amendment will not amend this Agreement. If such Exemption Request is denied by ICANN, the Approved Amendment will amend this Agreement as of the Amendment Effective Date (or, if such date has passed, such Approved Amendment shall be deemed effective immediately on the date of such denial), provided that Registry Operator may, within thirty (30) calendar days following receipt of ICANN's determination, appeal ICANN's decision to deny the Exemption Request pursuant to the dispute resolution procedures set forth in Article 5. The Approved

Amendment will be deemed not to have amended this Agreement during the pendency of the dispute resolution process. For avoidance of doubt, only Exemption Requests submitted by Registry Operator that are approved by ICANN pursuant to this Section 7.6(c) or through an arbitration decision pursuant to Article 5 shall exempt Registry Operator from any Approved Amendment, and no exemption request granted to any other Applicable Registry Operator (whether by ICANN or through arbitration) shall have any effect under this Agreement or exempt Registry Operator from any Approved Amendment.

(d) Except as set forth in this Section 7.6, no amendment, supplement or modification of this Agreement or any provision hereof shall be binding unless executed in writing by both parties, and nothing in this Section 7.6 shall restrict ICANN and Registry Operator from entering into bilateral amendments and modifications to this Agreement negotiated solely between the two parties. No waiver of any provision of this Agreement shall be binding unless evidenced by a writing signed by the party waiving compliance with such provision. No waiver of any of the provisions of this Agreement or failure to enforce any of the provisions hereof shall be deemed or shall constitute a waiver of any other provision hereof, nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided. For the avoidance of doubt, nothing in this Section 7.6 shall be deemed to limit Registry Operator's obligation to comply with Section 2.2.

(e) For purposes of this Section 7.6, the following terms shall have the following

meanings:

(i) "Applicable Registry Operators" means, collectively, the registry operators of the top-level domains party to a registry agreement that contains a provision similar to this Section 7.6, including Registry Operator.

(ii) "Registry Operator Approval" means the receipt of each of the following: (A) the affirmative approval of the Applicable Registry Operators whose payments to ICANN accounted for two-thirds of the total amount of fees (converted to U.S. dollars, if applicable) paid to ICANN by all the Applicable Registry Operators during the immediately previous calendar year pursuant to the Applicable Registry Agreements, and (B) the affirmative approval of a majority of the Applicable Registry Operators at the time such approval is obtained. For avoidance of doubt, with respect to clause (B), each Applicable Registry Operator shall have one vote for each top-level domain operated by such Registry Operator pursuant to an Applicable Registry Agreement.

(iii) "Restricted Amendment" means the following: (i) an amendment of Specification 1, (ii) except to the extent addressed in Section 2.10 hereof, an amendment that specifies the price charged by Registry Operator to registrars for domain name registrations, (iii) an amendment to the definition of Registry Services as set forth in the first paragraph of Section 2.1 of Specification 6, or (iv) an amendment to the length of the Term.

(iv) "Working Group" means representatives of the Applicable Registry Operators and other members of the community that ICANN appoints, from time to time, to serve as a working group to consult on amendments to the Applicable Registry Agreements (excluding bilateral amendments pursuant to Section 7.6(d)).

7.7 No Third-Party Beneficiaries. This Agreement will not be construed to create any obligation by either ICANN or Registry Operator to any non-party to this Agreement, including any registrar or registered name holder.

General Notices. Except for notices pursuant to Section 7.6, all notices to be given 7.8 under or in relation to this Agreement will be given either (i) in writing at the address of the appropriate party as set forth below or (ii) via facsimile or electronic mail as provided below, unless that party has given a notice of change of postal or email address, or facsimile number, as provided in this agreement. All notices under Section 7.6 shall be given by both posting of the applicable information on ICANN's web site and transmission of such information to Registry Operator by electronic mail. Any change in the contact information for notice below will be given by the party within thirty (30) calendar days of such change. Notices, designations, determinations, and specifications made under this Agreement will be in the English language. Other than notices under Section 7.6, 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 via facsimile or by electronic mail, upon confirmation of receipt by the recipient's facsimile machine or email server, provided that such notice via facsimile or electronic mail shall be followed by a copy sent by regular postal mail service within two (2) business days. Any notice required by Section 7.6 will be deemed to have been given when electronically posted on ICANN's website and upon confirmation of receipt by the email server. 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.

> If to ICANN, addressed to: Internet Corporation for Assigned Names and Numbers 4676 Admiralty Way, Suite 330 Marina Del Rey, California 90292 Telephone: 1-310-823-9358 Facsimile: 1-310-823-8649 Attention: President and CEO

With a Required Copy to: General Counsel Email: (As specified from time to time.)

If to Registry Operator, addressed to:

Telephone: Facsimile: Attention:

With a Required Copy to: Email: (As specified from time to time.)

7.9 Entire Agreement. This Agreement (including those specifications and documents incorporated by reference to URL locations which form a part of it) constitutes the entire agreement of the parties hereto pertaining to the operation of the TLD and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, between the parties on that subject.

7.10 English Language Controls. Notwithstanding any translated version of this Agreement and/or specifications that may be provided to Registry Operator, the English language version of this Agreement and all referenced specifications are the official versions that bind the parties hereto. In the event of any conflict or discrepancy between any translated version of this Agreement and the English language version, the English language version controls. Notices, designations, determinations, and specifications made under this Agreement shall be in the English language.

7.11 Ownership Rights. Nothing contained in this Agreement shall be construed as establishing or granting to Registry Operator any property ownership rights or interests in the TLD or the letters, words, symbols or other characters making up the TLD string.

7.12 Severability. This Agreement shall be deemed severable; the invalidity or unenforceability of any term or provision of this Agreement shall not affect the validity or enforceability of the balance of this Agreement or of any other term hereof, which shall remain in full force and effect. If any of the provisions hereof are determined to be invalid or unenforceable, the parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible.

7.13 Court Orders. ICANN will respect any order from a court of competent jurisdiction, including any orders from any jurisdiction where the consent or non-objection of the government was a requirement for the delegation of the TLD. Notwithstanding any other provision of this Agreement, ICANN's implementation of any such order will not be a breach of this Agreement.

[Note: The following section is applicable to intergovernmental organizations or governmental entities only.]

7.14 Special Provision Relating to Intergovernmental Organizations or Governmental Entities.

(a) ICANN acknowledges that Registry Operator is an entity subject to public international law, including international treaties applicable to Registry Operator (such public international law and treaties, collectively hereinafter the "Applicable Laws"). Nothing in this Agreement and its related specifications shall be construed or interpreted to require Registry Operator to violate Applicable Laws or prevent compliance therewith. The Parties agree that Registry Operator's compliance with Applicable Laws shall not constitute a breach of this Agreement.

(b) In the event Registry Operator reasonably determines that any provision of this Agreement and its related specifications, or any decisions or policies of ICANN referred to in this Agreement, including but not limited to Temporary Policies and Consensus Policies (such provisions, specifications and policies, collectively hereinafter, "ICANN Requirements"), may conflict with or violate Applicable Law (hereinafter, a "Potential Conflict"), Registry Operator shall provide detailed notice (a "Notice") of such Potential Conflict to ICANN as early as possible and, in the case of a Potential Conflict with a proposed Consensus Policy. In the event Registry Operator determines that there is Potential Conflict between a proposed Applicable Law and any ICANN Requirement, Registry Operator shall provide detailed Notice of such Potential Conflict to ICANN as early as possible and, in the case of a Potential Conflict with a proposed Consensus Policy. In the event Registry Operator determines that there is Potential Conflict between a proposed Applicable Law and any ICANN as early as possible and, in the case of a Potential Conflict with a proposed Consensus Policy, no later than the end of any public comment period on such proposed Consensus Policy.

(c) As soon as practicable following such review, the parties shall attempt to resolve the Potential Conflict by cooperative engagement pursuant to the procedures set forth in Section 5.1. In

addition, Registry Operator shall use its best efforts to eliminate or minimize any impact arising from such Potential Conflict between Applicable Laws and any ICANN Requirement. If, following such cooperative engagement, Registry Operator determines that the Potential Conflict constitutes an actual conflict between any ICANN Requirement, on the one hand, and Applicable Laws, on the other hand, then ICANN shall waive compliance with such ICANN Requirement (provided that the parties shall negotiate in good faith on a continuous basis thereafter to mitigate or eliminate the effects of such noncompliance on ICANN), unless ICANN reasonably and objectively determines that the failure of Registry Operator to comply with such ICANN Requirement would constitute a threat to the Security and Stability of Registry Services, the Internet or the DNS (hereinafter, an "ICANN Determination"). Following receipt of notice by Registry Operator of such ICANN Determination, Registry Operator shall be afforded a period of ninety (90) calendar days to resolve such conflict with an Applicable Law. If the conflict with an Applicable Law is not resolved to ICANN's complete satisfaction during such period, Registry Operator shall have the option to submit, within ten (10) calendar days thereafter, the matter to binding arbitration as defined in subsection (d) below. If during such period, Registry Operator does not submit the matter to arbitration pursuant to subsection (d) below, ICANN may, upon notice to Registry Operator, terminate this Agreement with immediate effect.

(d) If Registry Operator disagrees with an ICANN Determination, Registry Operator may submit the matter to binding arbitration pursuant to the provisions of Section 5.2, except that the sole issue presented to the arbitrator for determination will be whether or not ICANN reasonably and objectively reached the ICANN Determination. For the purposes of such arbitration, ICANN shall present evidence to the arbitrator supporting the ICANN Determination. If the arbitrator determines that ICANN did not reasonably and objectively reach the ICANN Determination, then ICANN shall waive Registry Operator's compliance with the subject ICANN Requirement. If the arbitrators or pre-arbitral referee, as applicable, determine that ICANN did reasonably and objectively reach the ICANN Determination, then ICANN Determination, then, upon notice to Registry Operator, ICANN may terminate this Agreement with immediate effect.

(e) Registry Operator hereby represents and warrants that, to the best of its knowledge as of the date of execution of this Agreement, no existing ICANN Requirement conflicts with or violates any Applicable Law.

(f) Notwithstanding any other provision of this Section 7.14, following an ICANN Determination and prior to a finding by an arbitrator pursuant to Section 7.14(d) above, ICANN may, subject to prior consultations with Registry Operator, take such reasonable technical measures as it deems necessary to ensure the Security and Stability of Registry Services, the Internet and the DNS. These reasonable technical measures shall be taken by ICANN on an interim basis, until the earlier of the date of conclusion of the arbitration procedure referred to in Section 7.14(d) above or the date of complete resolution of the conflict with an Applicable Law. In case Registry Operator disagrees with such technical measures taken by ICANN, Registry Operator may submit the matter to binding arbitration pursuant to the provisions of Section 5.2 above, during which process ICANN may continue to take such technical measures. In the event that ICANN takes such measures, Registry Operator shall pay all costs incurred by ICANN as a result of taking such measures. In addition, in the event that ICANN takes such measures, ICANN shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable.

* * * * *

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

By:		
	[]	
	President and CEO	
Date:		

[Registry Operator]



EXHIBIT A

Approved Services

SPECIFICATION 1

CONSENSUS POLICIES AND TEMPORARY POLICIES SPECIFICATION

1. Consensus Policies.

- 1.1. "*Consensus Policies*" are those policies established (1) pursuant to the procedure set forth in ICANN's Bylaws and due process, and (2) covering those topics listed in Section 1.2 of this document. The Consensus Policy development process and procedure set forth in ICANN's Bylaws may be revised from time to time in accordance with the process set forth therein.
- 1.2. Consensus Policies and the procedures by which they are developed shall be designed to produce, to the extent possible, a consensus of Internet stakeholders, including the operators of gTLDs. Consensus Policies shall relate to one or more of the following:
 - 1.2.1. issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, security and/or stability of the Internet or Domain Name System ("DNS");
 - 1.2.2. functional and performance specifications for the provision of Registry Services;
 - 1.2.3. Security and Stability of the registry database for the TLD;
 - 1.2.4. registry policies reasonably necessary to implement Consensus Policies relating to registry operations or registrars;
 - 1.2.5. resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names); or
 - 1.2.6. restrictions on cross-ownership of registry operators and registrars or registrar resellers and regulations and restrictions with respect to registry operations and the use of registry and registrar data in the event that a registry operator and a registrar or registrar reseller are affiliated.
- 1.3. Such categories of issues referred to in Section 1.2 shall include, without limitation:
 - 1.3.1. principles for allocation of registered names in the TLD (e.g., first-come/first-served, timely renewal, holding period after expiration);
 - 1.3.2. prohibitions on warehousing of or speculation in domain names by registries or registrars;
 - 1.3.3. reservation of registered names in the TLD that may not be registered initially or that may not be renewed due to reasons reasonably related to (i) avoidance of confusion among or misleading of users, (ii) intellectual property, or (iii) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration); and
 - 1.3.4. maintenance of and access to accurate and up-to-date information concerning domain name registrations; and procedures to avoid disruptions of domain name registrations due to suspension or termination of operations by a registry operator or a registrar, including procedures for allocation of responsibility for serving registered domain names in a TLD affected by such a suspension or termination.
- 1.4. In addition to the other limitations on Consensus Policies, they shall not:

- 1.4.1. prescribe or limit the price of Registry Services;
- 1.4.2. modify the terms or conditions for the renewal or termination of the Registry Agreement;
- 1.4.3. modify the limitations on Temporary Policies (defined below) or Consensus Policies;
- 1.4.4. modify the provisions in the registry agreement regarding fees paid by Registry Operator to ICANN; or
- 1.4.5. modify ICANN's obligations to ensure equitable treatment of registry operators and act in an open and transparent manner.
- <u>Temporary Policies.</u> Registry Operator shall comply with and implement all specifications or policies established by the Board on a temporary basis, if adopted by the Board by a vote of at least two-thirds of its members, so long as the Board reasonably determines that such modifications or amendments are justified and that immediate temporary establishment of a specification or policy on the subject is necessary to maintain the stability or security of Registry Services or the DNS ("*Temporary Policies*").
 - 2.1. Such proposed specification or policy shall be as narrowly tailored as feasible to achieve those objectives. In establishing any Temporary Policy, the Board shall state the period of time for which the Temporary Policy is adopted and shall immediately implement the Consensus Policy development process set forth in ICANN's Bylaws.
 - 2.1.1. ICANN shall also issue an advisory statement containing a detailed explanation of its reasons for adopting the Temporary Policy and why the Board believes such Temporary Policy should receive the consensus support of Internet stakeholders.
 - 2.1.2. If the period of time for which the Temporary Policy is adopted exceeds 90 days, the Board shall reaffirm its temporary adoption every 90 days for a total period not to exceed one year, in order to maintain such Temporary Policy in effect until such time as it becomes a Consensus Policy. If the one year period expires or, if during such one year period, the Temporary Policy does not become a Consensus Policy and is not reaffirmed by the Board, Registry Operator shall no longer be required to comply with or implement such Temporary Policy.
- 3. <u>Notice and Conflicts</u>. Registry Operator shall be afforded a reasonable period of time following notice of the establishment of a Consensus Policy or Temporary Policy in which to comply with such policy or specification, taking into account any urgency involved. In the event of a conflict between Registry Services and Consensus Policies or any Temporary Policy, the Consensus Polices or Temporary Policy shall control, but only with respect to subject matter in conflict.

SPECIFICATION 2 DATA ESCROW REQUIREMENTS

Registry Operator will engage an independent entity to act as data escrow agent ("*Escrow Agent*") for the provision of data escrow services related to the Registry Agreement. The following Technical Specifications set forth in Part A, and Legal Requirements set forth in Part B, will be included in any data escrow agreement between Registry Operator and the Escrow Agent, under which ICANN must be named a third-party beneficiary. In addition to the following requirements, the data escrow agreement may contain other provisions that are not contradictory or intended to subvert the required terms provided below.

PART A – TECHNICAL SPECIFICATIONS

- 1. **Deposits**. There will be two types of Deposits: Full and Differential. For both types, the universe of Registry objects to be considered for data escrow are those objects necessary in order to offer all of the approved Registry Services.
 - 1.1 "**Full Deposit**" will consist of data that reflects the state of the registry as of 00:00:00 UTC on each Sunday. Pending transactions at that time (i.e., transactions that have not been committed) will not be reflected in the Full Deposit.
 - 1.2 "**Differential Deposit**" means data that reflects all transactions that were not reflected in the last previous Full or Differential Deposit, as the case may be. Each Differential Deposit will contain all database transactions since the previous Deposit was completed as of 00:00:00 UTC of each day, but Sunday. Differential Deposits must include complete Escrow Records as specified below that were not included or changed since the most recent full or Differential Deposit (i.e., newly added or modified domain names).
- 2. <u>Schedule for Deposits</u>. Registry Operator will submit a set of escrow files on a daily basis as follows:
 - 2.1 Each Sunday, a Full Deposit must be submitted to the Escrow Agent by 23:59 UTC.
 - 2.2 The other six days of the week, the corresponding Differential Deposit must be submitted to Escrow Agent by 23:59 UTC.

3. <u>Escrow Format Specification.</u>

- 3.1 Deposit's Format. Registry objects, such as domains, contacts, name servers, registrars, etc. will be compiled into a file constructed as described in draft-arias-noguchi-registry-data-escrow, see [1]. The aforementioned document describes some elements as optional; Registry Operator will include those elements in the Deposits if they are available. Registry Operator will use the draft version available at the time of signing the Agreement, if not already an RFC. Once the specification is published as an RFC, Registry Operator will implement that specification, no later than 180 days after. UTF-8 character encoding will be used.
- 3.2 Extensions. If a Registry Operator offers additional Registry Services that require submission of additional data, not included above, additional "extension schemas" shall be defined in a case by case base to represent that data. These "extension schemas" will be specified as described in [1]. Data related to the "extensions schemas" will be included in the deposit file described in section

3.1. ICANN and the respective Registry shall work together to agree on such new objects' data escrow specifications.

- 4. <u>Processing of Deposit files.</u> The use of compression is recommended in order to reduce electronic data transfer times, and storage capacity requirements. Data encryption will be used to ensure the privacy of registry escrow data. Files processed for compression and encryption will be in the binary OpenPGP format as per OpenPGP Message Format RFC 4880, see [2]. Acceptable algorithms for Public-key cryptography, Symmetric-key cryptography, Hash and Compression are those enumerated in RFC 4880, not marked as deprecated in OpenPGP IANA Registry, see [3], that are also royalty-free. The process to follow for a data file in original text format is:
 - (1) The file should be compressed. The suggested algorithm for compression is ZIP as per RFC 4880.
 - (2) The compressed data will be encrypted using the escrow agent's public key. The suggested algorithms for Public-key encryption are Elgamal and RSA as per RFC 4880. The suggested algorithms for Symmetric-key encryption are TripleDES, AES128 and CAST5 as per RFC 4880.
 - (3) The file may be split as necessary if, once compressed and encrypted is larger than the file size limit agreed with the escrow agent. Every part of a split file, or the whole file if split is not used, will be called a processed file in this section.
 - (4) A digital signature file will be generated for every processed file using the Registry's private key. The digital signature file will be in binary OpenPGP format as per RFC 4880 [2], and will not be compressed or encrypted. The suggested algorithms for Digital signatures are DSA and RSA as per RFC 4880. The suggested algorithm for Hashes in Digital signatures is SHA256.
 - (5) The processed files and digital signature files will then be transferred to the Escrow Agent through secure electronic mechanisms, such as, SFTP, SCP, HTTPS file upload, etc. as agreed between the Escrow Agent and the Registry Operator. Non-electronic delivery through a physical medium such as CD-ROMs, DVD-ROMs, or USB storage devices may be used if authorized by ICANN.
 - (6) The Escrow Agent will then validate every (processed) transferred data file using the procedure described in section 8.
- 5. File Naming Conventions. Files will be named according to the following convention: gTLD {YYYY-MM-DD} {type} S{#} R{rev}.{ext} where:
 - 5.1 {gTLD} is replaced with the gTLD name; in case of an IDN-TLD, the ASCII-compatible form (A-Label) must be used;
 - 5.2 {YYYY-MM-DD} is replaced by the date corresponding to the time used as a timeline watermark for the transactions; i.e. for the Full Deposit corresponding to 2009-08-02T00:00Z, the string to be used would be "2009-08-02";
 - 5.3 {type} is replaced by:
 - (1) "full", if the data represents a Full Deposit;
 - (2) "diff", if the data represents a Differential Deposit;
 - (3) "thin", if the data represents a Bulk Registration Data Access file, as specified in section 3 of Specification 4;
 - 5.4 {#} is replaced by the position of the file in a series of files, beginning with "1"; in case of a lone file, this must be replaced by "1".
 - 5.5 $\{rev\}$ is replaced by the number of revision (or resend) of the file beginning with "0":

- 5.6 {ext} is replaced by "sig" if it is a digital signature file of the quasi-homonymous file. Otherwise it is replaced by "ryde".
- 6. **Distribution of Public Keys.** Each of Registry Operator and Escrow Agent will distribute its public key to the other party (Registry Operator or Escrow Agent, as the case may be) via email to an email address to be specified. Each party will confirm receipt of the other party's public key with a reply email, and the distributing party will subsequently reconfirm the authenticity of the key transmitted via offline methods, like in person meeting, telephone, etc. In this way, public key transmission is authenticated to a user able to send and receive mail via a mail server operated by the distributing party. Escrow Agent, Registry and ICANN will exchange keys by the same procedure.
- 7. <u>Notification of Deposits</u>. Along with the delivery of each Deposit, Registry Operator will deliver to Escrow Agent and to ICANN a written statement (which may be by authenticated e-mail) that includes a copy of the report generated upon creation of the Deposit and states that the Deposit has been inspected by Registry Operator and is complete and accurate. Registry Operator will include the Deposit's "id" and "resend" attributes in its statement. The attributes are explained in [1].

8. Verification Procedure.

- (1) The signature file of each processed file is validated.
- (2) If processed files are pieces of a bigger file, the latter is put together.
- (3) Each file obtained in the previous step is then decrypted and uncompressed.
- (4) Each data file contained in the previous step is then validated against the format defined in [1].
- (5) If [1] includes a verification process, that will be applied at this step.

If any discrepancy is found in any of the steps, the Deposit will be considered incomplete.

9. <u>References</u>.

- [1] Domain Name Data Escrow Specification (work in progress), <u>http://tools.ietf.org/html/draft-arias-noguchi-registry-data-escrow</u>
- [2] OpenPGP Message Format, <u>http://www.rfc-editor.org/rfc/rfc4880.txt</u>
- [3] OpenPGP parameters, <u>http://www.iana.org/assignments/pgp-parameters/pgp-parameters.xhtml</u>

PART B – LEGAL REQUIREMENTS

- 1. **Escrow Agent**. Prior to entering into an escrow agreement, the Registry Operator must provide notice to ICANN as to the identity of the Escrow Agent, and provide ICANN with contact information and a copy of the relevant escrow agreement, and all amendment thereto. In addition, prior to entering into an escrow agreement, Registry Operator must obtain the consent of ICANN to (a) use the specified Escrow Agent, and (b) enter into the form of escrow agreement provided. ICANN must be expressly designated a third-party beneficiary of the escrow agreement. ICANN reserves the right to withhold its consent to any Escrow Agent, escrow agreement, or any amendment thereto, all in its sole discretion.
- 2. <u>Fees</u>. Registry Operator must pay, or have paid on its behalf, fees to the Escrow Agent directly. If Registry Operator fails to pay any fee by the due date(s), the Escrow Agent will give ICANN written notice of such non-payment and ICANN may pay the past-due fee(s) within ten business days after receipt of the written notice from Escrow Agent. Upon payment of the past-due fees by ICANN, ICANN shall have a claim for such amount against Registry Operator, which Registry Operator shall be required to submit to ICANN together with the next fee payment due under the Registry Agreement.
- 3. <u>**Ownership**</u>. Ownership of the Deposits during the effective term of the Registry Agreement shall remain with Registry Operator at all times. Thereafter, Registry Operator shall assign any such ownership rights (including intellectual property rights, as the case may be) in such Deposits to ICANN. In the event that during the term of the Registry Agreement any Deposit is released from escrow to ICANN, any intellectual property rights held by Registry Operator in the Deposits will automatically be licensed on a non-exclusive, perpetual, irrevocable, royalty-free, paid-up basis to ICANN or to a party designated in writing by ICANN.
- 4. <u>Integrity and Confidentiality</u>. Escrow Agent will be required to (i) hold and maintain the Deposits in a secure, locked, and environmentally safe facility, which is accessible only to authorized representatives of Escrow Agent, (ii) protect the integrity and confidentiality of the Deposits using commercially reasonable measures and (iii) keep and safeguard each Deposit for one year. ICANN and Registry Operator will be provided the right to inspect Escrow Agent's applicable records upon reasonable prior notice and during normal business hours. Registry Operator and ICANN will be provided with the right to designate a third-party auditor to audit Escrow Agent's compliance with the technical specifications and maintenance requirements of this Specification 2 from time to time.

If Escrow Agent receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposits, Escrow Agent will promptly notify the Registry Operator and ICANN unless prohibited by law. After notifying the Registry Operator and ICANN unless prohibited by law. After notifying the Registry Operator and ICANN, Escrow Agent shall allow sufficient time for Registry Operator or ICANN to challenge any such order, which shall be the responsibility of Registry Operator or ICANN; provided, however, that Escrow Agent does not waive its rights to present its position with respect to any such order. Escrow Agent will cooperate with the Registry Operator or ICANN to support efforts to quash or limit any subpoena, at such party's expense. Any party requesting additional assistance shall pay Escrow Agent's standard charges or as quoted upon submission of a detailed request.

- 5. <u>**Copies.**</u> Escrow Agent may be permitted to duplicate any Deposit, in order to comply with the terms and provisions of the escrow agreement.
- 6. <u>**Release of Deposits**</u>. Escrow Agent will make available for electronic download (unless otherwise requested) to ICANN or its designee, within twenty-four hours, at the Registry Operator's expense, all Deposits in Escrow Agent's possession in the event that the Escrow Agent receives a request from Registry Operator to effect such delivery to ICANN, or receives one of the following written notices by ICANN stating that:
 - 6.1 the Registry Agreement has expired without renewal, or been terminated; or
 - 6.2 ICANN failed, with respect to (a) any Full Deposit or (b) five Differential Deposits within any calendar month, to receive, within five calendar days after the Deposit's scheduled delivery date, notification of receipt from Escrow Agent; (x) ICANN gave notice to Escrow Agent and Registry Operator of that failure; and (y) ICANN has not, within seven calendar days after such notice, received notice from Escrow Agent that the Deposit has been received; or
 - 6.3 ICANN has received notification from Escrow Agent of failed verification of a Full Deposit or of failed verification of five Differential Deposits within any calendar month and (a) ICANN gave notice to Registry Operator of that receipt; and (b) ICANN has not, within seven calendar days after such notice, received notice from Escrow Agent of verification of a remediated version of such Full Deposit or Differential Deposit; or
 - 6.4 Registry Operator has: (i) ceased to conduct its business in the ordinary course; or (ii) filed for bankruptcy, become insolvent or anything analogous to any of the foregoing under the laws of any jurisdiction anywhere in the world; or
 - 6.5 Registry Operator has experienced a failure of critical registry functions and ICANN has asserted its rights pursuant to Section 2.13 of the Registry Agreement; or
 - 6.6 a competent court, arbitral, legislative, or government agency mandates the release of the Deposits to ICANN.

Unless Escrow Agent has previously released the Registry Operator's Deposits to ICANN or its designee, Escrow Agent will deliver all Deposits to ICANN upon termination of the Registry Agreement or the Escrow Agreement.

7. <u>Verification of Deposits</u>.

- 7.1 Within twenty-four hours after receiving each Deposit or corrected Deposit, Escrow Agent must verify the format and completeness of each Deposit and deliver to ICANN a copy of the verification report generated for each Deposit. Reports will be delivered electronically, as specified from time to time by ICANN.
- 7.2 If Escrow Agent discovers that any Deposit fails the verification procedures, Escrow Agent must notify, either by email, fax or phone, Registry Operator and ICANN of such nonconformity within twenty-four hours after receiving the non-conformant Deposit. Upon notification of such verification failure, Registry Operator must begin developing modifications, updates, corrections, and other fixes of the Deposit necessary for the Deposit to pass the verification procedures and deliver such fixes to Escrow Agent as promptly as possible.
- 8. <u>Amendments</u>. Escrow Agent and Registry Operator shall amend the terms of the Escrow Agreement to conform to this Specification 2 within ten (10) calendar days of any amendment or modification to this Specification 2. In the event of a conflict between this Specification 2 and the Escrow Agreement, this Specification 2 shall control.
- **9.** <u>Indemnity</u>. Registry Operator shall indemnify and hold harmless Escrow Agent and each of its directors, officers, agents, employees, members, and stockholders ("Escrow Agent Indemnitees")

absolutely and forever from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Escrow Agent Indemnitees in connection with the Escrow Agreement or the performance of Escrow Agent or any Escrow Agent Indemnitees thereunder (with the exception of any claims based on the misrepresentation, negligence, or misconduct of Escrow Agent, its directors, officers, agents, employees, contractors, members, and stockholders). Escrow Agent shall indemnify and hold harmless Registry Operator and ICANN, and each of their respective directors, officers, agents, employees, members, and stockholders ("Indemnitees") absolutely and forever from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Indemnitee in connection with the misrepresentation, negligence or misconduct of Escrow Agent, its directors.

SPECIFICATION 3

FORMAT AND CONTENT FOR REGISTRY OPERATOR MONTHLY REPORTING

Registry Operator shall provide one set of monthly reports per gTLD to ______ with the following content. ICANN may request in the future that the reports be delivered by other means and using other formats. ICANN will use reasonable commercial efforts to preserve the confidentiality of the information reported until three months after the end of the month to which the reports relate.

1. Per-Registrar Transactions Report. This report shall be compiled in a comma separated-value formatted file as specified in RFC 4180. The file shall be named "gTLD-transactions-yyyymm.csv", where "gTLD" is the gTLD name; in case of an IDN-TLD, the A-label shall be used; "yyyymm" is the year and month being reported. The file shall contain the following fields per registrar:

Field #	Field Name	Description
01	registrar-name	registrar's full corporate name as registered with IANA
02	iana-id	http://www.iana.org/assignments/registrar-ids
03	total-domains	total domains under sponsorship
04	total-nameservers	total name servers registered for TLD
05	net-adds-1-yr	number of domains successfully registered with an initial term of one year (and not deleted within the add grace period)
06	net-adds-2-yr	number of domains successfully registered with an initial term of two years (and not deleted within the add grace period)
07	net-adds-3-yr	number of domains successfully registered with an initial term of three years (and not deleted within the add grace period)
08	net-adds-4-yr	number of domains successfully registered with an initial term of four years (and not deleted within the add grace period)
09	net-adds-5-yr	number of domains successfully registered with an initial term of five years (and not deleted within the add grace period)
10	net-adds-6-yr	number of domains successfully registered with an initial term of six years (and not deleted within the add grace period)
11	net-adds-7-yr	number of domains successfully registered with an initial term of seven years (and not deleted within the add grace period)

12	net-adds-8-yr	number of domains successfully registered with an initial term of eight years (and not deleted within the add grace period)
13	net-adds-9-yr	number of domains successfully registered with an initial term of nine years (and not deleted within the add grace period)
14	net-adds-10-yr	number of domains successfully registered with an initial term of ten years (and not deleted within the add grace period)
15	net-renews-1-yr	number of domains successfully renewed either automatically or by command with a new renewal period of one year (and not deleted within the renew grace period)
16	net-renews-2-yr	number of domains successfully renewed either automatically or by command with a new renewal period of two years (and not deleted within the renew grace period)
17	net-renews-3-yr	number of domains successfully renewed either automatically or by command with a new renewal period of three years (and not deleted within the renew grace period)
18	net-renews-4-yr	number of domains successfully renewed either automatically or by command with a new renewal period of four years (and not deleted within the renew grace period)
19	net-renews-5-yr	number of domains successfully renewed either automatically or by command with a new renewal period of five years (and not deleted within the renew grace period)
20	net-renews-6-yr	number of domains successfully renewed either automatically or by command with a new renewal period of six years (and not deleted within the renew grace period)
21	net-renews-7-yr	number of domains successfully renewed either automatically or by command with a new renewal period of seven years (and not deleted within the renew grace period)
22	net-renews-8-yr	number of domains successfully renewed either automatically or by command with a new renewal period of eight years (and not deleted within the renew grace period)
23	net-renews-9-yr	number of domains successfully renewed either

		automatically or by command with a new renewal period of nine years (and not deleted within the renew grace period)
24	net-renews-10-yr	number of domains successfully renewed either automatically or by command with a new renewal period of ten years (and not deleted within the renew grace period)
25	transfer-gaining-successful	transfers initiated by this registrar that were ack'd by the other registrar – either by command or automatically
26	transfer-gaining-nacked	transfers initiated by this registrar that were n'acked by the other registrar
27	transfer-losing-successful	transfers initiated by another registrar that this registrar ack'd – either by command or automatically
28	transfer-losing-nacked	transfers initiated by another registrar that this registrar n'acked
29	transfer-disputed-won	number of transfer disputes in which this registrar prevailed
30	transfer-disputed-lost	number of transfer disputes this registrar lost
31	transfer-disputed-nodecision	number of transfer disputes involving this registrar with a split or no decision
32	deleted-domains-grace	domains deleted within the add grace period
33	deleted-domains-nograce	domains deleted outside the add grace period
34	restored-domains	domain names restored from redemption period
35	restored-noreport	total number of restored names for which the registrar failed to submit a restore report
36	agp-exemption-requests	total number of AGP (add grace period) exemption requests
37	agp-exemptions-granted	total number of AGP (add grace period) exemption requests granted
38	agp-exempted-domains	total number of names affected by granted AGP (add grace period) exemption requests
39	attempted-adds	number of attempted (successful and failed) domain name create commands

The first line shall include the field names exactly as described in the table above as a "header line" as described in section 2 of RFC 4180. The last line of each report shall include totals for each column across all registrars; the first field of this line shall read "Totals" while the second field shall be left empty in that line. No other lines besides the ones described above shall be included. Line breaks shall be <U+000D, U+000A> as described in RFC 4180.

2. Registry Functions Activity Report. This report shall be compiled in a comma separated-value formatted file as specified in RFC 4180. The file shall be named "gTLD-activity-yyyymm.csv", where "gTLD" is the gTLD name; in case of an IDN-TLD, the A-label shall be used; "yyyymm" is the year and month being reported. The file shall contain the following fields:

Field #	Field Name	Description
01	operational-registrars	number of operational registrars at the end of the reporting period
02	ramp-up-registrars	number of registrars that have received a password for access to OT&E at the end of the reporting period
03	pre-ramp-up-registrars	number of registrars that have requested access, but have not yet entered the ramp-up period at the end of the reporting period
04	zfa-passwords	number of active zone file access passwords at the end of the reporting period
05	whois-43-queries	number of WHOIS (port-43) queries responded during the reporting period
06	web-whois-queries	number of Web-based Whois queries responded during the reporting period, not including searchable Whois
07	searchable-whois-queries	number of searchable Whois queries responded during the reporting period, if offered
08	dns-udp-queries-received	number of DNS queries received over UDP transport during the reporting period
09	dns-udp-queries-responded	number of DNS queries received over UDP transport that were responded during the reporting period
10	dns-tcp-queries-received	number of DNS queries received over TCP transport during the reporting period
11	dns-tcp-queries-responded	number of DNS queries received over TCP transport that were responded during the reporting period
12	srs-dom-check	number of SRS (EPP and any other interface) domain name "check" requests responded during the reporting period
13	srs-dom-create	number of SRS (EPP and any other interface) domain name "create" requests responded during the reporting period
14	srs-dom-delete	number of SRS (EPP and any other interface) domain name "delete" requests responded during the reporting period
15	srs-dom-info	number of SRS (EPP and any other interface) domain name "info" requests responded during the reporting period
16	srs-dom-renew	number of SRS (EPP and any other interface) domain name

		"renew" requests responded during the reporting period
17	srs-dom-rgp-restore-report	number of SRS (EPP and any other interface) domain name RGP "restore" requests responded during the reporting period
18	srs-dom-rgp-restore-request	number of SRS (EPP and any other interface) domain name RGP "restore" requests delivering a restore report responded during the reporting period
19	srs-dom-transfer-approve	number of SRS (EPP and any other interface) domain name "transfer" requests to approve transfers responded during the reporting period
20	srs-dom-transfer-cancel	number of SRS (EPP and any other interface) domain name "transfer" requests to cancel transfers responded during the reporting period
21	srs-dom-transfer-query	number of SRS (EPP and any other interface) domain name "transfer" requests to query about a transfer responded during the reporting period
22	srs-dom-transfer-reject	number of SRS (EPP and any other interface) domain name "transfer" requests to reject transfers responded during the reporting period
23	srs-dom-transfer-request	number of SRS (EPP and any other interface) domain name "transfer" requests to request transfers responded during the reporting period
24	srs-dom-update	number of SRS (EPP and any other interface) domain name "update" requests (not including RGP restore requests) responded during the reporting period
25	srs-host-check	number of SRS (EPP and any other interface) host "check" requests responded during the reporting period
26	srs-host-create	number of SRS (EPP and any other interface) host "create" requests responded during the reporting period
27	srs-host-delete	number of SRS (EPP and any other interface) host "delete" requests responded during the reporting period
28	srs-host-info	number of SRS (EPP and any other interface) host "info" requests responded during the reporting period
29	srs-host-update	number of SRS (EPP and any other interface) host "update" requests responded during the reporting period
30	srs-cont-check	number of SRS (EPP and any other interface) contact "check" requests responded during the reporting period
31	srs-cont-create	number of SRS (EPP and any other interface) contact "create" requests responded during the reporting period

32	srs-cont-delete	number of SRS (EPP and any other interface) contact "delete" requests responded during the reporting period
33	srs-cont-info	number of SRS (EPP and any other interface) contact "info" requests responded during the reporting period
34	srs-cont-transfer-approve	number of SRS (EPP and any other interface) contact "transfer" requests to approve transfers responded during the reporting period
35	srs-cont-transfer-cancel	number of SRS (EPP and any other interface) contact "transfer" requests to cancel transfers responded during the reporting period
36	srs-cont-transfer-query	number of SRS (EPP and any other interface) contact "transfer" requests to query about a transfer responded during the reporting period
37	srs-cont-transfer-reject	number of SRS (EPP and any other interface) contact "transfer" requests to reject transfers responded during the reporting period
38	srs-cont-transfer-request	number of SRS (EPP and any other interface) contact "transfer" requests to request transfers responded during the reporting period
39	srs-cont-update	number of SRS (EPP and any other interface) contact "update" requests responded during the reporting period

The first line shall include the field names exactly as described in the table above as a "header line" as described in section 2 of RFC 4180. The last line of each report shall include totals for each column across all registrars; the first field of this line shall read "Totals" while the second field shall be left empty in that line. No other lines besides the ones described above shall be included. Line breaks shall be <U+000D, U+000A> as described in RFC 4180.

SPECIFICATION FOR REGISTRATION DATA PUBLICATION SERVICES

1. **Registration Data Directory Services.** Until ICANN requires a different protocol, Registry Operator will operate a WHOIS service available via port 43 in accordance with RFC 3912, and a web-based Directory Service at <whois.nic.TLD> providing free public query-based access to at least the following elements in the following format. ICANN reserves the right to specify alternative formats and protocols, and upon such specification, the Registry Operator will implement such alternative specification as soon as reasonably practicable.

1.1. The format of responses shall follow a semi-free text format outline below, followed by a blank line and a legal disclaimer specifying the rights of Registry Operator, and of the user querying the database.

1.2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys, followed by a colon and a space as delimiters, followed by the value.

1.3. For fields where more than one value exists, multiple key/value pairs with the same key shall be allowed (for example to list multiple name servers). The first key/value pair after a blank line should be considered the start of a new record, and should be considered as identifying that record, and is used to group data, such as hostnames and IP addresses, or a domain name and registrant information, together.

1.4. Domain Name Data:

1.4.1. Query format: whois EXAMPLE.TLD

1.4.2. Response format:

Domain Name: EXAMPLE.TLD Domain ID: D1234567-TLD WHOIS Server: whois.example.tld Referral URL: http://www.example.tld Updated Date: 2009-05-29T20:13:00Z Creation Date: 2000-10-08T00:45:00Z Registry Expiry Date: 2010-10-08T00:44:59Z Sponsoring Registrar: EXAMPLE REGISTRAR LLC Sponsoring Registrar IANA ID: 5555555 Domain Status: clientDeleteProhibited Domain Status: clientRenewProhibited Domain Status: clientTransferProhibited Domain Status: serverUpdateProhibited Registrant ID: 5372808-ERL Registrant Name: EXAMPLE REGISTRANT Registrant Organization: EXAMPLE ORGANIZATION Registrant Street: 123 EXAMPLE STREET Registrant City: ANYTOWN Registrant State/Province: AP Registrant Postal Code: A1A1A1 Registrant Country: EX

Registrant Phone: +1.5555551212 Registrant Phone Ext: 1234 Registrant Fax: +1.5555551213 Registrant Fax Ext: 4321 Registrant Email: EMAIL@EXAMPLE.TLD Admin ID: 5372809-ERL Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE Admin Organization: EXAMPLE REGISTRANT ORGANIZATION Admin Street: 123 EXAMPLE STREET Admin City: ANYTOWN Admin State/Province: AP Admin Postal Code: A1A1A1 Admin Country: EX Admin Phone: +1.5555551212 Admin Phone Ext: 1234 Admin Fax: +1.5555551213 Admin Fax Ext: Admin Email: EMAIL@EXAMPLE.TLD Tech ID: 5372811-ERL Tech Name: EXAMPLE REGISTRAR TECHNICAL Tech Organization: EXAMPLE REGISTRAR LLC Tech Street: 123 EXAMPLE STREET Tech City: ANYTOWN Tech State/Province: AP Tech Postal Code: A1A1A1 Tech Country: EX Tech Phone: +1.1235551234 Tech Phone Ext: 1234 Tech Fax: +1.5555551213 Tech Fax Ext: 93 Tech Email: EMAIL@EXAMPLE.TLD Name Server: NS01.EXAMPLEREGISTRAR.TLD Name Server: NS02.EXAMPLEREGISTRAR.TLD DNSSEC: signedDelegation DNSSEC: unsigned >>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.5. Registrar Data:

1.5.1. Query format: whois "registrar Example Registrar, Inc."

1.5.2. Response format:

Registrar Name: Example Registrar, Inc. Street: 1234 Admiralty Way City: Marina del Rey State/Province: CA Postal Code: 90292 Country: US Phone Number: +1.3105551212 Fax Number: +1.3105551213 Email: registrar@example.tld WHOIS Server: whois.example-registrar.tld Referral URL: http://www.example-registrar.tld Admin Contact: Joe Registrar Phone Number: +1.3105551213 Fax Number: +1.3105551213 Email: joeregistrar@example-registrar.tld Admin Contact: Jane Registrar Phone Number: +1.3105551214 Fax Number: +1.3105551213 Email: janeregistrar@example-registrar.tld Technical Contact: John Geek Phone Number: +1.3105551215 Fax Number: +1.3105551216 Email: johngeek@example-registrar.tld >>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.6. Nameserver Data:

1.6.1. Query format: whois "NS1.EXAMPLE.TLD" or whois "nameserver (IP Address)"

1.6.2. Response format:

Server Name: NS1.EXAMPLE.TLD IP Address: 192.0.2.123 IP Address: 2001:0DB8::1 Registrar: Example Registrar, Inc. WHOIS Server: whois.example-registrar.tld Referral URL: http://www. example-registrar.tld >>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.7. The format of the following data fields: domain status, individual and organizational names, address, street, city, state/province, postal code, country, telephone and fax numbers, email addresses, date and times should conform to the mappings specified in EPP RFCs 5730-5734 so that the display of this information (or values return in WHOIS responses) can be uniformly processed and understood.

1.8. **Searchability**. Offering searchability capabilities on the Directory Services is optional but if offered by the Registry Operator it shall comply with the specification described in this section.

1.8.1. Registry Operator will offer searchability on the web-based Directory Service.

1.8.2. Registry Operator will offer partial match capabilities, at least, on the following fields: domain name, contacts and registrant's name, and contact and registrant's postal address, including all the sub-fields described in EPP (e.g., street, city, state or province, etc.).

1.8.3. Registry Operator will offer exact-match capabilities, at least, on the following fields: registrar id, name server name, and name server's IP address (only applies to IP addresses stored by the registry, i.e., glue records).

1.8.4. Registry Operator will offer Boolean search capabilities supporting, at least, the following logical operators to join a set of search criteria: AND, OR, NOT.

1.8.5. Search results will include domain names matching the search criteria.

1.8.6. Registry Operator will: 1) implement appropriate measures to avoid abuse of this feature (e.g., permitting access only to legitimate authorized users); and 2) ensure the feature is in compliance with any applicable privacy laws or policies.

2. Zone File Access

2.1. Third-Party Access

2.1.1. **Zone File Access Agreement.** Registry Operator will enter into an agreement with any Internet user that will allow such user to access an Internet host server or servers designated by Registry Operator and download zone file data. The agreement will be standardized, facilitated and administered by a Centralized Zone Data Access Provider (the "CZDA Provider"). Registry Operator will provide access to zone file data per Section 2.1.3 and do so using the file format described in Section 2.1.4. Notwithstanding the foregoing, (a) the CZDA Provider may reject the request for access of any user that does not satisfy the credentialing requirements in Section 2.1.2 below; (b) Registry Operator may reject the request for access of any user that does not provide correct or legitimate credentials under Section 2.1.2 or where Registry Operator reasonably believes will violate the terms of Section 2.1.5. below; and, (c) Registry Operator may revoke access of any user if Registry Operator has evidence to support that the user has violated the terms of Section 2.1.5.

2.1.2. **Credentialing Requirements.** Registry Operator, through the facilitation of the CZDA Provider, will request each user to provide it with information sufficient to correctly identify and locate the user. Such user information will include, without limitation, company name, contact name, address, telephone number, facsimile number, email address, and the Internet host machine name and IP address.

2.1.3. **Grant of Access.** Each Registry Operator will provide the Zone File FTP (or other Registry supported) service for an ICANN-specified and managed URL (specifically, <TLD>.zda.icann.org where <TLD> is the TLD for which the registry is responsible) for the user to access the Registry's zone data archives. Registry Operator will grant the user a non-exclusive, non-transferable, limited right to access Registry Operator's Zone File FTP server, and to transfer a copy of the top-level domain zone files, and any associated cryptographic checksum files no more than once per 24 hour period using FTP, or other data transport and access protocols that may be prescribed by ICANN. For every zone file access server, the zone files are in the top-level directory called <zone>.zone.gz, with <zone>.zone.gz.md5 and <zone>.zone.gz.sig to verify downloads. If the Registry Operator also provides historical data, it will use the naming pattern <zone>-yyyymmdd.zone.gz, etc.

2.1.4. **File Format Standard**. Registry Operator will provide zone files using a subformat of the standard Master File format as originally defined in RFC 1035, Section 5, including all the records present in the actual zone used in the public DNS. Sub-format is as follows:

- 1. Each record must include all fields in one line as: <domain-name> <TTL> <class> <type> <RDATA>.
- 2. Class and Type must use the standard mnemonics and must be in lower case.

- 3. TTL must be present as a decimal integer.
- 4. Use of /X and /DDD inside domain names is allowed.
- 5. All domain names must be in lower case.
- 6. Must use exactly one tab as separator of fields inside a record.
- 7. All domain names must be fully qualified.
- 8. No \$ORIGIN directives.
- 9. No use of "@" to denote current origin.
- 10. No use of "blank domain names" at the beginning of a record to continue the use of the domain name in the previous record.
- 11. No \$INCLUDE directives.
- 12. No \$TTL directives.
- 13. No use of parentheses, e.g., to continue the list of fields in a record across a line boundary.
- 14. No use of comments.
- 15. No blank lines.
- 16. The SOA record should be present at the top and (duplicated at) the end of the zone file.
- 17. With the exception of the SOA record, all the records in a file must be in alphabetical order.
- 18. One zone per file. If a TLD divides its DNS data into multiple zones, each goes into a separate file named as above, with all the files combined using tar into a file called <tld>.zone.tar.

2.1.5. Use of Data by User. Registry Operator will permit user to use the zone file for lawful purposes; provided that, (a) user takes all reasonable steps to protect against unauthorized access to and use and disclosure of the data, and (b) under no circumstances will Registry Operator be required or permitted to allow user to use the data to, (i) allow, enable, or otherwise support the transmission by e-mail, telephone, or facsimile of mass unsolicited, commercial advertising or solicitations to entities other than user's own existing customers, or (ii) enable high volume, automated, electronic processes that send queries or data to the systems of Registry Operator or any ICANN-accredited registrar.

2.1.6. **Term of Use.** Registry Operator, through CZDA Provider, will provide each user with access to the zone file for a period of not less than three (3) months. Registry Operator will allow users to renew their Grant of Access.

2.1.7. **No Fee for Access.** Registry Operator will provide, and CZDA Provider will facilitate, access to the zone file to user at no cost.

2.2 Co-operation

2.2.1. **Assistance**. Registry Operator will co-operate and provide reasonable assistance to ICANN and the CZDA Provider to facilitate and maintain the efficient access of zone file data by permitted users as contemplated under this Schedule.

2.3 ICANN Access. Registry Operator shall provide bulk access to the zone files for the TLD to ICANN or its designee on a continuous basis in the manner ICANN may reasonably specify from time to time.

2.4 Emergency Operator Access. Registry Operator shall provide bulk access to the zone files for the TLD to the Emergency Operators designated by ICANN on a continuous basis in the manner ICANN may reasonably specify from time to time.

3. Bulk Registration Data Access to ICANN

3.1. **Periodic Access to Thin Registration Data.** In order to verify and ensure the operational stability of Registry Services as well as to facilitate compliance checks on accredited registrars, Registry Operator will provide ICANN on a weekly basis (the day to be designated by ICANN) with up-to-date Registration Data as specified below. Data will include data committed as of 00:00:00 UTC on the day previous to the one designated for retrieval by ICANN.

3.1.1. **Contents**. Registry Operator will provide, at least, the following data for all registered domain names: domain name, domain name repository object id (roid), registrar id (IANA ID), statuses, last updated date, creation date, expiration date, and name server names. For sponsoring registrars, at least, it will provide: registrar name, registrar repository object id (roid), hostname of registrar Whois server, and URL of registrar.

3.1.2. **Format**. The data will be provided in the format specified in Specification 2 for Data Escrow (including encryption, signing, etc.) but including only the fields mentioned in the previous section, i.e., the file will only contain Domain and Registrar objects with the fields mentioned above. Registry Operator has the option to provide a full deposit file instead as specified in Specification 2.

3.1.3, **Access**. Registry Operator will have the file(s) ready for download as of 00:00:00 UTC on the day designated for retrieval by ICANN. The file(s) will be made available for download by SFTP, though ICANN may request other means in the future.

3.2. Exceptional Access to Thick Registration Data. In case of a registrar failure, deaccreditation, court order, etc. that prompts the temporary or definitive transfer of its domain names to another registrar, at the request of ICANN, Registry Operator will provide ICANN with up-to-date data for the domain names of the losing registrar. The data will be provided in the format specified in Specification 2 for Data Escrow. The file will only contain data related to the domain names of the losing registrar. Registry Operator will provide the data within 2 business days. Unless otherwise agreed by Registry Operator and ICANN, the file will be made available for download by ICANN in the same manner as the data specified in Section 3.1. of this Specification.

SCHEDULE OF RESERVED NAMES AT THE SECOND LEVEL IN GTLD REGISTRIES

Except to the extent that ICANN otherwise expressly authorizes in writing, Registry Operator shall reserve (i.e., Registry Operator shall not register, delegate, use or otherwise make available such labels to any third party, but may register such labels in its own name in order to withhold them from delegation or use) names formed with the following labels from initial (i.e. other than renewal) registration within the TLD:

- 1. **Example. The label "EXAMPLE**" shall be reserved at the second level and at all other levels within the TLD at which Registry Operator makes registrations.
- 2. **Two-character labels**. All two-character labels shall be initially reserved. The reservation of a twocharacter label string may be released to the extent that Registry Operator reaches agreement with the government and country-code manager. The Registry Operator may also propose release of these reservations based on its implementation of measures to avoid confusion with the corresponding country codes.
- 3. **Tagged Domain Names.** Labels may only include hyphens in the third and fourth position if they represent valid internationalized domain names in their ASCII encoding (for example "xn--ndk061n").
- 4. Second-Level Reservations for Registry Operations. The following names are reserved for use in connection with the operation of the registry for the TLD. Registry Operator may use them, but upon conclusion of Registry Operator's designation as operator of the registry for the TLD they shall be transferred as specified by ICANN: NIC, WWW, IRIS and WHOIS.
- 5. **Country and Territory Names.** The country and territory names contained in the following internationally recognized lists shall be initially reserved at the second level and at all other levels within the TLD at which the Registry Operator provides for registrations:
 - 5.1. the short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the name European Union http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso-3166-1_decoding_table.htm#EU;
 - 5.2. the United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part III Names of Countries of the World; and
 - 5.3. the list of United Nations member states in 6 official United Nations languages prepared by the Working Group on Country Names of the United Nations Conference on the Standardization of Geographical Names;

provided, that the reservation of specific country and territory names may be released to the extent that Registry Operator reaches agreement with the applicable government(s), provided, further, that

Registry Operator may also propose release of these reservations, subject to review by ICANN's Governmental Advisory Committee and approval by ICANN.

REGISTRY INTEROPERABILITY AND CONTINUITY SPECIFICATIONS

1. Standards Compliance

1.1. **DNS.** Registry Operator shall comply with relevant existing RFCs and those published in the future by the Internet Engineering Task Force (IETF) including all successor standards, modifications or additions thereto relating to the DNS and name server operations including without limitation RFCs 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 4343, and 5966.

1.2. **EPP**. Registry Operator shall comply with relevant existing RFCs and those published in the future by the Internet Engineering Task Force (IETF) including all successor standards, modifications or additions thereto relating to the provisioning and management of domain names using the Extensible Provisioning Protocol (EPP) in conformance with RFCs 5910, 5730, 5731, 5732, 5733 and 5734. If Registry Operator implements Registry Grace Period (RGP), it will comply with RFC 3915 and its successors. If Registry Operator requires the use of functionality outside the base EPP RFCs, Registry Operator must document EPP extensions in Internet-Draft format following the guidelines described in RFC 3735. Registry Operator will provide and update the relevant documentation of all the EPP Objects and Extensions supported to ICANN prior to deployment.

1.3. **DNSSEC**. Registry Operator shall sign its TLD zone files implementing Domain Name System Security Extensions ("DNSSEC"). During the Term, Registry Operator shall comply with RFCs 4033, 4034, 4035, 4509 and their successors, and follow the best practices described in RFC 4641 and its successors. If Registry Operator implements Hashed Authenticated Denial of Existence for DNS Security Extensions, it shall comply with RFC 5155 and its successors. Registry Operator shall accept public-key material from child domain names in a secure manner according to industry best practices. Registry shall also publish in its website the DNSSEC Practice Statements (DPS) describing critical security controls and procedures for key material storage, access and usage for its own keys and secure acceptance of registrants' public-key material. Registry Operator shall publish its DPS following the format described in "DPS-framework" (currently in draft format, see http://tools.ietf.org/html/draft-ietf-dnsop-dnssec-dps-framework) within 180 days after the "DPS-framework" becomes an RFC.

1.4. **IDN**. If the Registry Operator offers Internationalized Domain Names ("IDNs"), it shall comply with RFCs 5890, 5891, 5892, 5893 and their successors. Registry Operator shall comply with the ICANN IDN Guidelines at <<u>http://www.icann.org/en/topics/idn/implementation-guidelines.htm</u>>, as they may be amended, modified, or superseded from time to time. Registry Operator shall publish and keep updated its IDN Tables and IDN Registration Rules in the IANA Repository of IDN Practices as specified in the ICANN IDN Guidelines.

1.5. **IPv6**. Registry Operator shall be able to accept IPv6 addresses as glue records in its Registry System and publish them in the DNS. Registry Operator shall offer public IPv6 transport for, at least, two of the Registry's name servers listed in the root zone with the corresponding IPv6 addresses registered with IANA. Registry Operator should follow "DNS IPv6 Transport Operational Guidelines" as described in BCP 91 and the recommendations and considerations described in RFC 4472. Registry Operator shall offer public IPv6 transport for its Registration Data Publication Services as defined in Specification 4 of this Agreement; e.g. Whois (RFC 3912), Web based Whois. Registry Operator shall offer public IPv6 transport for its Shared Registration System (SRS) to any Registrar, no later than six months after receiving the first request in writing from a gTLD accredited Registrar willing to operate with the SRS over IPv6.

2. Registry Services

2.1. **Registry Services**. "Registry Services" are, for purposes of the Registry Agreement, defined as the following: (a) those services that are operations of the registry critical to the following tasks: the receipt of data from registrars concerning registrations of domain names and name servers; provision to registrars of status information relating to the zone servers for the TLD; dissemination of TLD zone files; operation of the registry DNS servers; and dissemination of contact and other information concerning domain name server registrations in the TLD as required by this Agreement; (b) other products or services that the Registry Operator is required to provide because of the establishment of a Consensus Policy as defined in Specification 1; (c) any other products or services that only a registry operator is capable of providing, by reason of its designation as the registry operator; and (d) material changes to any Registry Service within the scope of (a), (b) or (c) above.

2.2. **Wildcard Prohibition**. For domain names which are either not registered, or the registrant has not supplied valid records such as NS records for listing in the DNS zone file, or their status does not allow them to be published in the DNS, the use of DNS wildcard Resource Records as described in RFCs 1034 and 4592 or any other method or technology for synthesizing DNS Resources Records or using redirection within the DNS by the Registry is prohibited. When queried for such domain names the authoritative name servers must return a "Name Error" response (also known as NXDOMAIN), RCODE 3 as described in RFC 1035 and related RFCs. This provision applies for all DNS zone files at all levels in the DNS tree for which the Registry Operator (or an affiliate engaged in providing Registration Services) maintains data, arranges for such maintenance, or derives revenue from such maintenance.

3. Registry Continuity

3.1. **High Availability**. Registry Operator will conduct its operations using network and geographically diverse, redundant servers (including network-level redundancy, end-node level redundancy and the implementation of a load balancing scheme where applicable) to ensure continued operation in the case of technical failure (widespread or local), or an extraordinary occurrence or circumstance beyond the control of the Registry Operator.

3.2. **Extraordinary Event**. Registry Operator will use commercially reasonable efforts to restore the critical functions of the registry within 24 hours after the termination of an extraordinary event beyond the control of the Registry Operator and restore full system functionality within a maximum of 48 hours following such event, depending on the type of critical function involved. Outages due to such an event will not be considered a lack of service availability.

3.3. **Business Continuity**. Registry Operator shall maintain a business continuity plan, which will provide for the maintenance of Registry Services in the event of an extraordinary event beyond the control of the Registry Operator or business failure of Registry Operator, and may include the designation of a Registry Services continuity provider. If such plan includes the designation of a Registry Services continuity provider, Registry Operator shall provide the name and contact information for such Registry Services continuity provider to ICANN. In the case of an extraordinary event beyond the control of the Registry Operator where the Registry Operator cannot be contacted, Registry Operator consents that ICANN may contact the designated Registry Services continuity provider, if one exists. Registry Operator shall conduct Registry Services Continuity testing at least once per year.

4. Abuse Mitigation

4.1. **Abuse Contact**. Registry Operator shall provide to ICANN and publish on its website its accurate contact details including a valid email and mailing address as well as a primary contact for handling inquires related to malicious conduct in the TLD, and will provide ICANN with prompt notice of any changes to such contact details.

4.2. **Malicious Use of Orphan Glue Records**. Registry Operators shall take action to remove orphan glue records (as defined at http://www.icann.org/en/committees/security/sac048.pdf) when provided with evidence in written form that such records are present in connection with malicious conduct.

4. Supported Initial and Renewal Registration Periods

4.1. **Initial Registration Periods**. Initial registrations of registered names may be made in the registry in one (1) year increments for up to a maximum of ten (10) years. For the avoidance of doubt, initial registrations of registered names may not exceed ten (10) years.

4.2. **Renewal Periods**. Renewal of registered names may be made in one (1) year increments for up to a maximum of ten (10) years. For the avoidance of doubt, renewal of registered names may not extend their registration period beyond ten (10) years from the time of the renewal.

MINIMUM REQUIREMENTS FOR RIGHTS PROTECTION MECHANISMS

1. **Rights Protection Mechanisms.** Registry Operator shall implement and adhere to any rights protection mechanisms ("RPMs") that may be mandated from time to time by ICANN. In addition to such RPMs, Registry Operator may develop and implement additional RPMs that discourage or prevent registration of domain names that violate or abuse another party's legal rights. Registry Operator will include all ICANN mandated and independently developed RPMs in the registry-registrar agreement entered into by ICANN-accredited registrars authorized to register names in the TLD. Registry Operator shall implement in accordance with requirements established by ICANN each of the mandatory RPMs set forth in the Trademark Clearinghouse (posted at [url to be inserted when final Trademark Clearinghouse is adopted]), which may be revised by ICANN from time to time. Registry Operator shall not mandate that any owner of applicable intellectual property rights use any other trademark information aggregation, notification, or validation service in addition to or instead of the ICANN-designated Trademark Clearinghouse.

2. **Dispute Resolution Mechanisms.** Registry Operator will comply with the following dispute resolution mechanisms as they may be revised from time to time:

- a. the Trademark Post-Delegation Dispute Resolution Procedure (PDDRP) and the Registration Restriction Dispute Resolution Procedure (RRDRP) adopted by ICANN (posted at [urls to be inserted when final procedure is adopted]). Registry Operator agrees to implement and adhere to any remedies ICANN imposes (which may include any reasonable remedy, including for the avoidance of doubt, the termination of the Registry Agreement pursuant to Section 4.3(e) of the Registry Agreement) following a determination by any PDDRP or RRDRP panel and to be bound by any such determination; and
- b. the Uniform Rapid Suspension system ("URS") adopted by ICANN (posted at [url to be inserted]), including the implementation of determinations issued by URS examiners.

CONTINUED OPERATIONS INSTRUMENT

- 1. The Continued Operations Instrument shall (a) provide for sufficient financial resources to ensure the continued operation of the critical registry functions related to the TLD set forth in Section [] of the Applicant Guidebook posted at [url to be inserted upon finalization of Applicant Guidebook] (which is hereby incorporated by reference into this Specification 8) for a period of three (3) years following any termination of this Agreement on or prior to the fifth anniversary of the Effective Date or for a period of one (1) year following any termination of this Agreement after the fifth anniversary of the Effective Date but prior to or on the sixth (6^{th}) anniversary of the Effective Date, and (b) be in the form of either (i) an irrevocable standby letter of credit, or (ii) an irrevocable cash escrow deposit, each meeting the requirements set forth in Section [l of the Applicant Guidebook posted at [url to be inserted upon finalization of Applicant Guidebook] (which is hereby incorporated by reference into this Specification 8). Registry Operator shall use its best efforts to take all actions necessary or advisable to maintain in effect the Continued Operations Instrument for a period of six (6) years from the Effective Date, and to maintain ICANN as a third party beneficiary thereof. Registry Operator shall provide to ICANN copies of all final documents relating to the Continued Operations Instrument and shall keep ICANN reasonably informed of material developments relating to the Continued Operations Instrument. Registry Operator shall not agree to, or permit, any amendment of, or waiver under, the Continued Operations Instrument or other documentation relating thereto without the prior written consent of ICANN (such consent not to be unreasonably withheld). The Continued Operations Instrument shall expressly state that ICANN may access the financial resources of the Continued Operations Instrument pursuant to Section 2.13 or Section 4.5 [insert for government entity: or Section 7.14] of the Registry Agreement.
- 2. If, notwithstanding the use of best efforts by Registry Operator to satisfy its obligations under the preceding paragraph, the Continued Operations Instrument expires or is terminated by another party thereto, in whole or in part, for any reason, prior to the sixth anniversary of the Effective Date, Registry Operator shall promptly (i) notify ICANN of such expiration or termination and the reasons therefor and (ii) arrange for an alternative instrument that provides for sufficient financial resources to ensure the continued operation of the Registry Services related to the TLD for a period of three (3) years following any termination of this Agreement on or prior to the fifth anniversary of the Effective Date or for a period of one (1) year following any termination of this Agreement after the fifth anniversary of the Effective Date (an "Alternative Instrument"). Any such Alternative Instrument shall be on terms no less favorable to ICANN than the Continued Operations Instrument and shall otherwise be in form and substance reasonably acceptable to ICANN.
- 3. Notwithstanding anything to the contrary contained in this Specification 8, at any time, Registry Operator may replace the Continued Operations Instrument with an alternative

instrument that (i) provides for sufficient financial resources to ensure the continued operation of the Registry Services related to the TLD for a period of three (3) years following any termination of this Agreement on or prior to the fifth anniversary of the Effective Date or for a period one (1) year following any termination of this Agreement after the fifth anniversary of the Effective Date but prior to or on the sixth (6) anniversary of the Effective Date, and (ii) contains terms no less favorable to ICANN than the Continued Operations Instrument and is otherwise in form and substance reasonably acceptable to ICANN. In the event Registry Operation replaces the Continued Operations Instrument either pursuant to paragraph 2 or this paragraph 3, the terms of this Specification 8 shall no longer apply with respect to the original Continuing Operations Instrument, but shall thereafter apply with respect to such replacement instrument(s).

Registry Operator Code of Conduct

- 1. In connection with the operation of the registry for the TLD, Registry Operator will not, and will not allow any parent, subsidiary, Affiliate, subcontractor or other related entity, to the extent such party is engaged in the provision of Registry Services with respect to the TLD (each, a "Registry Related Party"), to:
 - a. directly or indirectly show any preference or provide any special consideration to any registrar with respect to operational access to registry systems and related registry services, unless comparable opportunities to qualify for such preferences or considerations are made available to all registrars on substantially similar terms and subject to substantially similar conditions;
 - b. register domain names in its own right, except for names registered through an ICANN accredited registrar that are reasonably necessary for the management, operations and purpose of the TLD, provided, that Registry Operator may reserve names from registration pursuant to Section 2.6 of the Registry Agreement;
 - c. register names in the TLD or sub-domains of the TLD based upon proprietary access to information about searches or resolution requests by consumers for domain names not yet registered (commonly known as, "front-running");
 - d. allow any Affiliated registrar to disclose user data to Registry Operator or any Registry Related Party, except as necessary for the management and operations of the TLD, unless all unrelated third parties (including other registry operators) are given equivalent access to such user data on substantially similar terms and subject to substantially similar conditions; or
 - e. disclose confidential registry data or confidential information about its Registry Services or operations to any employee of any DNS services provider, except as necessary for the management and operations of the TLD, unless all unrelated third parties (including other registry operators) are given equivalent access to such confidential registry data or confidential information on substantially similar terms and subject to substantially similar conditions.
- 2. If Registry Operator or a Registry Related Party also operates as a provider of registrar or registrar-reseller services, Registry Operator will, or will cause such Registry Related Party to, maintain separate books of accounts with respect to its registrar or registrar-reseller operations.
- 3. Registry Operator will conduct internal reviews at least once per calendar year to ensure compliance with this Code of Conduct. Within twenty (20) calendar days

following the end of each calendar year, Registry Operator will provide the results of the internal review, along with a certification executed by an executive officer of Registry Operator certifying as to Registry Operator's compliance with this Code of Conduct, via email to an address to be provided by ICANN. (ICANN may specify in the future the form and contents of such reports or that the reports be delivered by other reasonable means.) Registry Operator agrees that ICANN may publicly post such results and certification.

- 4. Nothing set forth herein shall: (i) limit ICANN from conducting investigations of claims of Registry Operator's non-compliance with this Code of Conduct; or (ii) provide grounds for Registry Operator to refuse to cooperate with ICANN investigations of claims of Registry Operator's non-compliance with this Code of Conduct.
- 5. Nothing set forth herein shall limit the ability of Registry Operator or any Registry Related Party, to enter into arms-length transactions in the ordinary course of business with a registrar or reseller with respect to products and services unrelated in all respects to the TLD.
- 6. Registry Operator may request an exemption to this Code of Conduct, and such exemption may be granted by ICANN in ICANN's reasonable discretion, if Registry Operator demonstrates to ICANN's reasonable satisfaction that (i) all domain name registrations in the TLD are registered to, and maintained by, Registry Operator for its own exclusive use, (ii) Registry Operator does not sell, distribute or transfer control or use of any registrations in the TLD to any third party that is not an Affiliate of Registry Operator, and (iii) application of this Code of Conduct to the TLD is not necessary to protect the public interest.

REGISTRY PERFORMANCE SPECIFICATIONS

1. **Definitions**

- 1.1. DNS. Refers to the Domain Name System as specified in RFCs 1034, 1035, and related RFCs.
- 1.2. **DNSSEC proper resolution.** There is a valid DNSSEC chain of trust from the root trust anchor to a particular domain name, e.g., a TLD, a domain name registered under a TLD, etc.
- 1.3. EPP. Refers to the Extensible Provisioning Protocol as specified in RFC 5730 and related RFCs.
- 1.4. **IP address.** Refers to IPv4 or IPv6 addresses without making any distinction between the two. When there is need to make a distinction, IPv4 or IPv6 is used.
- 1.5. **Probes.** Network hosts used to perform (DNS, EPP, etc.) tests (see below) that are located at various global locations.
- 1.6. **RDDS.** Registration Data Directory Services refers to the collective of WHOIS and Web-based WHOIS services as defined in Specification 4 of this Agreement.
- 1.7. **RTT.** Round-Trip Time or **RTT** refers to the time measured from the sending of the first bit of the first packet of the sequence of packets needed to make a request until the reception of the last bit of the last packet of the sequence needed to receive the response. If the client does not receive the whole sequence of packets needed to consider the response as received, the request will be considered unanswered.
- 1.8. **SLR.** Service Level Requirement is the level of service expected for a certain parameter being measured in a Service Level Agreement (SLA).

	Parameter	SLR (monthly basis)
	DNS service availability	0 min downtime = 100% availability
	DNS name server availability	\leq 432 min of downtime (\approx 99%)
DNS	TCP DNS resolution RTT	\leq 1500 ms, for at least 95% of the queries
	UDP DNS resolution RTT	\leq 500 ms, for at least 95% of the queries
	DNS update time	\leq 60 min, for at least 95% of the probes
RDDS	RDDS availability	\leq 864 min of downtime (\approx 98%)
	RDDS query RTT	\leq 2000 ms, for at least 95% of the queries
	RDDS update time	\leq 60 min, for at least 95% of the probes
EPP	EPP service availability	\leq 864 min of downtime (\approx 98%)
	EPP session-command RTT	\leq 4000 ms, for at least 90% of the commands
	EPP query-command RTT	\leq 2000 ms, for at least 90% of the commands
	EPP transform-command RTT	\leq 4000 ms, for at least 90% of the commands

2. Service Level Agreement Matrix

Registry Operator is encouraged to do maintenance for the different services at the times and dates of statistically lower traffic for each service. However, note that there is no provision for planned outages or similar; any downtime, be it for maintenance or due to system failures, will be noted simply as downtime and counted for SLA purposes.

3. **DNS**

- 3.1. **DNS service availability**. Refers to the ability of the group of listed-as-authoritative name servers of a particular domain name (e.g., a TLD), to answer DNS queries from DNS probes. For the service to be considered available at a particular moment, at least, two of the delegated name servers registered in the DNS must have successful results from "**DNS tests**" to each of their public-DNS registered "**IP addresses**" to which the name server resolves. If 51% or more of the DNS testing probes see the service as unavailable during a given time, the DNS service will be considered unavailable.
- 3.2. **DNS name server availability.** Refers to the ability of a public-DNS registered "**IP address**" of a particular name server listed as authoritative for a domain name, to answer DNS queries from an Internet user. All the public DNS-registered "**IP address**" of all name servers of the domain name being monitored shall be tested individually. If 51% or more of the DNS testing probes get undefined/unanswered results from "**DNS tests**" to a name server "**IP address**" during a given time, the name server "**IP address**" will be considered unavailable.
- 3.3. **UDP DNS resolution RTT.** Refers to the **RTT** of the sequence of two packets, the UDP DNS query and the corresponding UDP DNS response. If the **RTT** is 5 times greater than the time specified in the relevant **SLR**, the **RTT** will be considered undefined.
- 3.4. **TCP DNS resolution RTT.** Refers to the **RTT** of the sequence of packets from the start of the TCP connection to its end, including the reception of the DNS response for only one DNS query. If the **RTT** is 5 times greater than the time specified in the relevant **SLR**, the **RTT** will be considered undefined.
- 3.5. DNS resolution RTT. Refers to either "UDP DNS resolution RTT" or "TCP DNS resolution RTT".
- 3.6. **DNS update time.** Refers to the time measured from the reception of an EPP confirmation to a transform command on a domain name, until the name servers of the parent domain name answer "**DNS queries**" with data consistent with the change made. This only applies for changes to DNS information.
- 3.7. **DNS test.** Means one non-recursive DNS query sent to a particular "**IP address**" (via UDP or TCP). If DNSSEC is offered in the queried DNS zone, for a query to be considered answered, the signatures must be positively verified against a corresponding DS record published in the parent zone or, if the parent is not signed, against a statically configured Trust Anchor. The answer to the query must contain the corresponding information from the Registry System, otherwise the query will be considered unanswered. A query with a "**DNS resolution RTT**" 5 times higher than the corresponding SLR, will be considered unanswered. The possible results to a DNS test are: a number in milliseconds corresponding to the "**DNS resolution RTT**" or, undefined/unanswered.
- 3.8. Measuring DNS parameters. Every minute, every DNS probe will make an UDP or TCP "DNS test" to each of the public-DNS registered "IP addresses" of the name servers of the domain

name being monitored. If a "**DNS test**" result is undefined/unanswered, the tested IP will be considered unavailable from that probe until it is time to make a new test.

- 3.9. **Collating the results from DNS probes.** The minimum number of active testing probes to consider a measurement valid is 20 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 3.10. **Distribution of UDP and TCP queries.** DNS probes will send UDP or TCP "**DNS test**" approximating the distribution of these queries.
- 3.11. **Placement of DNS probes.** Probes for measuring DNS parameters shall be placed as near as possible to the DNS resolvers on the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

4. <u>RDDS</u>

- 4.1. **RDDS availability.** Refers to the ability of all the RDDS services for the TLD, to respond to queries from an Internet user with appropriate data from the relevant Registry System. If 51% or more of the RDDS testing probes see any of the RDDS services as unavailable during a given time, the RDDS will be considered unavailable.
- 4.2. WHOIS query RTT. Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the WHOIS response. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.
- 4.3. Web-based-WHOIS query RTT. Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the HTTP response for only one HTTP request. If Registry Operator implements a multiple-step process to get to the information, only the last step shall be measured. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.
- 4.4. **RDDS query RTT.** Refers to the collective of "**WHOIS query RTT**" and "**Web-based-WHOIS query RTT**".
- 4.5. **RDDS update time**. Refers to the time measured from the reception of an EPP confirmation to a transform command on a domain name, host or contact, up until the servers of the RDDS services reflect the changes made.
- 4.6. RDDS test. Means one query sent to a particular "IP address" of one of the servers of one of the RDDS services. Queries shall be about existing objects in the Registry System and the responses must contain the corresponding information otherwise the query will be considered unanswered. Queries with an RTT 5 times higher than the corresponding SLR will be considered as unanswered. The possible results to an RDDS test are: a number in milliseconds corresponding to the RTT or undefined/unanswered.
- 4.7. **Measuring RDDS parameters.** Every 5 minutes, RDDS probes will select one IP address from all the public-DNS registered "**IP addresses**" of the servers for each RDDS service of the TLD being monitored and make an "**RDDS test**" to each one. If an "**RDDS test**" result is

undefined/unanswered, the corresponding RDDS service will be considered as unavailable from that probe until it is time to make a new test.

- 4.8. **Collating the results from RDDS probes.** The minimum number of active testing probes to consider a measurement valid is 10 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 4.9. **Placement of RDDS probes.** Probes for measuring RDDS parameters shall be placed inside the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

5. <u>EPP</u>

- 5.1. EPP service availability. Refers to the ability of the TLD EPP servers as a group, to respond to commands from the Registry accredited Registrars, who already have credentials to the servers. The response shall include appropriate data from the Registry System. An EPP command with "EPP command RTT" 5 times higher than the corresponding SLR will be considered as unanswered. If 51% or more of the EPP testing probes see the EPP service as unavailable during a given time, the EPP service will be considered unavailable.
- 5.2. EPP session-command RTT. Refers to the RTT of the sequence of packets that includes the sending of a session command plus the reception of the EPP response for only one EPP session command. For the login command it will include packets needed for starting the TCP session. For the logout command it will include packets needed for closing the TCP session. EPP session commands are those described in section 2.9.1 of EPP RFC 5730. If the RTT is 5 times or more the corresponding SLR, the RTT will be considered undefined.
- 5.3. EPP query-command RTT. Refers to the RTT of the sequence of packets that includes the sending of a query command plus the reception of the EPP response for only one EPP query command. It does not include packets needed for the start or close of either the EPP or the TCP session. EPP query commands are those described in section 2.9.2 of EPP RFC 5730. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.
- 5.4. EPP transform-command RTT. Refers to the RTT of the sequence of packets that includes the sending of a transform command plus the reception of the EPP response for only one EPP transform command. It does not include packets needed for the start or close of either the EPP or the TCP session. EPP transform commands are those described in section 2.9.3 of EPP RFC 5730. If the RTT is 5 times or more the corresponding SLR, the RTT will be considered undefined.

5.5. EPP command RTT. Refers to "EPP session-command RTT", "EPP query-command RTT" or "EPP transform-command RTT".

5.6. **EPP test.** Means one EPP command sent to a particular "**IP address**" for one of the EPP servers. Query and transform commands, with the exception of "create", shall be about existing objects in the Registry System. The response shall include appropriate data from the Registry System. The possible results to an EPP test are: a number in milliseconds corresponding to the "**EPP command RTT**" or undefined/unanswered.

- 5.7. Measuring EPP parameters. Every 5 minutes, EPP probes will select one "IP address" of the EPP servers of the TLD being monitored and make an "EPP test"; every time they should alternate between the 3 different types of commands and between the commands inside each category. If an "EPP test" result is undefined/unanswered, the EPP service will be considered as unavailable from that probe until it is time to make a new test.
- 5.8. **Collating the results from EPP probes.** The minimum number of active testing probes to consider a measurement valid is 5 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 5.9. **Placement of EPP probes.** Probes for measuring EPP parameters shall be placed inside or close to Registrars points of access to the Internet across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

6. Emergency Thresholds

The following matrix presents the Emergency Thresholds that, if reached by any of the services mentioned above for a TLD, would cause the Emergency Transition of the Critical Functions as specified in Section 2.13. of this Agreement.

Critical Function	Emergency Threshold
DNS service (all servers)	4-hour downtime / week
DNSSEC proper resolution	4-hour downtime / week
EPP	24-hour downtime / week
RDDS (WHOIS/Web-based WHOIS)	24-hour downtime / week
Data Escrow	Breach of the Registry Agreement caused by missing escrow deposits as described in Specification 2, Part B, Section 6.

7. Emergency Escalation

Escalation is strictly for purposes of notifying and investigating possible or potential issues in relation to monitored services. The initiation of any escalation and the subsequent cooperative investigations do not in themselves imply that a monitored service has failed its performance requirements.

Escalations shall be carried out between ICANN and Registry Operators, Registrars and Registry Operator, and Registrars and ICANN. Registry Operators and ICANN must provide said emergency operations departments. Current contacts must be maintained between ICANN and Registry Operators and published to Registrars, where relevant to their role in escalations, prior to any processing of an Emergency Escalation by all related parties, and kept current at all times.

7.1. Emergency Escalation initiated by ICANN

Upon reaching 10% of the Emergency thresholds as described in Section 6, ICANN's emergency operations will initiate an Emergency Escalation with the relevant Registry Operator. An Emergency Escalation consists of the following minimum elements: electronic (i.e., email or SMS) and/or voice contact notification to the Registry Operator's emergency operations department with detailed information concerning the issue being escalated, including evidence of monitoring failures, cooperative trouble-shooting of the monitoring failure between ICANN staff and the Registry Operator, and the

commitment to begin the process of rectifying issues with either the monitoring service or the service being monitoring.

7.2. Emergency Escalation initiated by Registrars

Registry Operator will maintain an emergency operations departments prepared to handle emergency requests from registrars. In the event that a registrar is unable to conduct EPP transactions with the Registry because of a fault with the Registry Service and is unable to either contact (through ICANN mandated methods of communication) the Registry Operator, or the Registry Operator is unable or unwilling to address the fault, the registrar may initiate an Emergency Escalation to the emergency operator as explained above.

7.3. Notifications of Outages and Maintenance

In the event that a Registry Operator plans maintenance, they will provide related notice to the ICANN emergency operations department, at least, 24 hours ahead of that maintenance. ICANN's emergency operations department will note planned maintenance times, and suspend Emergency Escalation services for the monitored services during the expected maintenance outage period.

If Registry Operator declares an outage, as per their contractual obligations with ICANN, on services under SLA and performance requirements, it will notify the ICANN emergency operations department. During that declared outage, ICANN's emergency operations department will note and suspend Emergency Escalation services for the monitored services involved.

8. Covenants of Performance Measurement

- 8.1. **No interference.** Registry Operator shall not interfere with measurement **Probes**, including any form of preferential treatment of the requests for the monitored services. Registry Operator shall respond to the measurement tests described in this Specification as it would do with any other request from Internet users (for DNS and RDDS) or registrars (for EPP).
- 8.2. **ICANN testing registrar.** Registry Operator agrees that ICANN will have a testing registrar used for purposes of measuring the **SLR**s described above. Registry Operator agrees to not provide any differentiated treatment for the testing registrar other than no billing of the transactions. ICANN shall not use the registrar for registering domain names (or other registry objects) for itself or others, except for the purposes of verifying contractual compliance with the conditions described in this Agreement.