

## 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 Nokia Corporation, a corporation formed under the laws of the Republic of Finland (“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 **.nokia** (the “TLD”). Upon the Effective Date and until the earlier of the expiration of the Term (as defined in Section 4.1) or the termination of this Agreement pursuant to Article 4, 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 has 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 has 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 6 attached hereto ("Specification 6") and such other Registry Services set forth on Exhibit A (collectively, the "Approved Services"). If Registry Operator desires to provide any Registry Service that is not an Approved Service or is a material 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 <http://www.icann.org/en/registries/rsep/rsep.html>, 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 only with the written approval of ICANN, and, upon any such approval, such 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 <http://www.icann.org/general/consensus-policies.htm>, 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 in Specification 1 attached hereto ("Specification 1").

**2.3 Data Escrow.** Registry Operator shall comply with the registry data escrow procedures set forth in Specification 2 attached hereto ("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 set forth in Specification 3 attached hereto ("Specification 3").

**2.5 Publication of Registration Data.** Registry Operator shall provide public access to registration data in accordance with Specification 4 attached hereto (“Specification 4”).

**2.6 Reserved Names.** Except to the extent that ICANN otherwise expressly authorizes in writing, Registry Operator shall comply with the requirements set forth in Specification 5 attached hereto (“Specification 5”). Registry Operator may at any time establish or modify policies concerning Registry Operator’s ability to reserve (i.e., withhold from registration or allocate to Registry Operator, but not register to third parties, delegate, use, activate in the DNS or otherwise make available) or block additional character strings within the TLD at its discretion. Except as specified in Specification 5, if Registry Operator is the registrant for any domain names in the registry TLD, such registrations must be through an ICANN accredited registrar, and 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 attached hereto (“Specification 6”).

**2.8 Protection of Legal Rights of Third Parties.** Registry Operator must specify, and comply with, the processes and procedures for launch of the TLD and initial registration-related and ongoing protection of the legal rights of third parties as set forth Specification 7 attached hereto (“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) All domain name registrations in the TLD must be registered through an ICANN accredited registrar; provided, that Registry Operator need not use a registrar if it registers names in its own name in order to withhold such names from delegation or use in accordance with Section 2.6. Subject to the requirements of Specification 11, 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 (the “Registry-Registrar Agreement”). Registry Operator may amend the Registry-Registrar Agreement from time to time; provided, however, that any material revisions thereto must be approved by ICANN before any such revisions become effective and binding on any registrar. Registry Operator will provide ICANN and all registrars authorized to register names in the TLD at least fifteen (15) calendar days written notice of any revisions to the Registry-Registrar Agreement before any such revisions become effective and binding on any registrar. During such period, ICANN will determine whether such proposed revisions are immaterial, potentially material or material in nature. If ICANN has not provided Registry Operator with notice of its determination within such fifteen (15) calendar-day period, ICANN shall be deemed to have determined that such proposed revisions are immaterial in nature. If ICANN determines, or is deemed to have determined under this Section 2.9(a), that such revisions are immaterial, then Registry Operator may adopt and implement such revisions. If ICANN determines such revisions are either material or potentially material, ICANN will thereafter follow its procedure regarding review and approval of changes to Registry-Registrar Agreements at <http://www.icann.org/en/resources/registries/rra-amendment-procedure>, and such revisions may not be adopted and implemented until approved 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 treat such contract or related documents that are appropriately marked as confidential (as required by Section 7.15) as Confidential Information of Registry Operator in accordance with Section 7.15 (except that ICANN may disclose such contract and related documents to relevant competition authorities). ICANN reserves the right, but not the obligation, to refer any such contract, related documents, transaction or other arrangement to relevant competition authorities in the event that ICANN determines that such contract, related documents, transaction or other arrangement might raise significant competition issues under applicable law. If feasible and appropriate under the circumstances, ICANN will give Registry Operator advance notice prior to making any such referral to a competition authority.

(c) For the purposes of this Agreement: (i) “Affiliate” means a person or entity that, directly or indirectly, through one or more intermediaries, or in combination with one or more other persons or entities, 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 ICANN and 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 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 (1) to ten (10) years at the discretion of the registrar, but no greater than ten (10) years.

(b) With respect to renewal of domain name registrations, Registry Operator shall provide ICANN and 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 (1) to ten (10) years at the discretion of the registrar, but no greater than ten (10) years.

(c) In addition, Registry Operator must have uniform pricing for renewals of 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 during regular business hours and 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 reasonably necessary to demonstrate Registry Operator’s compliance with this Agreement. Upon no less than ten (10) calendar 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. ICANN will treat any information obtained in connection with such audits that is appropriately marked as confidential (as required by Section 7.15) as Confidential Information of Registry Operator in accordance with Section 7.15.

(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% in a given quarter 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 Registry Operator's knowledge 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 Specification 8 attached hereto ("Specification 8").

**2.13 Emergency Transition.** Registry Operator agrees that, in the event that any of the emergency thresholds for registry functions set forth in Section 6 of Specification 10 is reached, 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 <<http://www.icann.org/en/resources/registries/transition-processes>>) (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.

**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 Specification 9 attached hereto (“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 related to the operation of the TLD reasonably necessary for the purposes of such study requested by ICANN or its designee, provided, that Registry Operator may withhold (a) any internal analyses or evaluations prepared by Registry Operator with respect to such data and (b) any data to the extent that the delivery of such data would be in violation of applicable law. Any data delivered to ICANN or its designee pursuant to this Section 2.15 that is appropriately marked as confidential (as required by Section 7.15) shall be treated as Confidential Information of Registry Operator in accordance with Section 7.15, provided that, if ICANN aggregates and makes anonymous such data, ICANN or its designee may disclose such data to any third party. Following completion of an economic study for which Registry Operator has provided data, ICANN will destroy all data provided by Registry Operator that has not been aggregated and made anonymous.

**2.16 Registry Performance Specifications.** Registry Performance Specifications for operation of the TLD will be as set forth in Specification 10 attached hereto (“Specification 10”). Registry Operator shall comply with such Performance Specifications and, for a period of at least one (1) year, shall keep technical and operational records sufficient to evidence compliance with such specifications for each calendar year during the Term.

**2.17 Additional Public Interest Commitments.** Registry Operator shall comply with the public interest commitments set forth in Specification 11 attached hereto (“Specification 11”).

**2.18 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.

## 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 (the "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 (10) 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 (10) 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 of competent jurisdiction 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 of competent jurisdiction; or

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

(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 of competent jurisdiction 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 of competent jurisdiction.

(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) calendar 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 material 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 sixty (60) calendar 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 or Sections 2 and 3 of Specification 11, 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 who 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 knowledge of the foregoing.

(g) ICANN may, upon thirty (30) calendar days' notice to Registry Operator, terminate this Agreement as specified in Section 7.5.

#### **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 of competent jurisdiction 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 of competent jurisdiction.

(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 (i) ICANN will take into consideration any intellectual property rights of Registry Operator (as communicated to ICANN by Registry Operator) in determining whether to transition operation of the TLD to a successor registry operator and (ii) if Registry Operator demonstrates to ICANN's reasonable satisfaction that (A) all domain name registrations in the TLD are registered to, and maintained by, Registry Operator or its Affiliates for their exclusive use, (B) 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 (C) 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 for the maintenance and operation of the TLD, 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 Mediation.** In the event of any dispute arising under or in connection with this Agreement, before either party may initiate arbitration pursuant to Section 5.2 below, ICANN and Registry Operator must attempt to resolve the dispute through mediation in accordance with the following terms and conditions:

(a) A party shall submit a dispute to mediation by written notice to the other party. The mediation shall be conducted by a single mediator selected by the parties. If the parties cannot agree on a mediator within fifteen (15) calendar days of delivery of written notice pursuant to this Section 5.1, the parties will promptly select a mutually acceptable mediation provider entity, which entity shall, as soon as practicable following such entity's selection, designate a mediator, who is a licensed attorney with general knowledge of contract law, has no ongoing business relationship with either party and, to the extent necessary to mediate the particular dispute, general knowledge of the domain name system. Any mediator must confirm in writing that he or she is not, and will not become during the term of the mediation, an employee, partner, executive officer, director, or security holder of ICANN or Registry Operator. If such confirmation is not provided by the appointed mediator, then a replacement mediator shall be appointed pursuant to this Section 5.1(a).

(b) The mediator shall conduct the mediation in accordance with the rules and procedures that he or she determines following consultation with the parties. The parties shall discuss the dispute in good faith and attempt, with the mediator's assistance, to reach an amicable resolution of the dispute. The mediation shall be treated

as a settlement discussion and shall therefore be confidential and may not be used against either party in any later proceeding relating to the dispute, including any arbitration pursuant to Section 5.2. The mediator may not testify for either party in any later proceeding relating to the dispute.

(c) Each party shall bear its own costs in the mediation. The parties shall share equally the fees and expenses of the mediator. Each party shall treat information received from the other party pursuant to the mediation that is appropriately marked as confidential (as required by Section 7.15) as Confidential Information of such other party in accordance with Section 7.15.

(d) If the parties have engaged in good faith participation in the mediation but have not resolved the dispute for any reason, either party or the mediator may terminate the mediation at any time and the dispute can then proceed to arbitration pursuant to Section 5.2 below. If the parties have not resolved the dispute for any reason by the date that is ninety (90) calendar days following the date of the notice delivered pursuant to Section 5.1(a), the mediation shall automatically terminate (unless extended by agreement of the parties) and the dispute can then proceed to arbitration pursuant to Section 5.2 below.

**5.2 Arbitration.** Disputes arising under or in connection with this Agreement that are not resolved pursuant to Section 5.1, 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, (ii) the parties agree in writing to a greater number of arbitrators, or (iii) the dispute arises under Section 7.6 or 7.7. In the case of clauses (i), (ii) or (iii) 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). Each party shall treat information received from the other party pursuant to the arbitration that is appropriately marked as confidential (as required by Section 7.15) as

Confidential Information of such other party in accordance with Section 7.15. 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.

**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, except with respect to Registry Operator's indemnification obligations pursuant to Section 7.1 and Section 7.2. 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 or court of competent jurisdiction 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.

(a) 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 (collectively, the "Registry-Level Fees"). 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 consecutive four calendar quarter period in the

aggregate (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’s obligation to pay the quarterly registry-level fixed fee will begin on the date on which the TLD is delegated in the DNS to Registry Operator. The first quarterly payment of the registry-level fixed fee will be prorated based on the number of calendar days between the delegation date and the end of the calendar quarter in which the delegation date falls.

(b) Subject to Section 6.1(a), Registry Operator shall pay the Registry-Level Fees on a quarterly basis to an account designated by ICANN within thirty (30) calendar days following the date of the invoice provided 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 fourteen (14) calendar 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.**

(a) If the ICANN accredited registrars (accounting, in the aggregate, for payment of two-thirds of all registrar-level fees (or such portion of ICANN accredited registrars necessary to approve variable accreditation fees under the then-current registrar accreditation agreement), do not approve, pursuant to the 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 “Variable Registry-Level Fee”). 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 that 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 Pass Through Fees.** Registry Operator shall pay to ICANN (i) a one-time fee equal to US\$5,000 for access to and use of the Trademark Clearinghouse as described in Specification 7 (the “RPM Access Fee”) and (ii) an amount specified by ICANN not to exceed US\$0.25 per Sunrise Registration and Claims Registration (as such terms are used in Trademark Clearinghouse RPMs incorporated herein pursuant to Specification 7) (the “RPM Registration Fee”). The RPM Access Fee will be invoiced as of the Effective Date of this Agreement, and Registry Operator shall pay such fee to an account specified by ICANN within thirty (30) calendar days following the date of the invoice. ICANN will invoice Registry Operator quarterly for the RPM Registration Fee, which shall be due in accordance with the invoicing and payment procedure specified in Section 6.1.

**6.5 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 6.5 shall be effective as of the first day of the first calendar quarter following at least thirty (30) days after ICANN’s delivery to Registry Operator of such fee adjustment notice.

**6.6 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.

(a) Registry Operator shall indemnify and defend ICANN and its directors, officers, 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 of competent jurisdiction or arbitrator.

(b) For any claims by ICANN for indemnification whereby multiple registry 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.

**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.

**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 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 of Control; Assignment and Subcontracting.** Except as set forth in this Section 7.5, neither party may assign any of its rights and obligations under this Agreement without the prior written approval of the other party, which approval will not

be unreasonably withheld. For purposes of this Section 7.5, a direct or indirect change of control of Registry Operator or any subcontracting arrangement that relates to any Critical Function (as identified in Section 6 of Specification 10) for the TLD (a “Material Subcontracting Arrangement”) shall be deemed an assignment.

(a) Registry Operator must provide no less than thirty (30) calendar days advance notice to ICANN of any assignment or Material Subcontracting Arrangement, and any agreement to assign or subcontract any portion of the operations of the TLD (whether or not a Material Subcontracting Arrangement) 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. 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.

(b) Within thirty (30) calendar days of either such notification pursuant to Section 7.5(a), ICANN may request additional information from Registry Operator establishing (i) compliance with this Agreement and (ii) that the party acquiring such control or entering into such assignment or Material Subcontracting Arrangement (in any case, the “Contracting Party”) and the ultimate parent entity of the Contracting Party meets the ICANN-adopted specification or policy on registry operator criteria then in effect (including with respect to financial resources and operational and technical capabilities), in which case Registry Operator must supply the requested information within fifteen (15) calendar days.

(c) Registry Operator agrees that ICANN’s consent to any assignment, change of control or Material Subcontracting Arrangement will also be subject to background checks on any proposed Contracting Party (and such Contracting Party’s Affiliates).

(d) If ICANN fails to expressly provide or withhold its consent to any assignment, direct or indirect change of control of Registry Operator or any Material Subcontracting Arrangement within thirty (30) calendar days of ICANN’s receipt of notice of such transaction (or, if ICANN has requested additional information from Registry Operator as set forth above, thirty (30) calendar days of the receipt of all requested written information regarding such transaction) from Registry Operator, ICANN shall be deemed to have consented to such transaction.

(e) In connection with any such assignment, change of control or Material Subcontracting Arrangement, Registry Operator shall comply with the Registry Transition Process.

(f) Notwithstanding the foregoing, (i) any consummated change of control shall not be voidable by ICANN; provided, however, that, if ICANN reasonably determines to withhold its consent to such transaction, ICANN may terminate this Agreement pursuant to Section 4.3(g), (ii) ICANN may assign this Agreement without the

consent of Registry Operator upon approval of the ICANN Board of Directors in conjunction with a reorganization, reconstitution or re-incorporation of ICANN upon such assignee's express assumption of the terms and conditions of this Agreement, (iii) Registry Operator may assign this Agreement without the consent of ICANN directly to a wholly-owned subsidiary of Registry Operator, or, if Registry Operator is a wholly-owned subsidiary, to its direct parent or to another wholly-owned subsidiary of its direct parent, upon such subsidiary's or parent's, as applicable, express assumption of the terms and conditions of this Agreement, and (iv) ICANN shall be deemed to have consented to any assignment, Material Subcontracting Arrangement or change of control transaction in which the Contracting Party is an existing operator of a generic top-level domain pursuant to a registry agreement between such Contracting Party and ICANN (provided that such Contracting Party is then in compliance with the terms and conditions of such registry agreement in all material respects), unless ICANN provides to Registry Operator a written objection to such transaction within ten (10) calendar days of ICANN's receipt of notice of such transaction pursuant to this Section 7.5. Notwithstanding Section 7.5(a), in the event an assignment is made pursuant to clauses (ii) or (iii) of this Section 7.5(f), the assigning party will provide the other party with prompt notice following any such assignment.

#### **7.6 Amendments and Waivers.**

(a) If the ICANN Board of Directors 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 adopt a Special Amendment pursuant to the requirements of and process set forth in this Section 7.6; provided that a Special Amendment may not be a Restricted Amendment.

(b) Prior to submitting a Special Amendment for Registry Operator Approval, ICANN shall first consult in good faith with the Working Group regarding the form and substance of such 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 proposed amendment to the Applicable Registry Operators in accordance with Section 7.9. ICANN will consider the public comments submitted on a Special Amendment during the Posting Period (including comments submitted by the Applicable Registry Operators).

(c) If, within one hundred eighty (180) calendar days following the expiration of the Posting Period (the "Approval Period"), the ICANN Board of Directors approves a Special Amendment (which may be in a form different than submitted for public comment, but must address the subject matter of the Special Amendment posted for public comment, as modified to reflect and/or address input from the Working Group and public comments), ICANN shall provide notice of, and submit, such Special Amendment for approval or disapproval by the Applicable Registry Operators. If, during the sixty (60) calendar day period following the date ICANN provides such notice to the Applicable

Registry Operators, such Special Amendment receives Registry Operator Approval, such Special Amendment shall be deemed approved (an "Approved Amendment") by the Applicable Registry Operators, and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Approved Amendment to Registry Operator (the "Amendment Effective Date"). In the event that a Special Amendment does not receive Registry Operator Approval, the Special Amendment shall be deemed not approved by the Applicable Registry Operators (a "Rejected Amendment"). A Rejected Amendment will have no effect on the terms and conditions of this Agreement, except as set forth below.

(d) If the ICANN Board of Directors reasonably determines that a Rejected Amendment falls within the subject matter categories set forth in Section 1.2 of Specification 1, the ICANN Board of Directors may adopt a resolution (the date such resolution is adopted is referred to herein as the "Resolution Adoption Date") requesting an Issue Report (as such term is defined in ICANN's Bylaws) by the Generic Names Supporting Organization (the "GNSO") regarding the substance of such Rejected Amendment. The policy development process undertaken by the GNSO pursuant to such requested Issue Report is referred to herein as a "PDP." If such PDP results in a Final Report supported by a GNSO Supermajority (as defined in ICANN's Bylaws) that either (i) recommends adoption of the Rejected Amendment as Consensus Policy or (ii) recommends against adoption of the Rejected Amendment as Consensus Policy, and, in the case of (i) above, the Board adopts such Consensus Policy, Registry Operator shall comply with its obligations pursuant to Section 2.2 of this Agreement. In either case, ICANN will abandon the Rejected Amendment and it will have no effect on the terms and conditions of this Agreement. Notwithstanding the foregoing provisions of this Section 7.6(d), the ICANN Board of Directors shall not be required to initiate a PDP with respect to a Rejected Amendment if, at any time in the twelve (12) month period preceding the submission of such Rejected Amendment for Registry Operator Approval pursuant to Section 7.6(c), the subject matter of such Rejected Amendment was the subject of a concluded or otherwise abandoned or terminated PDP that did not result in a GNSO Supermajority recommendation.

(e) If (a) a Rejected Amendment does not fall within the subject matter categories set forth in Section 1.2 of Specification 1, (b) the subject matter of a Rejected Amendment was, at any time in the twelve (12) month period preceding the submission of such Rejected Amendment for Registry Operator Approval pursuant to Section 7.6(c), the subject of a concluded or otherwise abandoned or terminated PDP that did not result in a GNSO Supermajority recommendation, or (c) a PDP does not result in a Final Report supported by a GNSO Supermajority that either (A) recommends adoption of the Rejected Amendment as Consensus Policy or (B) recommends against adoption of the Rejected Amendment as Consensus Policy (or such PDP has otherwise been abandoned or terminated for any reason), then, in any such case, such Rejected Amendment may still be adopted and become effective in the manner described below. In order for the Rejected Amendment to be adopted, the following requirements must be satisfied:

(i) the subject matter of the Rejected Amendment must be within the scope of ICANN's mission and consistent with a balanced application of its core values (as described in ICANN's Bylaws);

(ii) the Rejected Amendment must be justified by a Substantial and Compelling Reason in the Public Interest, must be likely to promote such interest, taking into account competing public and private interests that are likely to be affected by the Rejected Amendment, and must be narrowly tailored and no broader than reasonably necessary to address such Substantial and Compelling Reason in the Public Interest;

(iii) to the extent the Rejected Amendment prohibits or requires conduct or activities, imposes material costs on the Applicable Registry Operators, and/or materially reduces public access to domain name services, the Rejected Amendment must be the least restrictive means reasonably available to address the Substantial and Compelling Reason in the Public Interest;

(iv) the ICANN Board of Directors must submit the Rejected Amendment, along with a written explanation of the reasoning related to its determination that the Rejected Amendment meets the requirements set out in subclauses (i) through (iii) above, for public comment for a period of no less than thirty (30) calendar days; and

(v) following such public comment period, the ICANN Board of Directors must (a) engage in consultation (or direct ICANN management to engage in consultation) with the Working Group, subject matter experts, members of the GNSO, relevant advisory committees and other interested stakeholders with respect to such Rejected Amendment for a period of no less than sixty (60) calendar days; and (b) following such consultation, reapprove the Rejected Amendment (which may be in a form different than submitted for Registry Operator Approval, but must address the subject matter of the Rejected Amendment, as modified to reflect and/or address input from the Working Group and public comments) by the affirmative vote of at least two-thirds of the members of the ICANN Board of Directors eligible to vote on such matter, taking into account any ICANN policy affecting such eligibility, including ICANN's Conflict of Interest Policy (a "Board Amendment").

Such Board Amendment shall, subject to Section 7.6(f), be deemed an Approved Amendment, and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Board Amendment to Registry Operator (which effective date shall be deemed the Amendment Effective Date hereunder). Notwithstanding the foregoing, a Board Amendment may not amend the registry fees charged by ICANN hereunder, or amend this Section 7.6.

(f) Notwithstanding the provisions of Section 7.6(e), a Board Amendment shall not be deemed an Approved Amendment if, during the thirty (30) calendar day period following the approval by the ICANN Board of Directors of the Board Amendment, the Working Group, on the behalf of the Applicable Registry Operators, submits to the ICANN Board of Directors an alternative to the Board Amendment (an “Alternative Amendment”) that meets the following requirements:

(i) sets forth the precise text proposed by the Working Group to amend this Agreement in lieu of the Board Amendment;

(ii) addresses the Substantial and Compelling Reason in the Public Interest identified by the ICANN Board of Directors as the justification for the Board Amendment; and

(iii) compared to the Board Amendment is: (a) more narrowly tailored to address such Substantial and Compelling Reason in the Public Interest, and (b) to the extent the Alternative Amendment prohibits or requires conduct or activities, imposes material costs on Affected Registry Operators, or materially reduces access to domain name services, is a less restrictive means to address the Substantial and Compelling Reason in the Public Interest.

Any proposed amendment that does not meet the requirements of subclauses (i) through (iii) in the immediately preceding sentence shall not be considered an Alternative Amendment hereunder and therefore shall not supersede or delay the effectiveness of the Board Amendment. If, following the submission of the Alternative Amendment to the ICANN Board of Directors, the Alternative Amendment receives Registry Operator Approval, the Alternative Amendment shall supersede the Board Amendment and shall be deemed an Approved Amendment hereunder (and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Alternative Amendment to Registry Operator, which effective date shall be deemed the Amendment Effective Date hereunder), unless, within a period of sixty (60) calendar days following the date that the Working Group notifies the ICANN Board of Directors of Registry Operator Approval of such Alternative Amendment (during which time ICANN shall engage with the Working Group with respect to the Alternative Amendment), the ICANN Board of Directors by the affirmative vote of at least two-thirds of the members of the ICANN Board of Directors eligible to vote on such matter, taking into account any ICANN policy affecting such eligibility, including ICANN’s Conflict of Interest Policy, rejects the Alternative Amendment. If (A) the Alternative Amendment does not receive Registry Operator Approval within thirty (30) calendar days of submission of such Alternative Amendment to the Applicable Registry Operators (and the Working Group shall notify ICANN of the date of such submission), or (B) the ICANN Board of Directors rejects the Alternative Amendment by such two-thirds vote, the Board Amendment (and not the Alternative Amendment) shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice to Registry Operator (which

effective date shall be deemed the Amendment Effective Date hereunder). If the ICANN Board of Directors rejects an Alternative Amendment, the board shall publish a written rationale setting forth its analysis of the criteria set forth in Sections 7.6(f)(i) through 7.6(f)(iii). The ability of the ICANN Board of Directors to reject an Alternative Amendment hereunder does not relieve the Board of the obligation to ensure that any Board Amendment meets the criteria set forth in Section 7.6(e)(i) through 7.6(e)(v).

(g) In the event that Registry Operator believes an Approved Amendment does not meet the substantive requirements set out in this Section 7.6 or has been adopted in contravention of any of the procedural provisions of this Section 7.6, Registry Operator may challenge the adoption of such Special Amendment pursuant to the dispute resolution provisions set forth in Article 5, except that such arbitration shall be conducted by a three-person arbitration panel. Any such challenge must be brought within sixty (60) calendar days following the date ICANN provided notice to Registry Operator of the Approved Amendment, and ICANN may consolidate all challenges brought by registry operators (including Registry Operator) into a single proceeding. The Approved Amendment will be deemed not to have amended this Agreement during the pendency of the dispute resolution process.

(h) Registry Operator may apply in writing to ICANN for an exemption from the Approved Amendment (each such request submitted by Registry Operator hereunder, an "Exemption Request") during the thirty (30) calendar day period following the date ICANN provided notice to Registry Operator of such Approved Amendment. 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 long-term 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. If the Exemption Request is approved by ICANN, the Approved Amendment will not amend this Agreement; provided, that any conditions, alternatives or variations of the Approved Amendment required by ICANN shall be effective and, to the extent applicable, will amend this Agreement as of the Amendment Effective Date. 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(j), agreed to by ICANN following mediation pursuant to Section 5.1 or through an arbitration decision pursuant to Section 5.2 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.

(i) Except as set forth in this Section 7.6, Section 7.7 and as otherwise set forth in this Agreement and the Specifications hereto, 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 or Section 7.7 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 Sections 7.6 or 7.7 shall be deemed to limit Registry Operator's obligation to comply with Section 2.2.

(j) 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 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, at the prevailing exchange rate published the prior day in the U.S. Edition of the Wall Street Journal for the date such calculation is made by ICANN) 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 the 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: (A) an amendment of Specification 1, (B) 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, (C) an amendment to the definition of Registry Services as set forth in the first paragraph of Section 2.1 of Specification 6, or (D) an amendment to the length of the Term.

(iv) “Substantial and Compelling Reason in the Public Interest” means a reason that is justified by an important, specific, and articulated public interest goal that is within ICANN's mission and consistent with a balanced application of ICANN's core values as defined in ICANN's Bylaws.

(v) “Working Group” means representatives of the Applicable Registry Operators and other members of the community that the Registry Stakeholders Group 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(i)).

(k) Notwithstanding anything in this Section 7.6 to the contrary, (i) if Registry Operator provides evidence to ICANN's reasonable satisfaction that the Approved Amendment would materially increase the cost of providing Registry Services, then ICANN will allow up to one-hundred eighty (180) calendar days for Approved Amendment to become effective with respect to Registry Operator, and (ii) no Approved Amendment adopted pursuant to Section 7.6 shall become effective with respect to Registry Operator if Registry Operator provides ICANN with an irrevocable notice of termination pursuant to Section 4.4(b).

## **7.7 Negotiation Process.**

(a) If either the Chief Executive Officer of ICANN (“CEO”) or the Chairperson of the Registry Stakeholder Group (“Chair”) desires to discuss any revision(s) to this Agreement, the CEO or Chair, as applicable, shall provide written notice to the other person, which shall set forth in reasonable detail the proposed revisions to this Agreement (a “Negotiation Notice”). Notwithstanding the foregoing, neither the CEO nor the Chair may (i) propose revisions to this Agreement that modify any Consensus Policy then existing, (ii) propose revisions to this Agreement pursuant to this Section 7.7 on or before June 30, 2014, or (iii) propose revisions or submit a Negotiation Notice more than once during any twelve (12) month period beginning on July 1, 2014.

(b) Following receipt of the Negotiation Notice by either the CEO or the Chair, ICANN and the Working Group (as defined in Section 7.6) shall consult in good faith negotiations regarding the form and substance of the proposed revisions to this Agreement, which shall be in the form of a proposed amendment to this Agreement (the “Proposed Revisions”), for a period of at least ninety (90) calendar days (unless a resolution is earlier reached) and attempt to reach a mutually acceptable agreement relating to the Proposed Revisions (the “Discussion Period”).

(c) If, following the conclusion of the Discussion Period, an agreement is reached on the Proposed Revisions, ICANN shall post the mutually agreed Proposed

Revisions on its website for public comment for no less than thirty (30) calendar days (the "Posting Period") and provide notice of such revisions to all Applicable Registry Operators in accordance with Section 7.9. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registry Operators). Following the conclusion of the Posting Period, the Proposed Revisions shall be submitted for Registry Operator Approval (as defined in Section 7.6) and approval by the ICANN Board of Directors. If such approvals are obtained, the Proposed Revisions shall be deemed an Approved Amendment (as defined in Section 7.6) by the Applicable Registry Operators and ICANN, and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days notice from ICANN to Registry Operator.

(d) If, following the conclusion of the Discussion Period, an agreement is not reached between ICANN and the Working Group on the Proposed Revisions, either the CEO or the Chair may provide the other person written notice (the "Mediation Notice") requiring each party to attempt to resolve the disagreements related to the Proposed Revisions through impartial, facilitative (non-evaluative) mediation in accordance with the terms and conditions set forth below. In the event that a Mediation Notice is provided, ICANN and the Working Group shall, within fifteen (15) calendar days thereof, simultaneously post the text of their desired version of the Proposed Revisions and a position paper with respect thereto on ICANN's website.

(i) The mediation shall be conducted by a single mediator selected by the parties. If the parties cannot agree on a mediator within fifteen (15) calendar days following receipt by the CEO or Chair, as applicable, of the Mediation Notice, the parties will promptly select a mutually acceptable mediation provider entity, which entity shall, as soon as practicable following such entity's selection, designate a mediator, who is a licensed attorney with general knowledge of contract law, who has no ongoing business relationship with either party and, to the extent necessary to mediate the particular dispute, general knowledge of the domain name system. Any mediator must confirm in writing that he or she is not, and will not become during the term of the mediation, an employee, partner, executive officer, director, or security holder of ICANN or an Applicable Registry Operator. If such confirmation is not provided by the appointed mediator, then a replacement mediator shall be appointed pursuant to this Section 7.7(d)(i).

(ii) The mediator shall conduct the mediation in accordance with the rules and procedures for facilitative mediation that he or she determines following consultation with the parties. The parties shall discuss the dispute in good faith and attempt, with the mediator's assistance, to reach an amicable resolution of the dispute.

(iii) Each party shall bear its own costs in the mediation. The parties shall share equally the fees and expenses of the mediator.

(iv) If an agreement is reached during the mediation, ICANN shall post the mutually agreed Proposed Revisions on its website for the Posting Period and provide notice to all Applicable Registry Operators in accordance with Section 7.9. ICANN and the Working Group will consider the public comments submitted on the agreed Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registry Operators). Following the conclusion of the Posting Period, the Proposed Revisions shall be submitted for Registry Operator Approval and approval by the ICANN Board of Directors. If such approvals are obtained, the Proposed Revisions shall be deemed an Approved Amendment (as defined in Section 7.6) by the Applicable Registry Operators and ICANN, and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days notice from ICANN to Registry Operator.

(v) If the parties have not resolved the dispute for any reason by the date that is ninety (90) calendar days following receipt by the CEO or Chair, as applicable, of the Mediation Notice, the mediation shall automatically terminate (unless extended by agreement of the parties). The mediator shall deliver to the parties a definition of the issues that could be considered in future arbitration, if invoked. Those issues are subject to the limitations set forth in Section 7.7(e)(ii) below.

(e) If, following mediation, ICANN and the Working Group have not reached an agreement on the Proposed Revisions, either the CEO or the Chair may provide the other person written notice (an "Arbitration Notice") requiring ICANN and the Applicable Registry Operators to resolve the dispute through binding arbitration in accordance with the arbitration provisions of Section 5.2, subject to the requirements and limitations of this Section 7.7(e).

(i) If an Arbitration Notice is sent, the mediator's definition of issues, along with the Proposed Revisions (be those from ICANN, the Working Group or both) shall be posted for public comment on ICANN's website for a period of no less than thirty (30) calendar days. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registry Operators), and information regarding such comments and consideration shall be provided to a three (3) person arbitrator panel. Each party may modify its Proposed Revisions before and after the Posting Period. The arbitration proceeding may not commence prior to the closing of such public comment period, and ICANN may consolidate all challenges brought by registry operators (including Registry Operator) into a single proceeding. Except as set forth in this Section 7.7, the arbitration shall be conducted pursuant to Section 5.2.

(ii) No dispute regarding the Proposed Revisions may be submitted for arbitration to the extent the subject matter of the Proposed

Revisions (i) relates to Consensus Policy, (ii) falls within the subject matter categories set forth in Section 1.2 of Specification 1, or (iii) seeks to amend any of the following provisions or Specifications of this Agreement: Articles 1, 3 and 6; Sections 2.1, 2.2, 2.5, 2.7, 2.9, 2.10, 2.16, 2.17, 2.19, 4.1, 4.2, 7.3, 7.6, 7.7, 7.8, 7.10, 7.11, 7.12, 7.13, 7.14, 7.16; Section 2.8 and Specification 7 (but only to the extent such Proposed Revisions seek to implement an RPM not contemplated by Sections 2.8 and Specification 7); Exhibit A; and Specifications 1, 4, 6, 10 and 11.

(iii) The mediator will brief the arbitrator panel regarding ICANN and the Working Group's respective proposals relating to the Proposed Revisions.

(iv) No amendment to this Agreement relating to the Proposed Revisions may be submitted for arbitration by either the Working Group or ICANN, unless, in the case of the Working Group, the proposed amendment has received Registry Operator Approval and, in the case of ICANN, the proposed amendment has been approved by the ICANN Board of Directors.

(v) In order for the arbitrator panel to approve either ICANN or the Working Group's proposed amendment relating to the Proposed Revisions, the arbitrator panel must conclude that such proposed amendment is consistent with a balanced application of ICANN's core values (as described in ICANN's Bylaws) and reasonable in light of the balancing of the costs and benefits to the business interests of the Applicable Registry Operators and ICANN (as applicable), and the public benefit sought to be achieved by the Proposed Revisions as set forth in such amendment. If the arbitrator panel concludes that either ICANN or the Working Group's proposed amendment relating to the Proposed Revisions meets the foregoing standard, such amendment shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days notice from ICANN to Registry Operator and deemed an Approved Amendment hereunder.

(f) With respect to an Approved Amendment relating to an amendment proposed by ICANN, Registry may apply in writing to ICANN for an exemption from such amendment pursuant to the provisions of Section 7.6.

(g) Notwithstanding anything in this Section 7.7 to the contrary, (a) if Registry Operator provides evidence to ICANN's reasonable satisfaction that the Approved Amendment would materially increase the cost of providing Registry Services, then ICANN will allow up to one-hundred eighty (180) calendar days for the Approved Amendment to become effective with respect to Registry Operator, and (b) no Approved Amendment adopted pursuant to Section 7.7 shall become effective with respect to Registry Operator if Registry Operator provides ICANN with an irrevocable notice of termination pursuant to Section 4.4(b).

**7.8 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.

**7.9 General Notices.** Except for notices pursuant to Sections 7.6 and 7.7, all notices to be given under or in relation to this Agreement will be given either (i) in writing at the address of the appropriate 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 Sections 7.6 and 7.7 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. Other than notices under Sections 7.6 or 7.7, 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 three (3) calendar days. Any notice required by Sections 7.6 or 7.7 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  
12025 Waterfront Drive, Suite 300  
Los Angeles, CA 90094-2536  
USA  
Telephone: +1-310-301-5800  
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:  
Nokia Corporation  
Karakaari 7  
Espoo 02610  
FI  
Telephone: + 358 (0) 504804790  
Facsimile: +358 (0) 504804790  
Attention: Jeremie Vaquer, Legal Counsel  
Email: jeremievaquer@valideus.com

**7.10 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.

**7.11 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.

**7.12 Ownership Rights.** Nothing contained in this Agreement shall be construed as (a) establishing or granting to Registry Operator any property ownership rights or interests of Registry Operator in the TLD or the letters, words, symbols or other characters making up the TLD string, or (b) affecting any existing intellectual property or ownership rights of Registry Operator.

**7.13 Severability; Conflicts with Laws.** 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. ICANN and the Working Group will mutually cooperate to develop an ICANN procedure for ICANN's review and consideration of alleged conflicts between applicable laws and non-WHOIS related provisions of this Agreement. Until such procedure is developed and implemented by ICANN, ICANN will review and consider alleged conflicts between applicable laws and non-WHOIS related provisions of this Agreement in a manner similar to ICANN's Procedure For Handling WHOIS Conflicts with Privacy Law.

**7.14 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

#### **7.15 Confidentiality**

(a) Subject to Section 7.15(c), during the Term and for a period of three (3) years thereafter, each party shall, and shall cause its and its Affiliates' officers, directors, employees and agents to, keep confidential and not publish or otherwise disclose to any third party, directly or indirectly, any information that is, and the disclosing party has

marked as, or has otherwise designated in writing to the receiving party as, “confidential trade secret,” “confidential commercial information” or “confidential financial information” (collectively, “Confidential Information”), except to the extent such disclosure is permitted by the terms of this Agreement.

(b) The confidentiality obligations under Section 7.15(a) shall not apply to any Confidential Information that (i) is or hereafter becomes part of the public domain by public use, publication, general knowledge or the like through no fault of the receiving party in breach of this Agreement, (ii) can be demonstrated by documentation or other competent proof to have been in the receiving party’s possession prior to disclosure by the disclosing party without any obligation of confidentiality with respect to such information, (iii) is subsequently received by the receiving party from a third party who is not bound by any obligation of confidentiality with respect to such information, (iv) has been published by a third party or otherwise enters the public domain through no fault of the receiving party, or (v) can be demonstrated by documentation or other competent evidence to have been independently developed by or for the receiving party without reference to the disclosing party’s Confidential Information.

(c) Each party shall have the right to disclose Confidential Information to the extent that such disclosure is (i) made in response to a valid order of a court of competent jurisdiction or, if in the reasonable opinion of the receiving party’s legal counsel, such disclosure is otherwise required by applicable law; provided, however, that the receiving party shall first have given notice to the disclosing party and given the disclosing party a reasonable opportunity to quash such order or to obtain a protective order or confidential treatment order requiring that the Confidential Information that is the subject of such order or other applicable law be held in confidence by such court or other third party recipient, unless the receiving party is not permitted to provide such notice under such order or applicable law, or (ii) made by the receiving party or any of its Affiliates to its or their attorneys, auditors, advisors, consultants, contractors or other third parties for use by such person or entity as may be necessary or useful in connection with the performance of the activities under this Agreement, provided that such third party is bound by confidentiality obligations at least as stringent as those set forth herein, either by written agreement or through professional responsibility standards.

\* \* \* \* \*

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: \_\_\_\_\_  
Akram Atallah  
President, Global Domains Division

**NOKIA CORPORATION**

By: \_\_\_\_\_  
Antti Loikala  
Vice President IT

By: \_\_\_\_\_  
Jeremie Vaquer  
Legal Counsel

By: \_\_\_\_\_  
Martin William Sebastian Nyström  
Head of Products Business

## **EXHIBIT A**

### **Approved Services**

The ICANN gTLD Applicant Guidebook (located at <http://newgtlds.icann.org/en/applicants/agb>) and the RSEP specify processes for consideration of proposed registry services. Registry Operator may provide any service that is required by the terms of this Agreement. In addition, the following services (if any) are specifically identified as having been approved by ICANN prior to the effective date of the Agreement, and Registry Operator may provide such services:

#### **1. DNS Service – TLD Zone Contents**

Notwithstanding anything else in this Agreement, as indicated in section 2.2.3.3 of the gTLD Applicant Guidebook, permissible contents for the TLD's zone are:

- 1.1.** Apex SOA record
- 1.2.** Apex NS records and in-bailiwick glue for the TLD's DNS servers
- 1.3.** NS records and in-bailiwick glue for DNS servers of registered names in the TLD
- 1.4.** DS records for registered names in the TLD
- 1.5.** Records associated with signing the TLD zone (i.e., RRSIG, DNSKEY, NSEC, and NSEC3)

(Note: The above language effectively does not allow, among other things, the inclusion of DNS resource records that would enable a dotless domain name (e.g., apex A, AAAA, MX records) in the TLD zone.)

If Registry Operator wishes to place any DNS resource record type into its TLD DNS zone (other than those listed in Sections 1.1 through 1.5 above), it must describe in detail its proposal and submit a Registry Services Evaluation Process (RSEP) request. This will be evaluated per RSEP to determine whether the service would create a risk of a meaningful adverse impact on security or stability of the DNS. Registry Operator recognizes and acknowledges that a service based on the use of less-common DNS resource records in the TLD zone, even if approved, might not work as intended for all users due to lack of software support.

#### **2. Anti-Abuse**

Registry Operator may suspend, delete or otherwise make changes to domain names in compliance with its anti-abuse policy.

#### **3. Searchable Whois**

Notwithstanding anything else in this Agreement, Registry Operator must offer a searchable Whois service compliant with the requirements described in Section 1.10 of Specification 4 of this Agreement. Registry Operator must make available the services only to authenticated users after they logged in by supplying proper credentials (e.g., user name and password).

Registry Operator must issue such credentials exclusively to eligible users and institutions that supply sufficient proof of their legitimate interest in this feature (e.g., law enforcement agencies). Registry Operator shall use rate-limiting to prevent abuse of the searchable Whois service.

#### **4. Internationalized Domain Names (IDNs)**

Registry Operator may offer registration of IDNs at the second and lower levels provided that Registry Operator complies with the following requirements:

**4.1.** Registry Operator must offer Registrars support for handling IDN registrations in EPP.

**4.2.** Registry Operator must handle variant IDNs as follows:

**4.2.1.** By default variant IDNs (as defined in the Registry Operator's IDN tables and IDN Registration Rules) must be blocked from registration.

**4.2.2.** Variant IDNs may be activated when requested by the sponsoring Registrar of the canonical name as described in the IDN Tables and IDN Registration Rules.

**4.2.3.** Active variant IDNs must be provisioned in the TLD's DNS zone file as zone cuts using the same NS resource records as the canonical name.

**4.3.** Registry Operator may offer registration of IDNs in the following languages/scripts (IDN Tables and IDN Registration Rules will be published by the Registry Operator as specified in the ICANN IDN Implementation Guidelines):

**4.3.1.** German language

**4.3.2.** Danish language

**4.3.3.** Hungarian language

**4.3.4.** Icelandic language

**4.3.5.** Korean language

**4.3.6.** Lithuanian language

**4.3.7.** Latvian language

**4.3.8.** Polish language

**4.3.9.** Swedish language

**4.3.10.** Spanish language

**4.3.11.** Chinese (Simplified) language

**4.3.12.** Chinese (Traditional) language

**4.3.13.** Russian language

**4.3.14.** Belarusian language

**4.3.15.** Ukrainian language

**4.3.16.** Bosnian language

**4.3.17.** Serbian language

**4.3.18.** Macedonian language

**4.3.19.** Bulgarian language

**4.3.20.** Montenegro language

## 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 Specification. 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 of this Specification 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.
2. **Temporary Policies.** 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 ninety (90) calendar days, the Board shall reaffirm its temporary adoption every ninety (90) calendar days for a total period not to exceed one (1) year, in order to maintain such Temporary Policy in effect until such time as it becomes a Consensus Policy. If the one (1) year period expires or, if during such one (1) 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. **Notice and Conflicts.** 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 Policies 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 (Coordinated Universal Time) on the day that such Full Deposit is submitted to Escrow Agent.
  - 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. **Schedule for Deposits.** 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 (6) days of the week, a Full Deposit or the corresponding Differential Deposit must be submitted to Escrow Agent by 23:59 UTC.
3. **Escrow Format Specification.**
  - 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 Part A, Section 9, reference 1 of this Specification and draft-arias-noguchi-dnrd-objects-mapping, see Part A, Section 9, reference 2 of this Specification (collectively, the “DNDE Specification”). The DNDE Specification describes some elements as

optional; Registry Operator will include those elements in the Deposits if they are available. If not already an RFC, Registry Operator will use the most recent draft version of the DNDE Specification available at the Effective Date. Registry Operator may at its election use newer versions of the DNDE Specification after the Effective Date. Once the DNDE Specification is published as an RFC, Registry Operator will implement that version of the DNDE Specification, no later than one hundred eighty (180) calendar 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 basis to represent that data. These “extension schemas” will be specified as described in Part A, Section 9, reference 2 of this Specification. Data related to the “extensions schemas” will be included in the deposit file described in Part A, Section 3.1 of this Specification. ICANN and the respective Registry Operator shall work together to agree on such new objects’ data escrow specifications.
4. **Processing of Deposit files.** 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 Part A, Section 9, reference 3 of this Specification. 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 Part A, Section 9, reference 4 of this Specification, that are also royalty-free. The process to follow for the data file in original text format is:
  - (1) The XML file of the deposit as described in Part A, Section 9, reference 1 of this Specification must be named as the containing file as specified in Section 5 but with the extension xml.
  - (2) The data file(s) are aggregated in a tarball file named the same as (1) but with extension tar.
  - (3) A compressed and encrypted OpenPGP Message is created using the tarball file as sole input. The suggested algorithm for compression is ZIP as per RFC 4880. 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.
  - (4) The file may be split as necessary if, once compressed and encrypted, it is larger than the file size limit agreed with the escrow agent. Every part of a

split file, or the whole file if not split, will be called a processed file in this section.

- (5) A digital signature file will be generated for every processed file using the Registry Operator's private key. The digital signature file will be in binary OpenPGP format as per RFC 4880 Section 9, reference 3, 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.
- (6) 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.
- (7) The Escrow Agent will then validate every (processed) transferred data file using the procedure described in Part A, Section 8 of this Specification.

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 Operator and ICANN will exchange public keys by the same procedure.
7. **Notification of Deposits.** Along with the delivery of each Deposit, Registry Operator will deliver to Escrow Agent and to ICANN (using the API described in draft-lozano-icann-registry-interfaces, see Part A, Section 9, reference 5 of this Specification (the “Interface Specification”)) 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 Part A, Section 9, reference 1 of this Specification.

If not already an RFC, Registry Operator will use the most recent draft version of the Interface Specification at the Effective Date. Registry Operator may at its election use newer versions of the Interface Specification after the Effective Date. Once the Interface Specification is published as an RFC, Registry Operator will implement that version of the Interface Specification, no later than one hundred eighty (180) calendar days after such publishing.

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 Part A, Section 9, reference 1 of this Specification.
  - (5) If Part A, Section 9, reference 1 of this Specification 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. **References.**

- (1) Domain Name Data Escrow Specification (work in progress),  
<http://tools.ietf.org/html/draft-arias-noguchi-registry-data-escrow>
- (2) Domain Name Registration Data (DNRD) Objects Mapping,  
<http://tools.ietf.org/html/draft-arias-noguchi-dnrd-objects-mapping>
- (3) OpenPGP Message Format, <http://www.rfc-editor.org/rfc/rfc4880.txt>
- (4) OpenPGP parameters,  
<http://www.iana.org/assignments/pgp-parameters/pgp-parameters.xhtml>
- (5) ICANN interfaces for registries and data escrow agents,  
<http://tools.ietf.org/html/draft-lozano-icann-registry-interfaces>

## 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 amendments 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 as 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. **Fees.** 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 fifteen (15) calendar 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. **Ownership.** 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 to ICANN or to a party designated in writing by ICANN on a non-exclusive, perpetual, irrevocable, royalty-free, paid-up basis, for any use related to the operation, maintenance or transition of the TLD.
4. **Integrity and Confidentiality.** 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 (1) 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, 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. **Copies.** Escrow Agent may be permitted to duplicate any Deposit, in order to comply with the terms and provisions of the escrow agreement.
6. **Release of Deposits.** Escrow Agent will make available for electronic download (unless otherwise requested) to ICANN or its designee, within twenty-four (24) 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 has not received a notification as described in Part B, Sections 7.1 and 7.2 of this Specification from Escrow Agent within five (5) calendar days after the Deposit's scheduled delivery date; (a) ICANN gave notice to Escrow Agent and Registry Operator of that failure; and (b) ICANN has not, within seven (7) calendar days after such notice, received the notification from Escrow Agent; or
  - 6.3. ICANN has received notification as described in Part B, Sections 7.1 and 7.2 of this Specification from Escrow Agent of failed verification of the latest escrow deposit for a specific date or a notification of a missing deposit, and the notification is for a deposit that should have been made on Sunday (i.e., a Full Deposit); (a) ICANN gave notice to Registry Operator of that receipt; and (b) ICANN has not, within seven (7) calendar days after such notice, received notification as described in Part B, Sections 7.1 and 7.2 of this Specification from Escrow Agent of verification of a remediated version of such Full Deposit; or
  - 6.4. ICANN has received five notifications from Escrow Agent within the last thirty (30) calendar days notifying ICANN of either missing or failed escrow deposits that should have been made Monday through Saturday (i.e., a Differential Deposit), and (x) ICANN provided notice to Registry Operator of the receipt of such notifications; and (y) ICANN has not, within seven (7) calendar days after delivery of such notice to Registry Operator, received notification from Escrow Agent of verification of a remediated version of such Differential Deposit; or

- 6.5. 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
- 6.6. Registry Operator has experienced a failure of critical registry functions and ICANN has asserted its rights pursuant to Section 2.13 of the Agreement; or
- 6.7. a competent court, arbitral, legislative, or government agency mandates the release of the Deposits to ICANN; or
- 6.8. pursuant to Contractual and Operational Compliance Audits as specified under Section 2.11 of the Agreement.

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 expiration or termination of the Registry Agreement or the Escrow Agreement.

7. **Verification of Deposits.**

- 7.1. Within twenty-four (24) hours after receiving each Deposit or corrected Deposit, Escrow Agent must verify the format and completeness of each Deposit and deliver to ICANN a notification generated for each Deposit. Reports will be delivered electronically using the API described in draft-lozano-icann-registry-interfaces, see Part A, Section 9, reference 5 of this Specification.
- 7.2. If Escrow Agent discovers that any Deposit fails the verification procedures or if Escrow Agent does not receive any scheduled Deposit, Escrow Agent must notify Registry Operator either by email, fax or phone and ICANN (using the API described in draft-lozano-icann-registry-interfaces, see Part A, Section 9, reference 5 of this Specification) of such nonconformity or non-receipt within twenty-four (24) hours after receiving the non-conformant Deposit or the deadline for such Deposit, as applicable. Upon notification of such verification or delivery failure, Registry Operator must begin developing modifications, updates, corrections, and other fixes of the Deposit necessary for the Deposit to be delivered and pass the verification procedures and deliver such fixes to Escrow Agent as promptly as possible.

8. **Amendments.** 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. **Indemnity.** 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, officers, agents, employees and contractors.

## SPECIFICATION 3

### FORMAT AND CONTENT FOR REGISTRY OPERATOR MONTHLY REPORTING

Registry Operator shall provide one set of monthly reports per gTLD, using the API described in draft-lozano-icann-registry-interfaces, see Specification 2, Part A, Section 9, reference 5, 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 (3) months after the end of the month to which the reports relate. Unless set forth in this Specification 3, any reference to a specific time refers to Coordinated Universal Time (UTC). Monthly reports shall consist of data that reflects the state of the registry at the end of the month (UTC).

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           | For cases where the registry operator acts as registrar (i.e., without the use of an ICANN accredited registrar) 9999 should be used, otherwise the sponsoring Registrar IANA id should be used as specified in <a href="http://www.iana.org/assignments/registrar-ids">http://www.iana.org/assignments/registrar-ids</a> |
| 03      | total-domains     | total domain names under sponsorship in any EPP status but pendingCreate that have not been purged  |
| 04      | total-nameservers | total name servers (either host objects or name server hosts as domain name attributes) associated with domain names registered for the TLD in any EPP status but pendingCreate that have not been purged   |
| 05      | net-adds-1-yr     | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of one (1) year (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.  |
| 06      | net-adds-2-yr     | number of domains successfully registered (i.e., not  |

|    |                |   |
|----|----------------|---|
|    |                | in EPP pendingCreate status) with an initial term of two(2) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.   |
| 07 | net-adds-3-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of three (3) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends. |
| 08 | net-adds-4-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of four (4) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.  |
| 09 | net-adds-5-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of five (5) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.  |
| 10 | net-adds-6-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of six (6) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.   |
| 11 | net-adds-7-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of seven (7) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends. |
| 12 | net-adds-8-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of eight (8) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends. |
| 13 | net-adds-9-yr  | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of nine (9) years (and not deleted within the add grace period). A transaction must be reported in the month the add grace period ends.  |
| 14 | net-adds-10-yr | number of domains successfully registered (i.e., not in EPP pendingCreate status) with an initial term of ten (10) years (and not deleted within the add grace period). A transaction must be reported in the month                             |

|    |                 |   |
|----|-----------------|---|
|    |                 | the add grace period ends.  |
| 15 | net-renews-1-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of one (1) year (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.    |
| 16 | net-renews-2-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of two (2) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.   |
| 17 | net-renews-3-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of three (3) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends. |
| 18 | net-renews-4-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of four (4) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.  |
| 19 | net-renews-5-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of five (5) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.  |
| 20 | net-renews-6-yr | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of six (6) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.   |

|    |                             |   |
|----|-----------------------------|---|
| 21 | net-renews-7-yr             | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of seven (7) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends. |
| 22 | net-renews-8-yr             | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of eight (8) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends. |
| 23 | net-renews-9-yr             | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of nine (9) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.  |
| 24 | net-renews-10-yr            | number of domains successfully renewed (i.e., not in EPP pendingRenew status) either automatically or by command with a new renewal period of ten (10) years (and not deleted within the renew or auto-renew grace period). A transaction must be reported in the month the renew or auto-renew grace period ends.  |
| 25 | transfer-gaining-successful | number of domain transfers initiated by this registrar that were successfully completed (either explicitly or automatically approved) and not deleted within the transfer grace period. A transaction must be reported in the month the transfer grace period ends.   |
| 26 | transfer-gaining-nacked     | number of domain transfers initiated by this registrar that were rejected (e.g., EPP transfer op="reject") by the other registrar   |
| 27 | transfer-losing-successful  | number of domain transfers initiated by another registrar that were successfully completed (either explicitly or automatically approved)  |
| 28 | transfer-losing-nacked      | number of domain transfers initiated by another registrar that this registrar rejected (e.g., EPP transfer op="reject")   |

|    |                              |   |
|----|------------------------------|---|
| 29 | transfer-disputed-won        | number of transfer disputes in which this registrar prevailed (reported in the month where the determination happened)  |
| 30 | transfer-disputed-lost       | number of transfer disputes this registrar lost (reported in the month where the determination happened)  |
| 31 | transfer-disputed-nodecision | number of transfer disputes involving this registrar with a split or no decision (reported in the month where the determination happened)                                     |
| 32 | deleted-domains-grace        | domains deleted within the add grace period (does not include names deleted while in EPP pendingCreate status). A deletion must be reported in the month the name is purged.  |
| 33 | deleted-domains-nograce      | domains deleted outside the add grace period (does not include names deleted while in EPP pendingCreate status). A deletion must be reported in the month the name is purged. |
| 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 (both 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                   |

| Field # | Field Name                  | Description  |
|---------|-----------------------------|--|
| 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 delivering a restore report responded during the reporting period     |
| 18      | srs-dom-rgp-restore-request | number of SRS (EPP and any other interface) domain name RGP "restore" requests 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   |

| Field # | Field Name                | Description   |
|---------|---------------------------|---|
| 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. No other lines besides the ones

described above shall be included. Line breaks shall be <U+000D, U+000A> as described in RFC 4180.

For gTLDs that are part of a single-instance Shared Registry System, the Registry Functions Activity Report may include the total contact or host transactions for all the gTLDs in the system.

## SPECIFICATION 4

### 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.

Registry Operator shall implement a new standard supporting access to domain name registration data (SAC 051) no later than one hundred thirty-five (135) days after it is requested by ICANN if: 1) the IETF produces a standard (i.e., it is published, at least, as a Proposed Standard RFC as specified in RFC 2026); and 2) its implementation is commercially reasonable in the context of the overall operation of the registry.

- 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. The fields specified below set forth the minimum output requirements. Registry Operator may output data fields in addition to those specified below, subject to approval by ICANN, which approval shall not be unreasonably withheld.

- 1.5. **Domain Name Data:**

- 1.5.1 **Query format:** whois EXAMPLE.TLD

- 1.5.2 **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 <<<

## 1.6. Registrar Data:

1.6.1 **Query format:** whois "registrar Example Registrar, Inc."

1.6.2 **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 <<<

## 1.7. Nameserver Data:

1.7.1 **Query format:** whois "NS1.EXAMPLE.TLD", whois "nameserver (nameserver name)", or whois "nameserver (IP Address)"

### 1.7.2 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 <<<

- 1.8. 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 (the extension will be provided as a separate field as shown above), 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.
- 1.9. In order to be compatible with ICANN's common interface for WHOIS (InterNIC), WHOIS output shall be in the format outline above.
- 1.10. **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.
  - 1.10.1 Registry Operator will offer searchability on the web-based Directory Service.
  - 1.10.2 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.).
  - 1.10.3 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).
  - 1.10.4 Registry Operator will offer Boolean search capabilities supporting, at least, the following logical operators to join a set of search criteria: AND, OR, NOT.
  - 1.10.5 Search results will include domain names matching the search criteria.
  - 1.10.6 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.

- 1.11. Registry Operator shall provide a link on the primary website for the TLD (i.e., the website provided to ICANN for publishing on the ICANN website) to a web page designated by ICANN containing WHOIS policy and educational materials.

## 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, which 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, which may be ICANN or an ICANN designee (the "CZDA Provider"). Registry Operator (optionally through the CZDA Provider) will provide access to zone file data per Section 2.1.3 of this Specification and do so using the file format described in Section 2.1.4 of this Specification. 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 below 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 below.
- 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 IP address.
- 2.1.3 **Grant of Access.** Each Registry Operator (optionally through the CZDA Provider) 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, nontransferable, limited right to access Registry Operator's (optionally CZDA Provider's) Zone File hosting 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 (or the CZDA Provider) also provides historical data, it will use the naming pattern <zone>-yyyymmdd.zone.gz, etc.

2.1.4 **File Format Standard.** Registry Operator (optionally through the CZDA Provider) 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 email, 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. Access will be provided at least daily. Zone files will include SRS data committed as close as possible to 00:00:00 UTC.

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 as soon as commercially practicable, but in no event later than five (5) calendar days following ICANN's request. 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.

## SPECIFICATION 5

### SCHEDULE OF RESERVED NAMES

Except to the extent that ICANN otherwise expressly authorizes in writing, and subject to the terms and conditions of this Specification, Registry Operator shall reserve the following labels from initial (i.e., other than renewal) registration within the TLD. If using self-allocation, the Registry Operator must show the registration in the RDDS. In the case of IDN names (as indicated below), IDN variants will be identified according to the registry operator IDN registration policy, where applicable.

1. **Example.** The ASCII label “EXAMPLE” shall be withheld from registration or allocated to Registry Operator at the second level and at all other levels within the TLD at which Registry Operator offers registrations (such second level and all other levels are collectively referred to herein as, “All Levels”). Such label may not be activated in the DNS, and may not be released for registration to any person or entity other than Registry Operator. Upon conclusion of Registry Operator’s designation as operator of the registry for the TLD, such withheld or allocated label shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such name without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.
2. **Two-character labels.** All two-character ASCII labels shall be withheld from registration or allocated to Registry Operator at the second level within the TLD. Such labels may not be activated in the DNS, and may not be released for registration to any person or entity other than Registry Operator, provided that such two-character label strings may be released to the extent that Registry Operator reaches agreement with the related government and country-code manager of the string as specified in the ISO 3166-1 alpha-2 standard. The Registry Operator may also propose the release of these reservations based on its implementation of measures to avoid confusion with the corresponding country codes, subject to approval by ICANN. Upon conclusion of Registry Operator’s designation as operator of the registry for the TLD, all such labels that remain withheld from registration or allocated to Registry Operator shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.
3. **Reservations for Registry Operations.**
  - 3.1. The following ASCII labels must be withheld from registration or allocated to Registry Operator at All Levels for use in connection with the operation of the registry for the TLD: WWW, RDDS and WHOIS. The following ASCII label must be allocated to Registry Operator at All Levels for use in connection with the operation of the registry for the TLD: NIC. Registry Operator may activate WWW, RDDS and WHOIS in the DNS, but must activate NIC in the

DNS, as necessary for the operation of the TLD. None of WWW, RDDS, WHOIS or NIC may be released or registered to any person (other than Registry Operator) or third party. Upon conclusion of Registry Operator's designation as operator of the registry for the TLD all such withheld or allocated names shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.

- 3.2. Registry Operator may activate in the DNS at All Levels up to one hundred (100) names (plus their IDN variants, where applicable) necessary for the operation or the promotion of the TLD. Registry Operator must act as the Registered Name Holder of such names as that term is defined in the then-current ICANN Registrar Accreditation Agreement (RAA). These activations will be considered Transactions for purposes of Section 6.1 of the Agreement. Registry Operator must either (i) register such names through an ICANN-accredited registrar; or (ii) self-allocate such names and with respect to those names submit to and be responsible to ICANN for compliance with ICANN Consensus Policies and the obligations set forth in Subsections 3.7.7.1 through 3.7.7.12 of the then-current RAA (or any other replacement clause setting out the terms of the registration agreement between a registrar and a registered name holder). At Registry Operator's discretion and in compliance with all other terms of this Agreement, such names may be released for registration to another person or entity.
- 3.3. Registry Operator may withhold from registration or allocate to Registry Operator names (including their IDN variants, where applicable) at All Levels in accordance with Section 2.6 of the Agreement. Such names may not be activated in the DNS, but may be released for registration to another person or entity at Registry Operator's discretion. Upon conclusion of Registry Operator's designation as operator of the registry for the TLD, all such names that remain withheld from registration or allocated to Registry Operator shall be transferred as specified by ICANN. Upon ICANN's request, Registry Operator shall provide a listing of all names withheld or allocated to Registry Operator pursuant to Section 2.6 of the Agreement. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.
4. **Country and Territory Names.** The country and territory names (including their IDN variants, where applicable) contained in the following internationally recognized lists shall be withheld from registration or allocated to Registry Operator at All Levels:
  - 4.1. 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](http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso-3166-1_decoding_table.htm)>;

- 4.2. 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
- 4.3. 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 (including their IDN variants according to the registry operator IDN registration policy, where applicable) may be released to the extent that Registry Operator reaches agreement with the applicable government(s). Registry Operator must not activate such names in the DNS; provided, that Registry Operator may propose the release of these reservations, subject to review by ICANN's Governmental Advisory Committee and approval by ICANN. Upon conclusion of Registry Operator's designation as operator of the registry for the TLD, all such names that remain withheld from registration or allocated to Registry Operator shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.

5. **International Olympic Committee; International Red Cross and Red Crescent Movement.** As instructed from time to time by ICANN, the names (including their IDN variants, where applicable) relating to the International Olympic Committee, International Red Cross and Red Crescent Movement listed at <http://www.icann.org/en/resources/registries/reserved> shall be withheld from registration or allocated to Registry Operator at the second level within the TLD. Additional International Olympic Committee, International Red Cross and Red Crescent Movement names (including their IDN variants) may be added to the list upon ten (10) calendar days notice from ICANN to Registry Operator. Such names may not be activated in the DNS, and may not be released for registration to any person or entity other than Registry Operator. Upon conclusion of Registry Operator's designation as operator of the registry for the TLD, all such names withheld from registration or allocated to Registry Operator shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.
6. **Intergovernmental Organizations.** As instructed from time to time by ICANN, Registry Operator will implement the protections mechanism determined by the

ICANN Board of Directors relating to the protection of identifiers for Intergovernmental Organizations. A list of reserved names for this Section 6 is available at <http://www.icann.org/en/resources/registries/reserved>. Additional names (including their IDN variants) may be added to the list upon ten (10) calendar days notice from ICANN to Registry Operator. Any such protected identifiers for Intergovernmental Organizations may not be activated in the DNS, and may not be released for registration to any person or entity other than Registry Operator. Upon conclusion of Registry Operator's designation as operator of the registry for the TLD, all such protected identifiers shall be transferred as specified by ICANN. Registry Operator may self-allocate and renew such names without use of an ICANN accredited registrar, which will not be considered Transactions for purposes of Section 6.1 of the Agreement.

## SPECIFICATION 6

### 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, 1123, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 4343, and 5966. DNS labels may only include hyphens in the third and fourth position if they represent valid IDNs (as specified above) in their ASCII encoding (e.g., “xn--ndk061n”).
- 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 (if using host objects), 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 RFC 6841.
- 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 <<http://www.icann.org/en/topics/idn/implementation-guidelines.htm>>,

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 (6) 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 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. Registry Operator's emergency operations department shall be available at all times to respond to extraordinary occurrences.
- 3.2. **Extraordinary Event.** Registry Operator will use commercially reasonable efforts to restore the critical functions of the registry within twenty-four (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 forty-eight (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 inquiries 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 Operator 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.

## 5. **Supported Initial and Renewal Registration Periods**

- 5.1. **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.
- 5.2. **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.

## 6. **Name Collision Occurrence Management**

- 6.1. **No-Activation Period.** Registry Operator shall not activate any names in the DNS zone for the Registry TLD (except for "NIC") until at least 120 calendar days after the effective date of this agreement. Registry Operator may allocate names (subject to subsection 6.2 below) during this period only if Registry Operator causes registrants to be clearly informed of the inability to activate names until the No-Activation Period ends.

### 6.2. **Name Collision Occurrence Assessment**

- 6.2.1 Registry Operator shall not activate any names in the DNS zone for the Registry TLD except in compliance with a Name Collision Occurrence Assessment provided by ICANN regarding the Registry TLD. Registry Operator will either (A) implement the mitigation measures described in its Name Collision Occurrence Assessment before activating any second-level domain name, or (B) block those second-level domain names for which the mitigation measures as described in the Name Collision Occurrence Assessment have not been implemented and proceed with activating names that are not listed in the Assessment.
- 6.2.2 Notwithstanding subsection 6.2.1, Registry Operator may proceed with activation of names in the DNS zone without implementation of the measures set forth in Section 6.2.1 only if (A) ICANN determines that the Registry TLD is eligible for this alternative path to activation of names; and (B) Registry Operator blocks all second-level domain names identified by ICANN and set forth at <http://newgtlds.icann.org/en/announcements-and-media/announcement-2-17nov13-en> as such list may be modified by ICANN from time to time. Registry Operator may activate names pursuant to this subsection and later activate names pursuant to subsection 6.2.1.

- 6.2.3 The sets of names subject to mitigation or blocking pursuant to Sections 6.2.1 and 6.2.2 will be based on ICANN analysis of DNS information including "Day in the Life of the Internet" data maintained by the DNS Operations, Analysis, and Research Center (DNS-OARC) <<https://www.dns-oarc.net/oarc/data/ditl>>.
- 6.2.4 Registry Operator may participate in the development by the ICANN community of a process for determining whether and how these blocked names may be released.
- 6.2.5 If ICANN determines that the TLD is ineligible for the alternative path to activation of names, ICANN may elect not to delegate the TLD pending completion of the final Name Collision Occurrence Assessment for the TLD, and Registry Operator's completion of all required mitigation measures. Registry Operator understands that the mitigation measures required by ICANN as a condition to activation of names in the DNS zone for the TLD may include, without limitation, mitigation measures such as those described in Section 3.2 of the New gTLD Name Collision Occurrence Management Plan approved by the ICANN Board New gTLD Program Committee (NGPC) on 7 October 2013 as found at <<http://www.icann.org/en/groups/board/documents/resolutions-new-gtld-annex-1-07oct13-en.pdf>>.

### 6.3. **Name Collision Report Handling**

- 6.3.1 During the first two years after delegation of the TLD, Registry Operator's emergency operations department shall be available to receive reports, relayed by ICANN, alleging demonstrably severe harm from collisions with overlapping use of the names outside of the authoritative DNS.
- 6.3.2 Registry Operator shall develop an internal process for handling in an expedited manner reports received pursuant to subsection 6.3.1 under which Registry Operator may, to the extent necessary and appropriate, remove a recently activated name from the TLD zone for a period of up to two years in order to allow the affected party to make changes to its systems.

## SPECIFICATION 7

### MINIMUM REQUIREMENTS FOR RIGHTS PROTECTION MECHANISMS

1. **Rights Protection Mechanisms.** Registry Operator shall implement and adhere to the rights protection mechanisms (“RPMs”) specified in this Specification. 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 RPMs required by this Specification 7 and any additional RPMs developed and implemented by Registry Operator 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 set forth therein each of the mandatory RPMs set forth in the Trademark Clearinghouse as of the date hereof, as posted at <http://www.icann.org/en/resources/registries/tmch-requirements> (the “Trademark Clearinghouse Requirements”), which may be revised in immaterial respects 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. If there is a conflict between the terms and conditions of this Agreement and the Trademark Clearinghouse Requirements, the terms and conditions of this Agreement shall control.
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 <http://www.icann.org/en/resources/registries/pddrp> and <http://www.icann.org/en/resources/registries/rrdrp>, respectively). 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 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 <http://www.icann.org/en/resources/registries/urs>), including the implementation of determinations issued by URS examiners.

## **SPECIFICATION 8**

### **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 6 of Specification 10 to this Agreement 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<sup>th</sup>) 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 item 50(b) of Attachment to Module 2 – Evaluation Questions and Criteria – of the gTLD Applicant Guidebook, as published and supplemented by ICANN prior to the date hereof (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. If Registry Operator elects to obtain an irrevocable standby letter of credit but the term required above is unobtainable, Registry Operator may obtain a letter of credit with a one-year term and an “evergreen provision,” providing for annual extensions, without amendment, for an indefinite number of additional periods until the issuing bank informs ICANN of its final expiration or until ICANN releases the letter of credit as evidenced in writing, if the letter of credit otherwise meets the requirements set forth in item 50(b) of Attachment to Module 2 – Evaluation Questions and Criteria – of the gTLD Applicant Guidebook, as published and supplemented by ICANN prior to the date hereof; provided, however, that if the issuing bank informs ICANN of the expiration of such letter of credit prior to the sixth (6<sup>th</sup>) anniversary of the Effective Date, such letter of credit must provide that ICANN is entitled to draw the funds secured by the letter of credit prior to such expiration. The letter of credit must require the issuing bank to give ICANN at least thirty (30) calendar days’ notice of any such expiration or non-renewal. If the letter of credit expires or is terminated at any time prior to the sixth (6<sup>th</sup>) anniversary of the Effective Date, Registry Operator will be required to obtain a replacement Continued Operations Instrument. ICANN may draw the funds under the original letter of credit, if the replacement Continued Operations Instrument is not in place prior to the expiration of the original letter of credit. 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).

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 critical registry functions related to the TLD set forth in Section 6 of Specification 10 to this Agreement 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) 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 critical registry functions related to the TLD set forth in Section 6 of Specification 10 to this Agreement 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 Operator 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 Alternative Instrument(s), and such instrument shall thereafter be considered the Continued Operations Instrument for purposes of this Agreement.

## SPECIFICATION 9

### 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; provided, however, that Registry Operator may (a) reserve names from registration pursuant to Section 2.6 of the Agreement and (b) may withhold from registration or allocate to Registry Operator up to one hundred (100) names pursuant to Section 3.2 of Specification 5;
  - 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”);  
or
  - d. allow any Affiliated registrar to disclose Personal Data about registrants to Registry Operator or any Registry Related Party, except as reasonably 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.
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, ensure that such services are offered through a legal entity separate from Registry Operator, and maintain separate books of accounts with respect to its registrar or registrar-reseller operations.
3. If Registry Operator or a Registry Related Party also operates as a provider of registrar or registrar-reseller services, 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; provided, however, ICANN shall not disclose Confidential Information contained in such results except in accordance with Section 7.15 of the Agreement.

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 the exclusive use of Registry Operator or its Affiliates, (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.

## SPECIFICATION 10

### 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).

#### 2. Service Level Agreement Matrix

|             | Parameter                    | SLR (monthly basis)                        |
|-------------|------------------------------|--|
| <b>DNS</b>  | DNS service availability     | 0 min downtime = 100% availability         |
|             | DNS name server availability | ≤ 432 min of downtime (≈ 99%)              |
|             | TCP DNS resolution RTT       | ≤ 1500 ms, for at least 95% of the queries |
|             | UDP DNS resolution RTT       | ≤ 500 ms, for at least 95% of the queries  |
|             | DNS update time              | ≤ 60 min, for at least 95% of the probes   |
| <b>RDDS</b> | RDDS availability            | ≤ 864 min of downtime (≈ 98%)              |

|            |                           |   |
|------------|---------------------------|---|
|            | RDDS query RTT            | ≤ 2000 ms, for at least 95% of the queries  |
|            | RDDS update time          | ≤ 60 min, for at least 95% of the probes    |
| <b>EPP</b> | EPP service availability  | ≤ 864 min of downtime (≈ 98%)               |
|            | EPP session-command RTT   | ≤ 4000 ms, for at least 90% of the commands |
|            | EPP query-command RTT     | ≤ 2000 ms, for at least 90% of the commands |
|            | EPP transform-command RTT | ≤ 4000 ms, for at least 90% of the commands |

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 periods of unavailable or slow service; 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. **RDDS**

- 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. EPP

- 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 Registry for the TLD as specified in Section 2.13 of this Agreement.

| <b>Critical Function</b>     | <b>Emergency Threshold</b>   |
|------------------------------|--|
| DNS Service (all servers)    | 4-hour total downtime / week   |
| DNSSEC proper resolution     | 4-hour total downtime / week   |
| EPP                          | 24-hour total downtime / week  |
| RDDS (WHOIS/Web-based WHOIS) | 24-hour total downtime / week  |
| Data Escrow                  | Breach of the Registry Agreement 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 of this Specification, 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 troubleshooting 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 department prepared to handle emergency requests from registrars. In the event that a registrar is unable to conduct EPP transactions with the registry for the TLD 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 operations department of ICANN. ICANN then may initiate an emergency escalation with the Registry Operator as explained above.

### 7.3. **Notifications of Outages and Maintenance**

In the event that a Registry Operator plans maintenance, it will provide notice to the ICANN emergency operations department, at least, twenty-four (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 its contractual obligations with ICANN, on services under a service level agreement 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 to any other request from an Internet user (for DNS and RDDS) or registrar (for EPP).

- 8.2. **ICANN testing registrar.** Registry Operator agrees that ICANN will have a testing registrar used for purposes of measuring the **SLRs** 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.

## SPECIFICATION 11

### PUBLIC INTEREST COMMITMENTS

1. Registry Operator will use only ICANN accredited registrars that are party to the Registrar Accreditation Agreement approved by the ICANN Board of Directors on 27 June 2013 in registering domain names. A list of such registrars shall be maintained by ICANN on ICANN's website.
2. (Intentionally omitted. Registry Operator has not included commitments, statements of intent or business plans provided for in its application to ICANN for the TLD.)
3. Registry Operator agrees to perform the following specific public interest commitments, which commitments shall be enforceable by ICANN and through the Public Interest Commitment Dispute Resolution Process established by ICANN (posted at <http://www.icann.org/en/resources/registries/picdrp>), which may be revised in immaterial respects by ICANN from time to time (the "PICDRP"). Registry Operator shall comply with the PICDRP. 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 Agreement) following a determination by any PICDRP panel and to be bound by any such determination.
  - a. Registry Operator will include a provision in its Registry-Registrar Agreement that requires Registrars to include in their Registration Agreements a provision prohibiting Registered Name Holders from distributing malware, abusively operating botnets, phishing, piracy, trademark or copyright infringement, fraudulent or deceptive practices, counterfeiting or otherwise engaging in activity contrary to applicable law, and providing (consistent with applicable law and any related procedures) consequences for such activities including suspension of the domain name.
  - b. Registry Operator will periodically conduct a technical analysis to assess whether domains in the TLD are being used to perpetrate security threats, such as pharming, phishing, malware, and botnets. Registry Operator will maintain statistical reports on the number of security threats identified and the actions taken as a result of the periodic security checks. Registry Operator will maintain these reports for the term of the Agreement unless a shorter period is required by law or approved by ICANN, and will provide them to ICANN upon request.
  - c. Registry Operator will operate the TLD in a transparent manner consistent with general principles of openness and non-discrimination by establishing, publishing and adhering to clear registration policies.

- d. Registry Operator of a “Generic String” TLD may not impose eligibility criteria for registering names in the TLD that limit registrations exclusively to a single person or entity and/or that person’s or entity’s “Affiliates” (as defined in Section 2.9(c) of the Registry Agreement). “Generic String” means a string consisting of a word or term that denominates or describes a general class of goods, services, groups, organizations or things, as opposed to distinguishing a specific brand of goods, services, groups, organizations or things from those of others.