# .NET Registry Agreement Appendix 1A Data Escrow Requirements 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 Registry Agreement. The following Technical Specifications set forth in Part A, and Legal Requirements set forth in Part B, will be included in any data escrow agreement between Registry Operator and the Escrow Agent, under which ICANN must be named a third party beneficiary. In addition to the following requirements, the data escrow agreement may contain other provisions that are not contradictory or intended to subvert the required terms provided below. 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.

#### PART A - TECHNICAL SPECIFICATIONS

- Deposits. There will be two types of Deposits: Full and Differential. For both types, the universe of Registry objects to be considered for data escrow are those objects necessary in order to offer all of the approved Registry Services.
  - 1.1 "Full Deposit" will consist of data that reflects the state ofin the registry as ofthrough 00:00:00 UTC (Coordinated Universal Time) on the day that such Full Deposit is submitted to Escrow Agent.
  - "Differential Deposit" means data that reflects all transactions that were not reflected in the last previous Full or Differential Deposit, as the case may be. Each Differential Deposit will contain all database transactions since the previous Deposit was completed as ofincluding data through 00:00:00 UTC of each day, but Sunday. 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., newly added or modified domain names).(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 <u>SundayMonday</u>, 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**.

- **Deposit's Format**. Registry objects, such as domains, contacts, 3.1 name servers, registrars, etc. will be compiled into a file constructed as described in draft-arias-noguchi-registry-dataescrow, see Part A. Section 9, reference 1 of this Specification Appendix and draft-arias-noguchi-dnrd-objectsmapping, see Part A, Section 9, reference 2 of this Specification 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 a Registry Operator offers additional Registry Services that require submission of additional data, not included above, additional "extension schemas" shall be defined in a case by case basis to represent that data. These "extension schemas"

will be specified as described in Part A, Section 9, reference 2 of this Specification. Appendix. Data related to the "extensions schemas" will be included in the deposit file described in Part A, Section 3.1 of this Specification. Appendix. ICANN and the respective Registry Operator shall work together to agree on such new objects' data escrow specifications.

- 4. <u>Processing of Deposit files</u>. The use of compression is recommended in order to reduce electronic data transfer times, and storage capacity requirements. Data encryption will be used to ensure the privacy of registry escrow data. Files processed for compression and encryption will be in the binary OpenPGP format as per OpenPGP Message Format RFC 4880, see <u>Part A</u>, Section 9, reference 3 of this <u>Specification</u>. <u>Appendix</u>. 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 <u>Part A</u>, Section 9, reference 4 of this <u>SpecificationAppendix</u>, that are also royalty-free. The process to follow for the data file in original text format is:
  - 1) The XML file of the deposit as described in Part A, Section 9, reference 1 of this SpecificationAppendix 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.

- 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.
- The processed files and digital signature files will then be transferred to the Escrow Agent through secure electronic mechanisms, such as, SFTP, SCP, HTTPS file upload, etc. as agreed between the Escrow Agent and the Registry Operator. Non-electronic delivery through a physical medium such as CD-ROMs, DVD-ROMs, or USB storage devices may be used if authorized by ICANN.
- 7) The Escrow Agent will then validate every (processed) transferred data file using the procedure described in Part A, Section 8 of this SpecificationAppendix.
- 5. **File Naming Conventions**. Files will be named according to the following convention: {gTLD}\_{YYYY-MM-DD}\_{type}\_S{#}\_R{rev}.{ext} where:
  - 5.1 {gTLD} is replaced with the gTLD name; in case of an IDN-TLD, the ASCII-compatible form (A-Label) must be used;
  - 5.2 {YYYY-MM-DD} is replaced by the date corresponding to the time used as a timeline watermark for the transactions; i.e. for the Full Deposit corresponding to 2009-08-02T00:00Z, the string to be used would be "2009-08-02";
  - 5.3 {type} is replaced by:
    - 1) "full", if the data represents a Full Deposit;
    - 2) "diff", if the data represents a Differential Deposit;
    - 3) "thin", if the data represents a Bulk Registration Data Access file, as specified in Section 3-2.1 of Specification Appendix 5A4;
    - 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 quasihomonymous file. Otherwise it is replaced by "ryde".
- 6. <u>Distribution of Public Keys</u>. Each of Registry Operator and Escrow Agent will distribute its public key to the other party (Registry Operator or Escrow Agent, as the case may be) via email to an email address to be specified. Each party will confirm receipt of the other party's public key with a reply email, and the distributing party will subsequently reconfirm the authenticity of the key transmitted via offline methods, like in person meeting, telephone, etc. In this way, public key transmission is authenticated to a user able to send and receive mail via a mail server operated by the distributing party. Escrow Agent, Registry Operator and ICANN will exchange public keys by the same procedure.
- 7. Notification of Deposits. Along with the delivery of each Deposit, Registry Operator will deliver to Escrow Agent and to ICANN (using the API described in draft-lozano-icann-registry-interfaces, see Part A, Section 9, reference 5 of this SpecificationAppendix (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 Part A, Section 9, reference 1 of this SpecificationAppendix.

If not already an RFC, Registry Operator will use the most recent draft version of the Interface Specification at the Effective Date. Registry Operator may at its election use newer versions of the Interface Specification after the Effective Date. Once the Interface Specification is

published as an RFC, Registry Operator will implement that version of the Interface Specification, no later than one hundred eighty (180) calendar days after such publishing.

#### 8. Verification Procedure.

- 1) The signature file of each processed file is validated.
- 2) If processed files are pieces of a bigger file, the latter is put together.
- 3) Each file obtained in the previous step is then decrypted and uncompressed.
- 4) Each data file contained in the previous step is then validated against the format defined in Part A, Section 9, reference 1 of this Specification Appendix.
- 5) If Part A, The data escrow agent extended verification process, as defined below in Section 9, reference 42 of this Specification includes a Appendix, as well as any other data escrow verification process that will be applied at this step. contained in such reference.

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

#### 9. References.

- Domain Name Data Escrow Specification (work in progress), http://tools.ietf.org/html/draft-arias-noguchi-registry-data-escrow
- Domain Name Registration Data (DNRD) Objects Mapping, http://tools.ietf.org/html/draft-arias-noguchi-dnrd-objects-mapping
- OpenPGP Message Format, http://www.rfceditor.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 2A Escrow Agreement

(1 July 2011)

This Escrow Agreement ("<u>Escrow Agreement</u>") is made as of <u>this 30 day of June, 2009the Appendix 1A, 2A and 5A Effective Date</u>, 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" Materials" and any "Additional Deposit" to Escrow Agent as defined and provided for herein. Registry Operator desires Escrow Agent to hold the Deposits Materials and, upon certain events described herein, deliver the Deposits 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 Deposits Materials, as defined and described in the "Data Escrow Specification," attached as Appendix 1A to the .com\_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 Materials in accordance with Exhibit C to Appendix 1A 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 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 them the Deposits, Escrow Agent shall verify that any the Deposit Materials are in the proper format and

appear to be complete by performing the verification procedures specified in Exhibit D of Appendix 1A. 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 Appendix 1A 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 that 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 Escrow 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; Distribution of Public Keys.

(a) Along Simultaneous with the delivery to Escrow Agent of the each Deposit to the Escrow Agent, Materials or any Additional Deposit, as the case may be, 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, 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 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, 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 verification report as confirmation that it has completed processing the depositrun 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 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) a Release release occurs according to Paragraph Section 8(b) below.
- **4.2 Delivery at Registry Operator's Request.** If the provisions of <u>Section</u> 4.1(a) <u>above</u> are satisfied, Escrow Agent shall, within five (5) business days after receipt of the notification and check specified in <u>Paragraph Section</u> 4.1(a), deliver the Deposit <u>Materials</u> and <u>Outstanding Additional Deposits</u> in accordance with the applicable instructions.
- **4.3 Delivery at ICANN's Request.** If the provisions of Paragraphs 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 these those paragraphs sections, 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 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 the preceding sentencethis 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 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 the 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 Section 4.3(b) above, the parties agree that any arbitration brought pursuant to Paragraph this Section 4.3 shall not reevaluate, 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 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 Paragraph Section 4.3. Any arbitration proceeding brought pursuant to Section Paragraph 4.3 shall be limited to a determination of whether Sections 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 the 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 Section 4.3 is judged to be proper in any arbitration brought in accordance with Section Paragraph 4.3, Escrow Agent shall promptly deliver to ICANN, in accordance with the instructions specified in Section 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 Section 4.3 is judged to have been improper in any arbitration brought in accordance with Section 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 Section 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 Escrow Agreement in accordance with Section Paragraph 7(a) or 7(b) hereof.

#### 5. Indemnity.

(a) 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 <u>Escrow</u> 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 <u>Paragraph Section 4</u> above and the parties under this <u>Escrow Agreement submit the matter to such arbitration as described in <u>Paragraph Section 4</u> of this <u>Escrow Agreement</u>. 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.
  </u>
  - (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 <u>Escrow</u> Agreement shall <u>be two (2) years</u>, <u>commencingcommence</u> on the date hereof <u>and continue until June 30, 2023</u> (the "Initial Term"). This <u>Escrow</u> Agreement shall be automatically extended for <u>an</u> additional terms of one year (<u>each an</u> "Additional Term") at the end of the Initial Term and at the end of each Additional Term hereunder. <u>The Initial Term and each Additional Term shall be referred to collectively as the "term."</u> Escrow Agent acting alone or Registry Operator, with the concurrence of ICANN, may terminate this <u>Escrow</u> 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 Section 7(a) above, and ICANN fails to concur according to Section 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 Escrow Agreement at any time upon giving the other parties ninety (90) days notice.
- (c) In the event of termination of this <u>Escrow</u> Agreement in accordance with <u>Section Paragraph</u> 7(a) or 7(b) hereof, Registry Operator shall pay all fees due Escrow Agent and shall promptly notify ICANN that this <u>Escrow</u>

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 Escrow 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 **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 Paragraph 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 Paragraph Section 4.3 as though ICANN had requested delivery of the Deposit-Materials.
- **(c) Invoice Submission Address.** During the term of this <u>Escrow</u> 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 <a href="Escrow">Escrow</a> Agreement and the <a href="Exhibits hereto">Exhibits hereto</a>. 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 <a href="Escrow">Escrow</a> 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 20190487 E. Middlefield Road Mountain View , CA 94043

Attn: Accounts Payable

Or Invoices may be submitted electronically to: <a href="mailto:accountspayable@verisign.net">accountspayable@verisign.net</a>

**9. Ownership of Deposit-Materials.** The parties recognize and acknowledge that ownership of the Deposit-Materials during the effective term of this <a href="Escrow"><u>Escrow</u></a> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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 <u>Escrow</u> 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 <u>Escrow</u> 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 <u>Escrow</u> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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 <a href="Escrow">Escrow</a> 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.

  All exhibits attached to Appendix 1A of the Registry Agreement is, specifically, Exhibits A through D are by this reference made a part of this Escrow Agreement and are incorporated herein.
- (g) Counterparts; Governing Law. This <u>Escrow</u> 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 <u>Agreementagreement</u>. This <u>Escrow</u> 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 <u>Escrow</u> 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 <u>Escrow</u> 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 <a href="Escrow">Escrow</a> Agreement by notice in writing to the other parties as provided herein.

- (i) Survival. Paragraphs 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 <a href="Escrow">Escrow</a> 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 <u>Escrow</u> Agreement as of the date and year first above written.

Iron Mountain Intellectual Property Management, Inc.

Phone: Fax:			
E-mail:	 	· · · · · · · · · · · · · · · · · · ·	

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VeriSign, Inc.
By: Title: Print Name: Address:
Phone: Fax: E-mail:
<del></del>
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 3A Zone File Access Agreement

Effective as of the Appendix 3A Effective Date

#### 21. Third-Party Zone File Access

#### 2.1. Third-Party Access

- 2.1.1 1.1 Zone File Access Agreement. Registry Operator will enter into an agreement with any Internet user, which will allow such user to access an Internet host server or servers designated by Registry Operator and download zone file data. The agreement will be standardized, facilitated and administered by a Centralized Zone Data Access Provider, which may be ICANN or an ICANN designee (the "CZDA Provider"). Registry Operator (optionally through the CZDA Provider) will provide access to zone file data per Section 2.1.31.3 of this Specification Appendix and do so using the file format described in Section 2.1.41.4 of this Specification 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 2.1.21.2 below; (b) Registry Operator may reject the request for access of any user that does not provide correct or legitimate credentials under Section 2.1.21.2 below or where Registry Operator reasonably believes will violate the terms of Section 2.1.51.5. below; and, (c) Registry Operator may revoke access of any user if Registry Operator has evidence to support that the user has violated the terms of Section 2.1.51.5 below.
- 2.1.2 Credentialing Requirements. Registry Operator, through the facilitation of the CZDA Provider, will request each user to provide it with information sufficient to correctly identify and locate the user. Such user information will include, without limitation, company name, contact name, address, telephone number, facsimile number, email address and IP address.
- 2.1.3 <u>1.3</u> **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.
- 2.1.4 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:
- 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.
- 2.1.5 Use of Data by User. Registry Operator will permit user to use the zone file for lawful purposes; provided that (a) user takes all reasonable steps to protect against unauthorized access to, 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.
- 2.1.6 1.6 Term of Use. Registry Operator, through CZDA Provider, will provide each user with access to the zone file for a period of not less than three (3) months. Registry Operator will allow users to renew their Grant of Access.

2.1.7 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.

#### 2.22. Co-operation

- **2.2.1 Assistance**. Registry Operator will co-operate and provide reasonable assistance to ICANN and the CZDA Provider to facilitate and maintain the efficient access of zone file data by permitted users as contemplated under this **Schedule Appendix**.
  - 2.3. ICANN Access. Registry Operator shall provide bulk access to the zone files for the TLD to ICANN or its designee on a continuous basis in the manner ICANN may reasonably specify from time to time. Access will be provided at least daily. Zone files will include SRS data committed as close as possible to 00:00:00 UTC.
  - 2.4. Emergency Operator Access. Registry Operator shall provide bulk access to the zone files for the TLD to the Emergency Operators designated by ICANN on a continuous basis in the manner ICANN may reasonably specify from time to time.

### .NET Registry Agreement Appendix 5A Whois Specifications

((1 July 2011 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/whoisat whois.nic.TLD> providing free public query-based access to at least the following elements in the following format. ICANN reserves the right to specify alternative formats and protocols, and upon such specification, the Registry Operator will implement such alternative specification as soon as reasonably practicable.

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

- 1.1. The format of responses shall follow a semi-free text format outline below, followed by a blank line and a legal disclaimer specifying the rights of Registry Operator, and of the user querying the database.
- 1.2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys, followed by a colon and a space as delimiters, followed by the value.
- 1.3. For fields where more than one value exists, multiple key/value pairs with the same key shall be allowed (for example to list multiple name servers). The first key/value pair after a blank line should be considered the start of a new record, and should be considered as identifying that record, and is used to group data, such as hostnames and IP addresses, or a domain name and registrant information, together.
- 1.4. The fields specified below set forth the minimum output requirements. Registry Operator may output data fields in

addition to those specified below, subject to approval by ICANN, which approval shall not be unreasonably withheld.

#### 1.5. **Domain Name Data:**

1.5.1 Query format: whois EXAMPLE.TLD

#### 1.5.2 **Response format:**

Domain Name: EXAMPLE.TLD Domain ID: D1234567-TLD

WHOIS Server: whois.example.tld Referral URL: http://www.example.tld Updated Date: 2009-05-29T20:13:00Z Creation Date: 2000-10-08T00:45:00Z

Registry Expiry Date: 2010-10-08T00:44:59Z

Sponsoring Registrar: EXAMPLE REGISTRAR LLC

Sponsoring Registrar IANA ID: 5555555
Domain Status: clientDeleteProhibited
Domain Status: clientRenewProhibited
Domain Status: clientTransferProhibited
Domain Status: serverUpdateProhibited

Registrant ID: 5372808-ERL

Registrant Name: EXAMPLE REGISTRANT

Registrant Organization: EXAMPLE ORGANIZATION

Registrant Street: 123 EXAMPLE STREET

Registrant City: ANYTOWN
Registrant State/Province: AP
Registrant Postal Code: A1A1A1

Registrant Country: EX

Registrant Phone: +1.5555551212

Registrant Phone Ext: 1234 Registrant Fax: +1.5555551213

Registrant Fax Ext: 4321

Registrant Email: EMAIL@EXAMPLE.TLD

Admin ID: 5372809-ERL

Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE Admin Organization: EXAMPLE REGISTRANT ORGANIZATION

Admin Street: 123 EXAMPLE STREET

Admin City: ANYTOWN Admin State/Province: AP Admin Postal Code: A1A1A1 Admin Country: EX

Admin Phone: +1.5555551212

Admin Phone Ext: 1234 Admin Fax: +1.5555551213

Admin Fax Ext:

Admin Email: EMAIL@EXAMPLE.TLD

Tech ID: 5372811-ERL

Tech Name: EXAMPLE REGISTRAR TECHNICAL Tech Organization: EXAMPLE REGISTRAR LLC

Tech Street: 123 EXAMPLE STREET

Tech City: ANYTOWN
Tech State/Province: AP
Tech Postal Code: A1A1A1

Tech Country: EX

Tech Phone: +1.1235551234

Tech Phone Ext: 1234 Tech Fax: +1.5555551213

Tech Fax Ext: 93

Tech Email: EMAIL@EXAMPLE.TLD

Name Server: NS01.EXAMPLEREGISTRAR.TLD Name Server: NS02.EXAMPLEREGISTRAR.TLD

DNSSEC: signedDelegation

**DNSSEC:** unsigned

>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

#### 1.6. Registrar Data:

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

#### 1.6.2 Response format:

Registrar Name: Example Registrar, Inc.

Street: 1234 Admiralty Way

City: Marina del Rey State/Province: CA Postal Code: 90292

Country: US

Phone Number: +1.3105551212 Fax Number: +1.3105551213 Email: registrar@example.tld

WHOIS Server: whois.example-registrar.tld Referral URL: http://www.example-registrar.tld

Admin Contact: Joe Registrar Phone Number: +1.3105551213 Fax Number: +1.3105551213

Email: joeregistrar@example-registrar.tld

Admin Contact: Jane Registrar Phone Number: +1.3105551214 Fax Number: +1.3105551213

Email: janeregistrar@example-registrar.tld

Technical Contact: John Geek Phone Number: +1.3105551215 Fax Number: +1.3105551216

Email: johngeek@example-registrar.tld

>>> Last update of WHOIS database: 2009-05-

29T20:15:00Z <<<

#### 1.7. Nameserver Data:

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

- 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: <u>registrar idRegistrar ID</u>, 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 departs 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 Registrar ID (IANA ID), statuses, last updated date, creation date, expiration date, and name server names. For sponsoring registrars, at least, it will provide: registrar name, Registrar repository object liDd (roidIANA ID), hostname of registrar Whois server, and URL of registrar.
  - **2.1.2 Format**. The data will be provided in the format specified in Specification 2 for Data EscrowAppendix 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 Ffull Ddeposit file instead as specified in Specification 2Appendix 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 <a href="Specification-2Appendix 1A">Specification-2Appendix 1A</a> for Data Escrow <a href="Specification-2Appendix 1A">Specification-2Append

than five (5) calendar days following ICANN's request. Unless otherwise agreed by Registry Operator and ICANN, the file will be made available for download by ICANN in the same manner as the data specified in Section 3.12.1 of this Specification. Appendix.