

.NET Registry Agreement

(1 July 2017)

REGISTRY AGREEMENT

This REGISTRY AGREEMENT (this "Agreement") is entered into as of _____ by and between Internet Corporation for Assigned Names and Numbers, a California nonprofit public benefit corporation ("ICANN"), and VeriSign, Inc. a Delaware corporation.

ARTICLE I INTRODUCTION

Section 1.1 Effective Date. The Effective Date for purposes of this Agreement shall be July 1, 2017.

Section 1.2 Top-Level Domain. The Top-Level Domain to which this Agreement applies is .net ("TLD").

Section 1.3 Designation as Registry Operator. Upon the Effective Date and throughout the Term (as defined in Section 4.1 hereof) of this Agreement, unless earlier terminated pursuant to Article 6 hereof, ICANN shall continue to designate VeriSign, Inc. as the sole registry operator for the TLD ("Registry Operator").

ARTICLE II REPRESENTATIONS AND WARRANTIES

Section 2.1 Registry Operator's Representations and Warranties.

(a) Organization; Due Authorization and Execution. Registry Operator is a corporation, duly organized, validly existing and in good standing under the laws of Delaware, and Registry Operator has all requisite power and authority to enter into this Agreement. All corporate approvals and actions necessary for the entrance by Registry Operator into this Agreement have been obtained and this Agreement has been duly and validly executed and delivered by Registry Operator.

(b) Statements made During Negotiation Process. The factual statements made in writing by both parties in negotiating this Agreement, were true and correct in all material respects at the time made. A violation or breach of this subsection shall not be a basis for termination, rescission or other equitable relief, and, instead shall only give rise to a claim for damages.

Section 2.2 ICANN's Representations and Warranties.

(a) Organization; Due Authorization and Execution. ICANN is a nonprofit public benefit corporation duly organized, validly existing and in good standing under the laws of California. ICANN has all requisite corporate power and authority to enter into this Agreement. All corporate approvals and actions necessary for the entrance by ICANN into this Agreement have been obtained and this Agreement has been duly and validly executed and delivered by ICANN.

ARTICLE III Covenants

Section 3.1 Covenants of Registry Operator. Registry Operator covenants and agrees with ICANN as follows:

(a) Preserve Security and Stability.

(i) ICANN Temporary Specifications or Policies. Registry Operator shall comply with and implement all specifications or policies established by the ICANN Board of Directors on a temporary basis, if adopted by the ICANN Board of Directors by a vote of at least two-thirds of its members, so long as the ICANN Board of Directors reasonably determines that immediate temporary establishment of a specification or policy on the subject is necessary to maintain the Stability or Security (as defined in Section 3.1(d)(iv)(G)) of Registry Services or the DNS ("Temporary Specification or Policies"). Such proposed specification or policy shall be as narrowly tailored as feasible to achieve those objectives. In establishing any specification or policy under this provision, the ICANN Board of Directors shall state the period of time for which the specification or policy is temporarily adopted and shall immediately implement the Consensus Policy development process set forth in ICANN's Bylaws. ICANN shall also issue an advisory statement containing a detailed explanation of its reasons for adopting the temporary specification or policy and why the Board believes the specification or policy should receive the consensus support of Internet stakeholders. If the period of time for which the specification or policy is adopted exceeds 90 days, the ICANN Board shall reaffirm its temporary adoption every 90 days for a total period not to exceed one year, in order to maintain such policy in effect until such time as it shall become a Consensus Policy as described in Section 3.1(b) below. If during such one year period, the temporary policy or specification does not become a Consensus Policy meeting the standard set forth in Section 3.1(b) below, Registry Operator shall no longer be required to comply with or implement such temporary policy or specification.

(b) Consensus Policies.

(i) At all times during the term of this Agreement and subject to the terms hereof, Registry Operator will fully comply with and implement all Consensus Policies found at <http://www.icann.org/en/general/consensus-policies.htm>, as of the Effective Date and as may in the future be developed and adopted in accordance with ICANN's Bylaws and as set forth below.

(ii) "Consensus Policies" are those specifications or policies established (1) pursuant to the procedure set forth in ICANN's Bylaws and due process, and (2) covering those topics listed in Section 3.1(b)(iv) below. The Consensus Policy development process and procedure set forth in ICANN's Bylaws may be revised from time to time in accordance with ICANN's Bylaws, and any Consensus Policy that is adopted through such a revised process and covering those topics listed in Section 3.1(b)(iv) below shall be considered a Consensus Policy for purposes of this Agreement.

(iii) For all purposes under this Agreement, the policies identified at <http://www.icann.org/en/general/consensus-policies.htm> shall be treated in the same manner and have the same effect as "Consensus Policies."

(iv) 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) issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, Security and/or Stability of the Internet or DNS; (2) functional and performance specifications for the provision of Registry Services (as defined in Section 3.1(d)(iii) below); (3) Security and Stability of the registry database for the TLD; (4) registry policies reasonably necessary to implement Consensus Policies relating to registry operations or registrars; or (5) resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names). Such categories of issues referred to in the preceding sentence shall include, without limitation:

(A) principles for allocation of registered names in the TLD (e.g., first-come, first-served, timely renewal, holding period after expiration);

(B) prohibitions on warehousing of or speculation in domain names by registries or registrars;

(C) 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 (a) avoidance of confusion among or misleading of users, (b) intellectual property, or (c) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration);

(D) maintenance of and access to accurate and up-to-date information concerning domain name registrations;

(E) procedures to avoid disruptions of domain name registration 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; and

(F) resolution of disputes regarding whether particular parties may register or maintain registration of particular domain names.

(v) In addition to the other limitations on Consensus Policies, they shall not:

(A) prescribe or limit the price of Registry Services;

(B) modify the standards for the consideration of proposed Registry Services, including the definitions of Security and Stability (set forth below) and the standards applied by ICANN;

(C) modify the terms or conditions for the renewal or termination of this Agreement;

(D) modify ICANN's obligations to Registry Operator under Section 3.2 (a), (b), and (c);

(E) modify the limitations on Consensus Policies or Temporary Specifications or Policies;

(F) modify the definition of Registry Services;

(G) modify the terms of Sections 7.2 and 7.3, below; and

(H) alter services that have been implemented pursuant to Section 3.1(d) of this Agreement (unless justified by compelling and just cause based on Security and Stability).

(vi) Registry Operator shall be afforded a reasonable period of time following notice of the establishment of a Consensus Policy or Temporary Specifications or Policies in which to comply with such policy or specification, taking into account any urgency involved.

In the event of a conflict between Registry Services (as defined in Section 3.1(d)(iii) below), on the one hand, and Consensus Policies developed in accordance with this Section 3.1(b) or any Temporary Specifications or Policies established pursuant to Section 3.1(a)(i) above, on the other hand, the Consensus Policies or Temporary Specifications or Policies shall control, notwithstanding any other provisions contained within this Agreement.

(c) Handling of Registry Data.

(i) Data Escrow. Registry Operator shall establish at its expense a data escrow or mirror site policy for the Registry Data compiled by Registry Operator. Registry Data, as used in this Agreement, shall mean the following: (1) data for domains sponsored by all registrars, consisting of domain name, server name for each nameserver, registrar id, updated date, creation date, expiration date, status information, and DNSSEC delegation signer (“DS”) data; (2) data for nameservers sponsored by all registrars consisting of server name, each IP address, registrar id, updated date, creation date, expiration date, and status information; (3) data for registrars sponsoring registered domains and nameservers, consisting of registrar id, registrar address, registrar telephone number, registrar e-mail address, whois server, referral URL, updated date and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts; and, (4) domain name registrant data collected by the Registry Operator from registrars as part of or following registration of a domain name. The escrow agent or mirror-site manager, and the obligations thereof, shall be mutually agreed upon by ICANN and Registry Operator on commercially reasonable standards that are technically and practically sufficient to allow a successor registry operator to assume management of the TLD. To this end, Registry Operator shall periodically deposit into escrow all Registry Data on a schedule (not more frequently than weekly for a complete set of Registry Data, and daily for incremental updates) and in an electronic format mutually approved from time to time by Registry Operator and ICANN, such approval not to be unreasonably withheld by either party. In addition, Registry Operator will deposit into escrow that data collected from registrars as part of offering Registry Services introduced after the Effective Date of this Agreement. The schedule, content, format, and procedure for escrow deposits shall be as reasonably established by ICANN from time to time, and as set forth in

Appendix 1 hereto. Changes to the schedule, content, format, and procedure may be made only with the mutual written consent of ICANN and Registry Operator (which neither party shall unreasonably withhold) or through the establishment of a Consensus Policy as outlined in Section 3.1(b) above. The escrow shall be held under an agreement, substantially in the form of Appendix 2, as the same may be revised from time to time, among ICANN, Registry Operator, and the escrow agent. Notwithstanding the foregoing, the above language in this Section 3.1(c)(i) shall expire and be of no further force and effect upon the later of August 1, 2017 or fifteen (15) days following the execution by all parties of an Escrow Agreement substantially in the form of Appendix 2A (Escrow Agreement), (hereinafter referred to as “**Appendix 1A, 2A and 5A Effective Date**”). Upon the Appendix 1A, 2A and 5A Effective Date: (1) Appendix 1, Appendix 2, and Appendix 5 shall be deleted in their entirety and replaced by Appendix 1A, 2A and 5A, respectively attached hereto; (2) Registry Operator shall comply with the registry data escrow specifications set forth in Appendix 1A; (3) the parties will comply with the executed Escrow Agreement substantially in the form of Appendix 2A; and (4) Registry Operator shall comply with Section 3(c)(v) below.

(ii) Personal Data. Registry Operator shall notify registrars sponsoring registrations in the registry for the TLD of the purposes for which Personal Data (as defined below) submitted to Registry Operator by registrars, if any, is collected, the intended recipients (or categories of recipients) of such Personal Data, and the mechanism for access to and correction of such Personal Data. Registry Operator shall take reasonable steps to protect Personal Data 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. "Personal Data" shall refer to all data about any identified or identifiable natural person.

(iii) Bulk Zone File Access. Registry Operator shall provide bulk access to the zone files for the registry for the TLD to ICANN on a continuous basis in the manner ICANN may reasonably specify from time to time. Bulk access to the zone files shall be provided to third parties on the terms set forth in the TLD zone file access agreement reasonably established by ICANN, which initially shall be in the form attached as Appendix 3 hereto. Notwithstanding the foregoing, upon one hundred twenty (120) days from the Effective Date (“**Appendix 3A Effective Date**”), Appendix 3 shall be deleted in its entirety and replaced with Appendix 3A and the Registry Operator will make available bulk access to zone files to third parties in accordance with the terms of

Appendix 3A. Changes to the zone file access agreement may be made upon the mutual written consent of ICANN and Registry Operator (which consent neither party shall unreasonably withhold).

(iv) Monthly Reporting. Within twenty (20) calendar days following the end of each calendar month, Registry Operator shall prepare and deliver to ICANN a report providing such data and in the format specified in Appendix 4. The parties agree to negotiate in good faith to develop a transition plan within six months of the Effective Date of this Agreement setting forth the timing and process by which Registry Operator will deliver the monthly operators reports with the content and format set forth in Specification 3 of the new gTLD registry agreement.

(v) Whois Service. Registry Operator shall provide such Whois data as set forth in Appendix 5 until the Appendix 1A, 2A and 5A Effective Date. Upon the Appendix 1A, 2A and 5A Effective Date, Registry Operator shall provide Whois data as set forth in Appendix 5A.

(d) Registry Operations.

(i) Registration Restrictions. Registry Operator shall reserve, and not register any TLD strings (i) appearing on the list of reserved TLD strings attached as Appendix 6 hereto or (ii) located at <http://data.iana.org/TLD/tlds-alpha-by-domain.txt> for initial (i.e., other than renewal) registration at the second level within the TLD.

(ii) Functional and Performance Specifications. Functional and Performance Specifications for operation of the TLD shall be as set forth in Appendix 7 hereto, and shall address without limitation DNS services; operation of the shared registration system; and nameserver operations. Registry Operator shall keep technical and operational records sufficient to evidence compliance with such specifications for at least one year.

(iii) Registry Services. Registry Services are, for purposes of this Agreement, defined as the following: (a) those services that are both (i) 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 zone servers; and dissemination of contact and other information concerning domain name server registrations in the TLD as required by this Agreement; and (ii) provided by the Registry Operator for the .net registry as of the Effective Date,

including as set forth in Appendix 9, as the case may be; (b) other products or services that the Registry Operator is required to provide because of the establishment of a Consensus Policy (as defined in Section 3.1(b) above); (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.

(iv) Process for Consideration of Proposed Registry Services. Following written notification by Registry Operator to ICANN that Registry Operator may make a change in a Registry Service within the scope of the preceding paragraph:

(A) ICANN shall have 15 calendar days to make a "preliminary determination" whether a Registry Service requires further consideration by ICANN because it reasonably determines such Registry Service: (i) could raise significant Security or Stability issues or (ii) could raise significant competition issues.

(B) Registry Operator must provide sufficient information at the time of notification to ICANN that it may implement such a proposed Registry Service to enable ICANN to make an informed "preliminary determination." Information provided by Registry Operator and marked "CONFIDENTIAL" shall be treated as confidential by ICANN. Registry Operator will not designate "CONFIDENTIAL" information necessary to describe the purpose of the proposed Registry Service and the effect on users of the DNS.

(C) ICANN may seek expert advice during the preliminary determination period (from entities or persons subject to confidentiality agreements) on the competition, Security or Stability implications of the Registry Service in order to make its "preliminary determination." To the extent ICANN determines to disclose confidential information to any such experts, it will provide notice to Registry Operator of the identity of the expert(s) and the information it intends to convey.

(D) If ICANN determines during the 15 calendar day "preliminary determination" period that the proposed Registry Service, does not raise significant Security or Stability (as defined below), or competition issues, Registry Operator shall be free to deploy it upon such a determination.

(E) In the event ICANN reasonably determines during the 15 calendar day "preliminary determination" period that the Registry Service might raise significant competition issues, ICANN shall refer the issue to the appropriate

governmental competition authority or authorities with jurisdiction over the matter within five business days of making its determination, or two business days following the expiration of such 15 day period, whichever is earlier, with notice to Registry Operator. Any such referral communication shall be posted on ICANN's website on the date of transmittal. Following such referral, ICANN shall have no further responsibility, and Registry Operator shall have no further obligation to ICANN, with respect to any competition issues relating to the Registry Service. If such a referral occurs, the Registry Operator will not deploy the Registry Service until 45 calendar days following the referral, unless earlier cleared by the referred governmental competition authority.

(F) In the event that ICANN reasonably determines during the 15 calendar day "preliminary determination" period that the proposed Registry Service might raise significant Stability or Security issues (as defined below), ICANN will refer the proposal to a Standing Panel of experts (as defined below) within five business days of making its determination, or two business days following the expiration of such 15 day period, whichever is earlier, and simultaneously invite public comment on the proposal. The Standing Panel shall have 45 calendar days from the referral to prepare a written report regarding the proposed Registry Service's effect on Security or Stability (as defined below), which report (along with a summary of any public comments) shall be forwarded to the ICANN Board. The report shall set forward the opinions of the Standing Panel, including, but not limited to, a detailed statement of the analysis, reasons, and information upon which the panel has relied in reaching their conclusions, along with the response to any specific questions that were included in the referral from ICANN staff. Upon ICANN's referral to the Standing Panel, Registry Operator may submit additional information or analyses regarding the likely effect on Security or Stability of the Registry Service.

(G) Upon its evaluation of the proposed Registry Service, the Standing Panel will report on the likelihood and materiality of the proposed Registry Service's effects on Security or Stability, including whether the proposed Registry Service creates a reasonable risk of a meaningful adverse effect on Security or Stability as defined below:

Security: For purposes of this Agreement, an effect on security by the proposed Registry Service 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.

Stability: For purposes of this Agreement, an effect on stability shall mean that the proposed Registry Service (1) is not compliant with applicable relevant standards that are authoritative and published by a well-established, recognized and authoritative standards body, such as relevant Standards-Track or Best Current Practice RFCs sponsored by the IETF or (2) creates 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, recognized and authoritative standards body, such as relevant Standards-Track or Best Current Practice RFCs and relying on Registry Operator's delegation information or provisioning services.

(H) Following receipt of the Standing Panel's report, which will be posted (with appropriate confidentiality redactions made after consultation with Registry Operator) and available for public comment, the ICANN Board will have 30 calendar days to reach a decision. In the event the ICANN Board reasonably determines that the proposed Registry Service creates a reasonable risk of a meaningful adverse effect on Stability or Security, Registry Operator will not offer the proposed Registry Service. An unredacted version of the Standing Panel's report shall be provided to Registry Operator upon the posting of the report. The Registry Operator may respond to the report of the Standing Panel or otherwise submit to the ICANN Board additional information or analyses regarding the likely effect on Security or Stability of the Registry Service.

(I) The Standing Panel shall consist of a total of 20 persons expert in the design, management and implementation of the complex systems and standards-protocols utilized in the Internet infrastructure and DNS (the "Standing Panel"). The members of the Standing Panel will be selected by its Chair. The Chair of the Standing Panel will be a person who is agreeable to both ICANN and the registry constituency of the supporting organization then responsible for generic top level domain registry policies. All members of the Standing Panel and the Chair shall execute an agreement requiring that they shall consider the issues before the panel neutrally and according to the definitions of Security and Stability. For each matter referred to the Standing Panel, the Chair shall select no more than five members from the Standing Panel to evaluate the referred matter, none of which shall have an existing competitive, financial, or legal conflict of interest, and with due regard to the particular technical issues raised by the referral.

(e) Fees and Payments. Registry Operator shall pay the Registry-Level Fees to ICANN on a quarterly basis in accordance with Section 7.2 hereof.

(f) Traffic Data. Nothing in this Agreement shall preclude Registry Operator from making commercial use of, or collecting, traffic data regarding domain names or non-existent domain names for purposes such as, without limitation, the determination of the availability and Security and Stability of the Internet, pinpointing specific points of failure, characterizing attacks and misconfigurations, identifying compromised networks and hosts, and promoting the sale of domain names; provided, however, that such use does not disclose domain name registrant, end user information or other Personal Data as defined in Section 3.1(c)(ii) for any purpose not otherwise authorized by this agreement. In this regard, in the event the TLD registry is a "thick" registry model, the traffic data that may be accessible to and used by Registry Operator shall be limited to the data that would be accessible to a registry operated under a "thin" registry model. The process for the introduction of new Registry Services shall not apply to such traffic data. Nothing contained in this Section 3.1(f) shall be deemed to constitute consent or acquiescence by ICANN to a re-introduction by Registry Operator of the SiteFinder service previously introduced by the Registry Operator on or about September 15, 2003, or the introduction of any other service employing a universal wildcard function, except that this sentence shall not prohibit the provision of nameservice or any other non-registry service for a domain or zone used for other than registration services to unaffiliated third parties by a single entity (including its affiliates) for domain names registered through an ICANN-accredited registrar. To the extent that traffic data subject to this provision is made available, access shall be on terms that are non-discriminatory.

(g) Emergency Transition. The parties agree to negotiate in good faith to amend this Agreement, including relevant appendices, if applicable, to incorporate an emergency transition process for the operation of the registry for the TLD within one hundred and twenty (120) days following the Effective Date. Such emergency transition process shall include mutually agreed upon requirements for ICANN's designation of an emergency interim registry operator of the registry for the TLD and objective standards under which Registry Operator would resume operation of the registry for the TLD.

Section 3.2 Covenants of ICANN. ICANN covenants and agrees with Registry Operator as follows:

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

(b) 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.

(c) TLD Zone Servers. In the event and to the extent that ICANN is authorized to set policy with regard to an authoritative root server system, it will ensure that (i) the authoritative root will point to the TLD zone servers designated by Registry Operator for the Registry TLD throughout the Term of this Agreement; and (ii) any changes to the TLD zone server designation submitted to ICANN by Registry Operator will be implemented by ICANN within seven days of submission.

(d) Nameserver Changes. Registry Operator may request changes in the nameserver delegation for the Registry TLD. Any such request must be made in a format, and otherwise meet technical requirements, specified from time to time by ICANN. ICANN will use commercially reasonable efforts to have such requests implemented in the Authoritative Root-Server System within seven calendar days of the submission.

(e) Root-zone Information Publication. ICANN's publication of root-zone contact information for the Registry 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.

3.3 Cooperation. The parties agree to cooperate with each other and share data as necessary to accomplish the terms of this Agreement.

3.4 Contractual and Operational Compliance Audits.

(a) ICANN may from time to time (not to exceed once per calendar quarter) 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 II of this Agreement and its covenants contained in Article III of this Agreement. Such audits shall be tailored to achieve the purpose of assessing compliance, and ICANN will (i) 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 (ii) use commercially reasonable efforts to conduct such audit in such a manner as to not unreasonably disrupt the operations of Registry Operator. As part of such audit and upon request by ICANN, Registry Operator shall timely provide all responsive documents, data and any other information necessary to demonstrate Registry Operator's compliance with

this Agreement. Upon no less than five (5) business days notice (unless otherwise agreed to by Registry Operator), ICANN may, as part of any contractual compliance audit, conduct site visits during regular business hours to assess compliance by Registry Operator with its covenants contained in Section 3.1.

(b) Any audit conducted pursuant to Section 3.4(a) will be at ICANN's expense, unless (i) the audit relates to Registry Operator's compliance with Section 3.1(c)(iv) and such audit reveals a material discrepancy or discrepancies in the data provided by Registry Operator, or (ii) the audit is related to a discrepancy in the fees paid by Registry Operator hereunder in excess of 5% to ICANN's detriment. In either such case of (i) or (ii) above, Registry Operator shall reimburse ICANN for all reasonable costs and expenses associated with such audit and 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.

ARTICLE IV TERM OF AGREEMENT

Section 4.1 Term. This Agreement shall be effective on the Effective Date through June 30, 2023 (the "Expiration Date"), subject to extension of such term upon renewal pursuant to Section 4.2 (together, the initial and any renewal terms shall constitute the "**Term**"). Registry Operator agrees that upon the earlier of (i) termination of this Agreement by ICANN in accordance with Article VI below or (ii) the Expiration Date, it will cease to be the Registry Operator for the TLD, unless, with respect to termination under the foregoing clause (ii), Registry Operator and ICANN agree on terms for renewal of the Agreement as set forth in Section 4.2 below prior to the Expiration Date.

Section 4.2 Renewal. This Agreement shall be renewed upon the expiration of the initial term set forth in Section 4.1 above and each renewal term of this Agreement, unless the following has occurred: (i) following notice of breach to Registry Operator in accordance with Section 6.1 and failure to cure such breach within the time period prescribed in Section 6.1, an arbitrator or court has determined that Registry Operator has been in fundamental and material breach of Registry Operator's obligations set forth in Sections 3.1(a), (b), (d) or (e); Section 5.2 or Section 7.3 and (ii) following the final decision of such arbitrator or court, Registry Operator has failed to comply within ten days with the decision of the arbitrator or court, or within such other time period as may be prescribed by the arbitrator or court. Upon renewal, in the event that the terms of this Agreement are not similar to the terms generally in effect in the Registry Agreements of the 5 largest gTLDs (determined by the number of

domain name registrations under management at the time of renewal), renewal shall be upon terms reasonably necessary to render the terms of this Agreement similar to such terms in the Registry Agreements for those other gTLDs. The preceding sentence, however, shall not apply to the terms of this Agreement regarding the price of Registry Services; the standards for the consideration of proposed Registry Services, including the definitions of Security and Stability and the standards applied by ICANN in the consideration process; the terms or conditions for the renewal or termination of this Agreement; ICANN's obligations to Registry Operator under Section 3.2 (a), (b), and (c); the limitations on Consensus Policies or Temporary Specifications or Policies; the definition of Registry Services; or the terms of Section 7.3. Upon renewal, Registry-Level Transaction Fees may be reasonably modified so long as any increase in such fees shall not exceed the average of the percentage increase in Registry-Level Transaction Fees for the 5 largest gTLDs (determined as above), during the prior three-year period. The parties agree to initiate negotiations with respect to each renewal of the Agreement at least six (6) months prior to the respective Expiration Date.

Section 4.3 Changes. While this Agreement is in effect, the parties agree to engage in good faith negotiations at regular intervals (at least once every three calendar years following the Effective Date) regarding possible changes to the terms of the Agreement, including to Section 7.2 regarding fees and payments to ICANN.

Section 4.4 Failure to Perform in Good Faith. In the event Registry Operator shall have been repeatedly and willfully in fundamental and material breach of Registry Operator's obligations set forth in Sections 3.1(a), (b), (d) or (e); Section 5.2 or Section 7.3, and arbitrators in accordance with Section 5.1(b) of this Agreement repeatedly have found Registry Operator to have been in fundamental and material breach of this Agreement, including in at least three separate awards, then the arbitrators shall award such punitive, exemplary or other damages as they may believe appropriate under the circumstances.

ARTICLE V DISPUTE RESOLUTION

Section 5.1 Resolution of Disputes.

(a) Cooperative Engagement. In the event of a disagreement between Registry Operator and ICANN arising under or out of this Agreement, either party may by notice to the other invoke the dispute resolution provisions of this Article V. Provided, however, that before either party may initiate arbitration as provided in Section 5.1(b) below, ICANN and Registry Operator

must attempt to resolve the dispute by cooperative engagement as set forth in this Section 5.1(a). If either party provides written notice to the other demanding cooperative engagement as set forth in this Section 5.1(a), then each party will, within seven calendar days after such written notice is deemed received in accordance with Section 8.8 hereof, designate a single executive officer as its representative under this Section 5.1(a) with full authority to act on such party's behalf to resolve the dispute. The designated representatives shall, within 2 business days after being designated, confer by telephone or in person to attempt to resolve the dispute. If they are not able to resolve the dispute during such telephone conference or meeting, they shall further meet in person at a location reasonably designated by ICANN within 7 calendar days after such initial telephone conference or meeting, at which meeting the parties shall attempt to reach a definitive resolution. The time schedule and process set forth in this Section 5.1(a) may be modified with respect to any dispute, but only if both parties agree to a revised time schedule or process in writing in advance. Settlement communications within the scope of this paragraph shall be inadmissible in any arbitration or litigation between the parties.

(b) Arbitration. Disputes arising under or in connection with this Agreement, including requests for specific performance, shall be resolved through binding arbitration conducted as provided in this Section 5.1(b) pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce ("ICC"). The arbitration shall be conducted in the English language and shall occur in Los Angeles County, California, USA only following the failure to resolve the dispute pursuant to cooperative engagement discussions as set forth in Section 5.1(a) above. There shall be three arbitrators: each party shall choose one arbitrator and, if the two arbitrators are not able to agree on a third arbitrator, the third shall be chosen by the ICC. The prevailing party in the arbitration shall have the right to recover its costs and reasonable attorneys' fees, which the arbitrators shall include in their awards. Any party that seeks to confirm or vacate an arbitration award issued under this Section 5.1(b) may do so only pursuant to the applicable arbitration statutes. In any litigation involving ICANN concerning this Agreement, jurisdiction and exclusive venue for such litigation shall be in a court located in Los Angeles County, California, USA; however, the parties shall also have the right to enforce a judgment of such a court in any court of competent jurisdiction. For the purpose of aiding the arbitration and/or preserving the rights of the parties during the pendency of an arbitration, the parties shall have the right to seek a temporary stay or injunctive relief from the arbitration panel or a court, which shall not be a waiver of this agreement to arbitrate.

Section 5.2 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 arbitrators specific performance of the terms of this Agreement (in addition to any other remedy to which each party is entitled).

Section 5.3 Limitation of Liability. ICANN's aggregate monetary liability for violations of this Agreement shall not exceed the amount of Registry-Level Fees paid by Registry Operator to ICANN within the preceding twelve-month period pursuant to Section 7.2 of this Agreement. Registry Operator's aggregate monetary liability to ICANN for violations of this Agreement shall be limited to fees, and monetary sanctions under Section 4.4, if any, due and owing to ICANN under this Agreement within the preceding twelve month period. In no event shall either party be liable for special, indirect, incidental, 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 pursuant to Section 4.4 of this Agreement. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, REGISTRY OPERATOR DOES NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICES RENDERED BY ITSELF, ITS SERVANTS, OR ITS AGENTS OR THE RESULTS OBTAINED FROM THEIR WORK, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE VI TERMINATION PROVISIONS

Section 6.1 Termination by ICANN. ICANN may terminate this Agreement if and only if: (i) Registry Operator fails to cure any fundamental and material breach of Registry Operator's obligations set forth in Sections 3.1(a), (b), (d) or (e); Section 5.2 or Section 7.3 within thirty calendar days after ICANN gives Registry Operator written notice of the breach, which notice shall include with specificity the details of the alleged breach; and (ii) (a) an arbitrator or court has finally determined that Registry Operator is, or was, in fundamental and material breach and failed to cure such breach within the prescribed time period and (b) following the decision of such arbitrator or court, Registry Operator has failed to comply with the decision of the arbitrator or court.

Section 6.2 Bankruptcy. 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 that if levied, would reasonably be expected to materially and adversely affect the Registry Operator's ability to operate the registry for the TLD, (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 (if such proceedings are instituted by Registry Operator or its Affiliates) or one hundred and eighty (180) calendar days of their commencement (if such proceedings are instituted by a third party against Registry Operator), 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.

Section 6.3 Transition of Registry upon Termination of Agreement. Upon any expiration of this Agreement as provided in Section 4.1 or termination of this Agreement as provided in Sections 6.1 and 6.2, the parties agree to work cooperatively to facilitate and implement the transition of the registry for the TLD in accordance with this Section 6.3. Registry Operator shall agree to provide ICANN or any successor registry authority that may be designated for the TLD with any data regarding operations of the registry for the TLD necessary to maintain operations that may be reasonably requested in addition to that data escrowed in accordance with Section 3.1(c)(i) hereof.

Section 6.4 Rights in Data. Registry Operator shall not be entitled to claim any intellectual property rights in Registry Data. In the event that Registry Data is released from escrow as set forth in Section 3.1(c)(i), rights, if any, held by Registry Operator in the data shall automatically be licensed on a non-exclusive, irrevocable, royalty-free, paid-up basis to ICANN or to a party designated in writing by ICANN.

Section 6.5 No Reimbursement. Any and all expenditures, capital investments or other investments made by Registry Operator in connection with this Agreement shall be at Registry Operator's own risk and ICANN shall have no obligation to reimburse Registry Operator for any such expense, capital expenditure or investment. Registry Operator shall not be required to make any payments to a successor registry operator by reason of registry fees paid

to Registry Operator prior to the effective date of (i) any termination or expiration of this Agreement or (ii) transition of the registry, unless any delay in transition of the registry to a successor operator shall be due to the actions of Registry Operator.

ARTICLE VII SPECIAL PROVISIONS

Section 7.1 Registry-Registrar Agreement.

(a) Access to Registry Services. Registry Operator shall make access to Registry Services, including the shared registration system, available to all ICANN-accredited registrars, subject to the terms of the Registry-Registrar Agreement attached as Appendix 8 hereto. Subject to Section 7.1(e), Registry Operator shall provide all ICANN-accredited registrars following execution of the Registry-Registrar Agreement, provided registrars are in compliance with such agreement, operational access to Registry Services, including the shared registration system for the TLD. Such nondiscriminatory access shall include without limitation the following:

(i) All registrars (including any registrar affiliated with Registry Operator, if any) can connect to the shared registration system gateway for the TLD via the Internet by utilizing the same maximum number of IP addresses and SSL certificate authentication;

(ii) Registry Operator has made the current version of the registrar toolkit software accessible to all registrars and has made any updates available to all registrars on the same schedule;

(iii) All registrars have the same level of access to customer support personnel via telephone, e-mail and Registry Operator's website;

(iv) All registrars have the same level of access to registry resources to resolve registry/registrar or registrar/registrar disputes and technical and/or administrative customer service issues;

(v) All registrars have the same level of access to data generated by Registry Operator to reconcile their registration activities from Registry Operator's Web and ftp servers;

(vi) All registrars may perform basic automated registrar account management functions using the same registrar tool made available to all registrars by Registry Operator; and

(vii) The shared registration system does not include, for purposes of providing discriminatory access, any algorithms or protocols that differentiate among registrars with respect to functionality, including database access, system priorities and overall performance.

Such Registry-Registrar Agreement may be revised by Registry Operator from time to time, provided however, that any such revisions must be approved in advance by ICANN.

(b) Special Programs. Notwithstanding Section 7.1(a), Registry Operator may for the purpose of supporting the development of the Internet in an underserved geographic region (a region being one or more countries) provide training, technical support, marketing or incentive programs based on the unique needs of registrars primarily focused on serving such geographies to such registrars, so long as Registry Operator does not treat similarly situated registrars differently or apply such programs arbitrarily. In addition, Registry Operator may implement such programs with respect to registrars within a specific geographic region (a region being one or more countries), so long as (i) such region is defined broadly enough to allow multiple registrars to participate and such programs are made available to all such registrars, and (ii) such programs do not favor any registrar in which Registry Operator may have an ownership interest. For purposes of this section, an underserved geographic region is one that, in the reasonable judgment of Registry Operator, is underserved by registry operators based upon an analysis of relevant metrics, including but not limited to broadband penetration, information and technology expenditures, domain penetration, registrar penetration, web hosting penetration, internet usage and number of internet users. Within five (5) calendar days of offering any such programs, Registry Operator shall post a notice of the offering of such program within the registrar facing communication tools of Registry Operator's website (which notice shall include, at a minimum, the terms and conditions of such program and identify the underserved geographic region underlying such program).

(c) Registry Operator Shall Not Act as Own Registrar. Registry Operator shall not act as a registrar with respect to the TLD. This shall not preclude Registry Operator from registering names within the TLD to itself through a request made to an ICANN-accredited registrar. In addition, where there is an imminent threat to the Security and Stability of the TLD or the Internet, this provision shall not preclude Registry Operator, for the purpose of protecting the Security and Stability of the TLD or the Internet, from temporarily preventing the registration of one or more names; provided, as soon as practicable but no later than 3 business days of taking such action, Registry

Operator provides ICANN with a written notice of such action, which notice shall list all affected names, state the expected length of time that such names will not be available for registration, and explain why Registry Operator took such action. The contents of such notice shall be treated as confidential to the extent permitted by law. If ICANN disagrees with such action, it will instruct Registry Operator to release such names and Registry Operator shall immediately release such names upon receipt of such written instructions from ICANN.

(d) Restrictions on Acquisition of Ownership or Controlling Interest in Registrar. Registry Operator shall not acquire, directly or indirectly, control of, or a greater than fifteen percent ownership interest in, any ICANN-accredited registrar.

(e) Compliance Actions. Registry Operator acknowledges that all ICANN-accredited registrars must enter into a registrar accreditation agreement ("RAA") with ICANN and ICANN may take certain compliance actions in response to an emergency or in accordance with the terms of the RAA, including suspension or termination of a registrar's accreditation or suspension of a registrar's ability to create new registered names or initiate inbound transfers of registered names. ICANN may require Registry Operator to take specific actions consistent with ICANN's authority under the terms of the RAA to: (i) suspend or terminate a registrar's ability to create new registered names or (ii) transfer registered names to a registrar designated by ICANN.

Section 7.2 Fees to be Paid to ICANN.

(a) Registry-Level Transaction Fee. Registry Operator shall pay ICANN a Registry-Level Transaction Fee in an amount equal to US\$0.75 for each annual increment of an initial or renewal domain name registration and for transferring a domain name registration from one ICANN accredited registrar to another during the calendar quarter to which the Registry-Level Transaction Fee pertains. ICANN intends to apply this fee to purposes including: (a) a special restricted fund for developing country Internet communities to enable further participation in the ICANN mission by developing country stakeholders, (b) a special restricted fund to enhance and facilitate the security and stability of the DNS, and (c) general operating funds to support ICANN's mission to ensure the stable and secure operation of the DNS; provided, that ICANN will not be required to segregate funds for any such purpose or establish separate accounts for such funds.

(b) Payment Schedule. Registry Operator shall pay the Registry-Level Fees specified in Sections 7.2(a) and (c), and Section 7.2(d), if applicable, by the 20th day following the end of each calendar quarter (i.e., on April 20, July 20, October 20 and January 20 for the calendar quarters ending March 31, June 30, September 30 and December 31) of the year to an account designated by ICANN.

(c) Fixed Registry-Level Fee. Registry Operator shall pay ICANN a quarterly Fixed Registry-Level Fee in an amount equal to US\$37,950 for each quarter. Such fee is subject to increase on July 1 of each year thereafter in an amount established by ICANN's Board of Directors, but not to exceed a sum equal to 115% of the prior year's fee. One dollar (USD) of the Fixed Registry-Level Fee shall be waived for each dollar that the Registry-Level Transaction Fee exceeds US\$2,000,000 per annum.

(d) Variable Registry-Level Fee. For fiscal quarters in which ICANN does not collect a variable accreditation fee from all registrars, upon receipt of written notice from ICANN, Registry Operator shall pay ICANN a Variable Registry-Level Fee. The fee will be calculated by ICANN, paid to ICANN by the Registry Operator in accordance with the Payment Schedule in Section 7.2(b), and the Registry Operator will invoice and collect the fees from the registrars who are party to a Registry-Registrar Agreement with Registry Operator. The fee will consist of two components; each component will be calculated by ICANN for each registrar:

(i) 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 fiscal year but shall not exceed US\$0.25.

(ii) 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 fiscal year.

(e) Interest on Late Payments. For any payments ten days or more overdue pursuant to Section 7.2, Registry Operator shall pay interest on late payments at the rate of 1.5% per month or, if less, the maximum rate permitted by applicable law.

Section 7.3 Pricing for Domain Name Registrations and Registry Services.

(a) Pricing. The price to ICANN-accredited registrars for new and renewal domain name registrations and for transferring a domain name registration

from one ICANN-accredited registrar to another, shall not exceed a total fee of US\$8.95, which fee consists of (A) a Registry Operator service fee ("Service Fee") equal to US\$8.20, and (B) an ICANN fee equal to US\$0.75. The Service Fee charged during a calendar year for each annual increment of a new and renewal domain name registration and for transferring a domain name registration from one ICANN-accredited registrar to another, shall not exceed the highest Service Fee charged during the preceding calendar year multiplied by 1.10. The same Service Fee shall be charged to all ICANN-accredited registrars. Volume discounts and marketing support and incentive programs may be made if the same opportunities to qualify for those discounts and marketing support and incentive programs are available to all ICANN-accredited registrars. For the avoidance of doubt, the programs expressly permitted by Section 7.1(b) shall not be a violation of this Section 7.3(a).

(b) Adjustments to Pricing for Domain Name Registrations. Registry Operator shall provide no less than six months prior notice in advance of any price increase for domain name registrations and shall continue to offer domain name registrations for periods of up to ten years.

ARTICLE VIII Miscellaneous

Section 8.1 Indemnification of ICANN.

(a) Registry Operator shall indemnify, defend, and hold harmless ICANN (including its directors, officers, employees, and agents) 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: (a) ICANN's reliance, in connection with its decision to delegate the TLD to Registry Operator or to enter into this Agreement, on information provided by Registry Operator in its application for the TLD; (b) Registry Operator's establishment or operation of the registry for the TLD; (c) Registry Operator's provision of Registry Services; (d) collection or handling of Personal Data by Registry Operator; (e) any dispute concerning registration of a domain name within the domain of the TLD for the registry; and (f) duties and obligations of Registry Operator in operating the registry for the TLD; provided that Registry Operator shall not be obligated to indemnify, defend, or hold harmless ICANN to the extent the claim, damage, liability, cost, or expense arose due to a breach by ICANN of any obligation contained in this Agreement or any willful misconduct of ICANN. For avoidance of doubt, nothing in this Section 8.1 shall be deemed to require Registry Operator to reimburse or otherwise indemnify ICANN for the costs associated with the negotiation or execution of this Agreement, or with the monitoring or management of the parties' respective obligations under

this Agreement. 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.

(b) For any claims by ICANN for indemnification whereby multiple registry operators (including Registry Operator) have engaged in the 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 Section 7.2 hereof for any applicable quarter) by the total number of domain names under registration within all TLDs for which the registry operators thereof that are engaging in the same acts or omissions giving rise to such claim. 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 above, but such registry operator(s) do not have the same or similar indemnification obligations to ICANN as set forth in 8.1(a) above, the number of domains under management by such registry operator(s) shall nonetheless be included in the calculation in the preceding sentence.

Section 8.2 Indemnification Procedures. If ICANN receives notice of any third-party claim that is indemnified under Section 8.1 above, ICANN shall promptly notify Registry Operator of such claim. 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 the indemnified party to handle and defend the same, at the indemnifying party's sole cost and expense, provided that in all events ICANN shall be entitled to control at its sole cost and expense the litigation of issues concerning the validity or interpretation of ICANN policies or conduct. ICANN shall cooperate, at its own cost, in all reasonable respects with Registry Operator and its attorneys in the investigation, trial, and defense of such claim and any appeal arising therefrom; provided, however, that the indemnified party 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 indemnified shall 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, Registry Operator may participate in such

defense, at its sole cost and expense, and ICANN shall have the right to defend the claim in such manner as it may deem appropriate, at the cost and expense of Registry Operator.

Section 8.3 No Offset. All payments due under this Agreement shall be made in a timely manner throughout the term of this Agreement and notwithstanding the pendency of any dispute (monetary or otherwise) between Registry Operator and ICANN.

Section 8.4 Use of ICANN Name and Logo. ICANN grants to Registry Operator a non-exclusive royalty-free license to state that it is designated by ICANN as the Registry Operator for the Registry TLD and to use a logo specified by ICANN to signify that Registry Operator is an ICANN-designated registry authority. This license may not be assigned or sublicensed by Registry Operator.

Section 8.5 Assignment and Subcontracting. Any assignment of this Agreement shall be effective only upon written agreement by the assignee with the other party to assume the assigning party's obligations under this Agreement. Moreover, neither party may assign this Agreement without the prior written approval of the other party, which shall not be unreasonably withheld. Notwithstanding the foregoing, ICANN may assign this Agreement in conjunction with a reorganization or re-incorporation of ICANN, to another nonprofit corporation organized for the same or substantially the same purposes. Registry Operator must provide notice to ICANN of any subcontracting arrangements, and any agreement to subcontract portions of the operations of the TLD must mandate compliance with all covenants, obligations and agreements by Registry Operator hereunder. Any subcontracting of technical operations shall provide that the subcontracted entity become party to the data escrow agreement mandated by Section 3.1(c)(i) hereof.

Section 8.6 Amendments and Waivers. No amendment, supplement, or modification of this Agreement or any provision hereof shall be binding unless executed in writing by both 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.

Section 8.7 No Third-Party Beneficiaries. This Agreement shall 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.

Section 8.8 Notices, Designations, and Specifications. All notices to be given under or in relation to this Agreement shall 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. Any change in the contact information for notice below shall be given by the party within 30 days of such change. Any notice required by this Agreement shall 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. Whenever this Agreement shall specify a URL address for certain information, Registry Operator shall be deemed to have been given notice of any such information when electronically posted at the designated URL. In the event other means of notice shall become practically achievable, such as notice via a secure website, the parties shall 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
Phone: +1 310 301 5800
FAX: +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:

VeriSign, Inc.
12061 Bluemont Way
Reston, VA 20190

Telephone: 1-703-948-3200
Facsimile: 1-703-435-4921
Attention: General Counsel
Email: (As specified from time to time.)

Section 8.9 Language. Notices, designations, determinations, and specifications made under this Agreement shall be in the English language.

Section 8.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Section 8.11 Entire Agreement. This Agreement (including its Appendices, 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. In the event of a conflict between the provisions in the body of this Agreement and any provision in its Appendices, the provisions in the body of the Agreement shall control.

[signature page follows]

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: _____

Göran Marby
President and Chief Executive Officer

Date: _____

VeriSign, Inc.

By: _____

D. James Bidzos
President and Chief Executive Officer

Date: _____

.NET Registry Agreement Appendix 1 Data Escrow Specification

(Effective July 1, 2017 until the Appendix 1A, 2A and 5A Effective Date)

This Appendix 1 to the .net Registry Agreement consists of four of the five exhibits to the Data Escrow Agreement that constitutes Appendix 2 to the TLD Registry Agreement:

[Exhibit A-Schedule for Escrow Deposits](#)

[Exhibit B-Escrow Deposit Format Specification](#)

[Exhibit C-Escrow Transfer Process](#)

[Exhibit D-Escrow Verification Procedures](#)

The fifth exhibit (Exhibit E), which sets forth Escrow Agent's fees, is subject to negotiation between Registry Operator and Escrow Agent.

EXHIBIT A Schedule for Escrow Deposits

Weekly and daily deposits will include records/transactions generated just before 00:00:00 (EST/EDT) of the next day they relate, e.g., report related to Sunday will include all transactions generated just before 00:00:00 of the following Monday. Date fields will be date-time data expressed in Eastern Standard Time / Eastern Daylight Time using the Gregorian calendar, e.g. "2010-03-29T18.04.32" until a future time, to be mutually agreed by the Parties, when the date fields will include a time zone indicator specifically corresponding to the Eastern Standard Time / Eastern Daylight Time, as appropriate, e.g. "2010-03-29T18.04.32-04:00" Data fields in the specified reports will be colon delimited until a future time, to be mutually agreed by the parties, when the delimiter will be changed to a tilde "~" or other agreed delimiter. Further, the Registrar Whois Report from the Weekly Deposit Materials will be provided in XML.

Weekly Escrow Deposits:

VNDS will deposit a complete set of Data into escrow on a weekly basis by electronically and securely transmitting a snapshot of each operational Registrar's data (the "Deposit Materials"). The snapshot captures the state of each Registrar's data at the time the snapshot was created. Specific data

elements contained in the Deposit Materials are identified in Table 1 of Exhibit B.

Daily Escrow Deposits:

VNDS will securely and electronically deposit a transaction log for each operational Registrar representing transactions that occurred over the previous 24-hour period (the "Additional Deposit"). The logs will be escrowed daily, being in the form of Additional Deposit each Tuesday through Sunday, and being in the form of the Weekly Deposit Materials each Monday, which shall capture that Sunday's data. The Daily Additional Deposit will act as incremental updates to the Weekly Deposit Materials and will include all Registrar activity, such as add, delete, and transfer of a domain name. Specific data elements contained in the Additional Deposit are identified in Table 2 of Exhibit B.

Electronic Delivery Service Escrow Deposit Method:

The transmitted data will be made available to Data Escrow Provider as follows:

Daily Deposits:

Daily transactional data will be made available no later than 18:00 (EDT/EST) each Tuesday through Sunday for the previous calendar day. For example, transactional data related to Monday would be available to the escrow company on Tuesday no later than 18:00 (EDT/EST). The results of transactions completed on Sunday will be made available in the Weekly Deposit Materials, thus no separate Daily Additional Deposit will be made for Sunday activity.

Weekly Deposits:

Weekly database snapshots taken at midnight on Sundays will be available not later than 18:00 (EDT/EST) each Monday.

EXHIBIT B ESCROW DEPOSIT FORMAT SPECIFICATION

Each Weekly and Daily Deposit consists of a series of reports that are concatenated in the escrow process.

Table 1: Weekly Deposit Materials Format

Weekly Reports

1. Registrar Domain Report - com

Title: Registrar Domain Report - com

Report name: rgr_domain_com

Description: This report contains data for domains sponsored by all registrars. Status Information will use Status Values from RFC 5731, Section 2.3. Since a domain may have more than one status, each domain will have separate lines for each domain/nameserver/status combination.

Fields:

Domain Name (domainname)

Server names for all nameservers (servername)

IANA Registrar ID (registrarid)

Updated Date (updatedate)

Creation Date (createdate)

Expiration Date (expirationdate)

Status Information (statusname)

Domain ROID (roid)

2. Registrar Nameserver Report

Title: Registrar Nameserver Report

Report name: rgr_nameserver

Description: This report contains data for all nameservers sponsored by all registrars. The nameserver is listed once with all associated information. Since a nameserver may have more than one IP address, each nameserver will have separate lines for each nameserver/IP address/status combination. Status Information will use Status Values from RFC 5732, Section 2.3.

Fields:

Server Name (servername)

IP Address (ipaddress)

IANA Registrar ID (registrarid)

Updated Date (updatedate)

Creation Date (createdate)

Expiration Date (expirationdate)

Status Information (statusname)
Nameserver ROID (nsroid)

3. Registrar Whois Report

Title: Registrar Whois Report

Report name: registrar_whois

Description: This report contains data for registrars sponsoring registered domains and nameservers and will consist of one record for each registrar.

Fields:

IANA Registrar ID (REGISTRARID)

Registrar Name (REGISTRARNAME)

Address 1 (ADDRESSLINE1)

Address 2 (ADDRESSLINE2)

Address 3 (ADDRESSLINE3)

City (CITY)

State / Province (STATEPROVINCE)

Postal Code (POSTALCODE)

Country (COUNTRYCODE)

Telephone Number (PHONENUMBER)

Fax Number (FAXNUMBER)

E-Mail Address (EMAIL)

Whois Server (WHOISSERVER)

Web URL (URL)

Updated Date (UPDATEDATE)

Administrative Contact First Name (ADMINFNAME)

Administrative Contact Last Name (ADMINLNAME)

Administrative Contact Telephone Number (ADMINPHONE)

Administrative Contact E-Mail (ADMINEMAIL)

Billing Contact First Name (BILLINGFNAME)

Billing Contact Last Name (BILLINGLNAME)

Billing Contact Telephone Number (BILLINGPHONE)

Billing Contact E-Mail (BILLINGEMAIL)

Technical Contact First Name (TECHFNAME)

Technical Contact Last Name (TECHLNAME)

Technical Contact Telephone Number (TECHPHONE)

Technical Contact E-Mail (TECHEMAIL)

4. Domain Name Registrant Data

If VNDS requires registrars to provide it with registrant domain name registration data, VNDS shall escrow such registrant domain name registration data that is collected from registrars.

5. DNSSEC-Related Data

At such time that VNDS implements DNSSEC and collects DS records, VNDS shall escrow such DS records.

Title: DS Report

Report name: ds_domain_report_com

Description: This report contains delegation signer (DS) records associated with domains sponsored by all registrars. Each DS record is listed once.

Fields:

Domain Name (domainname)

Domain ROID (roid)

Key Tag (keytag)

Algorithm (algorithm)

Digest Type (digesttype)

Digest (digest)

DS records will be escrowed in DS RR Presentation Format as defined in section 5.3 of RFC 4034.

6. Registry Services Data

VNDS shall escrow data collected from registrars as part of offering Registry Services introduced after the Effective Date of its Registry Agreement with ICANN, if any.

Table 2: Daily Additional Deposit Format

Registrar Daily Additional Deposits

1. Registrar Transaction Report

Title: Registrar Transaction Report

Report name: rgr_transaction

Description: This report contains transactions associated with a specific registrar. Domain operations produce one row for each associated

nameserver. Nameserver operations produce one row for each associated ipaddress. If multiple DS records are associated with a transaction, those records will be comma separated and included on a single line with that transaction. A transactionid is included to allow unique identification of transactions. Operations of type "MOD" (e.g., MOD_DOMAIN, MOD_NAMESERVER, etc.) will include all the associated objects even if they were not affected by the transaction, i.e., a MOD_DOMAIN operation will include a row for each nameserver even for those that were not modified. The content of columns 3 and 4 is dependent on the operation in the following ways:

operation Oe (ADD_DOMAIN, MOD_DOMAIN, DEL_DOMAIN) => [domainname][servername]

operation Oe (ADD_NAMESERVER, MOD_NAMESERVER, DEL_NAMESERVER) => [ipaddress][servername]

operation Oe (TRANSFER_DOMAIN) => [domainname][null]

operation Oe (ADD_DS, MOD_DS, DEL_DS) => [domainname][dsdata]

Only the seven (7) operation types above are included in the report.

The dsdata column will have the following fields in DS RR Presentation

Format as defined in section 5.3 of RFC 4033 with pipe delimiter for -

<KeyTag>|<Algorithm>|<DigestType>|<Digest>

Fields:

transactionid

operationname

domainname | ipaddress

servername | null

transactiondate

roid

dsdata | null

EXHIBIT C
Escrow Transfer Process
Effective: To Be Mutually Agreed Between VNDS and Data Escrow
Provider

Deposit Transfer Process. Registry Operator shall prepare and transfer the Deposit file by the following steps, in sequence:

1. The Reports making up the Deposit will first be created according to the format specification. (See Exhibit B above, "Escrow Deposit Format Specification").

2. The Reports making up the Deposit will be concatenated. The resulting file shall be named according to the following format: "com-SEQN-YYYYMMDD", where "SEQN" is a four digit decimal number that is incremented as each report is prepared and "YYYY" represents the year, "MM" the month, and "DD" the day of the date to which the file relates.

3. Next, the Deposit files will be processed by a program (provided by ICANN) that will verify that it complies with the format specification and contains reports of the same date/time (for a Full Deposit), count the number of objects of the various types in the Deposit, and append to the file a report of the program's results.

4. Registry Operator may optionally split the resulting file using the Unix SPLIT command (or equivalent) to produce files no less than 1 GB each (except the final file). If Deposit files are split, a .MD5 file (produced with MD5SUM or equivalent) must be included with the split files to isolate errors in case of transfer fault.

5. The Deposit file(s) will then be encrypted using Escrow Agent's public key for GPG or PGP and signed using Registry Operator's private key for GPG or PGP, both version 6.5.1 or above, with a key of DH/DSS type and 2048/1024-byte length. (Note that GPG or PGP compresses the Deposit file(s) in addition to encrypting it (them).)

The formatted, encrypted and signed Deposit file(s) will be sent, by anonymous file transfer, to Escrow Agent's SFTP server within the specified time window.

Significant changes to the escrow transfer process require extensive integration between the parties. To ensure the registry data is always protected via the escrow process, Registry Operator will continue to run the legacy escrow transfer process and the new escrow transfer process in parallel until such time as all parties agree to retire the legacy escrow transfer process. The legacy escrow process will escrow all data listed in Exhibit B.

EXHIBIT D
Escrow Verification Procedures
Effective: To Be Mutually Agreed Between VNDS and Data Escrow
Provider

Verification Procedures. Escrow Agent will verify the format and completeness of each Deposit by the following steps:

1. At the conclusion of the deposit window, all Deposit files will be moved to a not-publicly-accessible directory and the existence and size of each will be noted.

2. Each Deposit file will be decrypted using Escrow Agent's private key for GPG or PGP and authenticated using Registry Operator's public key for GPG or PGP. (In this step, GPG or PGP will also automatically decompress the escrow file).

3. If there are multiple files, they will be concatenated in sequence.

4. Escrow Agent will run a program (to be supplied by ICANN) on the Deposit files (without report) that will split it in to its constituent reports (including the format report prepared by the Registry Operator and appended to the Deposit) check its format, count the number of objects of each type, and verify that the data set is internally consistent. This program will compare its results with the results of the Registry-generated format report, and will generate a Deposit format and completeness report. The program will encrypt the report using ICANN's public key for GPG or PGP and signed using Escrow Agent's private key for GPG or PGP, both versions 6.5.1 or above, with a key of DH/DSS type and 2048/1024-byte length. (Note that GPG or PGP compresses the Deposit file(s) in addition to encrypting it (them)). Escrow Agent will send the encrypted and signed report to ICANN by email.

5. The decrypted Deposit files will be destroyed to reduce likelihood of data loss to intruders in case of partial security failure.

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. 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, Sponsor and ICANN shall exchange keys by the same procedure.

.NET Registry Agreement Appendix 1A

Data Escrow Specification

(Effective as of the Appendix 1A, 2A and 5A Effective Date)

As of the Appendix 1A, 2A and 5A Effective Date, 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 Agreement pursuant to an agreement substantially in the form of Appendix 2A, as the same may be revised from time to time, among ICANN, Registry Operator and the Escrow Agent.

Changes to the schedule, content, format, and procedure set forth herein may be made only with the mutual written consent of ICANN and Registry Operator (which neither party shall unreasonably withhold) or through the establishment of a Consensus Policy as outlined in Section 3.1(b) of the Agreement. The escrow shall be held under an agreement, substantially in the form of Appendix 2A, as the same may be revised from time to time, among ICANN, Registry Operator, and the Escrow Agent.

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 in the registry through 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 including data through 00:00:00 UTC of each day, but Monday. 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., all additions, modifications or removals of data since the last deposit).
2. **Schedule for Deposits.** Registry Operator will submit a set of escrow files on a daily basis as follows:

- 2.1 Each Monday, 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 Section 9, reference 1 of this Appendix and draft-arias-noguchi-dnrd-objects-mapping, see Section 9, reference 2 of this Appendix (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 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 Section 9, reference 2 of this Appendix. Data related to the "extensions schemas" will be included in the deposit file described in Section 3.1 of this Appendix. ICANN and 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 Section 9, reference 3 of this Appendix. 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 Section 9, reference 4 of this Appendix, 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 Section 9, reference 1 of this Appendix 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 Section 8 of this Appendix.

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 2.1 of Appendix 5A;
 - 4) "thick-{gurid}", if the data represents Thick Registration Data from a specific registrar, as defined in Section 2.2 of Appendix 5A. The {gurid} element must be replaced with the IANA Registrar ID associated with the data.
- 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 Section 9, reference 5 of this Appendix (the “Interface Specification”)) a written statement from Registry Operator (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. The preparation and submission of this statement must be performed by Registry Operator or its designee, provided that such designee may not be the Escrow Agent or any of Escrow Agent’s affiliates. Registry Operator will include the Deposit’s “id” and “resend” attributes in its statement. The attributes are explained in Section 9, reference 1 of this Appendix.

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 Section 9, reference 1 of this Appendix.

- 5) The data escrow agent extended verification process, as defined below in Section 9, reference 2 of this Appendix, as well as any other data escrow verification process contained in such reference.

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>

.NET Registry Agreement Appendix 2

Escrow Agreement

(Effective July 1, 2017 until the Appendix 1A, 2A and 5A Effective Date)

This Escrow Agreement ("Agreement") is made as of this 30 day of June, 2009, by and between VeriSign, Inc. ("Registry Operator"), Iron Mountain Intellectual Property Management, Inc. ("Escrow Agent"), and the Internet Corporation for Assigned Names and Numbers ("ICANN").

Preliminary Statement. Registry Operator intends to deliver the "Deposit Materials" and any "Additional Deposit" to Escrow Agent as defined and provided for herein. Registry Operator desires Escrow Agent to hold the Deposit Materials and, upon certain events described herein, deliver the Deposit Materials (or a copy thereof) to ICANN in accordance with the terms hereof.

Escrow Agent certifies that it is allowed to receive the Deposit under the UK Data Protection Act as a registered data controller and/or is certified under the European Union Safe Harbour Act.

Now, therefore, in consideration of the foregoing, of the mutual promises hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Delivery by Registry Operator. Registry Operator shall be solely responsible for delivering to Escrow Agent the Deposit Materials, as defined and described in the "Data Escrow Specification," attached as Appendix 1 to the .net Registry Agreement between Registry Operator and ICANN (the "Registry Agreement") and incorporated herein by reference ("Appendix 1"). Registry Operator may elect to deliver the Deposit Materials in accordance with Exhibit C to Appendix 1 or in a manner mutually agreed upon by Escrow Agent and Registry Operator. Upon receipt of the Deposit Materials, Escrow Agent shall immediately process the Deposit Materials in accordance with Exhibit D of Appendix 1 and generate a file listing, which Escrow Agent shall, within ten (10) business days of the end of each calendar month, forward to Registry Operator, via email or United States mail. Within two (2) business days after receiving them, Escrow Agent shall verify that any Deposit Materials are in the proper format and appear to be complete by performing the verification procedures specified in Exhibit D of Appendix 1. Escrow Agent

and Registry Operator agree that Escrow Agent will verify the Deposit Materials using a program that may be provided by ICANN ("Scripts"). Escrow Agent shall deliver, on the last business day of each month, a written certification to ICANN that it has performed the verification procedures described in Exhibit D on all Deposit Materials received during the last month and shall deliver to ICANN a copy of the verification reports generated by those procedures. If Escrow Agent discovers that any Deposit Materials fail the verification procedures, Escrow Agent shall notify ICANN and Registry Operator of such nonconformity within forty-eight (48) hours. Escrow Agent shall then hold the Deposit Materials in accordance with the terms and conditions hereof.

2. Duplication; Periodic Updates

(a) Escrow Agent may duplicate the Deposit Materials by any means in order to comply with the terms and provisions of this Agreement. Alternatively, Escrow Agent, by notice to Registry Operator, may reasonably require Registry Operator to promptly duplicate the Deposit Materials and forward the same to Escrow Agent.

(b) Registry Operator shall deposit with Escrow Agent the "Additional Deposit," as defined and described in the attached Exhibit A of Appendix 1. Within two (2) business days after receiving them, Escrow Agent shall verify that any Additional Deposits are in the proper format and appear to be complete by performing the verification procedures specified in Exhibit D of Appendix 1. Escrow Agent shall deliver, on the last business day of each month, a written certification to ICANN that it has performed those verification procedures on all Additional Deposits received during the last month and shall deliver to ICANN a copy of the verification reports generated by those procedures. If Escrow Agent discovers that any Additional Deposits fail the verification procedures, Escrow Agent shall notify ICANN and Registry Operator of such nonconformity within forty-eight (48) hours.

3. Notification of Deposits. Simultaneous with the delivery to Escrow Agent of the Deposit Materials or any Additional Deposit, as the case may be, Registry Operator shall deliver to Escrow Agent a written statement, via email, specifically identifying all items deposited and stating that the Deposit Materials and/or any Additional Deposit have been inspected by Registry Operator and are complete and accurate. Escrow Agent shall, within two (2) business days of receipt of any Deposit Materials or Additional Deposit, send notification to Registry Operator and ICANN, via email, that it has received from Registry Operator such Deposit Materials and/or any such Additional

Deposit. In addition, Escrow Agent shall also include a copy of the processing report as confirmation that it has completed processing the deposit.

4. Delivery by Escrow Agent

4.1 Delivery by Escrow Agent to ICANN. Escrow Agent shall deliver the Deposit Materials and any Additional Deposits received since the last submission of Deposit Material ("Outstanding Additional Deposits"), or a complete copy thereof, to ICANN only in the event that:

(a) Registry Operator notifies Escrow Agent to effect such delivery to ICANN at a specific address, the notification being accompanied by a check payable to Escrow Agent in the amount of one hundred dollars (\$100.00); or

(b) Escrow Agent receives from ICANN:

(i) Written notification that the Registry Agreement between Registry Operator and ICANN dated March 1, 2006 ("Registry Agreement") has been finally, validly and legally terminated under Section 6 of the Registry Agreement and no injunction or similar order has been obtained from an arbitrator or court prohibiting ICANN from securing the data in this escrow ("Registry Termination");

(ii) a written statement that ICANN has previously notified Registry Operator of such Registry Termination in writing;

(iii) a written demand that the Deposit Materials and Outstanding Additional Deposits be released and delivered to ICANN;

(iv) a written undertaking from ICANN that the Deposit Materials and Outstanding Additional Deposits being supplied to ICANN will be used only as permitted under the terms of the Registry Agreement;

(v) specific instructions from ICANN for this delivery; and

(vi) a check from Registry Operator, or from ICANN (who will then be reimbursed by Registry Operator), payable to Escrow Agent in the amount of one hundred dollars (\$100.00); or

(c) Release occurs according to Paragraph 8(b) below.

4.2 Delivery at Registry Operator's Request. If the provisions of 4.1(a) are satisfied, Escrow Agent shall, within five (5) business days after receipt of the notification and check specified in Paragraph 4.1(a), deliver the Deposit Materials and Outstanding Additional Deposits in accordance with the applicable instructions.

4.3 Delivery at ICANN's Request. If the provisions of Paragraphs 4.1(b) or 4.1(c) are satisfied, Escrow Agent within five (5) business days after receipt of all the documents specified in these paragraphs, shall deliver the following: (i) to Registry Operator, a photostatic copy of all such documents; (ii) to ICANN, as specifically instructed by ICANN, electronic copies of the Deposit Materials and electronic copies of the Outstanding Additional Deposits; provided, however, that if the delivery is commenced by reason of Paragraph 4.1 (c), Registry Operator may make the payment owing to Escrow Agent during the five (5) business day period referenced above, and Escrow Agent shall not thereafter deliver to ICANN the materials specified in subpart (ii), above. Following receipt of the notice to Registry Operator under subpart (i) of the preceding sentence, Registry Operator shall have thirty (30) days from the date on which Registry Operator receives such documents ("Objection Period") to notify Escrow Agent of its objection ("Objection Notice") to the release of the Deposit Materials to ICANN and request that the issue of entitlement to a copy of the Deposit Materials be submitted to arbitration in accordance with the following provisions:

(a) The sending of an Objection Notice shall not delay delivery of Deposit Materials and Outstanding Additional Deposits to ICANN.

(b) If Registry Operator shall send an Objection Notice to Escrow Agent during the Objection Period, the matter shall be submitted to and settled by arbitration by a panel of three (3) arbitrators chosen by the American Arbitration Association in accordance with the rules of the American Arbitration Association. The arbitrators shall apply the law of California exclusive of its conflicts of laws rules. At least one (1) arbitrator shall be reasonably familiar with the Internet industry. The decision of the arbitrators shall be binding and conclusive on all parties involved, and judgment upon their decision may be entered in a court of competent jurisdiction. All costs of the arbitration incurred by Escrow Agent, including reasonable attorneys' fees and costs, shall be paid by the party which does not prevail in the arbitration; provided, however, if the arbitration is settled prior to a decision by the arbitrators, the parties involved in the arbitration shall each pay an equal percentage of all such costs.

(c) Notwithstanding Paragraph 4.3(b), the parties agree that any arbitration brought pursuant to Paragraph 4.3 shall not re-evaluate, reconsider, or otherwise subject to review any issues, causes of action, or other claims which were decided, in an arbitration or court decision involving the parties hereto concerning the Registry Agreement and/or the Cooperative Agreement, and that any decision regarding such issues or claims in an arbitration brought pursuant to Paragraph 4.3 would be invalid, unenforceable, and not binding. The propriety, validity, legality, or effectiveness of any terminations or actions under the Registry Agreement and/or Cooperative Agreement shall be determined solely through procedures and remedies provided for by those respective agreements, not through any arbitration brought pursuant to Paragraph 4.3. Any arbitration proceeding brought pursuant to Paragraph 4.3 shall be limited to a determination of whether Paragraphs 4.1(b) and (c) have been satisfied.

(d) Registry Operator may, at any time prior to the commencement of arbitration proceedings, notify Escrow Agent that Registry Operator has withdrawn the Objection Notice. Upon receipt of any such notice from Registry Operator, Escrow Agent shall promptly deliver Deposit Materials and Outstanding Additional Deposits to ICANN in accordance with the instructions provided by ICANN.

(e) If the release of materials to ICANN pursuant to Paragraph 4.3 is judged to be proper in any arbitration brought in accordance with Paragraph 4.3, Escrow Agent shall promptly deliver to ICANN, in accordance with the instructions specified in Paragraph 4.1(b)(v) above, any Deposit Materials and Outstanding Additional Deposits that have not previously been delivered. All parties agree that Escrow Agent shall not be required to deliver such Deposit Materials and Outstanding Additional Deposits until all such fees then due to Escrow Agent have been paid.

(f) If the release of the Deposit Materials and Outstanding Additional Deposits to ICANN pursuant to Paragraph 4.3 is judged to have been improper in any arbitration brought in accordance with Paragraph 4.3, ICANN shall promptly return or destroy, at Registry Operator's discretion, those Deposit Materials and Outstanding Additional Deposits that were received by ICANN pursuant to Paragraph 4.3.

4.4 Delivery by Escrow Agent to Registry Operator. Escrow Agent shall release and deliver the Deposit Materials and any Additional Deposit to Registry Operator upon termination of this Agreement in accordance with Paragraph 7(a) or 7(b) hereof.

5. Indemnity.

(a) General Indemnity. Subject to the limitation imposed under Section 11(a), Registry Operator and ICANN shall jointly and severally indemnify and hold harmless Escrow Agent and each of its directors, officers, agents and employees ("Escrow Agent Indemnitees") absolutely and forever, from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Escrow Agent Indemnitee in connection with this Agreement or the performance of Escrow Agent or any Escrow Agent Indemnitee hereunder, except for any claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, or any other expenses arising in connection with the misrepresentation, negligence, or misconduct of Escrow Agent, its directors, officers, agents, employees or contractors. Subject to the limitation imposed under Section 11(a), Escrow Agent shall likewise indemnify and hold harmless Registry Operator and ICANN, and each of their respective directors, officers, agents, and employees ("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.

6. Disputes and Interpleader.

(a) Escrow Agent may submit any dispute under this Agreement to any court of competent jurisdiction in an interpleader or similar action other than a matter submitted to arbitration after Escrow Agent's receipt of an Objection Notice under Paragraph 4 and the parties under this Agreement submit the matter to such arbitration as described in Paragraph 4 of this Agreement. Any and all costs incurred by Escrow Agent in connection therewith, including reasonable attorneys' fees and costs, shall be borne 50% by each of Registry Operator and ICANN.

(b) Escrow Agent shall perform any acts ordered by any court of competent jurisdiction, without any liability or obligation to any party hereunder by reason of such act.

7. Term and Renewal.

(a) The initial term of this Agreement shall be two (2) years, commencing on the date hereof (the "Initial Term"). This Agreement shall be automatically extended for an additional term of one year ("Additional Term") at the end of the Initial Term and at the end of each Additional Term hereunder. Escrow Agent acting alone or Registry Operator, with the concurrence of ICANN, may terminate this Agreement at any time upon giving the other parties ninety (90) days notice.

(b) In the event Registry Operator gives notice of its intent to terminate pursuant to Paragraph 7(a), and ICANN fails to concur according to Paragraph 7(a), ICANN shall be responsible for payment of all subsequent fees in accordance with Exhibit E and shall have the right to seek reimbursement of such fees from Registry Operator and to terminate this Agreement at any time upon giving the other parties ninety (90) days notice.

(c) In the event of termination of this Agreement in accordance with Paragraph 7(a) or 7(b) hereof, Registry Operator shall pay all fees due Escrow Agent and shall promptly notify ICANN that this Agreement has been terminated and that Escrow Agent shall return to Registry Operator all copies of the Deposit Materials and any Additional Deposit then in its possession.

8. Fees. Registry Operator shall pay to Escrow Agent the applicable fees in accordance with Exhibit E as compensation for Escrow Agent's services under this Agreement. The first year's fees are due upon receipt of the signed contract or Deposit Materials, whichever comes first, and shall be paid in U.S. Dollars.

(a) Invoice Payment. After acceptance, Registry Operator shall pay valid and properly submitted invoices within thirty (30) days of the date of such invoice; provided, however, that Registry Operator shall not be obligated to pay any amounts disputed in good faith. Registry Operator shall notify Escrow Agent in writing in the event Registry Operator in good faith disputes the invoice or any portion thereof setting forth the reasons of such dispute, and the parties agree to negotiate in good faith a resolution to such disputed invoice; provided, however, that if the parties cannot reasonably agree on the disputed charges, the parties shall escalate such dispute to the appropriate director/vice president level to resolve such dispute. Payments to Escrow Agent shall be sent to the remittance address set forth on Escrow Agent's invoice.

(b) Nonpayment. In the event of non-payment of any fees or charges invoiced by Escrow Agent, Escrow Agent shall give notice of non-payment of any fee due and payable hereunder to Registry Operator and, in such an

event, Registry Operator shall have the right to pay the unpaid fee within ten (10) business days after receipt of notice from Escrow Agent. If Registry Operator fails to pay in full all fees due during such ten (10) day period, Escrow Agent shall give notice of non-payment of any fee due and payable hereunder to ICANN and, in such event, ICANN shall have the right to pay the unpaid fee within ten (10) business days of receipt of such notice from Escrow Agent. Upon payment of the unpaid fee by either Registry Operator or ICANN, as the case may be, this Agreement shall continue in full force and effect until the end of the applicable term. Upon a failure to pay the unpaid fee under this Paragraph 8(b) by either Registry Operator or ICANN, or by Registry Operator under 4.3, the Escrow Agent shall proceed as set forth in Paragraph 4.3 as though ICANN had requested delivery of the Deposit Materials.

(c) Invoice Submission Address. During the term of this Agreement, Escrow Agent agrees to submit detailed and timely invoices, not more frequently than once a month, and not later than ninety (90) days after the work performed under such invoice has been completed, to Registry Operator at the address set forth below as described herein. All invoices issued hereunder shall reference the Purchase Order number assigned to the work performed under this Agreement and the Exhibits hereto. Escrow Agent shall not submit any invoices to Registry Operator that do not reference the applicable Purchase Order number provided that Registry Operator shall be responsible for timely providing Escrow Agent such applicable Purchase Order number. Escrow Agent shall submit original invoices solely to Registry Operator's Accounts Payable department at the mailing or electronic mailing address as set forth below:

Invoice Submission Address:

VeriSign, Inc.
487 E. Middlefield Road
Mountain View , CA 94043
Attn: Accounts Payable

Or Invoices may be submitted electronically to:
accountspayable@verisign.net

9. Ownership of Deposit Materials. The parties recognize and acknowledge that ownership of the Deposit Materials during the effective term of this Agreement shall remain with Registry Operator at all times.

10. Retention and Confidentiality.

(a) Retention. Escrow Agent shall hold and maintain the Deposit Materials in a secure, locked, and environmentally safe facility which is accessible only to authorized representatives of Escrow Agent. Escrow Agent shall use commercially reasonable efforts to protect the integrity of the Deposit Materials. Each of ICANN and Registry Operator shall have the right to inspect Escrow Agent's written records with respect to this Agreement upon reasonable prior notice and during normal business hours.

(b) Confidentiality. Escrow Agent shall at all times protect the confidentiality of the Deposit Materials. Except as provided in this Agreement, Escrow Agent shall not disclose, transfer, make available, or use any Deposit Materials (or any copies of any Deposit Materials). Should Escrow Agent be put on notice that it is required to disclose any Deposit Materials by statute, rule, regulation, order, or other requirement of a governmental agency, legislative body, court of competent jurisdiction, or binding arbitral body (other than any requirement pursuant to Sections 4 or 8(b) of this Agreement), Escrow Agent shall notify ICANN and Registry Operator within seven (7) days or as soon as practicable and reasonably cooperate with Registry Operator and/or ICANN in any contest of the disclosure. Should any contest prove unsuccessful, Escrow Agent shall not be held liable for any disclosure pursuant to such governmental, legislative, judicial, or arbitral order, statute, rule, regulation, or other requirement.

11. Miscellaneous.

(a) Remedies; Limitation of Liability.

(i) Except for liability arising from (i) death or bodily injury; or (ii) gross negligence, or willful misconduct, in any dispute between Registry Operator and/or ICANN on the one hand and Escrow Agent on the other hand, all liability of Escrow Agent, Registry Operator and/or ICANN related to this Agreement, if any, whether arising in contract, tort (including negligence) or otherwise, shall be limited to an amount equal to the then annual fees paid to Escrow Agent under this Agreement.

(ii) As between Registry Operator and ICANN the liability limitations of the Registry Agreement also apply.

(iii) In no event shall any party to this Agreement be liable to another party for any incidental, special, punitive or consequential damages, lost profits, any costs or expenses for the procurement of substitute services (excluding substitute escrow services), or any other indirect damages, whether arising in

contract, tort (including negligence) or otherwise even if the possibility thereof may be known in advance to one or more parties.

(iv) Each party expressly reserves all rights in law or equity to enforce the provisions of this Agreement, subject only to the limitations set forth in this Section 11(a).

(b) Permitted Reliance and Abstention. Escrow Agent may rely and shall be fully protected in acting or refraining from acting upon any notice or other document believed by Escrow Agent in good faith to be genuine and to have been signed or presented by the proper person or entity. Escrow Agent shall have no duties or responsibilities except those expressly set forth herein.

(c) Independent Contractor. Escrow Agent is an independent contractor and is not an employee or agent of either Registry Operator or ICANN.

(d) Amendments. This Agreement shall not be modified or amended except by another agreement in writing executed by each of the parties hereto.

(e) Assignment. Neither Registry Operator nor ICANN may assign or transfer this Agreement (by merger, sale of assets, operation of law, or otherwise), except that the rights and obligations of Registry Operator or ICANN automatically shall be transferred to the assignee of one of those parties' rights and obligations under the Registry Agreement. However, Escrow Agent shall have no obligation in performing this Agreement to recognize any successor or assign of Registry Operator or ICANN unless Escrow Agent receives clear, authoritative and conclusive written evidence of the change of parties. Escrow Agent may not assign or transfer this Agreement without the prior written consent of both Registry Operator and ICANN, which consent shall not be unreasonably delayed or withheld.

(f) Entire Agreement. This Agreement, including all exhibits hereto, supersedes all prior discussions, understandings and agreements between Escrow Agent and the other parties with respect to the matters contained herein, and constitutes the entire agreement between Escrow Agent and the other parties with respect to the matters contemplated herein. All exhibits attached to Appendix 1 of the Registry Agreement, specifically, Exhibits A through D are by this reference made a part of this Agreement and are incorporated herein.

(g) Counterparts; Governing Law. This Agreement may be executed in counterparts, each of which when so executed shall be deemed to be an

original and all of which when taken together shall constitute one and the same Agreement. This Agreement shall be governed by and interpreted in accordance with the laws of California, without regard to its conflicts of law principles. Except as specifically provided for herein, all of the parties additionally consent to the personal jurisdiction of California, acknowledge that venue is proper in any state and Federal court in California, agree to any action related to this Agreement properly brought in one of these courts, and waive any objection it has or may have in the future with respect to any of the foregoing.

(h) Notices. All notices, requests, demands or other communications required or permitted to be given or made under this Agreement shall be in writing and shall be delivered by hand or by commercial overnight delivery service which provides for evidence of receipt, or mailed by certified mail, return receipt requested, postage prepaid. If delivered personally or by commercial overnight delivery service, the date on which the notice, request, instruction or document is delivered shall be the date on which delivery is deemed to be made, and if delivered by mail, the date on which such notice, request, instruction or document is received shall be the date on which delivery is deemed to be made. Any party may change its address for the purpose of this Agreement by notice in writing to the other parties as provided herein.

(i) Survival. Paragraphs 5, 6, 8, 9, 10 and 11 shall survive any termination of this Agreement.

(j) No Waiver. No failure on the part of any party hereto to exercise, and no delay in exercising any right, power or single or partial exercise of any right, power or remedy by any party will preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No express waiver or assent by any party hereto to any breach of or default in any term or condition of this Agreement shall constitute a waiver of or an assent to any succeeding breach of or default in the same or any other term or condition hereof.

IN WITNESS WHEREOF each of the parties has caused its duly authorized officer to execute this Agreement as of the date and year first above written.

Iron Mountain Intellectual Property Management, Inc.

By:

Title:

Print Name:

Address:

Phone:

Fax:

E-mail:

VeriSign, Inc.

By:

Title:

Print Name:

Address:

Phone:

Fax:

E-mail:

Internet Corporation for Assigned Names and Numbers

By:

Title:

Print Name:

Address:

Phone:

Fax:

E-mail:

See Appendix 1 to the Registry Agreement for Exhibits A through D to this Agreement.

.NET Registry Agreement Appendix 2A Escrow Agreement

This Escrow Agreement ("Escrow Agreement") is made as of the Appendix 1A, 2A and 5A Effective Date, by and between VeriSign, Inc. ("Registry Operator"), Iron Mountain Intellectual Property Management, Inc. ("Escrow Agent"), and the Internet Corporation for Assigned Names and Numbers ("ICANN").

Preliminary Statement. Registry Operator intends to deliver the "Deposits" to Escrow Agent as defined and provided for herein. Registry Operator desires Escrow Agent to hold the Deposits and, upon certain events described herein, deliver the Deposits (or a copy thereof) to ICANN in accordance with the terms hereof.

Now, therefore, in consideration of the foregoing, of the mutual promises hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Delivery by Registry Operator. Registry Operator shall be solely responsible for delivering to Escrow Agent the Deposits, as defined and described in the "Data Escrow Specification," attached as Appendix 1A to the .net Registry Agreement between Registry Operator and ICANN (the "Registry Agreement") and incorporated herein by this reference ("Appendix 1A"). Registry Operator may elect to deliver the Deposits to Escrow Agent in accordance with Appendix 1A or in a manner mutually agreed upon by Escrow Agent and Registry Operator. Upon receipt of the Deposits, Escrow Agent shall immediately process the Deposits in accordance with Appendix 1A and generate a file listing, which Escrow Agent shall, within ten (10) business days of the end of each calendar month, forward to Registry Operator, via email or United States mail. Within two (2) business days after receiving the Deposits, Escrow Agent shall verify that the Deposits are in the proper format and appear to be complete by performing the verification procedure specified in Appendix 1A. Escrow Agent shall deliver, on the last business day of each month, a written certification to ICANN that it has performed the verification procedure described in Appendix 1A on all Deposits received during the last month and shall deliver to ICANN a copy of the verification reports generated by that procedure. If Escrow Agent discovers

that any Deposits fail the verification procedure, Escrow Agent shall notify ICANN and Registry Operator of such nonconformity within forty-eight (48) hours. Escrow Agent shall then hold the Deposits in accordance with the terms and conditions hereof.

2. Duplication. Escrow Agent may duplicate the Deposits by any means in order to comply with the terms and provisions of this Escrow Agreement. Alternatively, Escrow Agent, by notice to Registry Operator, may reasonably require Registry Operator to promptly duplicate the Deposits and forward the same to Escrow Agent.

3. Notification of Deposits; Distribution of Public Keys.

(a) Along with the delivery of each Deposit to the Escrow Agent, Registry Operator shall deliver to Escrow Agent and to ICANN a written statement from Registry Operator pursuant to the terms and conditions of Section 7 (Notification of Deposits) of Appendix 1A. Escrow Agent shall, within two (2) business days of receipt of any Deposit, send notification to Registry Operator either by email, facsimile or telephone, or as may be otherwise requested by Registry Operator, and to ICANN electronically using the API described in <http://tools.ietf.org/html/draft-lozano-icann-registry-interfaces> that it has received from Registry Operator such Deposit. In addition, Escrow Agent shall also include a copy of the verification report as confirmation that it has run the verification process.

(b) 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.

4. Delivery by Escrow Agent

4.1 Delivery by Escrow Agent to ICANN. Escrow Agent shall deliver the Deposits, or a complete copy thereof, to ICANN only in the event that:

(a) Registry Operator notifies Escrow Agent to effect such delivery to ICANN at a specific address, the notification being accompanied by a check payable to Escrow Agent in the amount of one hundred dollars (\$100.00); or

(b) Escrow Agent receives from ICANN:

(i) Written notification that the Registry Agreement has been finally, validly and legally terminated under Section 6 of the Registry Agreement and no injunction or similar order has been obtained from an arbitrator or court prohibiting ICANN from securing the data in this escrow ("Registry Termination");

(ii) a written statement that ICANN has previously notified Registry Operator of such Registry Termination in writing;

(iii) a written demand that the Deposits be released and delivered to ICANN;

(iv) a written undertaking from ICANN that the Deposits being supplied to ICANN will be used only as permitted under the terms of the Registry Agreement;

(v) specific instructions from ICANN for this delivery; and

(vi) a check from Registry Operator, or from ICANN (who will then be reimbursed by Registry Operator), payable to Escrow Agent in the amount of one hundred dollars (\$100.00); or

(c) a release occurs according to Section 8(b) below.

4.2 Delivery at Registry Operator's Request. If the provisions of Section 4.1(a) above are satisfied, Escrow Agent shall, within five (5) business days after receipt of the notification and check specified in Section 4.1(a), deliver the Deposits in accordance with the applicable instructions.

4.3 Delivery at ICANN's Request. If the provisions of Section 4.1(b) or 4.1(c) above are satisfied, Escrow Agent shall, within five (5) business days after receipt of all the documents specified in those sections, deliver the following: (i) to Registry Operator, a copy of all such documents; (ii) to ICANN, as specifically instructed by ICANN, electronic copies of the Deposits; provided, however, that if the delivery is commenced by reason of Section 4.1(c) above, Registry Operator may make the payment owing to Escrow Agent during the five (5) business day period referenced above, and Escrow Agent shall not

thereafter deliver to ICANN the materials specified in subpart (ii) of this section, above. Following receipt of the notice to Registry Operator under subpart (i) of this section, Registry Operator shall have thirty (30) days from the date on which Registry Operator receives such documents ("Objection Period") to notify Escrow Agent of its objection ("Objection Notice") to the release of the Deposits to ICANN and request that the issue of entitlement to a copy of the Deposits be submitted to arbitration in accordance with the following provisions:

(a) The sending of an Objection Notice shall not delay delivery of the Deposits to ICANN.

(b) If Registry Operator shall send an Objection Notice to Escrow Agent during the Objection Period, the matter shall be submitted to and settled by arbitration by a panel of three (3) arbitrators chosen by the American Arbitration Association in accordance with the rules of the American Arbitration Association. The arbitrators shall apply the law of California exclusive of its conflicts of laws rules. At least one (1) arbitrator shall be reasonably familiar with the Internet industry. The decision of the arbitrators shall be binding and conclusive on all parties involved, and judgment upon their decision may be entered in a court of competent jurisdiction. All costs of the arbitration incurred by Escrow Agent, including reasonable attorneys' fees and costs, shall be paid by the party which does not prevail in the arbitration; provided, however, if the arbitration is settled prior to a decision by the arbitrators, the parties involved in the arbitration shall each pay an equal percentage of all such costs.

(c) Notwithstanding Section 4.3(b) above, the parties agree that any arbitration brought pursuant to this Section 4.3 shall not re-evaluate, reconsider, or otherwise subject to review any issues, causes of action, or other claims which were decided, in an arbitration or court decision involving the parties hereto concerning the Registry Agreement and/or the Cooperative Agreement, and that any decision regarding such issues or claims in an arbitration brought pursuant to Section 4.3 would be invalid, unenforceable, and not binding. The propriety, validity, legality, or effectiveness of any terminations or actions under the Registry Agreement and/or Cooperative Agreement shall be determined solely through procedures and remedies provided for by those respective agreements, not through any arbitration brought pursuant to Section 4.3. Any arbitration proceeding brought pursuant to Section 4.3 shall be limited to a determination of whether Sections 4.1(b) and (c) have been satisfied.

(d) Registry Operator may, at any time prior to the commencement of arbitration proceedings, notify Escrow Agent that Registry Operator has withdrawn the Objection Notice. Upon receipt of any such notice from Registry Operator, Escrow Agent shall promptly deliver the Deposits to ICANN in accordance with the instructions provided by ICANN.

(e) If the release of materials to ICANN pursuant to Section 4.3 is judged to be proper in any arbitration brought in accordance with Section 4.3, Escrow Agent shall promptly deliver to ICANN, in accordance with the instructions specified in Section 4.1(b)(v) above, any Deposits that have not previously been delivered. All parties agree that Escrow Agent shall not be required to deliver such Deposits until all such fees then due to Escrow Agent have been paid.

(f) If the release of the Deposits to ICANN pursuant to Section 4.3 is judged to have been improper in any arbitration brought in accordance with Section 4.3, ICANN shall promptly return or destroy, at Registry Operator's discretion, those Deposits that were received by ICANN pursuant to Section 4.3.

4.4 Delivery by Escrow Agent to Registry Operator. Escrow Agent shall release and deliver the Deposits to Registry Operator upon termination of this Escrow Agreement in accordance with Section 7(a) or 7(b) hereof.

5. Indemnity.

General Indemnity. Subject to the limitation imposed under Section 11(a) below, Registry Operator and ICANN shall jointly and severally indemnify and hold harmless Escrow Agent and each of its directors, officers, agents and employees ("Escrow Agent Indemnitees") absolutely and forever, from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Escrow Agent Indemnitee in connection with this Escrow Agreement or the performance of Escrow Agent or any Escrow Agent Indemnitee hereunder, except for any claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, or any other expenses arising in connection with the misrepresentation, negligence, or misconduct of Escrow Agent, its directors, officers, agents, employees or contractors. Subject to the limitation imposed under Section 11(a), Escrow Agent shall likewise indemnify and hold harmless Registry Operator and ICANN, and each of their respective directors, officers, agents, and employees ("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.

6. Disputes and Interpleader.

(a) Escrow Agent may submit any dispute under this Escrow Agreement to any court of competent jurisdiction in an interpleader or similar action other than a matter submitted to arbitration after Escrow Agent's receipt of an Objection Notice under Section 4 above and the parties under this Escrow Agreement submit the matter to such arbitration as described in Section 4 of this Escrow Agreement. Any and all costs incurred by Escrow Agent in connection therewith, including reasonable attorneys' fees and costs, shall be borne 50% by each of Registry Operator and ICANN.

(b) Escrow Agent shall perform any acts ordered by any court of competent jurisdiction, without any liability or obligation to any party hereunder by reason of such act.

7. Term and Renewal.

(a) The initial term of this Escrow Agreement shall commence on the date hereof and continue until June 30, 2023 (the "Initial Term"). This Escrow Agreement shall be automatically extended for additional terms of one year (each an "Additional Term") at the end of the Initial Term and at the end of each Additional Term hereunder. The Initial Term and each Additional Term shall be referred to collectively as the "term." Escrow Agent acting alone or Registry Operator, with the concurrence of ICANN, may terminate this Escrow Agreement at any time upon giving the other parties ninety (90) days notice.

(b) In the event Registry Operator gives notice of its intent to terminate pursuant to Section 7(a) above, and ICANN fails to concur according to Section 7(a), ICANN shall be responsible for payment of all subsequent fees and shall have the right to seek reimbursement of such fees from Registry Operator and to terminate this Escrow Agreement at any time upon giving the other parties ninety (90) days notice.

(c) In the event of termination of this Escrow Agreement in accordance with Section 7(a) or 7(b) hereof, Registry Operator shall pay all fees due Escrow Agent and shall promptly notify ICANN that this Escrow Agreement has been

terminated and that Escrow Agent shall return to Registry Operator all copies of the Deposits then in its possession.

8. Fees. Registry Operator shall pay to Escrow Agent the applicable fees as compensation for Escrow Agent's services under this Escrow Agreement. The first year's fees are due upon receipt of the signed contract or Deposits, whichever comes first, and shall be paid in U.S. Dollars.

(a) Invoice Payment. After acceptance, Registry Operator shall pay valid and properly submitted invoices within thirty (30) days of the date of such invoice; provided, however, that Registry Operator shall not be obligated to pay any amounts disputed in good faith. Registry Operator shall notify Escrow Agent in writing in the event Registry Operator in good faith disputes the invoice or any portion thereof setting forth the reasons of such dispute, and the parties agree to negotiate in good faith a resolution to such disputed invoice; provided, however, that if the parties cannot reasonably agree on the disputed charges, the parties shall escalate such dispute to the appropriate director/vice president level to resolve such dispute. Payments to Escrow Agent shall be sent to the remittance address set forth on Escrow Agent's invoice.

(b) Nonpayment. In the event of non-payment of any fees or charges invoiced by Escrow Agent, Escrow Agent shall give notice of non-payment of any fee due and payable hereunder to Registry Operator and, in such an event, Registry Operator shall have the right to pay the unpaid fee within ten (10) business days after receipt of notice from Escrow Agent. If Registry Operator fails to pay in full all fees due during such ten (10) day period, Escrow Agent shall give notice of non-payment of any fee due and payable hereunder to ICANN and, in such event, ICANN shall have the right to pay the unpaid fee within ten (10) business days of receipt of such notice from Escrow Agent. Upon payment of the unpaid fee by either Registry Operator or ICANN, as the case may be, this Escrow Agreement shall continue in full force and effect until the end of the applicable term. Upon a failure to pay the unpaid fee under this Section 8(b) by either Registry Operator or ICANN, or by Registry Operator under Section 4.3, the Escrow Agent shall proceed as set forth in Section 4.3 as though ICANN had requested delivery of the Deposits.

(c) Invoice Submission Address. During the term of this Escrow Agreement, Escrow Agent agrees to submit detailed and timely invoices, not more frequently than once a month, and not later than ninety (90) days after the work performed under such invoice has been completed, to Registry Operator at the address set forth below as described herein. All invoices issued hereunder shall reference the Purchase Order number assigned to the work

performed under this Escrow Agreement. Escrow Agent shall not submit any invoices to Registry Operator that do not reference the applicable Purchase Order number provided that Registry Operator shall be responsible for timely providing Escrow Agent such applicable Purchase Order number. Escrow Agent shall submit original invoices solely to Registry Operator's Accounts Payable department at the mailing or electronic mailing address as set forth below:

Invoice Submission Address:

VeriSign, Inc.
12061 Bluemont Way
Reston, Virginia 20190
Attn: Accounts Payable

Or Invoices may be submitted electronically to:
accountspayable@verisign.net

9. Ownership of Deposits. The parties recognize and acknowledge that ownership of the Deposits during the effective term of this Escrow Agreement shall remain with Registry Operator at all times.

10. Retention and Confidentiality.

(a) Retention. Escrow Agent shall hold and maintain the Deposits in a secure, locked, and environmentally safe facility which is accessible only to authorized representatives of Escrow Agent. Escrow Agent shall use commercially reasonable efforts to protect the integrity of the Deposits. Each of ICANN and Registry Operator shall have the right to inspect Escrow Agent's written records with respect to this Escrow Agreement upon reasonable prior notice and during normal business hours.

(b) Confidentiality. Escrow Agent shall at all times protect the confidentiality of the Deposits. Except as provided in this Escrow Agreement, Escrow Agent shall not disclose, transfer, make available, or use any Deposits (or any copies of any Deposits). Should Escrow Agent be put on notice that it is required to disclose any Deposits by statute, rule, regulation, order, or other requirement of a governmental agency, legislative body, court of competent jurisdiction, or binding arbitral body (other than any requirement pursuant to Sections 4 or 8(b) of this Escrow Agreement), Escrow Agent shall notify ICANN and Registry Operator within seven (7) days or as soon as practicable and reasonably cooperate with Registry Operator and/or ICANN in any

contest of the disclosure. Should any contest prove unsuccessful, Escrow Agent shall not be held liable for any disclosure pursuant to such governmental, legislative, judicial, or arbitral order, statute, rule, regulation, or other requirement.

11. Miscellaneous.

(a) Remedies; Limitation of Liability.

(i) Except for liability arising from (i) death or bodily injury; or (ii) gross negligence, or willful misconduct, in any dispute between Registry Operator and/or ICANN on the one hand and Escrow Agent on the other hand, all liability of Escrow Agent, Registry Operator and/or ICANN related to this Escrow Agreement, if any, whether arising in contract, tort (including negligence) or otherwise, shall be limited to an amount equal to the then annual fees paid to Escrow Agent under this Escrow Agreement.

(ii) As between Registry Operator and ICANN the liability limitations of the Registry Agreement also apply.

(iii) In no event shall any party to this Escrow Agreement be liable to another party for any incidental, special, punitive or consequential damages, lost profits, any costs or expenses for the procurement of substitute services (excluding substitute escrow services), or any other indirect damages, whether arising in contract, tort (including negligence) or otherwise even if the possibility thereof may be known in advance to one or more parties.

(iv) Each party expressly reserves all rights in law or equity to enforce the provisions of this Escrow Agreement, subject only to the limitations set forth in this Section 11(a).

(b) Permitted Reliance and Abstention. Escrow Agent may rely and shall be fully protected in acting or refraining from acting upon any notice or other document believed by Escrow Agent in good faith to be genuine and to have been signed or presented by the proper person or entity. Escrow Agent shall have no duties or responsibilities except those expressly set forth herein.

(c) Independent Contractor. Escrow Agent is an independent contractor and is not an employee or agent of either Registry Operator or ICANN.

(d) Amendments. This Escrow Agreement shall not be modified or amended except by another agreement in writing executed by each of the parties hereto.

(e) Assignment. Neither Registry Operator nor ICANN may assign or transfer this Escrow Agreement (by merger, sale of assets, operation of law, or otherwise), except that the rights and obligations of Registry Operator or ICANN automatically shall be transferred to the assignee of one of those parties' rights and obligations under the Registry Agreement. However, Escrow Agent shall have no obligation in performing this Escrow Agreement to recognize any successor or assign of Registry Operator or ICANN unless Escrow Agent receives clear, authoritative and conclusive written evidence of the change of parties. Escrow Agent may not assign or transfer this Escrow Agreement without the prior written consent of both Registry Operator and ICANN, which consent shall not be unreasonably delayed or withheld.

(f) Entire Agreement. This Escrow Agreement, including all exhibits hereto (if any), supersedes all prior discussions, understandings and agreements between Escrow Agent and the other parties with respect to the matters contained herein, and constitutes the entire agreement between Escrow Agent and the other parties with respect to the matters contemplated herein. Appendix 1A of the Registry Agreement is by this reference made a part of this Escrow Agreement and incorporated herein.

(g) Counterparts; Governing Law. This Escrow Agreement may be executed in counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same agreement. This Escrow Agreement shall be governed by and interpreted in accordance with the laws of California, without regard to its conflicts of law principles. Except as specifically provided for herein, all of the parties additionally consent to the personal jurisdiction of California, acknowledge that venue is proper in any state and Federal court in California, agree to any action related to this Escrow Agreement properly brought in one of these courts, and waive any objection it has or may have in the future with respect to any of the foregoing.

(h) Notices. All notices, requests, demands or other communications required or permitted to be given or made under this Escrow Agreement shall be in writing and shall be delivered by hand or by commercial overnight delivery service which provides for evidence of receipt, or mailed by certified mail, return receipt requested, postage prepaid. If delivered personally or by commercial overnight delivery service, the date on which the notice, request,

instruction or document is delivered shall be the date on which delivery is deemed to be made, and if delivered by mail, the date on which such notice, request, instruction or document is received shall be the date on which delivery is deemed to be made. Any party may change its address for the purpose of this Escrow Agreement by notice in writing to the other parties as provided herein.

(i) Survival. Sections 5, 6, 8, 9, 10 and 11 shall survive any termination of this Escrow Agreement.

(j) No Waiver. No failure on the part of any party hereto to exercise, and no delay in exercising any right, power or single or partial exercise of any right, power or remedy by any party will preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No express waiver or assent by any party hereto to any breach of or default in any term or condition of this Escrow Agreement shall constitute a waiver of or an assent to any succeeding breach of or default in the same or any other term or condition hereof.

IN WITNESS WHEREOF each of the parties has caused its duly authorized officer to execute this Escrow Agreement as of the date and year first above written.

Iron Mountain Intellectual Property Management, Inc.

By:
Title:
Print Name:
Address:

Phone:
Fax:
E-mail:

VeriSign, Inc.

By:
Title:
Print Name:
Address:

Phone:
Fax:
E-mail:

Internet Corporation for Assigned Names and Numbers

By:
Title:
Print Name:
Address:

Phone:
Fax:
E-mail:

.NET Registry Agreement Appendix 3

Zone File Access Agreement

(Effective July 1, 2017 until the 3A Effective Date)

1. PARTIES

The User named in this Agreement hereby contracts with VeriSign, Inc. ("VNDS") for a non-exclusive, non-transferable, limited right to access an Internet host server or servers designated by VNDS from time to time, and to transfer a copy of the described Data to the User's Internet host machine specified below, under the terms of this Agreement. Upon execution of this Agreement by VNDS, VNDS will return a copy of this Agreement to you for your records with your UserID and Password entered in the spaces set forth below.

2. USER INFORMATION

(a) User: _____

(b) Contact Person: _____

(c) Street Address: _____

(d) City, State or Province: _____

(e) Country and Postal Code: _____

(f) Telephone Number: _____
(including area/country code)

(g) Fax Number: _____
(including area/country code)

(h) E-Mail Address: _____

(i) Specific Internet host machine which will be used to access VNDS's server to transfer copies of the Data:

Name: _____

IP Address: _____

(j) Purpose(s) for which the Data will be used: During the term of this Agreement, you may use the data for any legal purpose, not prohibited under Section 4 below. You may incorporate some or all of the Data in your own products or services, and distribute those products or services for a purpose not prohibited under Section 4 below.

3. TERM

This Agreement is effective for a period of three (3) months from the date of execution by VNDS (the "Initial Term"). Upon conclusion of the Initial Term, this Agreement will automatically renew for successive three-month renewal terms (each a "Renewal Term") until terminated by either party as set forth in Section 12 of this Agreement or one party provides the other party with a written notice of termination at least seven (7) days prior to the end of the Initial Term or the then current Renewal Term.

NOTICE TO USER: CAREFULLY READ THE FOLLOWING TERMS AND CONDITIONS. YOU MAY USE THE USER ID AND ASSOCIATED PASSWORD PROVIDED IN CONJUNCTION WITH THIS AGREEMENT ONLY TO OBTAIN A COPY OF .NET TOP-LEVEL DOMAIN ("TLD") ZONE FILES, AND ANY ASSOCIATED ENCRYPTED CHECKSUM FILES (COLLECTIVELY THE "DATA"), VIA THE FILE TRANSFER PROTOCOL ("FTP") OR HYPERTEXT TRANSFER PROTOCOL ("HTTP") PURSUANT TO THESE TERMS.

4. GRANT OF ACCESS

VNDS grants to you a non-exclusive, non-transferable, limited right to access an Internet host server or servers designated by VNDS from time to time, and to transfer a copy of the Data to the Internet host machine identified in Section 2 of this Agreement no more than once per 24 hour period without the express prior written consent of VNDS using FTP or HTTP for the purposes described in this Section 4. You agree that you will:

(a) use this Data only for lawful purposes but that under no circumstances will you use this Data to: (1) allow, enable, or otherwise support any marketing activities, regardless of the medium used. Such media include but are not limited to e-mail, telephone, facsimile, postal mail, SMS, and wireless alerts; or (2) enable high volume, automated, electronic processes that send queries or data to the systems of VNDS or any ICANN-accredited registrar, except as

reasonably necessary to register domain names or modify existing registrations. VNDS reserves the right, with the approval of the Internet Corporation for Assigned Names and Numbers ("ICANN"), to specify additional specific categories of prohibited uses by giving you reasonable written notice at any time and upon receiving such notice you shall not make such prohibited use of the Data you obtain under this Agreement.

(b) copy the Data you obtain under this Agreement into a machine-readable or printed form only as necessary to use it in accordance with this Agreement in support of your use of the Data.

(c) comply with all applicable laws and regulations governing the use of the Data.

(d) not distribute the Data you obtained under this Agreement or any copy thereof to any other party without the express prior written consent of VNDS, except that you may redistribute the Data insofar as it has been incorporated by you into a value-added product or service that does not permit the extraction of a substantial portion of the Data from the value-added product or service, provided you prohibit the recipient of the Data from using the Data in a manner contrary to Section 4(a).

(e) take all reasonable steps to protect against unauthorized access to, use, and disclosure of the Data you obtain under this Agreement.

5. FEE

You agree to remit in advance to VNDS a quarterly fee of \$0 (USD) for the right to access the files during either the Initial Term or Renewal Term of this Agreement. VNDS reserves the right to adjust, with the approval of ICANN, this fee on thirty days' prior notice to reflect a change in the cost of providing access to the files.

6. PROPRIETARY RIGHTS

You agree that no ownership rights in the Data are transferred to you under this Agreement. You agree that any copies of the Data that you make will contain the same notice that appears on and in the Data obtained under this Agreement.

7. METHOD OF ACCESS

VNDS reserves the right, with the approval of ICANN, to change the method of access to the Data at any time. You also agree that, in the event of significant degradation of system processing or other emergency, VNDS may, in its sole discretion, temporarily suspend access under this Agreement in order to minimize threats to the operational stability and security of the Internet.

8. NO WARRANTIES

The Data is being provided "as-is." VNDS disclaims all warranties with respect to the Data, either expressed or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, and non-infringement of third party rights. Some jurisdictions do not allow the exclusion of implied warranties or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

9. SEVERABILITY

In the event of invalidity of any provision of this Agreement, the parties agree that such invalidity shall not affect the validity of the remaining provisions of this Agreement.

10. NO CONSEQUENTIAL DAMAGES

In no event shall VNDS be liable to you for any consequential, special, incidental or indirect damages of any kind arising out of the use of the Data or the termination of this Agreement, even if VNDS has been advised of the possibility of such damages.

11. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Virginia, USA. You agree that any legal action or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement shall be brought or otherwise commenced only in the state or federal courts in Fairfax County and the Eastern District of the Commonwealth of in Virginia, USA. You expressly and irrevocably agree and consent to the personal jurisdiction and venue of the federal and states courts located Virginia, USA (and each appellate court located therein) for matters arising in connection with this Agreement or your obtaining, use, or distribution

of the Data. The United Nations Convention on Contracts for the International Sale of Goods is specifically disclaimed.

12. TERMINATION

You may terminate this Agreement at any time by erasing the Data you obtained under this Agreement from your Internet host machine together with all copies of the Data and providing written notice of your termination to VNDS at 12061 Bluemont Way, Reston, VA 20190, Attention: Customer Service. VNDS has the right to terminate this Agreement immediately if you fail to comply with any term or condition of this Agreement. You agree upon receiving notice of such termination of this Agreement by VNDS or expiration of this Agreement to erase the Data you obtained under this Agreement together with all copies of the Data.

13. DEFINITION

"Data" means all data contained in a DNS zone file for the Registry TLD as provided to TLD nameservers on the Internet.

14. ENTIRE AGREEMENT

This is the entire agreement between you and VNDS concerning access and use of the Data, and it supersedes any prior agreements or understandings, whether written or oral, relating to access and use of the Data.

VeriSign, Inc.

By: **(sign)**

Name: (print)

Title:

Date:

User:

By: **(sign)**

Name: (print)

Title:

Date:

ASSIGNED USERID AND PASSWORD

(To be assigned by VNDS upon execution of this Agreement):

USERID:

PASSWORD:

.NET Registry Agreement Appendix 3A

Zone File Access Agreement

Effective as of the Appendix 3A Effective Date

1. Third-Party Zone File Access

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 1.3 of this Appendix and do so using the file format described in Section 1.4 of this Appendix. 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 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 1.2 below or where Registry Operator reasonably believes will violate the terms of Section 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 1.5 below.

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.

1.3 Grant of Access. Each Registry Operator (optionally through the CZDA Provider) will provide the Zone File SFTP (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 SFTP, 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.

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 zone goes into a separate file named as above, with all the files combined using tar into a file called <tld>.zone.tar.

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, use of, 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 any marketing activities to entities other than the user's existing customers, regardless of the medium used (such media include but are not limited to transmission by e-mail, telephone, facsimile, postal mail, SMS, and wireless alerts of mass unsolicited, commercial advertising or solicitations to entities), (ii) enable high volume, automated, electronic processes that send queries or data to the systems of Registry Operator or any ICANN-accredited registrar, or (iii) interrupt, disrupt or interfere in the normal business operations of any registrant.

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.

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. Co-operation

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 Appendix.

.NET Registry Agreement Appendix 4

Monthly Operators Reports

July 1, 2017

Registry Operator shall provide the following information for .NET in three monthly reports as described below. Reports shall be submitted via email to <registry-reports@icann.org>. ICANN may request in the future that the reports be delivered by other means. ICANN shall use reasonable commercial efforts to preserve the confidentiality of the information reported until three months after the end of the month to which the report relates.

(A) Monthly Report. File shall be in Portable Document Format (PDF). Report shall contain the following information:

1. Accredited Registrar Status. State the number of registrars in each of the following three categories: (1) operational, (2) ramp-up (registrars that have received a password for access to OT&E), and (3) pre-ramp-up (registrars that have requested access, but have not yet entered the ramp-up period).

2. Service Level Agreement Performance. Compare Service Level Agreement requirements with actual performance measures for the reporting month.

3. TLD Zone File Access Activity. State the total number of zone file access passwords at end of the reporting month.

4. Completed System Software Releases. Describe significant releases during the reporting month, including release name, features, and completion date.

5. Whois Service Activity. State the number of Whois queries during the reporting month.

6. Total Number of Transactions by Subcategory by Month. State the total number of transactions during the reporting month, in the following subcategories: adds, deletes, modifies, checks, renews, transfers, restores.

7. Daily Transaction Range. Tabulate the number of total daily transactions. The range of transaction volume should be shown for each month, along with the average daily transaction volume.

(B) Per-Registrar Activity Report. File shall be named "net-transactions-YYYYMM.csv"; where "YYYYMM" is the year and month being reported. This report shall be in comma separated-value format as specified in RFC 4180, using the following fields per registrar:

Field #	Field Name	Notes
01	registrar-name	registrar's full corporate name
02	iana-id	http://www.iana.org/assignments/registrar-ids/
03	total-domains	total domains under sponsorship
04	total-nameservers	total nameservers registered
05	net-adds-1-yr	domains successfully added (and not deleted within the add grace period)
06	net-adds-2-yr	number of domains successfully registered with an initial term of two years (and not deleted within the add grace period)
07	net-adds-3-yr	number of domains successfully registered with an initial term of three years (and not deleted within the add grace period)
08	net-adds-4-yr	etc.
09	net-adds-5-yr	" "
10	net-adds-6-yr	" "
11	net-adds-7-yr	" "
12	net-adds-8-yr	" "
13	net-adds-9-yr	" "

14	net-adds-10-yr	" "
15	net-renews-1-yr	domains renewed either automatically or by command (and not deleted within the renew grace period)
16	net-renews-2-yr	number of domains successfully renewed with a new renewal period of two years (and not deleted within the renew grace period)
17	net-renews-3-yr	number of domains successfully renewed with a new renewal period of three years (and not deleted within the renew grace period)
18	net-renews-4-yr	etc.
19	net-renews-5-yr	" "
20	net-renews-6-yr	" "
21	net-renews-7-yr	" "
22	net-renews-8-yr	" "
23	net-renews-9-yr	" "
24	net-renews-10-yr	" "
25	transfer-gaining-successful	transfers initiated by this registrar that were ack'd by the other registrar - either by command or automatically
26	transfer-gaining-nacked	transfers initiated by this registrar that were n'acked by the other registrar
27	transfer-losing-successful	transfers initiated by another registrar that this registrar ack'd - either by command or automatically
28	transfer-losing-nacked	transfers initiated by another registrar that this registrar n'acked

29	transfer-disputed-won	number of transfer disputes in which this registrar prevailed
30	transfer-disputed-lost	number of transfer disputes this registrar lost
31	transfer-disputed-nodecision	number of transfer disputes involving this registrar with a split or no decision
32	deleted-domains-grace	domains deleted within the add grace period
33	deleted-domains-nograce	domains deleted outside the add grace period
34	restored-domains	domain names restored from redemption period
35	restored-noreport	total number of restored names for which the registrar failed to submit a restore report
36	agp-exemption-requests	total number of AGP (add grace period) exemption requests
37	agp-exemptions-granted	total number of AGP (add grace period) exemption requests granted
38	agp-exempted-domains	total number of names affected by granted AGP (add grace period) exemption requests
39	attempted-adds	number of attempted (successful and failed) domain name create commands

The first line shall include the field names exactly as they appear in the table above as a "header line" as described in section 2 of RFC 4180. The last line of each report should 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 "CRLF" as described in RFC 4180.

(C) 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 "net-activity-yyyymm.csv", where "yyyymm" is the year and month being reported. The file shall contain the following fields:

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

14	srs-dom-delete	number of SRS (EPP and any other interface) domain name "delete" requests responded during the reporting period
15	srs-dom-info	number of SRS (EPP and any other interface) domain name "info" requests responded during the reporting period
16	srs-dom-renew	number of SRS (EPP and any other interface) domain name "renew" requests responded during the reporting period
17	srs-dom-rgp-restore-report	number of SRS (EPP and any other interface) domain name RGP "restore" requests 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
28	srs-host-info	number of SRS (EPP and any other interface) host "info" requests responded during the reporting period
29	srs-host-	number of SRS (EPP and any other interface) host "update"

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

The first line shall include the field names exactly as described in the table above as a "header line" as described in section 2 of RFC 4180. The last line of each report shall include totals for each column across all registrars; the first field of this line shall read "Totals" while the second field shall be left

empty in that line. No other lines besides the ones described above shall be included. Line breaks shall be <U+000D, U+000A> as described in RFC 4180.

.NET Registry Agreement Appendix 5

Whois Specifications

(Effective July 1, 2017 until the Appendix 1A, 2A and 5A Effective Date)

Public Whois Specification

Registry Operator's Whois service is the authoritative Whois service for all second-level Internet domain names registered in the.NET top-level domain and for all hosts registered using these names. This service is available to anyone. It is available via port 43 access and via links at the Registry Operator's web site. It is updated daily.

To use Registry Whois via port 43 enter the applicable parameter on the command line as illustrated below:

For a domain name: whois "domain verisign.net"

For a registrar name: whois "registrar Go Daddy Software, Inc."

For a nameserver: whois "DNS3.REGISTER.NET" or whois "nameserver 216.21.234.72"

By default, Whois performs a very broad search, looking in all record types for matches to your query in these fields: domain name, nameserver name, nameserver IP address, and registrar names. Use keywords to narrow the search (for example, 'domain root'). Specify only part of the search string to perform a "partial" search on domain. Every domain starting with the string will be found. A trailing dot (or dots) after your text or the partial keyword indicates a partial search. For example, entering 'mack.' will find "Mack", "Mackall", "Mackay", and so on.

To use Registry Whois using the web interface:

Go to www.verisign-grs.net/whois

Click on the appropriate button ("domain," "registrar" or "nameserver")

Enter the applicable parameter:

Domain name including the TLD (e.g., verisign-grs.net)

Full name of the registrar including punctuation, "Inc.", etc. (e.g., America Online, Inc.)

Full host name or the IP address (e.g., ns1.crsnic.net or 198.41.3.39)

Click on the "submit" button.

For all registered second-level domain names in .NET, information as illustrated in the following example is displayed in a thin format, where the entry parameter is the domain name (including the TLD):

Domain Name: VERISIGN-GRS.NET
Registrar: NETWORK SOLUTIONS, LLC.
Whois Server: whois.networksolutions.com
Referral URL: <http://www.networksolutions.com/>
Name Server: NS1.CRSNIC.NET
Name Server: NS2.NSIREGISTRY.NET
Name Server: NS3.VERISIGN-GRS.NET
Name Server: NS4.VERISIGN-GRS.NET
Status: REGISTRAR-LOCK
Updated Date: 20-oct-2004
Creation Date: 08-sep-2000
Expiration Date: 08-sep-2008

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST <<<

For all ICANN-accredited registrars who are authorized to register .net second-level domain names through Registry Operator, information as illustrated in the following example is displayed, where the entry parameter is the full name of the registrar (including punctuation, "Inc.", etc.):

Registrar Name: SAMPLE REGISTRAR, INC. DBA SAMPLE NAMES
Address: 1234 Any Way, Anytown, VA 20153, US
Phone Number: 703-555-5555
Email: registrar-agent@samplenames.net
Whois Server: whois.registrar.samplenames.net
Referral URL: www.registrar.samplenames.net
Admin Contact: Jane Doe
Phone Number: 703-555-5556
Email: janedoe@samplenames.net
Admin Contact: John Smith
Phone Number: 703-555-5557
Email: johnsmith@samplenames.net

Admin Contact: Domain Name Administrator
Phone Number: 703-555-5558
Email: dns-eng@samplenames.net
Billing Contact: Petranella Jones
Phone Number: 703-555-5559
Email: pjones@samplenames.net
Technical Contact: Harry Nerd
Phone Number: 703 555-6000
Email: harrynerd@samplenames.net
Technical Contact: Harry Nerd II
Phone Number: 703-555-6001
Email: harrynerd@samplenames.net

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST <<<
For all hosts registered using second-level domain names in .NET,
information as illustrated in the following example is displayed, where the
entry parameter is either the full host name or the IP address:

Server Name: DNS.MOMINC.NET
IP Address: 209.143.112.34
Registrar: BULKREGISTER, LLC.
Whois Server: whois.bulkregister.net
Referral URL: <http://www.bulkregister.net/>

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST <<<

Whois Provider Data Specification

Registry Operator shall provide bulk access to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of providing free public query-based access to up-to-date data concerning domain name and nameserver registrations in multiple TLDs, to a party designated from time to time in writing by ICANN. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until changed according to the Registry Agreement.

Content

The data shall be provided in three files:

A. *Domain file*. One file shall be provided reporting on the domains sponsored by all registrars. For each domain, the file shall give the domainname, servename for each nameserver, registrarid, and updateddate.

B. *Nameserver file*. One file shall be provided reporting on the nameservers sponsored by all registrars. For each registered nameserver, the file shall give the servename, each ipaddress, registrarid, and updateddate.

C. *Registrar file*. A single file shall be provided reporting on the registrars sponsoring registered domains and nameservers. For each registrar, the following data elements shall be given: registrarid, registrar address, registrar telephone number, registrar e-mail address, whois server, referral URL, updateddate and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts.

Format

The format for the above files shall be as specified by ICANN, after consultation with Registry Operator.

Procedures for Providing Access

The procedures for providing daily access shall be as mutually agreed by ICANN and Registry Operator. In the absence of an agreement, the files shall be provided by Registry Operator sending the files in encrypted form to the party designated by ICANN by Internet File Transfer Protocol.

Whois Data Specification - ICANN

Registry Operator shall provide bulk access by ICANN to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the .NET TLD on a daily schedule, only for purposes of verifying and ensuring the operational stability of Registry Services and the DNS. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until changed according to the Registry Agreement.

Content

The data shall be provided in three files:

A. *Domain file*. One file shall be provided reporting on the domains sponsored by all registrars. For each domain, the file shall give the domainname, servename for each nameserver, registrarid, and updateddate.

B. *Nameserver file*. One file shall be provided reporting on the nameservers sponsored by all registrars. For each registered nameserver, the file shall give the servename, each ipaddress, registrarid, and updateddate.

C. *Registrar file*. A single file shall be provided reporting on the registrars sponsoring registered domains and nameservers. For each registrar, the following data elements shall be given: registrarid, registrar address, registrar telephone number, registrar e-mail address, whois server, referral URL, updateddate and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts.

Format

The format for the above files shall be as specified by ICANN, after consultation with Registry Operator.

Procedures for Providing Access

The procedures for providing daily access shall be as mutually agreed by ICANN and Registry Operator. In the absence of an agreement, an up-to-date version (encrypted using a public key supplied by ICANN) of the files shall be placed at least once per day on a designated server and available for downloading by ICANN by Internet File Transfer Protocol.

.NET Registry Agreement Appendix 5A

Whois Specifications

(Effective as of the 1A, 2A and 5A Effective Date)

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 at whois.verisign.net, and a web-based Directory Service at www.verisign.com/whois 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 “nameserver (nameserver name)”, or whois “nameserver (IP Address).” For example: whois “nameserver NS1.EXAMPLE.TLD”.

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. **Bulk Registration Data Access to ICANN**

2.1 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.

2.1.1 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 ID (IANA ID), hostname of registrar Whois server, and URL of registrar.

2.1.2 Format. The data will be provided in the format specified in Appendix 1A Data Escrow Specification (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 Appendix 1A.

2.1.3 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.

2.2 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 Appendix 1A Data Escrow Specification. 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 2.1 of this Appendix.

.NET Registry Agreement Appendix 6

Schedule of Reserved Names

(1 July 2017)

Except to the extent that ICANN otherwise expressly authorizes in writing, the Registry Operator shall reserve names formed with the following labels from initial (i.e. other than renewal) registration within the TLD:

A. Labels Reserved at All Levels. The following names shall be reserved at the second level and at all other levels within the TLD at which Registry Operator makes registrations:

ICANN-related names:

aso

gnso

icann

internic

ccnso

IANA-related names:

afrinic

apnic

arin

example

gtld-servers

iab

iana

iana-servers

iesg

ietf

irtf

istf

lacnic

latnic

rfc-editor

ripe

root-servers

B. Additional Second-Level Reservations. In addition, the following names shall be reserved at the second level:

All single-character labels.

All two-character labels shall be initially reserved. The reservation of a two-character label string shall be released to the extent that the Registry Operator reaches agreement with the government and country-code manager, or the ISO 3166 maintenance agency, whichever appropriate. The Registry Operator may also propose release of these reservations based on its implementation of measures to avoid confusion with the corresponding country codes.

C. Tagged Domain Names. All labels with hyphens in the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n")

D. Second-Level Reservations for Registry Operations. The following names are reserved for use in connection with the operation of the registry for the Registry TLD. They may be used by Registry Operator, but upon conclusion of Registry Operator's designation as operator of the registry for the Registry TLD they shall be transferred as specified by ICANN:

nic

whois

WWW

.NET Registry Agreement Appendix 7

Functional and Performance Specifications

(July 1, 2017)

These functional specifications for the Registry TLD consist of the following parts:

1. Standards Compliance;
2. Supported initial and renewal registration periods;
3. Grace period policy;
4. Wildcard Prohibition;
5. Patch, update, and upgrade policy;
6. Performance Specifications;
7. Responsibilities of the Parties; and
8. Additional Services

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 for RFCs 1034, 1035, 1123, 1982, 2181, 2182, 3226, 3596, 3597, 4343, 5966 and 6891. 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. Notwithstanding the foregoing, nothing herein shall require Registry Operator to comply with informational RFCs with respect to EPP under this Section 1.2 of Appendix 7. 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 is not required to submit documented EPP extensions to the IETF but 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”). For the absence of doubt, Registry Operator shall sign the zone file of <TLD> and zone files used for in-bailiwick glue for the TLD’s DNS servers. During the Term, Registry Operator shall comply with RFCs 4033, 4034, 4035, 4509 and their successors, and follow the best practices described in RFC 6781 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. DNSSEC validation must be active and use the IANA DNS Root Key Signing Key set (available at <https://www.iana.org/dnssec/files>) as a trust anchor for Registry Operator’s Registry Services making use of data obtained via DNS responses.

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.

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 Appendix 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.

1.6 IANA Rootzone Database. In order to ensure that authoritative information about the TLD remains publicly available, Registry Operator shall submit a change request to the IANA functions operator updating any outdated or inaccurate DNS or WHOIS records of the TLD. Registry Operator shall use commercially reasonable efforts to submit any such change request no later than seven (7) calendar days after the date any such DNS or WHOIS records becomes outdated or inaccurate. Registry Operator must submit all change requests in accordance with the procedures set forth at <<http://www.iana.org/domains/root>>.

1.7 Network Ingress Filtering. Registry Operator shall implement network ingress filtering checks for its Registry Services as described in BCP 38 and BCP 84, which ICANN will also implement.

2. Supported initial and renewal registration periods

2.1 Initial registrations of Registered Names (where available according to functional specifications and other requirements) may be made in the registry for terms of up to ten years.

2.2 Renewal registrations of Registered Names (where available according to functional specifications and other requirements) may be made in the registry for terms not exceed a total of ten years.

2.3 Upon change of sponsorship of the registration of a Registered Name from one registrar to another, according to Part A of the ICANN Policy on Transfer of Registrations between Registrars, the term of registration of the Registered Name shall be extended by one year, provided that the maximum term of the registration as of the effective date of the sponsorship change shall not exceed ten years.

2.4 The change of sponsorship of registration of Registered Names from one registrar to another, according to Part B of the ICANN Policy on Transfer of Registrations between Registrars shall not result in the extension of the term of the registration and Registry Operator may assist in such change of sponsorship.

3. Grace period policy

This section describes Registry Operator's practices for operational "Grace" and "Pending" periods, including relationships among sequential operations that occur within given time frames. A *Grace Period* refers to a specified number of calendar days following a Registry operation in which a domain action may be reversed and a credit may be issued to a registrar. Relevant registry operations in this context are:

- Registration of a new domain,
- Renewal of an existing domain,
- Auto-Renew of an existing domain;
- Transfer of an existing domain; and
- Deletion of an existing domain.

Extension of a registration period is accomplished using the EPP RENEW command or by auto-renewal; registration is accomplished using the EPP CREATE command; deletion/removal is accomplished using the EPP DELETE command; transfer is accomplished using the EPP TRANSFER command or, where ICANN approves a bulk transfer under Part B of the ICANN Policy on Transfer of Registrations between Registrars, using the procedures specified in that Part. Restore is accomplished using the EPP UPDATE command.

There are five grace periods provided by Registry Operator's Shared Registration System: *Add Grace Period, Renew/Extend Grace Period, Auto-Renew Grace Period, Transfer Grace Period, and Redemption Grace Period.*

A *Pending Period* refers to a specified number of calendar days following a Registry operation in which final Registry action is deferred before the operation may be completed. Relevant Registry operations in this context are:

- Transfer of an existing domain,
- Deletion of an existing domain, and
- Restore of a domain name in Redemption Grace Period.

3.1 Grace Periods

3.1.1 Add Grace Period

The *Add Grace Period* is a specified number of calendar days following the initial registration of a domain. The current value of the *Add Grace Period* for all registrars is five calendar days. If a Delete, Extend (EPP Renew

command), or Transfer operation occurs within the five calendar days, the following rules apply:

Delete. If a domain is deleted within the *Add Grace Period*, the sponsoring Registrar at the time of the deletion is credited for the amount of the registration; provided, however, that Registry Operator shall have the right to charge Registrars a fee as set forth in its Registry-Registrar Agreement for disproportionate deletes during the *Add Grace Period*. The domain is deleted from the Registry database and is immediately available for registration by any Registrar. See Section 3.2 for a description of overlapping grace period exceptions.

Extend (EPP Renew command). If a domain is extended within the *Add Grace Period*, there is no credit for the add. The expiration date of the domain registration is extended by the number of years, up to a total of ten years, as specified by the registrar's requested Extend operation.

Transfer (other than ICANN-approved bulk transfer). Transfers under Part A of the ICANN Policy on Transfer of Registrations between Registrars may not occur during the *Add Grace Period* or at any other time within the first 60 days after the initial registration. Enforcement is the responsibility of the Registrar sponsoring the domain name registration and is enforced by the SRS.

Bulk Transfer (with ICANN approval). Bulk transfers with ICANN approval may be made during the *Add Grace Period* according to the procedures in Part B of the ICANN Policy on Transfer of Registrations between Registrars. The expiration dates of transferred registrations are not affected. The losing Registrar's account is charged for the initial add.

3.1.2 Renew/Extend Grace Period

The *Renew/Extend Grace Period* is a specified number of calendar days following the renewal/extension of a domain name registration period through an EPP Command Renew. The current value of the *Renew/Extend Grace Period* is five calendar days. If a Delete, Extend, or Transfer occurs within that five calendar days, the following rules apply:

Delete. If a domain is deleted within the *Renew/Extend Grace Period*, the sponsoring Registrar at the time of the deletion receives a credit of the renew/extend fee. The domain immediately goes into the Redemption Grace Period. See Section 3.2 for a description of overlapping grace period exceptions.

Extend ("EPP Command "Renew"). A domain registration can be extended within the *Renew/Extend Grace Period* for up to a total of ten years. The account of the sponsoring Registrar at the time of the additional extension will be charged for the additional number of years the registration is extended.

Transfer (other than ICANN-approved bulk transfer). If a domain is transferred within the *Renew/Extend Grace Period*, there is no credit. The expiration date of the domain registration is extended by one year and the years added as a result of the Extend remain on the domain name up to a total of 10 years.

Bulk Transfer (with ICANN approval). Bulk transfers with ICANN approval may be made during the *Renew/Extend Grace Period* according to the procedures in Part B of the ICANN Policy on Transfer of Registrations between Registrars. The expiration dates of transferred registrations are not affected. The losing Registrar's account is charged for the Renew/Extend operation.

3.1.3 Auto-Renew Grace Period

The *Auto-Renew Grace Period* is a specified number of calendar days following an auto-renewal. An auto-renewal occurs if a domain name registration is not renewed by the expiration date; in this circumstance the registration will be automatically renewed by the system the first day after the expiration date. The current value of the *Auto-Renew Grace Period* is 45 calendar days. If a Delete, Extend, or Transfer occurs within the *Auto-Renew Grace Period*, the following rules apply:

Delete. If a domain is deleted within the *Auto-Renew Grace Period*, the sponsoring Registrar at the time of the deletion receives a credit of the Auto-Renew fee. The domain immediately goes into the Redemption Grace Period. See Section 3.2 for a description of overlapping grace period exceptions.

Extend. A domain can be extended within the *Auto-Renew Grace Period* for up to a total of ten years. The account of the sponsoring Registrar at the time of the additional extension will be charged for the additional number of years the registration is extended.

Transfer (other than ICANN-approved bulk transfer). If a domain is transferred within the *Auto-Renew Grace Period*, the losing Registrar is credited with the Auto-Renew charge and the year added by the Auto-Renew operation is cancelled. The expiration date of the domain is extended by one year up to a total maximum of ten and the gaining Registrar is charged for that additional

year, even in cases where a full year is not added because of the 10-year registration term maximum.

Bulk Transfer (with ICANN approval). Bulk transfers with ICANN approval may be made during the *Auto-Renew Grace Period* according to the procedures in Part B of the ICANN Policy on Transfer of Registrations between Registrars. The expiration dates of transferred registrations are not affected. The losing Registrar's account is charged for the Auto-Renew.

3.1.4 Transfer Grace Period

The *Transfer Grace Period* is a specified number of calendar days following the transfer of a domain according to Part A of the ICANN Policy on Transfer of Registrations between Registrars. The current value of the *Transfer Grace Period* is five calendar days. If a Delete, Extend, or Transfer occurs within that five calendar days, the following rules apply:

Delete. If a domain is deleted within the *Transfer Grace Period*, the sponsoring Registrar at the time of the deletion receives a credit of the transfer fee. The domain immediately goes into the Redemption Grace Period. See Section 3.2 for a description of overlapping grace period exceptions.

Extend. If a domain registration is extended within the *Transfer Grace Period*, there is no credit for the transfer. The Registrar's account will be charged for the number of years the registration is extended. The expiration date of the domain registration is extended by the number of years, up to a maximum of ten years, as specified by the registrar's requested Extend operation.

Transfer (other than ICANN-approved bulk transfer). If a domain is transferred within the *Transfer Grace Period*, there is no credit. The expiration date of the domain registration is extended by one year up to a maximum term of ten years. The ICANN Policy on Transfer of Registrations between Registrars does not allow transfers within the first 60 days after another transfer has occurred; it is registrars' responsibility to enforce this restriction.

Bulk Transfer (with ICANN approval). Bulk transfers with ICANN approval may be made during the *Transfer Grace Period* according to the procedures in Part B of the ICANN Policy on Transfer of Registrations between Registrars. The expiration dates of transferred registrations are not affected. The losing Registrar's account is charged for the Transfer operation that occurred prior to the Bulk Transfer.

3.1.5 Bulk Transfer Grace Period

There is no grace period associated with Bulk Transfer operations. Upon completion of the Bulk Transfer, any associated fee is not refundable.

3.1.6 Redemption Grace Period

A domain name is placed in REDEMPTIONPERIOD status when a registrar requests the deletion of a domain that is not within the Add Grace Period. A name that is in REDEMPTIONPERIOD status will not be included in the zone file. A registrar cannot modify or purge a domain in REDEMPTIONPERIOD status. The only action a registrar can take on a domain in REDEMPTIONPERIOD is to request that it be restored. Any other registrar requests to modify or otherwise update the domain will be rejected. Unless restored, the domain will be held in REDEMPTIONPERIOD status for a specified number of calendar days. The current length of this Redemption Period is 30 calendar days.

3.2 Overlapping Grace Periods

If an operation is performed that falls into more than one grace period, the actions appropriate for each grace period apply (with some exceptions as noted below).

- If a domain is deleted within the Add Grace Period and the Extend Grace Period, then the Registrar is credited the registration and extend amounts, taking into account the number of years for which the registration and extend were done.
- If a domain is auto-renewed, then extended, and then deleted within the Extend Grace Period, the registrar will be credited for any Auto-Renew fee charged and the number of years for the extension.

3.2.1 Overlap Exception

- If a domain registration is extended within the Transfer Grace Period, then the current Registrar's account is charged for the number of years the registration is extended.

Note: If several billable operations, including a transfer, are performed on a domain and the domain is deleted within the grace periods of each of those operations, only those operations that were performed after the latest transfer, including the latest transfer, are credited to the current Registrar.

3.3 Pending Periods

3.3.1 Transfer Pending Period

The *Transfer Pending Period* is a specified number of calendar days following a request from a registrar (registrar A) to transfer a domain in which the current registrar of the domain (registrar B) may explicitly approve or reject the transfer request. The current value of the *Transfer Pending Period* is five calendar days for all registrars. The transfer will be finalized upon receipt of explicit approval or rejection from the current registrar (registrar B). If the current registrar (registrar B) does not explicitly approve or reject the request initiated by registrar A, the registry will approve the request automatically after the end of the *Transfer Pending Period*. During the *Transfer Pending Period*:

- a. EPP TRANSFER request or EPP RENEW request is denied.
- b. SYNC is not allowed.
- c. EPP DELETE request is denied.
- d. Bulk Transfer operations are allowed.
- e. EPP UPDATE request is denied.

After a transfer of a domain, the EPP TRANSFER request may be denied for 60 days.

3.3.2 Pending Delete Period

A domain name is placed in PENDING DELETE status if it has not been restored during the Redemption Grace Period. A name that is in PENDING DELETE status will not be included in the zone file. All registrar requests to modify or otherwise update a domain in PENDING DELETE status will be rejected. A domain name is purged from the registry database a specified number of calendar days after it is placed in PENDING DELETE status. The current length of this Pending Delete Period is five calendar days.

4. 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 but this provision shall not apply to the provision of nameservice or any other non-registry service for a domain or zone used for other than registration services to unaffiliated third parties by a single entity (including its affiliates) for domain names registered through an ICANN-Accredited Registrar.

5. Patch, update, and upgrade policy

Registry Operator may issue periodic patches, updates or upgrades to the Software, EPP or APIs ("Licensed Product") licensed under the Registry-Registrar Agreement (the "Agreement") that will enhance functionality or otherwise improve the Shared Registration System under the Agreement. For the purposes of this Section 5 of Appendix 7, the following terms have the associated meanings set forth herein.

5.1 A "Patch" means minor modifications to the Licensed Product made by Registry Operator during the performance of error correction services. A Patch does not constitute a Version.

5.2 An "Update" means a new release of the Licensed Product which may contain error corrections, minor enhancements, and, in certain circumstances, major enhancements, and which is indicated by a change in the digit to right of the decimal point in the version number of the Licensed Product.

5.3 An "Upgrade" means a new release of the Licensed Product which involves the addition of substantial or substantially enhanced functionality and which is indicated by a change in the digit to the left of the decimal point in the version of the Licensed Product.

5.4 A "Version" means the Licensed Product identified by any single version number.

Each Update and Upgrade causes a change in version.

* Patches do not require corresponding changes to client applications developed, implemented, and maintained by each registrar.

* Updates may require changes to client applications by each registrar in order to take advantage of the new features and/or capabilities and continue to have access to the Shared Registration System.

* Upgrades require changes to client applications by each registrar in order to take advantage of the new features and/or capabilities and continue to have access to the Shared Registration System.

Registry Operator, in its sole discretion, will deploy Patches during scheduled and announced Shared Registration System maintenance periods.

For Updates and Upgrades, Registry Operator will give each registrar notice prior to deploying the Updates and Upgrades into the production environment. The notice shall be at least ninety (90) days. Such notice will include an initial notice before deploying the Update that requires changes to client applications or the Upgrade into the Operational Test and Evaluation ("OT&E") environment to which all registrars have access. Registry Operator will maintain the Update or Upgrade in the OT&E environment for at least thirty (30) days, to allow each registrar the opportunity to modify its client applications and complete testing, before implementing the new code in the production environment.

This notice period shall not apply in the event Registry Operator's system is subject to the imminent threat of a failure or a material security threat, the discovery of a major security vulnerability, or a Denial of Service (DoS) attack where the Registry Operator's systems are rendered inaccessible by being subject to:

- i) excessive levels of data traffic
- ii) unauthorized traffic
- iii) data traffic not conforming to the protocols used by the Registry

6. Performance Specifications

These Performance Specifications provide a means to measure Registry Operator's delivery of SRS, DNS Name Server and Whois services for the Registry TLD and serve as the basis for the Service Level Agreements Credits ("**SLA Credits**") set forth in Appendix 10.

6.1 Definitions. Capitalized terms used in this Section 6 and not otherwise defined shall have the meaning ascribed to them in the Registry Agreement.

6.1.1 "Core Internet Service Failure" means an extraordinary and identifiable event beyond the control of Registry Operator affecting the Internet services to be measured pursuant to this Section 6 below. Such

events include but are not limited to congestion collapse, partitioning, power grid failures, and routing failures.

6.1.2 "Credit Level" means the credit levels set forth in the Table SLA Credits in Section 2 of Appendix 10 that outlines the total credits, penalties and/or liabilities that may be assessed to Registry Operator and sole remedies available to ICANN-Accredited Registrars for Registry Operators failure to meet Performance Specifications outlined in this Appendix 7.

6.1.3 "DNS Name Server" means the service complying with RFC 1034, 1035 and related RFCs made available on TCP/UDP port 53 on Registry Operator's selected servers.

6.1.4 "ICANN-Accredited Registrar" means an ICANN-Accredited Registrar that has a Registry-Registrar Agreement in effect with Registry Operator.

6.1.5 "Monthly Timeframe" means each single calendar month beginning and ending at 0000 Coordinated Universal Time (UTC).

6.1.6 "Performance Specifications" means a description of the measurable functional attributes of a particular System Services.

6.1.7 "Registrar Community" means all of the ICANN-Accredited Registrars who have a Registry-Registrar Agreements in effect with Registry Operator for the Registry TLD and who have registered greater than 150 net new .net domain names in the prior thirty (30) calendar day period.

6.1.8 "Round-trip" means the amount of measured time that it takes for a reference query to make a complete trip from the SRS gateway, through the SRS system, back to the SRS gateway.

6.1.9 "Service Level Agreement (SLA)" means the service level agreements attached as Appendix 10 to the Registry Agreement outlining performance standards levels.

6.1.10 "SRS" means the Shared Registration System, a system that the Registry Operator provides to the Registrar Community via a defined protocol (EPP) for registry-registrar interaction. Specifically, it refers to the ability of ICANN-Accredited Registrars to add, modify, and delete (create, update and delete) information associated with registered domain names and associated DNS Name Servers.

6.1.11 "System Services" means the SRS, DNS Name Server and Whois services for the Registry TLD for which availability and Performance Specifications are established.

6.1.12 "Whois" refers to the Registry Operator's Whois service provided in accordance with Appendix 5.

6.2. Service Availability. Service availability is defined as the time, in minutes, that the Registry Operator's System Services are each individually responding to its users ("**Service Availability**") as further defined in Sections 6.2.1 through 6.2.4.

6.2.1 Service Availability is measured as follows:

Service Availability % = $\{[(MTM - POMU) - UOM] / (MTM - POMU)\} * 100$
where:

MTM = Monthly Timeframe Minutes calculated as the number days in that month times 24 hours times 60 minutes. For example, the MTM for January is 31 days * 24 hours * 60 minutes or MTM = 44,640 minutes.

POMU = Planned Outage Minutes Used equals the number of minutes of a Planned Outage (as defined in Section 6.3 below) or Extended Planned Outage (as defined in Section 6.4 below) for that Monthly Timeframe for each individual System Service. No Monthly Timeframe shall have both a Planned and an Extended Planned Outage.

UOM = Unplanned Outage Minutes equals the total number of minutes the System Services is unavailable excluding any Planned Outages (as defined in Section 6.3 below) or Extended Planned Outage (as defined in Section 6.4 below) for that Monthly Timeframe.

The Service Availability calculation shall be calculated by the Registry Operator and the results reported for each Monthly Timeframe for SRS, Whois and DNS Name Server availability. For Service Availability Performance Specifications measured by calendar year, Yearly Timeframe Minutes (YTM) shall be substituted for Monthly Timeframe Minutes (MTM) in the calculation above. Yearly Timeframe Minutes calculated as 365 days * 24 hours * 60 minutes = 525,600 minutes. Results will be reported to the Registrar Community via e-mail and to ICANN according to Appendix 4.

6.2.2 Service Availability--SRS = 99.99% per calendar year. Service Availability as it applies to the SRS refers to the ability of the SRS to respond to ICANN-Accredited Registrars that access the SRS through the EPP protocol. SRS unavailability, except for Planned Outages (as defined in Section 6.3 below) and Extended Planned Outages (as defined in Section 6.4 below), will be logged with the Registry Operator as Unplanned Outage Minutes. Unavailability will not include any events affecting individual ICANN-Accredited Registrars locally.

SRS unavailability as it applies to the SRS shall mean when, as a result of a failure of systems within the VeriSign Registry's control, an ICANN-Accredited Registrar is unable to establish a session with the SRS gateway; provided, however, that SRS unavailability shall not include an ICANN-Accredited Registrars inability to establish a session with the SRS gateway that results from it exceeding its designated number of sessions. Establishing a session with the SRS gateway shall be defined as:

- a) successfully complete a TCP session start,
- b) successfully complete the SSL authentication handshake, and
- c) successfully complete the Extensible Provisioning Protocol (EPP) login command.

Registry Operator will log SRS unavailability once an ICANN-Accredited Registrar reports an occurrence to Registry Operator's customer service help desk in the manner required by the Registry Operator (i.e., e-mail, fax, telephone). The committed Service Availability for SRS is 99.99% per calendar year. The SRS Service Availability metric is a Credit Level 2.

6.2.3 Service Availability--DNS Name Server = 100% per Monthly Timeframe. Service Availability as it applies to the DNS Name Server refers to the ability of the DNS Name Server to resolve a DNS query from an Internet user. DNS Name Server unavailability will be logged with the Registry Operator as Unplanned Outage Minutes. Registry Operator will log DNS Name Server unavailability (a) when such unavailability is detected by monitoring tools, or (b) once an ICANN-Accredited Registrar reports an occurrence to Registry Operator's customer service help desk in the manner required by the Registry Operator (i.e., e-mail, fax, telephone) and Registry Operator confirms that the occurrence is not unique to the reporting registrar.

DNS Name Server unavailability shall mean less than eight (8) sites on the Registry Operator's constellation are returning answers to queries with less than 1% packet loss averaged over a Monthly Timeframe or 5% packet loss for any five minute period.

The committed Service Availability for DNS Name Server is 100% per Monthly Timeframe. The DNS Name Server Service Availability metric is a Credit Level 1.

6.2.4 Service Availability--Whois = 100% per Monthly Timeframe. Service Availability as it applies to Whois refers to the ability of Internet users to access and use the Whois. Whois unavailability, except for Planned Outages (as defined in Section 6.3 below) and Extended Planned Outages (as defined in Section 6.4 below), will be logged with the Registry Operator as Unplanned Outage Minutes. Registry Operator will log Whois unavailability (a) when such unavailability is detected by Registry Operator's monitoring tools, or (b) once an ICANN-Accredited Registrar reports an occurrence to Registry Operator's customer service help desk in the manner required by the Registry Operator (i.e., e-mail, fax, telephone). The committed Service Availability for Whois is 100% per Monthly Timeframe. The Whois Service Availability metric is a Credit Level 2.

6.3 Planned Outage. From time to time the Registry Operator will require an outage for regular maintenance or the addition of new functions or features ("**Planned Outage**").

6.3.1 Planned Outage Duration. Planned Outage duration defines the maximum allowable time, in minutes, that the Registry Operator is permitted to take the System Services out of service for regularly scheduled maintenance ("**Planned Outage Duration**"). Planned Outages are planned in advance and the Registrar Community is provided notification prior to an outage. The Planned Outage Duration for the System Services is as follows:

- (i) Planned Outage Duration - SRS = 45 minutes per Monthly Timeframe;
- (ii) Planned Outage Duration - DNS Name Server = no Planned Outages allowed; and
- (iii) Planned Outage Duration - Whois = no Planned Outages allowed.

The Planned Outage Duration metric is a Credit Level 6.

6.3.2 Planned Outage Timeframe. The Planned Outage Timeframe defines the hours and days in which a Planned Outage may occur ("**Planned Outage Timeframe**"). The Planned Outage Timeframe for the System Services is as follows:

- (i) Planned Outage Timeframe - SRS = 0100-0900 UTC Sunday;
- (ii) Planned Outage Timeframe - DNS Name Server = no Planned Outages allowed; and
- (iii) Planned Outage Timeframe - Whois = no Planned Outages allowed.

The Planned Outage Timeframe metric is a Credit Level 5.

6.3.3 Planned Outage Notification. The Registry Operator shall notify all ICANN-Accredited Registrars of any Planned Outage ("**Planned Outage Notification**"). The Planned Outage Notification shall set forth the date and time of the Planned Outage. The number of days prior to a Planned Outage that the Registry Operator shall notify the Registrar Community is as follows:

- (i) Planned Outage Timeframe - SRS = 30 days for general maintenance and 90 days for Updates or Upgrades as defined in the Patch, Update and Upgrade Policy in Section 5 of this Appendix 7;
- (ii) Planned Outage Timeframe - DNS Name Server = no Planned Outages allowed; and
- (iii) Planned Outage Timeframe - Whois = no Planned Outages allowed.

The Planned Outage Notification metric is a Credit Level 5.

6.4 Extended Planned Outage. In some cases, such as major software upgrades and platform replacements, an extended maintenance timeframe is required ("**Extended Planned Outage**"). Extended Planned Outages will be less frequent than Planned Outages but their duration may be longer.

6.4.1 Extended Planned Outage Duration. The Extended Planned Outage duration defines the maximum allowable time, in hours and minutes that the Registry Operator is permitted to take the System Services out of service for extended maintenance ("**Extended Planned Outage Duration**"). Extended Planned Outages are planned in advance and the Registrar Community is provided notification in accordance with Section 6.4.3. Extended Planned

Outage periods may not occur in the same Monthly Timeframe as a Planned Outage.

The Extended Planned Outage Duration for the System Services is as follows:

(i) Extended Planned Outage Duration - SRS = 4 hours (240 minutes) per calendar year and one Extend Planned Outage of 8 hours (480) minutes every 3 years;

(ii) Extended Planned Outage Duration - DNS Name Server = no Extended Planned Outages allowed; and

(iii) Extended Planned Outage Duration - Whois = no Extended Planned Outages allowed.

The Extended Planned Outage Duration metric is a Credit Level 6.

6.4.2 Extended Planned Outage Timeframe. The Extended Planned Outage Timeframe defines the hours and days in which the Extended Planned Outage may occur ("**Extended Planned Outage Timeframe**"). The Extended Planned Outage Timeframe for the System Services is as follows:

(i) Extended Planned Outage Timeframe - SRS = 0100 - 1300 UTC Sunday;

(ii) Extended Planned Outage Timeframe - DNS Name Server = no Extended Planned Outages allowed; and

(iii) Extended Planned Outage Timeframe - Whois = no Extended Planned Outages allowed.

The Extended Planned Outage Timeframe metric is a Credit Level 5.

6.4.3 Extended Planned Outage Notification. The Registry Operator must notify the Registrar Community of any Extended Planned Outage ("**Extended Planned Outage Notification**"). The Extended Planned Outage Notification shall set forth the date and time of the Extended Planned Outage. The number of days prior to an Extended Planned Outage that the Registry Operator must notify ICANN-Accredited Registrars is as follows:

(i) Extended Planned Outage Timeframe - SRS = 90 Days;

(ii) Extended Planned Outage Timeframe - DNS Name Server =no Extended Planned Outages allowed; and

(iii) Extended Planned Outage Timeframe - Whois = no Extended Planned Outages allowed.

The Extended Planned Outage Notification metric is a Credit Level 5.

6.5 Processing Time. Processing time is a measurement of Service Availability and equals the Round-trip for the System Services ("**Processing Time**"). The Registry Operator will log the Processing Time for all of the protocol transactions (i.e. Check, Add/Create, Modify/Update and Delete). Processing Time will be measured in a Monthly Timeframe and reported on a monthly basis to ICANN in accordance with Appendix 4. Should the total volume of protocol transactions (measured individually) added by all ICANN-Accredited Registrars for a Monthly Timeframe exceed Registry Operator's actual volume of protocol transactions for the previous Monthly Timeframe by more than 20%, then ICANN-Accredited Registrars shall not be eligible for any SLA credit, and Registry Operator shall have no liability to ICANN, if Registry Operator fails to meet a Processing Time Performance Specification set forth in this Section 6.5.

6.5.1 Processing Time--Check Domain = 25 milliseconds for 95%.

(i) The Processing Time for Check Domain is applicable to the SRS as accessed through the defined protocol (EPP) for registry-registrar interaction and measures the Processing Time for an availability check of a specific domain name.

(ii) The performance specification for Check Domain is 25 milliseconds Round-trip for 95% of the transactions during a Monthly Timeframe.

The Processing Time for Check Domain metric is a Credit Level 3.

6.5.2 Processing Time--Add/Create = 50 milliseconds for 95%.

(i) The Processing Time for Add/Create is applicable to the SRS as accessed through the defined protocol (EPP) for registry-registrar interaction and measures the Processing Time for add/create transactions associated with domain names.

(ii) The Performance Specification for ADD/Create is 50 milliseconds for Round-trip for 95% of the transactions processed during a Monthly Timeframe.

The Processing Time for Add/Create metric is a Credit Level 3.

6.5.3 Processing Time--Modify/Update and Delete Domain = 100 milliseconds for 95%.

(i) The Processing Time for Modify/Update and Delete is applicable to the SRS as accessed through the defined protocol (EPP) for registry-registrar interaction and measures the Processing Time for Modify/Update and Delete transactions associated with domain names.

(ii) The Performance Specification for Modify/Update and Delete is 100 milliseconds Round-trip for 95% of the transactions processed during a Monthly Timeframe.

The Processing Time for Modify/Update and Delete metric is a Credit Level 3

6.5.4 Processing Time--Whois Query = 5 milliseconds for 95%.

(i) The Processing Time for Whois query is applicable to the Whois and measures the Processing Time for a Whois query.

(ii) The Performance Specification for a Whois query is 5 milliseconds for 95% of the transactions during a Monthly Timeframes. That is, 95% of the transactions during a Monthly Timeframe will take 5 milliseconds or less from the time the Whois receives a query to the time it responds.

The Processing Time for Whois Query metric is a Credit Level 3.

6.5.5 Processing Time--DNS Name Server Resolution = 100 milliseconds for 95%.

(i) The Processing Time for DNS Name Server Resolution is applicable to the DNS Name Server and measures the processing time for a DNS query.

(ii) The Performance Specification for DNS Name Server Resolution is 100 milliseconds for 95% of the transactions during a Monthly Timeframe. That is, 95% of the transactions during a Monthly Timeframe will take 100 milliseconds or less from the time the name server receives the DNS query to the time it provides a response.

The Processing Time for the DNS Name Server metric is a Credit Level 3.

6.6 Update Frequency. The Registry Operator makes timely updates to the data on the DNS Name Servers and Whois. ICANN-Accredited Registrars record these updates through the SRS. The SRS then updates the DNS Name Server and the Whois. Registry Operator processes this updates on a near real time basis.

The committed performance specification with regards to Update frequency for both the DNS Name Server and the Whois is 3 minutes for 95% of the transactions during a Monthly Timeframe. That is, 95% of the updates to the DNS Name Servers and Whois during a Monthly Timeframe will be completed within 3 minutes. Update frequency is measured from the time that the Registry Operator confirms the update to the time the update appears in the DNS Name Server and Whois. Update frequency performance will be reported on a monthly basis to ICANN in accordance with Appendix 4.

6.6.1 Update Frequency--DNS Name Server = 3 minutes for 95% during a Monthly Timeframe.

The Update frequency metric for DNS Name Server is Credit Level 4.

6.6.2 Update Frequency--Whois

Update Frequency-Whois = 3 minutes for 95% during a Monthly Timeframe.

The Update frequency metric for Whois is Credit Level 4.

6.7 Cross-Network Name Server Performance Requirements. DNS Name Server Round-trip and packet loss from the Internet are important elements of the quality of service provided by the Registry Operator. These characteristics, however, are affected by Internet performance and, therefore, cannot be closely controlled by Registry Operator. Accordingly, these requirements are not matters subject to SLA Credits under the Service Level Agreement set forth on Appendix 10 or obligations upon which a breach by Registry Operator of the Registry Agreement may be asserted.

The committed performance specification for cross-network name server performance is a measured Round-trip of under 300 milliseconds and measured packet loss of under 1% averaged over the course of a Monthly Timeframe and no greater than 5% for any five (5) minute period over the course of a Monthly Timeframe. Cross-network name server performance measurements may be conducted by ICANN at times of its choosing, in the following manner:

6.7.1 The measurements may be conducted by sending strings of DNS request packets from different measuring locations to each of the .net DNS Name Servers and observing the responses from the .net DNS Name Servers. (These strings of requests and responses are referred to as a "**CNNP Test**".) The measuring locations will be distributed around the Internet.

6.7.2 Each string of request packets will consist of UDP or TCP packets requesting nameserver (NS) records for arbitrarily selected .net second-level domains, preselected to ensure that the names exist in the Registry TLD and are resolvable. The packet loss (i.e. the percentage of response packets not received) and the average Round-trip time for response packets received may be noted.

6.7.3 To meet the packet loss and Round-trip requirements for a particular CNNP Test, all three of the following must be true:

6.7.3.1 The Round-trip and packet loss from each measurement location to at least one .net name server must not exceed the required values;

6.7.3.2 The packet loss to each of the .net name servers from at least one of the measurement locations must not exceed the required value; and

6.7.3.3 Any failing CNNP Test result obtained during an identified Core Internet Service Failure shall not be considered.

6.7.4 To ensure a properly diverse testing sample, ICANN will conduct the CNNP Tests at varying times (i.e. at different times of the day, as well as on different days of the week). Registry Operator may only be deemed to have persistently failed to meet the cross-network name server performance requirement only if the .net DNS Name Servers fail the CNNP Tests (see Section 6.7.3 above) with no less than three consecutive failed CNNP Tests.

6.7.5 In the event of persistent failure of the CNNP Tests, ICANN will give Registry Operator written notice of the failures (with backup data) and Registry Operator will have sixty days to cure the failure.

6.7.6 Sixty days prior to the commencement of testing under this provision, ICANN will provide Registry Operator with the opportunity to evaluate the testing tools, measuring locations and procedures to be used by ICANN. In the event that Registry Operator does not approve of such tools and procedures, ICANN will work directly with Registry Operator to make necessary modifications.

7. Responsibilities of the Parties

7.1 Except in the case of DNS Name Server performance measurements, Registry Operator will perform monitoring from internally located systems as a means to verify that the availability and performance measurements in this document are being met.

7.2 The Registry Operator will provide system performance and availability reports monthly to the Registrar Community via e-mail and to ICANN according to Appendix 4.

7.3 The Registry Operator will provide the Whois Service as specified in Appendix 5.

7.4 The Registry Operator will use commercially reasonable efforts to restore the critical systems of the System Services within 24 hours after the termination of a force majeure event and restore full system functionality within 48 hours after the termination of a force majeure event. Outages due to a force majeure will not be considered service unavailability for purposes of this Appendix 7 or the SLA.

7.5 Registry Operator shall not be liable to ICANN or ICANN-Accredited Registrars for any credits or penalties or be deemed to be in breach of any of its obligations under the Registry Agreement if it fails to meet a Performance Specification as a result of its compliance with any Consensus Policy established after the Effective Date to the extent and for so long as the failure to meet a Performance Specification is unavoidable by commercially reasonable efforts due to Registry Operator's compliance with such Consensus Policy.

7.6 Abuse Mitigation

7.6.1 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.

7.6.2 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.

8. Additional Services

8.1 Bulk Transfer After Partial Portfolio Acquisition (BTAPPA)

Bulk Transfer After Partial Portfolio Acquisition (BTAPPA) is a registry service available to consenting registrars in the circumstance where one ICANN-accredited registrar purchases, by means of a stock or asset purchase, merger or similar transaction, a portion but not all, of another ICANN-accredited registrar's domain name portfolio in the dot-NET top-level domain.

At least fifteen days before completing a BTAPPA, the losing registrar must provide to all domain name registrants for names involved in the bulk transfer, written notice of the bulk change of sponsorship. The notice must include an explanation of how the Whois record will change after the bulk transfer occurs, and customer support and technical contact information of the gaining registrar.

If a domain is transferred under the BTAPPA service during any applicable grace period as described in Section 3 above, there is no credit. The expiration dates of transferred registrations are not affected.

Domain names in the following statuses at the time of the Transfer Request will not be transferred in a BTAPPA: "pending transfer", "redemption grace period (RGP)", or "pending delete". Domain names that are within the auto-renew grace window are subject to bulk transfer, but VeriSign may decline to provide a credit for those names deleted after the bulk transfer, but prior to the expiration of the auto-renew grace window.

VeriSign has discretion to reject a BTAPPA request if there is reasonable evidence that a transfer under BTAPPA is being requested in order to avoid fees otherwise due to VeriSign or ICANN, or if a registrar with common ownership or management or both has already requested BTAPPA service within the preceding six-month period.

NET Registry Agreement Appendix 9

Approved Services

(July 1, 2017)

The Registry Agreement specifies a "Process for Consideration of Proposed Registry Services." The following services are specifically identified as having been approved by ICANN prior to the effective date of the Registry Agreement. As such, notwithstanding any other provisions of the Registry Agreement, VeriSign shall be free to deploy the following services:

- ConsoliDate, in accordance with VeriSign's Registrar Reference Manual
- Internationalized Domain Names, in accordance with the Letter from Rusty Lewis to Paul Twomey dated 13 October 2003;
- Redemption Grace Period, in accordance with VeriSign's Registrar Reference Manual;
- Restore, which allows use of the EPP Update command to retrieve a previously deleted domain name registration during the Redemption Grace Period (approved by ICANN in accordance with Verisign's Registrar Reference Manual);
- Wait Listing Service, in accordance with the letter from John O. Jeffrey to Russell Lewis dated 26 January 2004;
- DNS Update Service, in accordance with <https://www.icann.org/en/system/files/files/icann-to-verisign-04apr07-en.pdf> dated April 11, 2007;
- DNSSEC, in accordance with <https://www.icann.org/en/system/files/files/icann-to-verisign-2009011-06nov09-en.pdf> dated November 7, 2009;
- Bulk Transfer after Partial Portfolio Acquisition ("BTAPPA") Restore, in accordance with <https://www.icann.org/resources/board-material/minutes-2009-12-09-en> dated December 9, 2009;
- Domain Name WhoWas, in accordance with <https://www.icann.org/en/system/files/files/verisign-whoas-16jul09-en.pdf>, dated July 16, 2009;
- IDN DNS Updates, in accordance with <https://www.icann.org/en/system/files/files/icann-to-verisign-200906-10jul09-en.pdf>, dated July 10, 2009;
- Registry Lock Service, in accordance with <https://www.icann.org/en/system/files/files/icann-to-verisign-200905-10jul09-en.pdf>, dated July 10, 2009;

- Registry-Registrar Two-Factor Authentication Services, in accordance with <https://www.icann.org/en/system/files/files/icann-to-verisign-200904-10jul09-en.pdf>, dated July 10, 2009;
- Verification Code Extension for Extensible Provisioning Protocol, in accordance with <https://www.icann.org/en/system/files/correspondence/papac-to-kane-27feb17-en.pdf>, dated February 27, 2017.

.NET Registry Agreement Appendix 10

Service Level Agreement (SLA)

(July 1, 2017)

VeriSign, Inc. ("**Registry Operator**") strives to provide a world-class level of service to its customers. This Service Level Agreement ("**SLA**") provides remedies in the form of SLA Credits (as defined in Section 2 below) should the operational performance of Registry Operator fall below certain Performance Specifications identified in Appendix 7.

1. Definitions.

Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to them in the Registry Agreement, including, but not limited to Appendix 7.

2. SLA Credits.

If the Registry Operator fails to meet the Performance Specifications defined in Appendix 7, Section 6 thereof, to which Credit Levels apply, the Registry Operator shall pay credits to ICANN-Accredited Registrar(s) in accordance with the identified Credit Level for such failed Performance Specifications metrics, calculated in accordance with the Credit Level tables set forth in this Section 2 ("**SLA Credit**"). The SLA Credit due to each ICANN-Accredited Registrar shall be paid as an offset to registrations and other fees owed to Registry Operator by the ICANN-Accredited Registrar. SLA Credits represent the total credits, penalties and/or liabilities that may be assessed to the Registry Operator for a breach of the Performance Specifications set forth in Appendix 7. All SLA Credits shall be paid in U.S. Dollars. The Credit Level Table (Refer to Table SLA Credits) indicates the corresponding Credit Level for each Performance Specification to which Credit Levels apply. This SLA will be reconciled on a quarterly basis and unless otherwise specified in this SLA, SLA Credits will be issued on a quarterly basis.

TABLE SLA Credits

App. 7 Reference	Performance Specification	SRS	Name Server	Whois
6.2.2, 6.2.3, 6.2.4	Service Availability	Level 2	Level 1	Level 2

6.3.1	Planned Outage - Duration	Level 6	NA	NA
6.3.2	Planned Outage - Timeframe	Level 5	NA	NA
6.3.3	Planned Outage - Notification	Level 5	NA	NA
6.4.1	Extended Planned Outage - Duration	Level 6	NA	NA
6.4.2	Extended Planned Outage - Timeframe	Level 5	NA	NA
6.4.3	Extended Planned Outage - Notification	Level 5	NA	NA
6.5.1	Processing Time - Check Domain	Level 3	NA	NA
6.5.2	Processing Time - Add/Create Domain	Level 3	NA	NA
6.5.3	Processing Time - Modify/Update and Delete Domain	Level 3	NA	NA
6.5.4	Processing Time - Whois Query	NA	NA	Level 3
6.5.5	Processing Time - DNS Name Server Resolution	NA	Level 3	NA
6.6.1	Update Frequency - DNS Name Server	NA	Level 4	NA
6.6.2	Update Frequency - Whois	NA	NA	Level 4

2.1 Credit Level 1 - Credit Level 1 is assessed for DNS Name Server Service Availability less than 100% per Monthly Timeframe. If the DNS Name Server Service Availability Performance Specification is not met, the SLA Credit for Credit Level 1 shall be payable to active ICANN-Accredited Registrars 30 days after the applicable calendar month in which the Service Availability Performance Specification was not met. For purposes of this Appendix 10, an

"active" ICANN-Accredited Registrar is one who has registered greater than 150 net new .net domain names in the previous Monthly Timeframe.

Each active ICANN-Accredited Registrar that meets the requirements of Section 3 below would be credited an amount equal to such active ICANN-Accredited Registrars net new .net domain name registrations during the applicable Monthly Timeframe divided by the net amount of new .net domain name registrations for all active ICANN-Accredited Registrars within the applicable Monthly Timeframe times the Monthly Credit Amount set forth in Table Credit Level 1.

Table Credit Level 1

	< 30 sec.'s	30-<60 sec.'s	1-<2 min.'s	2-<10 min.'s	10<30 min.'s	over 30 min.'s
SLA Credit Amount	\$ 100,000	\$ 175,000	\$250,000	\$400,000	\$750,000	\$1,000,000

2.2 Credit Level 2 - Credit Level 2 is assessed for SRS Service Availability less than 99.99% per calendar year and for Whois Service Availability less than 100% per Monthly Timeframe. If a Service Availability Performance Specifications metrics are not met, the SLA Credit for Credit Level 2 shall be credited directly to active ICANN-Accredited Registrar(s) that meet the requirements of Section 3 below in an amount equal to the duration of the outage times (OT) times the average daily number of .net registrations over the previous three (3) months (NRAvg) times the .net wholesale fee divided by the number of minutes per day (1,440 minutes).

Active ICANN-Accredited Registrar would be credited:

$$\frac{(.net \text{ Registry Fee}) * (OT) * (NRAvg)}{(1,440 \text{ minutes})}$$

Additionally, for any month where the total combined Unplanned Outage of SRS and Whois is greater than 30 minutes, Registry Operator will credit active ICANN-Accredited Registrars that meet the requirements of Section 3 below One Thousand Dollars (\$1,000).

2.3 Credit Level 3 - Credit Level 3 is assessed for failure to meet the Performance Specifications for the Processing Time for check domain,

add/create, modify/update and delete domain commands, and DNS Name Server Resolution and Whois queries. If the Processing Time Performance Specifications metrics are not met, the SLA Credit for Credit Level 3 (Refer to Table Credit Level 3) shall be payable to active ICANN-Accredited Registrars in an amount based upon the % of time that the Processing Time exceeds the applicable Performance Specifications metric.

Each active ICANN-Accredited Registrar that meets the requirements of Section 3 below would be credited an amount equal to such active ICANN-Accredited Registrars net new .net domain name registrations during the applicable Monthly Timeframe divided by the net amount of net new .net domain name registrations for all active ICANN-Accredited Registrars within the applicable Monthly Timeframe times the SLA Credit Amount set forth in Table Credit Level 3 within 30 days after the applicable calendar month.

Table Credit Level 3

	5 - <10%	10 - <25%	25 - <50%	≥ 50%
SLA Credit Amount	\$500	\$1,000	\$2,000	\$5,000

2.4 Credit Level 4 - Credit Level 4 is assessed for failure to meet the Performance Specifications for Update frequencies for DNS Name Server and Whois. If the Update frequency Performance Specifications metrics are not met, the SLA Credit for Credit Level 4 (Refer to Table Credit Level 4) shall be payable to active ICANN-Accredited Registrars in an amount based upon the % of time that the Update frequency exceeds the applicable Performance Specifications metric.

Each active ICANN-Accredited Registrar that meets the requirements of Section 3 below would be credited an amount equal to such active ICANN-Accredited Registrar's net new .net domain name registrations during the applicable Monthly Timeframe divided by the net amount of new .net domain name registrations for all active ICANN-Accredited Registrars within the applicable Monthly Timeframe times the SLA Credit Amount set forth in Table Credit Level 4.

Table Credit Level 4

	Up to <15 minutes over	15 minutes to <1 hour	1 hour to <12 hours	≥12 hours

SLA Credit Amount	\$500	\$1,000	\$2,000	\$5,000
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2.5 Credit Level 5 - Credit Level 5 is assessed for failure to meet the Performance Specifications for Planned Outage Timeframe, Planned Outage Notification, Extended Planned Outage Timeframe and Extended Planned Outage Notification. If the Performance Specifications metrics are not met, the SLA Credit for Credit Level 5 shall be payable to each active ICANN-Accredited Registrar that meets the requirements of Section 3 below in an amount equal to such active ICANN-Accredited Registrar's net new .net domain name registrations during the applicable Monthly Timeframe divided by the net amount of new .net domain name registrations for all active ICANN-Accredited Registrars within the applicable Monthly Timeframe times One Thousand Dollars (\$1,000).

2.6 Credit Level 6 - Credit Level 6 is assessed for failure to meet the Performance Specifications for Planned Outage Duration and Extended Planned Outage Duration. If the Performance Specifications are not met, the SLA Credit for Credit Level 6 shall be payable directly to active ICANN-Accredited Registrar(s) that meet the requirements of Section 3 below in an amount equal to the Average Daily Volume (ADM) of net .net new adds as averaged over the course of the previous three months times the Planned Duration Overage (PDO) in minutes times the SLA Credit graduated financial penalty set forth in Table Credit Level 6. For purposes of this Appendix 10, PDO is calculated by subtracting the maximum allowable time in hours and minutes for an Planned Outage Duration or Extended Planned Outage Duration, as applicable, from the total outage in hours and minutes.

Table Credit Level 6

	1 to <15 minutes	15 minutes to <1 hour	1 to <3 hours	3 - <6 hours	≥6 hours
SLA Credit	ADM*PDO*\$ 25	ADM*PDO*\$ 5	ADM*PDO*\$ 1	ADM*PDO*\$1.5 0	ADM*PDO*\$ 2

3. Registrar Responsibilities.

In order for ICANN-Accredited Registrars to claim SLA Credits outlined in this Appendix 10, the procedures of this Section 3 must be strictly followed.

3.1 The affected ICANN-Accredited Registrar must report each occurrence of alleged failure by Registry Operator to meet a Performance Specification and make a request for SLA Credit to the Registry Operator's customer service help desk in the manner required by the Registry Operator (i.e., e-mail, fax, telephone) in order to be eligible for a SLA Credit. An affected ICANN Accredited Registrar must initiate a request for SLA Credits within three (3) months of the end of the calendar year in which the failure to meet a Performance Specification occurred.

3.2 Each ICANN-Accredited Registrar must inform the Registry Operator any time its estimated volume of transactions (excluding check domain commands) is expected to exceed the ICANN-Accredited Registrar's previous month's volume by more than 25%. In the event that an ICANN-Accredited Registrar fails to inform Registry Operator of a forecasted increase of volume of transactions of 25% or more and the ICANN-Accredited Registrar's volume increases 25% or more over the previous month, and should the total volume of transactions for the Registry Operator for all ICANN-Accredited Registrars for that month exceed the Registry Operator's actual volume of the previous month's transactions by more than 20%, then the ICANN-Accredited Registrar will not be eligible for any SLA Credits outlined in this SLA in that Monthly Timeframe. An ICANN-Accredited Registrar shall provide such forecast at least 30 days prior to the first day of the applicable calendar month. Registry Operator agrees to provide monthly transaction summary reports to ICANN-Accredited Registrars via e-mail.

3.3 The affected ICANN-Accredited Registrar must provide documentation to support its claim for a SLA Credit. An ICANN-Accredited Registrar shall provide documentation in the form of either:

a) ICANN-Accredited Registrar initiated notification(s) to the Registry Operator of a Performance Specification that exceeded SLA limits or failed to meet SLA requirements, including the trouble ticket number issued by the Registry Operator. The closing ticket(s) should be included as well in order to determine the total downtime (unless the trouble ticket includes this); or

b) Notification from the Registry Operator (with trouble ticket number attached) of a Performance Specification that exceeded SLA limits or failed to meet SLA requirements. The closing ticket(s) should be included as well in order to determine the total downtime (unless the trouble ticket includes this).

3.4 In order to calculate credits, the affected ICANN-Accredited Registrar must include volume figures for the past three (3) calendar months (or, if less,

such amount of time that the ICANN-Accredited Registrar has been authorized to register names in the .net registry) and a certification that these numbers accurately reflect the minimum number of registrations that would be covered during the affected period.

3.5 Registry Operator shall perform the required measurements in order to corroborate the total SLA Credits requested by ICANN-Accredited Registrar. Such measurements and associated documentation shall be delivered by e-mail to each of the ICANN-Accredited Registrars requesting a SLA Credit.

3.6 When the above steps have been accurately completed, Registry Operator shall provide notification of the number of SLA Credits that will be entered in the affected ICANN-Accredited Registrar's account that can be used immediately toward .net domain name registrations and other fees owed to Registry Operator by the ICANN-Accredited Registrar.

4. Obligations.

4.1 Except in the case of cross-network name server performance (which is not a subject of this Service Level Agreement), Registry Operator will perform monitoring from at least two external locations and a minimum of one internal location as a means to verify that a) sessions can effectively be established and b) EPP commands can be successfully completed.

4.2 In the event that all ICANN-Accredited Registrars are affected by a SRS unavailability, the Registry Operator is responsible for opening a blanket trouble ticket and immediately notifying all ICANN-Accredited Registrar of the trouble ticket number and details.

4.3 In the event that the System Services are unavailable to an individual ICANN-Accredited Registrar, Registry Operator will use commercially reasonable efforts to re-establish the affected System Services for such ICANN-Accredited Registrar as soon as reasonably practicable. Any System Services unavailability attributable to any individual ICANN-Accredited Registrar that does not represent a System Services outage will not result in SLA Credits or be subject to this SLA.

4.4 ICANN-Accredited Registrar(s) and the Registry Operator agree to use reasonable commercial good faith efforts to establish the cause of any alleged System Services unavailability. If it is mutually determined to be a Registry Operator problem, the System Services unavailability will be subject to this SLA.

4.5 The Registry Operator will use commercially reasonable efforts to restore any System Services within 24 hours after the termination of a force majeure event and restore full system functionality within 48 hours after the termination of a force majeure event. Outages due to a force majeure will not be considered System Services unavailability, impact the Performance Specifications set forth in Appendix 7, or be subject to this SLA.

4.6 The Registry Operator will open incident trouble tickets within a commercially reasonable period of time and will treat all system performance problems in order of decreasing severity and fix them within a commercially reasonable period of time. Incidents flagged by the measurement system will also qualify as ticketed events and will be subject to this SLA.

4.7 The Registry Operator will publish monthly system performance and Service Availability reports.

5. Miscellaneous.

5.1 This SLA is independent of any rights, obligations or duties set forth in the Registry Agreement. In the event of any conflict between the terms and conditions of this SLA and the Registry Agreement, the Registry Agreement shall control.

5.2 As an addendum to the Registry-Registrar Agreement ("**RRA**"), no provision in this SLA is intended to replace any term or condition in the RRA.

5.3 Dispute Resolution will be handled per RRA Section 6.7.

5.4 Any interruption of System Services that occurs, as a direct result of RRA Sections 2.12, 5.4, or 6.3, any other applicable provision within the RRA, or Registry Operator's compliance with any Consensus Policy established after the Effective Date, will not be subject to this SLA, but only to the extent and for so long as such interruption of System Services is unavoidable by commercially reasonable efforts due to Registry Operator's compliance with such provisions within the RRA or any Consensus Policy established after the Effective Date.