

.ORG Agreement Appendix 1 Data Escrow Specification

(2 June 2010 TBD)

Registry Operator and ICANN agree to engage in good faith negotiations to replace this Appendix with a Data Escrow Specification equivalent to that of new gTLDs within 90 days after the final Data Escrow Specification has been published as an RFC.

This Appendix 1 to the Registry Agreement consists of four of the five exhibits to the Escrow Agreement that constitutes Appendix 1 to the Registry Agreement:

Exhibit 1 -Schedule for Escrow Deposits

Exhibit 2-Escrow Deposit Format Specification

Exhibit 3-Escrow Transfer Process

Exhibit 4-Escrow Verification Procedures

Exhibit 1 to Appendix 1 SCHEDULE FOR ESCROW DEPOSITS

Full Deposit Schedule

Full Deposits shall consist of data that reflects the state of the registry as of 0000 UTC on each Sunday. Pending transactions at that time (i.e. transactions that have not been committed to the Registry Database) shall not be reflected in the Full Deposit.

Full Deposits shall be made, according to the transfer process described in Exhibit 3 below, within a four-hour window beginning at 1200 UTC on the same Sunday.

Incremental Deposit Schedule

Incremental Deposits are cumulative since the last full escrow. Each incremental file will contain all database transactions since the full escrow file was completed.

Incremental Deposits shall be made, according to the transfer process described in Exhibit 3 below, within a four-hour window beginning at 1200 UTC on the day to which the Incremental Deposit relates.

Exhibit 2 ESCROW DEPOSIT FORMAT SPECIFICATION

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

Full Deposit Contents. The reports involved in a Full Deposit are:

Domain Object Report–This reports on the contents of all domain objects in the registry database.

Host Object Report–This reports on the contents of all host objects in the registry database.

Contact Object Report–This reports on the contents of all contact objects in the registry database.

Registrar Object Report–This reports on the contents of all registrar objects in the registry database.

Format of Reports. All reports are to be formatted in XML format. In compliance with the XML 1.0 specification, certain characters in the data must be escaped, as described in item 1 below. Each Report shall then be prepared according to the general XML format described in items 2 to 6 below. Item 2 describes the report container that is common to all reports. Items 3 to 6 describe the structure of the contents of the report container for each of the specific reports.

1. Escape-Character Requirements. In compliance with the XML 1.0 specification, in data escrowed using the XML format the following characters in any data elements must be replaced with the corresponding escape sequences listed here:

Character	Escape Sequence
"	"
&	&
•	'
<	<
>	>

2. The Report Container. At its highest level, the XML format consists of an escrow container with header attributes followed by escrow data. The header attributes are required and include the version of escrow (1.0), the .org TLD ("org"), the report type (domain, host, contact or registrar), and data base-committed date and time as to which the escrow relates. The date and time of the escrow will be specified in UTC. The general format of the report container is as follows:

```
<?xml version="1.0" encoding='UTF-8' ?>
<!DOCTYPE escrow SYSTEM "whois-export.dtd" >
< escrow version="1.0" tld="org" report="domain" date="26-Aug-2001 3:15:00AM">
```

{Here the report contains the actual data being escrowed. It contains one element for each object of the type (domain, host, contact or registrar) covered by the report. The specific format for each

report is described in items 3 to 6 below.}

</escrow>

- **3. The Domain Element.** The domain element has the property "fqdn" (the fully qualified name of the domain) and is a container consisting of the following elements:
- a. status: The domain status code.
- b. id: Unique identifier of the domain name
- c. sponsoring registrar: An identification of the sponsoring registrar of the domain. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- d. authcode: authorization code.
- e. UIN
- f. created-on: The date/time the domain object was originally created.
- g. created-by: An identification of the registrar that created the domain object. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- h. renewed-on: The date/time the domain was last renewed.
- i. expires-on: The date the registration expires.
- j. updated-by: An identification of the registrar that last updated the domain object. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- k. updated-on: The date/time the domain object was last updated.
- 1. transferred-on: The date/time when the domain object was last transferred.
- m. host: Up to thirteen (13) host names that are nameservers for the domain to which the domain object relates.
- n. contact-id: Multiple contact-ids that reference the contact records for this domain. Contact-id has the property "type" to denote the type of contact. "Type" can be one of: Registrant, Administrative, Technical, or Billing.
- o. ds: DS records that represent the secure entry point keys registered for the domain to which the domain object relates. Records will be in standard DS Presentation Format as shown in the example below.

An example domain container appears below:

```
<domain fqdn="example.org">
 <id>AAA-0001</id>
 <status>ACTIVE</status>
 <sponsoring registrar>REG-042/owned-by>
 <authcode>ORG-1221</ens-authid>
 <created-on>1-Jul-2001 12:34:56AM</created-on>
 <created-by>REG-042</created-by>
 <renewed-on></renewed-on>
 <expires-on>1-Jul-2003</expires-on>
 <updated-by>42</updated-by>
 <updated-on>1-Jul-2001 12:34:56AM</updated-on>
 <transferred-on></transferred-on>
 <host>dns1.example.org</host>
 <host>dns2.example.org</host>
< ds >
 <keytag>54135</keytag>
 <algorithm>7</algorithm>
 <digesttype>1</digesttype>
 <digest>225F055ACB65C8B60AD18B3640062E8C23A5FD89</digest>
 </ds>
 < ds >
 <keytag>54135</keytag>
 <algorithm>7</algorithm>
 <digesttype>2</digestype>
  <digest>6CDE2DE97F1D07B23134440F19682E7519ADDAE180E20B1B1EC52E7F58B283
1D</digest>
 </ds>
 \langle ds \rangle
 <keytag>53347</keytag>
 <algorithm>5</algorithm>
 <digesttype>1</digesttype>
 <digest>F4F3248CA668AAA92DB5ABC40EF550F244347B4A</digest>
 </ds>
 <contact-id type="Registrant">PER-0001</contact-id>
 <contact-id type="Administrative">PER-0002</contact-id>
 <contact-id type="Technical">PER-0003</contact-id>
 <contact-id type="Billing">PER-0004</contact-id>
</domain>
```

- **4. The Host Element.** The host element has the property "fqdn" (the fully qualified name of the host) and is a container consisting of the following elements:
- a. id: Identifier of the host.

- b. sponsoring registrar: An identification of the sponsoring registrar of the host. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- c. created-on: The date/time the host object was originally created.
- d. updated-by: An identification of the registrar that last updated the host object. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- e. updated-on: The date/time the host object was last updated.
- f. transferred-on: The date/time when the host object was last transferred.
- g. ip-address: Any number of IP addresses associated with this host.

An example host container appears below:

- **5. The Contact Element.** The contact element has the property "id" and is a container consisting of the following elements:
- a. name: The name of the contact.
- b. organization: The organization for the contact.
- c. street1: The first part of the street address of the contact.
- d. street2: The second part of the street address of the contact.
- e. street3: The third part of the street address of the contact.
- f. city: The name of the city of the contact.
- g. state-province: The name of the state/province of the contact.
- h. postal-code: The postal/zip code of the contact.

- i. geographic location: The two letter ISO 3166 code for the contact's geographic location.
- j. voice: The voice phone number of the contact in E164a format.
- k. fax: The fax number of the contact in E164a format.
- 1. email: The e-mail address of the contact.
- m. sponsoring registrar: An identification of the sponsoring registrar of the contact. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- n. created-by: An identification of the registrar that created the contact object. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- o. created-on: The date/time the contact object was originally created.
- p. updated-by: An identification of the registrar that last updated the contact object. The sponsoring registrar is designated by a number uniquely assigned by the IANA.
- q. updated-on: The date/time the contact object was last updated.
- r. transferred-on: The date/time when the contact object was last transferred.
- s. status: Contact status.

An example contact container appears below:

```
<contact id="1">
<name>John Doe</name>
<organization>PIR</organization>
<street1>1775 Wiehle Avenue</street1>
<street2>Suite 200</street2>
<street3></street3>
<city>Reston</city>
<state-province>VA</state-province>
<postal-code>20190</postal-code>
<country>US</country>
<voice>+1 703.8895778</voice>
<fax>+1 703.8895779</fax>
<email>jdoe@example.org</email>
<sponsoring registrar>42</owned-by>
<created-by>REG-042</created-by>
<created-on>1-Jul-2001 12:42:22AM</created-on>
<updated-by>42</updated-by>
 <updated-on>1-Jul-2001 12:42:22AM</updated-on>
 <transferred-on></transferred-on>
```

```
<status>ACTIVE</status> </contact>
```

6. The Registrar Element. The registrar element has the property "id" and is a container consisting of the following elements:

a. name: The name of the registrar.

b. status: The registrar status code.

c. contact-id: Any number of contact-id associated with this registrar. Contact-id has the property "type" to denote the type of contact. "Type" can be one of: Registrar, Administrative, Technical or Billing

An example registrar container appears below:

Exhibit 3 ESCROW TRANSFER PROCESS

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 2 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: "orgSEQN", where "SEQN" is a four digit decimal number that is incremented as each report is prepared.
- 3. Next, the Deposit file 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 .MDS file (produced with MDSSUM 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 PGP and signed using Registry Operator's private key for PGP, both version 6.5.1 or above, with a key of DH/DSS type and 2048/1024-byte length. (Note that 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 ftp server within the specified time window.

Exhibit 4 ESCROW VERIFICATION PROCEDURES

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 PGP and authenticated using Registry Operator's public key for PGP. (In this step, 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 file (without report) that will split it in to its constituent reports (including the format report prepared by 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 PGP and signed using Escrow Agent's private key for PGP, both versions 6.5.1 or above, with a key of DH/DSS type and 2048/1024-byte length. (Note that PGP compresses the Deposit file(s) in addition to encrypting it (them).)
- 5. The decrypted Deposit file 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, Registry and ICANN shall exchange keys by the same procedure.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013		
1:43:41 PM		
Style Name: JD Color With Moves		
Original Filename:		
Original DMS:iw://IRI/IRI/51058/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51058/3		
Changes:		
Add	2	
Delete	1	
Move From	0	
Move To	0	
Table Insert	0	
Table Delete	0	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	3	



.ORG Agreement Appendix 3 Zone File Access Agreement (<u>8 December 2006TBD</u>)

Registry Operator and ICANN agree to engage in good faith negotiations to replace this Appendix 3 with the Zone File Access provisions equivalent to that of new gTLD registry operators within 90 days after the final new gTLD Registry Agreement has been approved by the ICANN Board of Directors.

1. Parties PARTIES

The User named in this Agreement ("User" or "you") hereby contracts with Public Interest Registry, a Pennsylvania non-profit corporation ("Registry Operator"); for a non-exclusive, non-transferable, limited right to access an Internet host server or servers designated by Registry Operator 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 Registry Operator, Registry Operator 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 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 <u>Public Interest-Registry's Registry Operator's</u> 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. TermTERM

This Agreement is effective for a period of three (3) months from the date of execution by Registry Operator (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 .ORG TOP-LEVEL DOMAIN ("TLD") ZONE FILES, AND ANY ASSOCIATED ENCRYPTED CHECKSUM FILES (COLLECTIVELY THE "DATA"), VIA THE FILE TRANSFER PROTOCOL ("FTP") OR THE HYPERTEXT TRANSFER PROTOCOL ("HTTP") PROTOCOLS SPECIFIED IN SECTION 4 BELOW PURSUANT TO THESE TERMS.

4. Grant Of Access GRANT OF ACCESS

Registry Operator grants to you a non-exclusive, non-transferable, limited right to access an Internet host server or servers designated by Registry Operator 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 using FTP or HTTP without the express prior written consent of Registry Operator using SFTP or HTTPS (or other registry operator defined retrieval mechanisms) for the purposes described in this Section 4. Registry Operator reserves the right to change the format of the Data and the specified access protocol, provided that the format will be compliant with standard Master File format as originally defined in RFC 1035, Section 5. Registry Operator will provide notice via Registry Operator's website no less than sixty (60) days prior to such change. 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 the transmission byany marketing activities, regardless of the medium used. Such media include but are not limited to e-mail, telephone, or facsimile of mass unsolicited, commercial advertising or solicitations to entities other than your own existing customers, postal mail, SMS, and wireless alerts; or (2) enable high volume, automated, electronic processes that send queries or data to the systems of Registry Operator or any ICANN-Accredited Registrar accredited registrar, except as reasonably necessary to register domain names or modify existing registrations. Registry Operator 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 Registry Operator, 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. FeeFEE

You agree to remit in advance to Registry Operator a quarterly fee of \$0 (USD) for the right to access the files during either the Initial Term or Renewal Term of this Agreement. Registry Operator 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 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 METHOD OF ACCESS

Registry Operator 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, Registry Operator 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 NO WARRANTIES

THE DATA IS PROVIDED "AS IS." REGISTRY OPERATOR DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE DATA, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS The Data is being provided "as-is." Registry Operator 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 DATA FORMAT

Registry Operator may change the format of the Data from time to time, in a manner that will not materially change the content of the Data (but which may affect other aspects of the content of the file, including, without limitation, comments, spacing and ordering), provided that the format will be compliant with standard Master File format as originally defined in RFC 1035, Section 5. Registry Operator will provide notice via Registry Operator's website not less than sixty (60) days prior to any such change.

10. 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.

11. NO CONSEQUENTIAL DAMAGES

10. No Consequential Damages; Limitation of Damages.

In no event shall Registry Operator 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 Registry Operator has been advised of the possibility of such damages. In no event shall Registry Operator be liable to you for direct damages in an amount in excess of the fees paid by you to Registry Operator during the one (1) year period preceding the date of your claim.

1112. Governing Law GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Virginia, without reference to conflicts of laws principles. 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 in the United States District Court for the <u>Fastern</u> District of Virginia or, if such court does not have subject matter jurisdiction over such claim, in the state courts of Virginia located in <u>Fairfax</u> County, Virginia. You expressly and irrevocably agree and consent to the personal jurisdiction and venue of the federal and state courts located in <u>Fairfax</u> County, Virginia (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.

1213. Termination 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 Registry Operator at 1775 Wiehle Avenue, Suite 102A, Reston, VA, 20190 <u>USA</u>, <u>Attention: Legal Dept</u>. Registry Operator 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 Registry Operator or expiration of this Agreement to erase the Data you obtained under this Agreement together with all copies of the Data.

1314. Definition DEFINITION

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

1415. Waiver WAIVER

Any delay or forbearance by either party in exercising any right hereunder shall not be deemed a waiver of that right.

1516. Entire Agreement ENTIRE AGREEMENT

This is the entire agreement between you and Registry Operator 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. Any modification of this Agreement will be effective only if it is in writing signed by the party to be charged.

Public Interest Registry	User:
By:	By:
(sign)	(sign)
Name:	Name:
(print)	(print)
Title:	Title:
Date:	Date:

Registry Operator Limited
<u>By:</u>
<u>(sign)</u>
Name:
(print)
<u>Title:</u>
Date:
=
<u>User:</u>
<u>By:</u>
<u>(sign)</u>
Name:
(print)
<u>Title:</u>
Date:
ASSIGNED USERID AND PASSWORD (To be assigned by Public Interest Registry Operator upon execution of this Agreement):
USERID: PASSWORD:
USERID: PASSWORD:

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013 1:48:45 PM		
Style Name: JD Color With Moves		
Original Filename:		
Original DMS:iw://IRI/IRI/51493/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51493/2		
Changes:		
Add	58	
Delete	49	
Move From	0	
Move To	0	
Table Insert	0	
Table Delete	2	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	109	



.ORG Agreement Appendix 4 Registry Operator's Operator Monthly Report Reports

(8 December 2006TBD)

Registry Operator shall continue to provide reports to ICANN per the terms set forth in Appendix 4 to the Registry Agreement, dated 8 December 2006, for the TLD as set forth at http://www.icann.org/en/about/agreements/registries/biz/appendix-04-08dec06-en.htm. Notwithstanding the foregoing, Registry Operator shall provide monthly reports for the TLD to ICANN using the API described in draft-lozano-icann-registry-interfaces http://tools.ietf.org/html/draft-lozano-icann-registry-interfaces, no later than 180 calendar days after the later of (i) such publication becomes an RFC or (ii) the Effective Date of this Agreement.

Registry Operator shall provide the following information in its monthly CANN may request in the future that the reports. Reports shall be submitted via email to <registry reports@icann.org> be delivered by other means and using other formats. ICANN shall will use reasonable commercial efforts to preserve the confidentiality of the information reported until three months after the end of the month to which the report relates, reports relate. Unless set forth in this Appendix, any reference to a specific time refers to Coordinated Universal Time (UTC).

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

1. Accredited Registrar Status. State the number of registrars in each of the followingthreecategories: (1) operational, (2) ramp-up-(registrars that have received a password for access to OT&E), and (3) pre-ramp-up- (registrars that have requestedaccess, 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.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013 2:01:32 PM		
Style Name: JD Color With Moves		
Original Filename:		
Original DMS:iw://IRI/IRI/51060/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51060/3		
Changes:		
Add	46	
Delete	36	
Move From	0	
Move To	0	
Table Insert	5	
Table Delete	0	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	87	



.ORG Agreement Appendix 5 Whois Specifications

(8 December 2006 TBD)

Registry Operator will operate a WHOIS service available via port 43 in accordance with RFC 3912, and a web-based Directory Service providing free public query-based access to at least the following elements in the following format. Both services will be provided over both IPv4 and IPv6 transport. In the alternative, Registry Operator may transition, upon notice to ICANN, to the Registration Data Publication Services requirements set forth in Specification 4 to the new gTLD Registry Agreement upon the approval of the new gTLD Registry Agreement by the ICANN Board of Directors.

Registry Operator shall implement a new standard supporting access to domain name registration data (SAC 051) no later than 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. Public Whois Specification

The Whois service substantially consists of two parts:

- Port 43 Whois services
- Web-based Whois services

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

Provisions for the detection of abusive usage of Registry Operator's Whois system (e.g., excessive numbers of queries from one source), and corresponding protective measures, have been implemented, and Registry Operator may implement further countermeasures against abuse as necessary.

Registry Operator's Whois service will be updated on a near real-time basis.

The Whois servers shall provide results in ASCII for standard and IDN .ORG domains.

The status values reported will be those stated in http://www.ietf.org/rfc/rfc<mark>3731</mark>5731.txt except that domains in PendingDelete status will be reported as either PENDING-DELETE (Restorable) or PENDING-DELETE (Scheduled for release) as appropriate.

Port 43 Whois service

- 1. The format of responses will follow a semi-free text format outline below, preceded by a mandatory disclaimer specifying the rights of Registry Operator, and of the user querying the database.
- 2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys, followed by the colon as a delimiter, followed by the value.
- 3. All Whois data will be in the ASCII character set, which has encoding compatible with UTF-8 for easy transition to including internationalized data, and as per the IETF's recommendations on i18n in Internet protocols. 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.
- 4. All record and key types shall be specified in a publicly available description on the Registry Operator website. The key names and record types should change as infrequently as possible, and only upon the agreement of ICANN and Registry Operator.

Web-based Whois service

Registry Operator will make available a Whois interface on its website which can also be linked to by each ICANN-Accredited Registrar that is a party to a Registry-Registrar Agreement. The information available in the Whois database will be returned as a results page on the website.

Query and Output for Reports Delivered by Web Page and Port 43

Whois Queries

For all Whois queries, the client provides a character string for which information is desired and optionally, the object type and interpretation control parameters to limit the search. Several interpretation controls are defined below to limit searches. If the object type and interpretation control parameters are not specified, Whois searches for the character string in the Name fields of the Domain object. Queries can be made as either an "exact search" or as a "partial search", both of which are insensitive to the case of the input string.

By default, if multiple matches are found for a query, then a summary of all the matching results is presented. A second query is required to retrieve the specific details of one of the

matching records.

If only a single match is found, then full details will be provided. Full detail consists of the data in the matching object as well as the data in any associated objects. Additional information and samples of the various types of Whois result records are available in the section below.

Query Controls

Whois query controls fall into two categories: those that specify the type of field and those that modify the interpretation of the input or determine the type of output to provide.

Object Type Control

The following keywords restrict a search to a specific object type:

DOmain: Search only domain objects. The input string is searched in the Name field.

HOst: Search only name server objects. The input string is searched in the Name field

and the IP Address field.

Contact: Search only contact objects. The input string is searched in the ID field.

Registrar: Search only registrar objects. The input string is searched in the Name field.

By default, if no object type control is specified, then the Name field of the Domain object is searched.

Interpretation Control

The following keywords modify the interpretation of the input or determine the level of output to provide:

ID: Search on ID field of an object. This applies to Contact IDs and Registrar IDs.

Full or Always show detailed results, even for multiple matches ′=′:

Summary Always show summary results, even for single matches or SUM:

'%': Used as a suffix on the input, will produce all records that start with that input string

<u>'_'</u>: Used as a suffix on the input, will produce all records that start with that input string and have one and only one additional character

By default, if no interpretation control keywords are used, the output will include full details if a single record is found and a summary if multiple matches are found.

Query Examples

Domain Record

A Whois query that results in domain information will return the following example fields from the Domain object and the associated data from host and contact objects. This set of data is also referred to as the Domain Record.

Registry Whois Outputs

The following output is an example of a Whois response for a domain record. The Registry Operator will not be required to post Whois Output Fields that are not required for posting in the Registrar Accreditation Agreement.

Input:

WHOISDOMAIN.ORG

-or-

domain WHOISDOMAIN.ORG

Output:

Domain ID:D5353344-LRMS

Domain Name: WHOISDOMAIN.ORG Created On:01-Jan-2005 04:00:00 UTC

Last Updated On:10-Jan-2005 20:25:23 UTC Expiration Date:01-Jan-2007 04:00:00 UTC

Sponsoring Registrar: EXAMPLE REGISTRAR LLC (R63-LRMS)

Status:DELETE PROHIBITED Status:RENEW PROHIBITED Status:TRANSFER PROHIBITED Status:UPDATE PROHIBITED Registrant ID:5372808-ERL

Registrant Name: EXAMPLE REGISTRAR REGISTRANT

Registrant Organization: EXAMPLE REGISTRANT ORGANIZATION

Registrant Street1:123 EXAMPLE STREET

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

Registrant Phone:+1.1235551234

Registrant Email:EMAIL@EXAMPLE.COM

Admin ID:5372809-ERL

Admin Name: EXAMPLE REGISTRAR ADMINISTRATIVE

Admin Organization: EXAMPLE REGISTRANT ORGANIZATION

Admin Street1:123 EXAMPLE STREET

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

Admin Country:EX

Admin Phone:+1.1235551234

Admin Email: EMAIL@EXAMPLE.COM

Billing ID:5372810-ERL

Billing Name: EXAMPLE REGISTRAR BILLING

Billing Organization: EXAMPLE REGISTRANT ORGANIZATION

Billing Street1:123 EXAMPLE STREET

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

Billing Country:EX

Billing Phone:+1.1235551234

Billing Email: EMAIL@EXAMPLE.COM

Tech ID:5372811-ERL

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

Tech Street1:123 EXAMPLE STREET

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

Tech Country:EX

Tech Phone:+1.1235551234

Tech Email: EMAIL@EXAMPLE.COM

Name Server:NS01.EXAMPLEREGISTRAR.ORG Name Server:NS02.EXAMPLEREGISTRAR.ORG

Nameserver Record

A Whois query that results in Nameserver information will return the following. This set of information is referred to as the Nameserver Record.

Input:

host NS01.EXAMPLEREGISTRAR.ORG

host 192.168.0.100

Output:

Host ID:H123456-LRMS

Host Name: NS01.EXAMPLEREGISTRAR.ORG

Sponsoring Registrar:R123-LRMS Created On:01-Jan-2005 20:21:50 UTC Last Updated On:01-Jan-2005 20:22:58 UTC

IP Address: 192.168.0.100

Contact Record

A Whois query that results in contact information will return the following. This set of information is referred to as the Contact Record.

Input:

contact CNT-2222

Output:

Contact ID:CNT-2222

Sponsoring Registrar:R1234-LRMS

Name: EXAMPLE CONTACT

Organization: EXAMPLE ORGANIZATION LLC

Street1:123 EXAMPLE STREET

City:ANYTOWN Postal Code:A1A1A1

Country:EX

Phone:+1.4443331234

Email:EMAIL@EXAMPLE.COM Created On:01-Jan-2005 14:33:12 UTC

Registrar Record

A Whois query that results in Registrar information will return the following. This set of information is referred to as the Registrar Record.

Input:

Whois registrar EXAMPLE REGISTRAR LLC

Output:

Registrar ID:FDRD-DR

Registrar GUID:99

Registrar Organization: EXAMPLE REGISTRAR LLC

Street1:123 EXAMPLE STREET

City:ANYTOWN Postal Code:A1A1A1

Country:EX

Phone:+1.4443331234

Email:EMAIL@EXAMPLE.COM Created On:01-Jan-2005 16:50:58 UTC Last Updated On:10-Jan-2005 15:34:36 UTC

Status:OK

2. Whois Provider Data Specification

If requested by ICANN, Registry Operator will provide bulk access to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the .ORG TLD on a daily schedule. This is 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 "Designated Recipient").

The specification of the content and format of this data, and procedures for providing access, will be as stated below, until changed according to the Registry Agreement.

Content

The data sets will consist of files containing the following:

1. Registrar objects. The registrar object corresponds to a single registrar. It includes the following data:

Registrar ID (conforming to the IANA registrar-ids registry)

Contact ID of Registrar

Registrar Administrative Contacts

Registrar Technical Contacts

Registrar Billing Contacts

Registrar URL

Registrar Creation Date

Registrar Last Updated Date

2. Contact objects. The contact object corresponds to a single contact (whether registrant, administrative, technical or billing contact). The contact object includes the following data:

Contact ID
Contact Name
Contact Organization
Contact Address, City, State/Province, Country
Contact Postal Code
Contact Phone, Fax, E-mail

3. Nameserver objects. A nameserver object corresponds to a single registered nameserver. The nameserver object includes the following data:

Name Server ID
Name Server Host Name
Name Server IP Addresses if applicable
Current Registrar
Name Server Creation Date
Name Server Last Updated Date

4. Domain objects. The domain object corresponds to a single Registered Name. Each domain object includes the following data:

Domain ID
Domain Name
Sponsoring Registrar
Domain Status
All contact information (including all details) with at least one each of:

- Registrant
- Administrative
- Technical
- Billing

All nameservers associated with this domain Domain Registration Date Domain Expiration Date Domain Last Updated Date

Format

The format for the above files <u>sallshall</u> 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

If requested by 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 Registry 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 sets will consist of files containing the following:

1. Registrar objects. The registrar object corresponds to a single registrar. It includes the following data:

Registrar ID (conforming to the IANA registrar-ids registry)
Contact ID of Registrar
Registrar Administrative Contacts
Registrar Technical Contacts
Registrar Billing Contacts
Registrar URL
Registrar Creation Date
Registrar Last Updated Date

2. Contact objects. The contact object corresponds to a single contact (whether registrant, administrative, technical or billing contact). The contact object includes the following data:

Contact ID
Contact Name
Contact Organization
Contact Address, City, State/Province, Country
Contact Postal Code
Contact Phone, Fax, E-mail

3. Nameserver objects. A nameserver object corresponds to a single registered nameserver. The nameserver object includes the following data:

Name Server ID Name Server Host Name Name Server IP Addresses if applicable Current Registrar Name Server Creation Date Name Server Last Updated Date

4. Domain objects. The domain object corresponds to a single Registered Name. Each domain object includes the following data:

Domain Name Sponsoring Registrar Domain Status All contact information (including all details) with at least one each of:

Registrant

Domain ID

- Administrative
- Technical
- Billing

All nameservers associated with this domain Domain Registration Date Domain Expiration Date Domain Last Updated Date

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.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013 2:03:11 PM		
Original Filename:		
Original DMS:iw://IRI/IRI/51061/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51061/3		
Changes:		
Add	5	
Delete	3	
Move From	0	
Move To	0	
Table Insert	0	
Table Delete	0	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	8	

.ORG Agreement Appendix 7



.ORG Agreement Appendix 7
Functional Specifications
(TBD)

Functional and Performance Specifications

(1 March 2012)

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

- 1. Registry Operator Registrar Protocol;
- 2. Supported initial and renewal registration periods;
- 3. Grace period policy;
- 4. Nameserver functional specifications DNS;
- 5. Patch, update, and upgrade policy; and
- 5. IDN;
- 6. Performance Specifications IPv6; and
- 7. Additional Services
- 1. Registry Operator Registrar Protocol
- 1.1 Extensible Provisioning Protocol

Registry Operator has implemented, and shall maintain support of, the Extensible Provisioning Protocol ("EPP") in conformance with the Proposed Standard and Informational RFCs 3730, 3731, 3732, 3734, 3735, and 3915shall comply with relevant existing RFCs and those published in the future by the Internet Engineering Task Force ("IETF") and/oranyincluding all successor standards, versions, modifications or additions thereto asrelating

to the provisioning and management of domain names using the Extensible Provisioning

Protocol (EPP) in conformance with RFCs 3915, 5910, 5730, 5731, 5732, 5733 and 5734. If

Registry Operator deems reasonably necessary requires the use of proprietary EPP

functionality, 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.

2. Supported initial and renewal registration periods

- a. 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.
- b. Renewal registrations of Registered Names (where available according to functional specifications and other requirements) may be made in the registry for terms not exceeding a total of ten years.
- c. 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.
- d. 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 and Pending 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,
- Extension of an existing domain,
- · Auto-Renew of an existing domain;

- Transfer of an existing domain; and
- Deletion of an existing domain.
- Restore of a deleted 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 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 either by using the Restore screen in the web-based administrative site, or by using the EPP RENEW UPDATE command with the RGP extension; provided, however, that in the case of (i) Bulk Transfers under Part B of the ICANN Policy on Transfer of Registrations between Registrars and (ii) Large Incidents, Restore may be accomplished by e-mail or fax using a Restore Request Form as specified by Registry Operator.

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, Renew/Extend, 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 on Exhibit A to the Registry-Registrar Agreement for excess 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.

Excess Deletes: An Excess Deletion Fee will be charged pursuant to Appendix 8, Exhibit A of the Registry Agreement when the number of deleted registrations within the five-day add grace period is in excess of ninety percent (90%) of the total number of initial registrations made by the registrar over a relevant time period as determined by PIR.

Renew/Extend. If a domain is renewed/extended within the Add Grace Period, there is no credit for the add. The account of the sponsoring Registrar at the time of the extension will be charged for the initial add plus 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 total of ten years, as specified by the registrar's requested Renew/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. 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 is deleted from the Registry database and is moved to the Redemption Grace Period (that is, to the status: Pending Delete – Restorable). See Section 3.2 for a description of overlapping grace period exceptions.

Renew/Extend. 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 is deleted from the Registry database and is moved to the Redemption Grace Period (that is, to the status: Pending Delete – Restorable). See Section 3.2 for a description of overlapping grace period exceptions.

Renew/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, Renew/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 is deleted from the Registry database and is moved to the Redemption Grace Period. See Section 3.2 for a description of overlapping grace period exceptions.

Renew/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 Renew/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 can not 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 that 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 Renew/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. The domain is removed from the Registry database and is immediately available for registration by any Registrar.
- If a domain is auto-renewed, then extended, and then deleted within the Renew/Extend Grace Period, the registrar will be credited for any Auto-Renew fee charged and the number of years for the extension. The years that were added to the domain's expiration as a result of the auto-renewal and extension are removed. The deleted domain is moved to the Redemption Grace Period (that is, to the status: Pending Delete -- Restorable).

3.2.1 Overlap Exception

- If a domain is deleted within one or several Transfer Grace Periods, then only the current sponsoring Registrar is credited for the transfer amount. For example, if a domain is transferred from Registrar A to Registrar B and then to Registrar C and finally deleted by Registrar C within the Transfer Grace Period of the first and second transfers, then only the last transfer is credited to Registrar C.
- 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. AUTO-RENEW is 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. Nameserver functional specifications DNS

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

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.

Registry Operator shall sign its TLD zone files implementing Domain Name System Security Extensions ("DNSSEC"). During the Term, Registry Operator shall comply with RFCs 4033, 4034, 4035, 4509 and their successors, and follow the best practices described in RFC 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.

Nameserver operations for the Registry TLD shall comply with RFCs 1034, 1035, and 2182.

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 Part 5 of Appendix 7, the following terms have the associated meanings set forth herein.

- 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.
- 2. An "Update" means a new release of the Licensed Product which may contain error-corrections, minor enhancements, and, in certain circumstances, major enhancements.
- 3. An "Upgrade" means a new release of the Licensed Product which involves the addition of substantial or substantially enhanced functionality.
- 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 (where client changes are not required), Registry Operator will give each registrar notice prior to deploying the Updates into the production environment. The notice shall be at least thirty (30) days.

For Updates (where client changes are required) and Upgrades, Registry Operator will give-each registrar notice prior to deploying the Update or Upgrade 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 or any other kind of excessive load where the Registry Operator's systems are rendered inaccessible or degraded by being-subject to, without limitation:

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

6. Performance Specifications

(A) Registry Operator shall use commercially reasonable efforts to provide Registry Services for the .org TLD. The Performance Specifications, defined below, provide a means to measure Registry Operator's delivery of Registry Services and, when applicable, allow for calculation of the SLA Credits as set forth in Appendix 10 to the Agreement.

1. Conventions.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in IETF RFC 2119.

- 2. Definitions. Capitalized terms used herein and not otherwise defined shall have the meaning ascribed to them in the Registry Agreement.
- 2.1 "Core Internet Service Failure" refers to an extraordinary and identifiable event beyond the control of Registry Operator affecting the Internet services to be measured pursuant to Section 7 below. Such events include but are not limited to congestion, collapse, partitioning, power grid failures, and routing failures.
- 2.2 "Current Pricing Level" refers to prices charged for Registry Services.
- 2.3 "C1" means Category 1, a mission critical service.
- 2.4 "C2" means Category 2, a mission important service.
- 2.5 "C3" means Category 3, a mission beneficial service.
- 2.6 "Degraded Performance" means a service not meeting the performance requirement set forth in this document. Round-trip time is used as the basis of this metric for all services except nameservice; for nameservice packet loss and Round-trip time are used as metrics.
- 2.7 "Monthly Timeframe" shall mean each single calendar month beginning and ending at 0000 Coordinated Universal Time (UTC).
- 2.8 "Monthly Unplanned Outage Time" shall be the sum of minutes of all Unplanned Outage Time during the Monthly Timeframe. Each minute of Unplanned Outage Time subtracts from the available Monthly Planned Outage Time up to four (4) hours.
- 2.9 "Not Responding" means a service will be deemed as "Not Responding" in the event that the Registry Component Ping (rcPing), as described in Section 7 below, responds with a negative or degraded service response.
- 2.10 "Planned Outage" means the periodic pre-announced occurrences during the Service—Term when the System is taken out of service for maintenance or care. Planned Outages will only be scheduled during the following window period of time each week, 1300 to 2300 UTC on Saturday (the "Planned Outage Period"). The Planned Outage Period may be changed-from time to time by the Registry Operator, in its sole discretion, upon prior notice to each-Registrar. Planned Outages will not exceed four (4) hours/per calendar week beginning at 0000 UTC Monday nor total more than eight (8) hours/per Monthly Timeframe. Planned Outage for a nameserver shall not coincide with or overlap Planned Outage for any other-nameserver. Not withstanding the foregoing, in each calendar year Registry Operator may incur one (1) additional Planned Outage of up to eight (8) hrs in duration during the Planned Outage Period for major systems or software upgrades (an "Extended Planned Outage"). An Extended Planned Outage represents the total allowed Planned Outages for the month.

- 2.11 "Round-trip" means the amount of measured time, usually measured in milliseconds, that it takes for a reference query to make a complete trip from the sampling agent to the system or process being tested and back again.
- 2.12 "Service Availability" means when the System is operational and predictably responding in a commercially reasonable manner. By definition, neither Planned Outages nor Extended Planned Outages shall be considered or included in determining Service Availability.
- 2.13 "Service Unavailability" means when, as a result of a failure of systems (with respect to systems that are within the Registry Operator's control):
- 2.13.1 With respect to services other than Whois Service and nameservice, Registrar is unable to establish a session with the System gateway which shall be defined as:
- 2.13.1.1 successfully complete a TCP session start,
- 2.13.1.2 successfully complete the SSL authentication handshake, and
- 2.13.1.3 successfully complete the Extensible Provisioning Protocol ("EPP") < login> or RRP login command.
- 2.13.2 With respect to all services, system monitoring tools register three (3) consecutive monitoring failures on any of the components listed in Section 3–System Services.
- 2.13.3 Neither Planned Outages nor Extended Planned Outages shall be considered or included in determining Service Unavailability.
- 2.14 "SLA" means the service level agreement between Registry Operator and Registrar set forth on Appendix 10.
- 2.15 "SLA Credit" means those credits available to the Registrar pursuant to the SLA.
- 2.16 "System" shall mean the list of components listed in Section 3-System Services.
- 2.17 "Transaction" shall mean chargeable Registry Services, which includes initial and renewal registrations.
- 2.18 "Unplanned Outage Time" shall mean all of the following:
- 2.18.1 With respect to services other than Whois Service and nameserver resolution, the amount of time recorded between a trouble ticket first being opened by the Registry Operator in response to a Service Unavailability experienced by a Registrar through the time when the Service Unavailability has been resolved with a final fix or a temporary work around. This will be considered Service Unavailability only for those individual Registrars impacted by the Service Unavailability;

- 2.18.2 With respect to services other than Whois Service and nameserver resolution, the amount of time recorded between a trouble ticket first being opened by the Registry Operator in the event of Service Unavailability that affects all Registrars through the time when the Registry Operator resolves the problem with a final fix or a temporary work around;
- 2.18.3 With respect to all services, the amount of time that Planned Outage time exceeds the limits established in Section 2.10 above; or
- 2.18.4 With respect to all services, the amount of time that Planned Outage time occurs outside the window of time established in Section 2.10 above.
- 2.19 "Whois Service" means the Registry Operator Whois Services described in Appendix O of the Registry Agreement.
- 2.20 With respect to the use of ".org nameservers" (Appendix D, Exhibit A) for definition of described testing, ".org nameservers" will refer to those hostnames and IP addresses associated for operation of the .org zone file delegation as listed within the root zone, and published by the Internet Assigned Numbers Authority.

3. System Services.

The following table lists, by category (C1, C2, or C3), the Registry System services for which availability and performance requirements are established. Services shall meet availability requirements according to their category, as listed in the "Cat." column below. In addition, various services must meet the performance requirements listed in the "Perf." column below. These availability and performance requirements are the subject of the Service Level Agreement (SLA) between Registry Operator and registrars as noted by the × marks below.

Component/Service	Cat.	Perf.	SLA
DNS	-	-	-
← AXFR/IXFR Updates	C3	P5	×
 Resolution of queries within the .org TLD, each nameserver 	C1	P 4	-
Whois	-	-	-
← Singular query/response	C2	P3	-

Billing	-	-	-
 Account balance check/modify 	C2	-	×
 Manual balance adjust 	C3	-	×
Admin	-	-	-
← Update Registrar profile	C3	-	×
← Update Registrar status	C3	-	×
Protocol Interface	-	-	-
Add/Renew/Delete/ Update	C2	P1	×
← Transfer	C2	P6	×
← Check	C2	P2	×

4. Service Levels (Availability and Performance)

4.1 Service Level Matrix

Total duration of Unplanned Outage Time of C1 class services must not exceed 20 seconds perMonthly Timeframe. This represents a Service Availability percentage of 99.999%

Total duration of Planned Outages of C1 class services must not exceed the limits set forth in thedefinition of Planned Outage above

Total duration of Unplanned Outage Time of C2 class services must not exceed 240 minutes permonthly Timeframe. This represents a Service Availability percentage of 99.45%.

C2

Total duration of Planned Outages of C2 class services must not exceed the limits set forth in thedefinition of Planned Outage above

C3	Total duration of Unplanned Outage Time of C3 class services must not exceed 300 minutes per- Monthly Timeframe. This represents a Service Availability percentage of 99.31%.
63	Total duration of Planned Outages of C3 class services must not exceed the limits set forth in the definition of Planned Outage above
P1	For a single-entity payload, Round-trip time should not exceed 800ms as measured by the system-monitoring tools that simulates a representative registrar. A request with a multiple entity payload-should materially perform consistent with the behavior of multiple, single entity payload operation.
P2	For a single-entity payload, Round-trip time should not exceed 400ms as measured by the system-monitoring tools that simulates a representative registrar. A request with a multiple-entity payload-should materially perform consistent with the behavior of multiple, single entity payload operation.
P3	For a singular query/response, Round-trip time should not exceed 800ms as measured by the system monitoring tools.
P4	Each nameserver achieves a measured Round-trip time of under 300ms and measured packet loss of under 10%. See Exhibit A for the measurement methodology.
P5	See Section 6.3 below.
P6	For a single-entity payload, Round-trip time should not exceed 1600ms as measured by the system monitoring tools that simulates a representative registrar. A request with a multiple-entity payload should materially perform consistent with the behavior of multiple, single entity payload operation.

4.2 Service Definition and Service Level Requirement

Service Attribute	Unit of Measure	Commitment
DNS service availability from any nameserver (i.e., at least one nameserver available), minimum	percentage uptime	99.999%
DNS service availability from each	percentage uptime	99.93%

nameserver, minimum		
DNS query response rate for all- nameservers combined, minimum absolute	queries/sec	Minimum- 10,000/sec
DNS query response rate for each- nameserver, minimum	% of measured load (busiest hour- averaged over one month) on most- loaded server	300% (see RFC 2780,- sec. 2.3)
Cross-network nameserver round-trip time, maximum	Milliseconds	300
Cross-network nameserver packet loss, maximum	Percentage	< 10%
DNS update interval, maximum	Minutes	15
SRS service availability, minimum	percentage uptime	99.45%
SRS processing time, maximum for query- operations	Milliseconds	4 00ms
SRS processing time, maximum for write- operations	Milliseconds	800ms
SRS service planned outage duration, maximum	hours/month	8 hrs/month- (includes Whois)
SRS service planned outage timeframe	days and hours	13:00-23:00 UTC Saturday
SRS service planned outage notification, minimum	days	7 days
-	-	-

SRS service extended planned outage-timeframe	days and hours	13:00-23:00 UTC- Saturday
Whois service availability, minimum	percentage uptime	99.45%
Whois query processing time, maximum	milliseconds	800 ms
Whois update interval, maximum	minutes	15
Whois service planned outage duration, maximum	hours/month	8 hrs/month (includes SRS)
Whois service planned outage timeframe	days and hours	13:00-23:00 UTC- Saturday
Whois service planned outage notification, minimum	days	7 days

5. Measurement. 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

Except for nameserver performance measurements (P4), Registry Operator will monitor the System in accordance with the following principles.

5.1 System/Component Monitoring:

The services defined in this Appendix will be sampled and tested as to availability pursuant to the schedule attached hereto as Exhibit A.

5.2 Performance Monitoring:

The services defined in this Appendix will be sampled and tested as to their performance pursuant to the schedule attached hereto as Exhibit A. Services Not Responding within the Round-trip response times listed in Section 4 – Service Levels will be deemed suffering from Degraded Performance for the purposes of this Appendix.

Nameserver performance measurements will be conducted by ICANN according to Exhibit A.

6. Responsibilities of the Parties. 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 5 of this Agreement; e.g.
Whois (RFC 3912), Web based Whois. Registry Operator shall offer public IPv6 transport for
its Shared Registration System (SRS) to any Registrar, no later than six months after
receiving the first request in writing from a gTLD accredited Registrar willing to operate with
the SRS over IPv6.

- 6.1 Except in the case of nameserver performance measurements, Registry Operator will perform monitoring from internally located systems as a means to verify that the availability and performance measurements of this document are being met.
- 6.2 The Registry Operator will update the Whois Service on a near real-time basis. During normal operation, all registration and information updates sent from a Registrar to the Registry are stored in the primary database (database A). The information in database A is replicated to a backup database (database B) at regular intervals, normally within five (5) minutes. The Whois Service uses replicated databases as its source of information. The time lag in the Whois information update is determined by the database replication interval. Whois may be serviced by multiple backup replicated databases (database B, C, D etc). The Registry Operator will notify Registrars in advance when changes to the Whois Service update schedule occur.
- 6.3 The Registry Operator will initiate the addition, deletion, or other modification of DNS zone information to its DNS service within 5 minutes after a Transaction. The Registry Operator will notify Registrar in advance when changes to the schedule occur. The Registry Operator will notify Registrars regarding any scheduled maintenance and unavailability of the TLD nameservers.

6.4 The Registry Operator will use commercially reasonable efforts to restore the critical systems of the System within 24 hours in the event of a force majeure and restore full system functionality within 48 hours. Outages due to a force majeure will not be considered Service-Unavailability.

6.5 Beginning no later than 60 days post Commencement-of-Service Date, the Registry Operator will publish preliminary weekly system performance and availability reports.

Registry Operator will use best efforts to finalize these reports no later than 30 days after the preliminary reports are provided.

6.6 The Registry Operator will provide Service Availability percentages during each Monthly Timeframe as listed in Section 4.1 – Service Level Matrix.

7. Additional Services

-7.1 ORG Single and Two Character Phased Allocation Program ("Phased Allocation Program").

The domain names included within the scope of the Phased Allocation Program shall be limited to single and two-character .ORG domain names. Registry Operator reserves the right to allocate less than all of the previously reserved single and two-character .ORG domain names.

Pursuant to the Phased Allocation Program, Registry Operator shall allocate the domain names through an auction process to registrants who commit to building out the domain with a sound marketing and branding strategy to include but not limited to a strong focus on quality, creativity, and the ability to launch the initiative in a timely manner.

The domain names allocated via the Phased Allocation Program are an exception to the Maximum Service Fee described in Section 7.3(a) of the .ORG Registry Agreement. Revenue derived from the Phased Allocation Program will be considered in the calculation of the average annual price of registrations for purposes of Section 7.2(a).

The parties have duly executed this Amendment as of the date first written below.

EXHIBIT A

Sampling and Testing Schedule

The Registry Component Ping (rcPing) facility is used to determine two elements of service level agreement (SLA) compliance for the registry. The first level of compliance involves determining the availability of specific components/functions within the registry system. The second level of compliance involves determining if the components/functions are responding within a pre-determined time period.

The rcPing request is generated by a monitor (rcPing Monitor) component within the server complex. The interface/request handler which is responsible for receiving commands for the monitored components/functions should record the time of the request arriving, ping the monitored component/function, record the stop time, determine the difference in milliseconds and respond with the integer value in milliseconds of the difference. The rcPing Monitor will time out if no response is received from the interface within a pre-determined interval. The rcPing request is specific to the component being monitored. Monitoring requests are sent-independent of one another.

The following table lists the components to be monitored by the rcPing facility.

Component	Function	Interface	rcPing Command	Response Time
eppServer	AddDomain	eppServer	RcPingepp(add)	800
eppServer	renewDomain	eppServer	RcPingepp(renew)	800
eppServer	deleteDomain	eppServer	RcPingepp(delete)	800
eppServer	transferDomain	eppServer	RcPingepp(transfer)	800
eppServer	checkDomain	eppServer	RcPingepp(check)	400
radmin	updateRegistrar	Radmin	RcPingAdmin(update)	800
billingServer	checkBalance	eppServer	RcPingepp(checkBalance)	800
billingServer	updateBalance	eppServer	RcPingepp(updateBalance)	800
whois	whois	Whois	RcPingWhois(whois)	800
Dns	transfer	eppServer	RcPingepp(dnsTransfer)	800

Each component being monitored can be configured with the following:

- 1. The time-out threshold. A typical value for timeout is three (3) seconds.
- 2. The expected response time for each ping command, as listed above.

- 3. The interval at which the ping commands will be sent. A typical value for the sampling interval is five (5) minutes.
- 4. The number of consecutive failures (i.e. exceeded response times and ping time outs) that determine a non-compliance with the SLA for a single component. A typical value is three (3) consecutive failures.

The rcPing monitor will store all response time data in a database that will be archived on a daily basis.

Nameserver Availability and Performance Measurements

- 1. Availability of each .org nameserver shall be measured by the rcPing utility. A nameserver that does not respond to three consecutive ping requests (pings at five-minute intervals with three-second timeouts) will be considered as Not Responding.
- 2. Cross-Network Nameserver Performance Requirements. Nameserver Round-trip time 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 Service Level Exceptions and credits under the Service Level Agreement (Appendix E), but they are Registry Operator obligations under Subsection 3.3 of the Registry Agreement.

The committed Performance Specification for cross-network nameserver performance is a measured Round-trip time of under 300ms and measured packet loss of under 10%.

Cross-network nameserver performance measurements will be conducted by ICANN at times of its choosing, in the following manner:

- 2.1. The measurements will be conducted by sending strings of DNS request packets from each of four measuring locations to each of the .org nameservers and observing the responses from the .org nameservers. (These strings of requests and responses are referred to as a "CNNP Test".) The measuring locations will be four root nameserver locations (on the US East Coast, US West Coast, Asia, and Europe).
- 2.2. Each string of request packets will consist of 100 UDP packets at 10 second intervals requesting ns records for arbitrarily selected .org 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 will be noted.
- 2.3. To meet the packet loss and Round-trip-time requirements for a particular CNNP Test, all three of the following must be true:

- 2.3.1. The Round-trip time and packet loss from each measurement location to at least one .org nameserver must not exceed the required values.
- 2.3.2. The Round-trip time to each of 75% of the .org nameservers from at least one of the measurement locations must not exceed the required value.
- 2.3.3. The packet loss to each of the .org nameservers from at least one of the measurement locations must not exceed the required value.
- 2.4. Any failing CNNP Test result obtained during an identified Core Internet Service Failure shall not be considered.
- 2.5. 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 will be deemed to have failed to meet the cross-network nameserver performance requirement only if the .org nameservers persistently fail (see item 1.1.3 above) the CNNP Tests with no less than three consecutive failed CNNP Tests to be considered to have persistently failed.
- 2.6. 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.
- 2.7. If, following that opportunity to cure, the .org nameservers continue to persistently fail CNNP Tests and Registry Operator fails to resolve the problem within thirty days after written notice of the continuing failures, Registry Operator will be deemed not to have met its obligations under Subsection 3.3 of the Registry Agreement.
- 2.8. Sixty days before the commencement of testing under this provision, ICANN will provide Registry Operator with the opportunity to evaluate the testing tools, procedures and testing methodology to be used by ICANN. In the event that Registry Operator does not approve of such tools, procedures and testing methodology, ICANN will work directly with Registry Operator to make necessary modifications.

7.2 Bulk Transfer After Partial Portfolio Acquisition

<u>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 .ORG top-level domain.</u>

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 Registry Operator 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.

Registry Operator 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 Registry Operator or ICANN, or if a registrar with common ownership or management or both has already requested BTAPPA service within the preceding six-month period.

In the event that one or more ICANN-accredited Registrars participate in the BTAPPA service, each such Registrar shall be required to agree to the pricing, terms and conditions set forth in Appendix 7.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/20/2013 1:10:57 PM

0/20/2015 1:10:5/ 1 101	
Style Name: JD Color With Moves	
Original Filename:	
Original DMS:iw://IRI/IRI/51062/1	
Modified Filename:	
Modified DMS: iw://IRI/IRI/51062/3	
Changes:	
Add	28
Delete	114
Move From	0
Move To	0
Table Insert	1
Table Delete	4
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Total Changes:	147



.ORG Agreement Appendix 8 Registry-Registrar Agreement

(4 April 2007 TBD)

This Registry-Registrar Agreement (the "Agreement"), dated as of,, is made and entered into by and between PUBLIC INTEREST REGISTRY, a Pennsylvania
non-profit corporation with its principal place of business located at 1775 Wiehle Avenue, Suite
102A, Reston, VA 20190 (PIR), and, a
, with its principal place of business located at
("Registrar"). PIR and Registrar may be referred to
individually as a "Party" and collectively as the "Parties."
WHEREAS, PIR has entered a Registry Agreement with the Internet Corporation for Assigned Names and Numbers to operate a shared registration system, TLD nameservers, and other equipment for the .ORG top-level domain;
WHEREAS multiple registrars will provide Internet domain name registration services within

WHEREAS, multiple registrars will-provide Internet domain name registration services within the .ORG top-level domain;

WHEREAS, Registrar wishes to act as a registrar for domain names within the .ORG top-level domain.

NOW, THEREFORE, for and in consideration of the mutual promises, benefits and covenants contained herein and for other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, PIR and Registrar, intending to be legally bound, hereby agree as follows:

1. DEFINITIONS

- **1.1.** The "APIs" are the application program interfaces by which Registrar may interact, through the EPP, with the Registry System.
- **1.2.** "Confidential Information" means all information and materials, including, without limitation, computer software, data, information, intellectual property, databases, protocols, reference implementation and documentation, financial information, statistics and functional and interface specifications, provided by the Disclosing Party to the Receiving Party under this Agreement and marked or otherwise identified as Confidential, provided that if a communication is oral, the

Disclosing Party will notify the Receiving Party in writing, including by email, within 15 days of the disclosure that it is confidential.

- **1.3.** "DNS" means the Internet domain name system.
- **1.4.** The "Effective Date" shall be the date first set forth above.
- **1.5.** "EPP" means the Extensible Provisioning Protocol, which is the protocol used by the Registry System.
- **1.6.** "ICANN" means the Internet Corporation for Assigned Names and Numbers.
- **1.7.** "Personal Data" refers to data about any identified or identifiable natural person.
- **1.8.** "Registered Name" refers to a domain name within the domain of the Registry TLD, whether consisting of two or more (e.g., john.smith.ORG) levels, about which PIR or an affiliate engaged in providing Registry Services maintains data in a Registry Database, arranges for such maintenance, or derives revenue from such maintenance. A name in a Registry Database may be a Registered Name even though it does not appear in a TLD zone file (e.g., a registered but inactive name).
- **1.9.** "Registered Name Holder" means the holder of a Registered Name.
- **1.10.** The "Registrar Tool Kit" comprises the EPP, APIs and Software.
- **1.11.** "Registry Agreement" means the Registry Agreement between PIR and ICANN dated as of 8 December, 2006 2013, for the operation of the Registry TLD, as amended from time to time.
- **1.12.** "Registry Database" means a database comprised of data about one or more DNS domain names within the domain of the Registry TLD that is used to generate either DNS resource records that are published authoritatively or responses to domain-name availability lookup requests or Whois queries, for some or all of those names.
- **1.13.** "Registry Services" Registry Services are: (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 .org registry as of the Effective Date; (b) other products or services that the Registry Operator is required to provide because of the establishment of a Consensus Policy (as defined in the Registry Agreement); (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.

- **1.14.** "Registry TLD" means the .ORG TLD.
- **1.15.** The "Registry System" means the system operated by PIR for Registered Names in the Registry TLD.
- **1.16.** "Software" means reference client software intended to allow Registrar to develop its system to register second-level domain names through the Registry System.
- **1.17.** "Term" means the term of this Agreement, as set forth in Subsection 9.1.
- **1.18.** A "TLD" means a top-level domain of the DNS.

Other terms used in this Agreement as defined terms shall have the meanings ascribed to them in the context in which they are defined.

2. OBLIGATIONS OF PIR

- **2.1. Access to Registry System.** Throughout the Term of this Agreement, PIR shall operate the Registry System and provide Registrar with access to the Registry System to transmit domain name registration information for the Registry TLD to the Registry System. Nothing in this Agreement entitles Registrar to enforce any agreement between PIR and ICANN.
- **2.2.** Maintenance of Registrations Sponsored by Registrar. Subject to the provisions of this Agreement, ICANN requirements, and PIR requirements authorized by ICANN, PIR shall maintain the registrations of Registered Names sponsored by Registrar in the Registry System during the term for which Registrar has paid the fees required by Subsection 4.1.
- **2.3. Provision of Tool Kit; License.** No later than three business days after the Effective Date, PIR shall provide to Registrar a copy of the Registrar Tool Kit, which shall provide sufficient technical specifications to permit registrar interface with the Registry System and employ its features that are available to Registrars. Subject to the terms and conditions of this Agreement, PIR hereby grants Registrar and Registrar accepts a non-exclusive, non-transferable, worldwide limited license to use for the Term and purposes of this Agreement, all components owned by or licensed to PIR in and to the EPP, APIs, any reference client software and any other intellectual property included in the Registrar Tool Kit, as well as updates and redesigns thereof, to provide domain name registration services in the Registry TLD only and for no other purpose.
- **2.4. Changes to System.** PIR may from time to time replace or make modifications to the EPP, APIs, or Software or other materials licensed hereunder that will modify, revise or augment the features of the Registry System. PIR will provide Registrar with at least ninety days notice prior to the implementation of any material changes to the EPP, APIs, Software or other materials licensed hereunder.
- 2.5. Engineering and Customer Service Support.

- **2.5.1. Engineering Support.** PIR agrees to provide Registrar with reasonable engineering telephone support (24 hour/7 day) to address engineering issues arising in connection with Registrar's use of the Registry System.
- **2.5.2. Customer Service Support.** During the Term of this Agreement, PIR will provide reasonable telephone and e-mail customer service support to Registrar (but not to Registered Name Holders or prospective customers of Registrar), for non-technical issues solely relating to the Registry System and its operation. PIR will provide Registrar with a telephone number and e-mail address for such support during implementation of the Protocol, APIs and Software. First-level telephone support will be available on business days between the hours of 9 a.m. and 5 p.m. Eastern US time.
- **2.6. Handling of Personal Data.** PIR shall notify Registrar of the purposes for which Personal Data submitted to PIR by Registrar 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. PIR shall take reasonable steps to protect Personal Data from loss, misuse, unauthorized disclosure, alteration or destruction. PIR shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars. PIR may from time to time use the demographic data collected for statistical analysis, provided that this analysis will not disclose individual Personal Data and provided that such use is compatible with the notice provided to registrars regarding the purpose and procedures for such use.
- **2.7. Service Level Agreement.** PIR shall issue credits to Registrar as described in Appendix 10 to the Registry Agreement, which appendix is hereby incorporated by reference, as amended from time to time.
- **2.8. ICANN Requirements.** PIR'S obligations hereunder are subject to modification at any time as the result of ICANN-mandated requirements and consensus policies. Notwithstanding anything in this Agreement to the contrary, Registrar shall comply with any such ICANN requirements in accordance with the timeline defined by ICANN.

3. OBLIGATIONS OF REGISTRAR

- **3.1.** Accredited Registrar. During the Term of this Agreement, Registrar shall maintain in full force and effect its accreditation by ICANN as a registrar for the Registry TLD.
- **3.2. Registrar Responsibility for Customer Support.** Registrar shall provide (i) support to accept orders for registration, cancellation, modification, renewal, deletion or transfer of Registered Names and (ii) customer service (including domain name record support) and billing and technical support to Registered Name Holders. Registrar shall publish to Registered Name Holders emergency contact information for critical situations such as domain name hijacking.
- **3.3. Registrar's Registration Agreement.** At all times while it is sponsoring the registration of any Registered Name within the Registry System, Registrar shall have in effect an electronic or paper registration agreement with the Registered Name Holder. Registrar shall include in its

registration agreement those terms required by this Agreement and other terms that are consistent with Registrar's obligations to PIR under this Agreement.

- **3.4. Indemnification Required of Registered Name Holders.** In its registration agreement with each Registered Name Holder, Registrar shall require such Registered Name Holder to indemnify, defend and hold harmless PIR and its subcontractors, and the directors, officers, employees, affiliates and agents of each of them, from and against any and all claims, damages, liabilities, costs and expenses, including reasonable legal fees and expenses, arising out of or relating to the Registered Name Holder's domain name registration. The registration agreement shall further require that this indemnification obligation survive the termination or expiration of the registration agreement.
- **3.5.** Compliance with Terms and Conditions. Registrar shall comply with each of the following requirements, and further shall include in its registration agreement with each Registered Name Holder, as applicable, an obligation for such Registered Name Holder to comply with each of the following requirements:
- **3.5.1.** ICANN standards, policies, procedures, and practices for which PIR has monitoring responsibility in accordance with the Registry Agreement or other arrangement with ICANN; and
- **3.5.2.** operational standards, policies, procedures, and practices for the Registry TLD established from time to time by PIR in a non-arbitrary manner and applicable to all registrars, including affiliates of PIR, and consistent with ICANN's standards, policies, procedures, and practices and PIR'S Registry Agreement with ICANN. Additional or revised PIR operational standards, policies, procedures, and practices for the Registry TLD shall be effective upon thirty days notice by PIR to Registrar. If there is a discrepancy between the terms required by this Agreement and the terms of the Registrar's registration agreement, the terms of this Agreement shall supersede those of the Registrar's registration agreement.
- **3.6.** Additional Requirements for Registration Agreement. In addition to the provisions of Subsection 3.5, in its registration agreement with each Registered Name Holder, Registrar shall require such Registered Name Holder to:
- **3.6.1.** consent to the use, copying, distribution, publication, modification and other processing of Registered Name Holder's Personal Data by PIR and its designees and agents in a manner consistent with the purposes specified pursuant to Subsection 2.6;
- **3.6.2.** submit to proceedings commenced under ICANN's Uniform Domain Name Dispute Resolution Policy ("UDRP"); and
- **3.6.3.** immediately correct and update the registration information for the Registered Name during the registration term for the Registered Name;
- **3.6.4.** agree to be bound by the terms and conditions of the initial launch of the Registry TLD, including without limitation the sunrise period and the land rush period, and the Sunrise Dispute Resolution Policy, and further to acknowledge that PIR has no liability of any kind for any loss or

liability resulting from the proceedings and processes relating to the sunrise period or the land rush period, including, without limitation: (a) the ability or inability of a registrant to obtain a Registered Name during these periods, and (b) the results of any dispute over a sunrise registration; and

3.6.5. acknowledge and agree that PIR reserves the right to deny, cancel or transfer any registration or transaction, or place any domain name(s) on registry lock, hold or similar status, that it deems necessary, in its discretion; (1) to protect the integrity and stability of the registry; (2) to comply with any applicable laws, government rules or requirements, requests of law enforcement, or any dispute resolution process; (3) to avoid any liability, civil or criminal, on the part of PIR, as well as its affiliates, subsidiaries, officers, directors, and employees; (4) per the terms of the registration agreement or (5) to correct mistakes made by PIR or any Registrar in connection with a domain name registration. PIR also reserves the right to place upon registry lock, hold or similar status a domain name during resolution of a dispute.

3.7. Data Submission Requirements.

- **3.7.1.** As part of its registration and sponsorship of Registered Names in the Registry TLD, Registrar shall submit complete data as required by technical specifications of the Registry System that are made available to Registrar from time to time. Registrar hereby grants PIR a non-exclusive, non-transferable, limited license to such data for propagation of and the provision of authorized access to the TLD zone files and as otherwise required in PIR'S operation of the Registry TLD.
- **3.7.2.** Registrar shall submit any corrections or updates from a Registered Name Holder relating to the registration information for a Registered Name to PIR in a timely manner.

3.8. Security.

- **3.8.1.** Registrar shall develop and employ in its domain name registration business all necessary technology and restrictions to ensure that its connection to the Registry System is secure and that all data exchanged between Registrar's system and the Registry System shall be protected to avoid unintended disclosure of information. Registrar shall employ the necessary measures to prevent its access to the Registry System granted hereunder from being used to (i) allow, enable, or otherwise support the transmission by e-mail, telephone, or facsimile of mass unsolicited, commercial advertising or solicitations to entities other than its own existing customers; or (ii) enable high volume, automated, electronic processes that send queries or data to the systems of PIR, any other registry operated under an agreement with ICANN, or any ICANN-accredited registrar, except as reasonably necessary to register domain names or modify existing registrations. In addition, PIR may require other reasonable security provisions to ensure that the Registry System is secure and stable.
- **3.8.2.** Each session wherein Registrar accesses the Registry System shall be authenticated and encrypted using two-way secure socket layer ("SSL") protocol. At a minimum, Registrar shall authenticate every client connection with the Registry System using both an X.509 server certificate issued by a commercial certification authority identified by the PIR and its Registrar password. Registrar shall disclose only its Registrar password to its employees with a need to

know. Registrar agrees to notify PIR within four hours of learning that its Registrar password has been compromised in any way or if its server certificate has been revoked by the issuing certification authority or compromised in any way.

- **3.8.3.** Registrar shall not provide identical Registrar-generated authorization <authinfo> codes for domain names registered by different registrants with the same Registrar. PIR in its sole discretion may choose to modify <authinfo> codes for a given domain and shall notify the sponsoring registrar of such modifications via EPP compliant mechanisms (i.e. EPP<poll> or EPP<domain:Info>). Documentation of these mechanisms shall be made available to Registrar by PIR. The Registrar shall provide the Registered Name Holder with timely access to the authorization code along with the ability to modify the authorization code. Registrar shall respond to any inquiry by a Registered Name Holder regarding access to and/or modification of an authorization code within five (5) calendar days.
- **3.9. Resolution of Technical Problems.** Registrar shall employ necessary employees, contractors, or agents with sufficient technical training and experience to respond to and fix all technical problems concerning the use of the EPP, the APIs and the systems of PIR in conjunction with Registrar's systems. In the event of significant degradation of the Registry System or other emergency, PIR may, in its sole discretion, temporarily suspend or restrict Registrar's access to the Registry System. Such temporary suspensions shall be applied in a non-arbitrary manner and shall apply fairly to any registrar similarly situated, including affiliates of PIR.
- **3.10. Time.** In the event of any dispute concerning the time of the entry of a domain name registration into the Registry Database, the time shown in the Registry records shall control.
- **3.11. Transfer of Registration Sponsorship.** Registrar agrees to implement transfers of Registered Name registrations from another registrar to Registrar and vice versa pursuant to the Policy on Transfer of Registrations Between Registrars as may be amended from time to time by ICANN (the "Transfer Policy").
- **3.12. Restrictions on Registered Names.** In addition to complying with ICANN standards, policies, procedures, and practices limiting domain names that may be registered, Registrar agrees to comply with applicable statutes and regulations limiting the domain names that may be registered.

4. FEES

4.1. Amount of PIR Fees. Registrar agrees to pay PIR the fees set forth in Exhibit A for services provided by PIR to Registrar (collectively, "Fees"). PIR reserves the right to revise the Fees from time to time, provided that PIR shall provide at least six (6) months notice to Registrar prior to any increases in fees for initial registrations, renewal registrations or fees for registrations associated with transfers of sponsorship. In addition, Registrar agrees to pay PIR the applicable variable fees assessed to Registry Operator by ICANN, as permitted by Subsection 7.2(b) of the Registry Agreement by no later ten (10) days after the date of an invoice from Registry Operator for such fees.

- **4.2. Payment of PIR Fees.** In advance of incurring Fees, Registrar shall establish a letter of credit, deposit account, or other credit facility accepted by PIR ("Payment Security"), which acceptance will not be unreasonably withheld so long as payment is assured. All Fees are due immediately upon receipt of applications for initial and renewal registrations, registrations associated with transfers of sponsorship, or upon provision of other services provided by PIR to Registrar. Payment shall be made via debit or draw down of the deposit account, letter of credit or other credit facility. PIR shall provide monthly invoice statements to the Registrar. The Registrar must pay this invoice upon receipt in order to ensure timely processing of future domain name registrations.
- **4.3. Non-Payment of Fees.** In the event Registrar has insufficient funds deposited or available through the letter of credit or credit facility with PIR, PIR may do any or all of the following: (a) stop accepting new initial or renewal registrations, or registrations associated with transfers of sponsorship, from Registrar; (b) delete the domain names associated with any negative balance incurred or invoice not paid in full from the Registry database (c) give written notice of termination of this Agreement pursuant to Subsection 9.2.1; and (d) pursue any other remedy under this Agreement.
- 4.4 Taxes. All Fees due under this Agreement are exclusive of tax. All taxes, duties, fees and other governmental charges of any kind (including sales, turnover, services, use and value-added taxes, but excluding taxes based on the net income of PIR) which are imposed by or under the authority of any government or any political subdivision thereof on the fees for any services, software and/or hardware shall be borne by Registrar and shall not be considered a part of, a deduction from or an offset against such Fees. All payments due to PIR shall be made without any deduction or withholding on account of any tax, duty, charge or penalty except as required by law, in which case, the sum payable by Registrar from which such deduction or withholding is to be made shall be increased to the extent necessary to ensure that, after making such deduction or withholding, PIR receives and retains (free from any liability with respect thereof) a net sum equal to the sum it would have received but for such deduction or withholding being required.

5. CONFIDENTIALITY AND INTELLECTUAL PROPERTY

- **5.1. Use of Confidential Information.** During the Term of this Agreement, each party (the "Disclosing Party") may disclose its Confidential Information to the other party (the "Receiving Party"). Each party's use and disclosure of the Confidential Information of the other party shall be subject to the following terms and conditions:
- **5.1.1.** The Receiving Party shall treat as strictly confidential, and use all reasonable efforts to preserve the secrecy and confidentiality of, all Confidential Information of the Disclosing Party, including implementing reasonable physical security measures and operating procedures.
- **5.1.2.** The Receiving Party agrees that it will use any Confidential Information of the Disclosing Party solely for the purpose of exercising its right or performing its obligations under this Agreement and for no other purposes whatsoever.

- **5.1.3.** The Receiving Party shall make no disclosures whatsoever of any Confidential Information of the Disclosing Party to others; provided, however, that if the Receiving Party is a corporation, partnership, or similar entity, disclosure is permitted to the Receiving Party's officers, employees, contractors and agents who have a demonstrable need to know such Confidential Information, provided the Receiving Party shall advise such personnel of the confidential nature of the Confidential Information and of the procedures required to maintain the confidentiality thereof, and shall require them to acknowledge in writing that they have read, understand, and agree to be individually bound by the confidentiality terms of this Agreement.
- **5.1.4.** The Receiving Party shall not modify or remove any confidentiality legends and/or copyright notices appearing on any Confidential Information of the Disclosing Party.
- **5.1.5.** The Receiving Party agrees not to prepare any derivative works based on the Confidential Information.
- **5.1.6.** Notwithstanding the foregoing, this Subsection 5.1 imposes no obligation upon the parties with respect to information that (i) is disclosed in the absence of a confidentiality agreement and such disclosure was agreed to by the Disclosing Party in writing prior to such disclosure; or (ii) is or has entered the public domain through no fault of the Receiving Party; or (iii) is known by the Receiving Party prior to the time of disclosure; or (iv) is independently developed by the Receiving Party without use of the Confidential Information; or (v) is made generally available by the Disclosing Party without restriction on disclosure; or (vi) is required to be disclosed by law, regulation or court order; provided, that in the event the Receiving Party is required by law, regulation or court order to disclose any of Disclosing Party's Confidential Information, Receiving Party will promptly notify Disclosing Party in writing prior to making any such disclosure in order to facilitate Disclosing Party seeking a protective order or other appropriate remedy from the proper authority, at the Disclosing Party's expense. Receiving Party agrees to cooperate with Disclosing Party in seeking such order or other remedy. Receiving Party further agrees that if Disclosing Party is not successful in precluding the requesting legal body from requiring the disclosure of the Confidential Information, it will furnish only that portion of the Confidential Information which is legally required.
- **5.1.7.** The Receiving Party's duties under this Subsection 5.1 shall expire two (2) years after the expiration or termination of this Agreement or earlier, upon written agreement of the parties.

5.2. Intellectual Property.

- **5.2.1.** Subject to the licenses granted hereunder, each party will continue to independently own its intellectual property, including all patents, trademarks, trade names, service marks, copyrights, trade secrets, proprietary processes and all other forms of intellectual property.
- **5.2.2.** Without limiting the generality of the foregoing, no commercial use rights or any licenses under any patent, patent application, copyright, trademark, know-how, trade secret, or any other intellectual proprietary rights are granted by the Disclosing Party to the Receiving Party by this Agreement, or by any disclosure of any Confidential Information to the Receiving Party under this Agreement.

6. INDEMNITIES AND LIMITATION OF LIABILITY

- **6.1. Indemnification.** Registrar, at its own expense and within thirty days after presentation of a demand by PIR under this Section, will indemnify, defend and hold harmless PIR and its subcontractors, and the directors, officers, employees, representatives, agents and affiliates of each of them, against any claim, suit, action, or other proceeding brought against any such party(ies) based on or arising from any claim or alleged claim: (i) relating to any product or service of Registrar; (ii) relating to any agreement, including Registrar's dispute policy, with any Registered Name Holder or Registrar; or (iii) relating to Registrar's domain name registration business, including, but not limited to, Registrar's advertising, domain name application process, systems and other processes, fees charged, billing practices and customer service. PIR shall provide Registrar with prompt notice of any such claim, and upon Registrar's written request, PIR will provide to Registrar all available information and assistance reasonably necessary for Registrar to defend such claim, provided that Registrar reimburses PIR for PIR'S actual and reasonable costs incurred in connection with providing such information and assistance. Registrar will not enter into any settlement or compromise of any such indemnifiable claim without PIR'S prior written consent, which consent shall not be unreasonably withheld. Registrar will pay any and all costs, damages, and expenses, including, but not limited to, reasonable attorneys' fees and costs awarded against or otherwise incurred by PIR in connection with or arising from any such indemnifiable claim, suit, action or proceeding.
- **6.2. Representation and Warranty.** Registrar represents and warrants that: (i) it is a corporation duly incorporated, validly existing and in good standing under the law of the jurisdiction of its formation (ii) it has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement, (iii) the execution, performance and delivery of this Agreement has been duly authorized by Registrar, (iv) it is, and will continue to be, accredited by ICANN or its successor and (v) no further approval, authorization or consent of any governmental or regulatory authority is required to be obtained or made by Registrar in order for it to enter into and perform its obligations under this Agreement.
- 6.3. Limitation of Liability. IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES RESULTING FROM LOSS OF PROFITS OR BUSINESS INTERRUPTION, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, EVEN IF THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE MAXIMUM AGGREGATE LIABILITY OF PIR AND ITS SUBCONTRACTORS EXCEED THE LESSER OF (i) THE TOTAL AMOUNT PAID TO PIR UNDER THE TERMS OF THIS AGREEMENT FOR THE IMMEDIATELY PRECEEDING 12 MONTH PERIOD, OR (ii) \$100,000 USD.
- **6.4. Disclaimer of Warranties.** THE REGISTRAR TOOL KIT AND ALL OTHER ITEMS PROVIDED BY PIR HEREUNDER ARE PROVIDED "AS-IS" AND WITHOUT ANY WARRANTY OF ANY KIND. PIR EXPRESSLY DISCLAIMS ALL WARRANTIES AND/OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE AND

NONINFRINGEMENT OF THIRD PARTY RIGHTS. PIR DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE REGISTRAR TOOL KIT WILL MEET REGISTRAR'S REQUIREMENTS, OR THAT THE OPERATION OF THE REGISTRAR TOOL KIT WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE REGISTRAR TOOL KIT WILL BE CORRECTED. FURTHERMORE, PIR DOES NOT WARRANT NOR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE REGISTRAR TOOL KIT OR RELATED DOCUMENTATION IN TERMS OF THEIR CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE. SHOULD THE REGISTRAR TOOL KIT PROVE DEFECTIVE, REGISTRAR ASSUMES THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION OF REGISTRAR'S OWN SYSTEMS AND SOFTWARE.

6.5. Reservation of Rights. PIR reserves the right to deny, cancel or transfer any registration or transaction, or place any domain name(s) on registry lock, hold or similar status, that it deems necessary, in its discretion; (1) to protect the integrity and stability of the registry; (2) to comply with any applicable laws, government rules or requirements, requests of law enforcement, or any dispute resolution process; (3) to avoid any liability, civil or criminal, on the part of PIR, as well as its affiliates, subsidiaries, officers, directors, and employees; (4) for violations of this Agreement, including, without limitation, the exhibits hereto; or (5) to correct mistakes made by PIR or any Registrar in connection with a domain name registration. PIR also reserves the right to place a domain name on registry hold, registry lock, or similar status during resolution of a dispute.

7. INSURANCE

7.1. Insurance Requirements. Registrar shall acquire, on or before the Effective Date, at least US \$1,000,000 in comprehensive general liability insurance from a reputable insurance provider with a rating equivalent to an A.M. Best rating of "A" or better and shall maintain insurance meeting these requirements throughout the Term of this Agreement. Registrar shall provide a copy of the insurance policy to Registry Operator, current as of the Effective Date, upon execution of this Agreement, and from time to time thereafter upon Registry Operator's reasonable request. Such insurance shall entitle PIR to seek compensation under such policy on behalf of PIR and its subcontractors, and the directors, officers, employees, representatives, agents, and affiliates of each of them, in respect of all costs and damages (including reasonable attorney fees) which any of them may suffer by reason of Registrar's failure to meet its indemnification obligations under this Agreement.

8. DISPUTE RESOLUTION

8.1. Dispute Resolution. 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 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 the state of Virginia, U.S.A. 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 parties shall bear the costs of the arbitration in equal shares, subject to the right of the arbitrators to reallocate the costs in their award as provided in the ICC

rules. The parties shall bear their own attorneys' fees in connection with the arbitration, and the arbitrators may not reallocate the attorneys' fees in conjunction with their award. The arbitrators shall render their decision within ninety days of the initiation of arbitration. Any litigation brought to enforce an arbitration award shall be brought in the state or federal courts of the state of Virginia, U.S.A.; 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 a party during the pendency of an arbitration, each party shall have the right to seek temporary or preliminary injunctive relief from the arbitration panel or a court located in the state or federal courts in the state of Virginia, U.S.A., which shall not be a waiver of this arbitration agreement.

9. TERM AND TERMINATION

9.1. Term of the Agreement; Revisions. The Term of this Agreement shall commence on the Effective Date and, unless earlier terminated in accordance with the provisions of this Agreement, shall expire on the last day of the calendar month which is two (2) years following the Effective Date. This Agreement shall automatically renew for additional successive two (2) year terms unless Registrar provides notice of termination to Registry Operator at least thirty (30) days prior to the end of the initial or any renewal term. In the event that revisions to PIR'S approved form of Registry-Registrar Agreement are approved or adopted by ICANN, Registrar will either execute an amendment substituting the revised agreement in place of this Agreement or, at its option exercised within fifteen (15) days after receiving notice of such amendment, terminate this Agreement immediately by giving written notice to PIR. In the event that PIR does not receive such executed amendment or notice of termination from Registrar within such fifteen day period, Registrar shall be deemed to have terminated this Agreement effective immediately.

9.2. Termination. This Agreement may be terminated as follows:

- **9.2.1.** Termination For Cause. In the event that either party materially breaches any of its obligations under this Agreement and such breach is not substantially cured within thirty calendar days after written notice thereof is given by the other party, then the non-breaching party may, by giving written notice thereof to the other party, terminate this Agreement as of the date specified in such notice of termination.
- **9.2.2.** Termination at Option of Registrar. Registrar may terminate this Agreement at any time by giving PIR thirty days notice of termination.
- **9.2.3.** Termination Upon Loss of Registrar's Accreditation. This Agreement shall terminate in the event Registrar's accreditation by ICANN is terminated or expires without renewal.
- **9.2.4.** Termination in the Event of Termination of Registry Agreement. This Agreement shall terminate in the event that PIR'S Registry Agreement with ICANN is terminated or expires without entry of a subsequent Registry Agreement with ICANN and this Agreement is not assigned under Subsection 10.1.1.

- **9.2.5.** Termination in the Event of Insolvency or Bankruptcy. Either party may terminate this Agreement if the other party is adjudged insolvent or bankrupt, or if proceedings are instituted by or against a party seeking relief, reorganization or arrangement under any laws relating to insolvency, or seeking any assignment for the benefit of creditors, or seeking the appointment of a receiver, liquidator or trustee of a party's property or assets or the liquidation, dissolution or winding up of a party's business.
- **9.3. Effect of Termination.** Upon the expiration or termination of this Agreement for any reason:
- **9.3.1.** PIR will complete the registration of all domain names processed by Registrar prior to the effective date of such expiration or termination, provided that Registrar's payments to PIR for Fees are current and timely.
- **9.3.2.** Registrar shall immediately transfer its sponsorship of Registered Names to another ICANN-accredited registrar in compliance with any procedures established or approved by ICANN.
- **9.3.3.** All Confidential Information of the Disclosing Party in the possession of the Receiving Party shall be immediately returned to the Disclosing Party.
- **9.3.4.** In the event of termination in accordance with the provisions of Subsections 9.1, 9.2.1, 9.2.2, 9.2.3 or 9.2.5, PIR reserves the right to immediately contact any and all Registered Name Holders to facilitate the orderly and stable transition of Registered Name Holders to other ICANN-accredited registrars.
- **9.3.5.** All fees owing to PIR shall become immediately due and payable.
- **9.4. Survival.** In the event of termination of this Agreement, the following shall survive: (i) Subsections 2.6, 3.6, 5.1, 5.2, 6.1, 6.3, 6.4, 8.1, 9.4, 10.2, 10.3, 10.4, 10.6, 10.7 and 10.8 and (ii) the Registered Name Holder's indemnification obligation under Subsection 3.4. Neither party shall be liable to the other for damages of any sort resulting solely from terminating this Agreement in accordance with its terms.

10. MISCELLANEOUS

10.1. Assignments.

- **10.1.1.** Assignment to Successor PIR. In the event the PIR'S Registry Agreement is terminated or expires without entry by PIR and ICANN of a subsequent registry agreement, PIR'S rights under this Agreement may be assigned to a company with a subsequent registry agreement covering the Registry TLD upon ICANN's giving Registrar written notice within sixty days of the termination or expiration, provided that the subsequent PIR assumes the duties of PIR under this Agreement.
- **10.1.2.** Assignment in Connection with Assignment of Agreement with ICANN. In the event that PIR'S Registry Agreement with ICANN for the Registry TLD is validly assigned, PIR'S rights under this Agreement shall be automatically assigned to the assignee of the Registry Agreement,

provided that the assignee assumes the duties of PIR under this Agreement. In the event that Registrar's accreditation agreement with ICANN for the Registry TLD is validly assigned, Registrar's rights under this Agreement shall be automatically assigned to the assignee of the accreditation agreement, provided that the subsequent registrar assumes the duties of Registrar under this Agreement.

- **10.1.3.** Other Assignments. Except as otherwise expressly provided in this Agreement, the provisions of this Agreement shall inure to the benefit of and be binding upon, the successors and permitted assigns of the parties. Neither party shall assign or transfer its rights or obligations under this Agreement without the prior written consent of the other party, which shall not be unreasonably withheld.
- **10.2. Notices.** Any notice or other communication required or permitted to be delivered to any party under this Agreement shall be in writing and shall be deemed properly delivered, given and received when delivered (by hand, by registered mail, by courier or express delivery service, by e-mail or by telecopier during business hours) to the address or telecopier number set forth beneath the name of such party below, unless such party has given a notice of a change of address in writing:

If to Registrar:		
with copy to:		

If to PIR:

Public Interest Registry 1775 Wiehle Avenue, Suite 102A Reston, VA 20190, U.S.A.

Telephone: +1 703-464-7005 Facsimile: +1 703-464-7006

Attention: President and Chief Executive Officer

Email: (As specified from time to time.)

with a copy to:

Public Interest Registry 1775 Wiehle Avenue, Suite 102A Reston, VA 20190, U.S.A.

Attention: General Counsel

10.3. Third-Party Beneficiaries. The parties expressly agree that ICANN is an intended third-party beneficiary of this Agreement. Otherwise, this Agreement shall not be construed to create any obligation by either party to any non-party to this Agreement, including any holder of a Registered Name. Registrar expressly acknowledges that, notwithstanding anything in this Agreement to the contrary, it is not an intended third-party beneficiary of the Registry Agreement.

- **10.4. Relationship of the Parties.** Nothing in this Agreement shall be construed as creating an employer-employee or agency relationship, a partnership or a joint venture between the parties.
- **10.5. Force Majeure.** Neither party shall be liable to the other for any loss or damage resulting from any cause beyond its reasonable control (a "Force Majeure Event") including, but not limited to, insurrection or civil disorder, war or military operations, national or local emergency, acts or omissions of government or other competent authority, compliance with any statutory obligation or executive order, industrial disputes of any kind (whether or not involving either party's employees), fire, lightning, explosion, flood, subsidence, weather of exceptional severity, and acts or omissions of persons for whom neither party is responsible. Upon occurrence of a Force

Majeure Event and to the extent such occurrence interferes with either party's performance of this Agreement, such party shall be excused from performance of its obligations (other than payment obligations) during the first six months of such interference, provided that such party uses best efforts to avoid or remove such causes of nonperformance as soon as possible.

- **10.6. Amendments.** No amendment, supplement, or modification of this Agreement or any provision hereof shall be binding unless executed in writing by both parties.
- 10.7. Waivers. No failure on the part of either party to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of either party in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise or waiver of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy. Neither party shall be deemed to have waived any claim arising out of this Agreement, or any power, right, privilege or remedy under this Agreement, unless the waiver of such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of such party; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given.
- **10.8. Entire Agreement.** This Agreement (including its exhibits, which form a part of it) constitutes the entire agreement between the parties concerning the subject matter of this Agreement and supersedes any prior agreements, representations, statements, negotiations, understandings, proposals or undertakings, oral or written, with respect to the subject matter expressly set forth herein.
- **10.9. Counterparts.** All executed copies of this Agreement are duplicate originals, equally admissible as evidence. This Agreement may be executed in counterparts, and such counterparts taken together shall be deemed the Agreement. A facsimile copy of a signature of a party hereto shall have the same effect and validity as an original signature.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date set forth in the first paragraph hereof.

PUBLIC INTEREST REGISTRY	[Registrar]
By:	By:
Name:	Name:
Title:	Title:

Exhibit A REGISTRATION FEES

1. Domain-Name Initial Registration Fee

PIR will charge a fee per annual increment of an initial registration of a Registered Name (the "Initial Registration Fee"). The Initial Registration Fee shall be paid in full by Registrar sponsoring the domain name at the time of registration. The current Initial Registration Fee as of the Effective Date is US\$6.00.

2. Domain-Name Renewal Fee

PIR will charge a fee per annual increment of a renewal of a Registered Name (the "Renewal Fee") in the Registry TLD. The Renewal Fee shall be paid in full by Registrar sponsoring the domain name at the time of renewal. The current Renewal Fee as of the Effective Date is US\$6.00.

3. Fees for Transfers of Sponsorship of Domain-Name Registrations

Where the sponsorship of a domain name is transferred from one ICANN-Accredited Registrar to another ICANN-Accredited Registrar, PIR will require the registrar receiving the sponsorship to request a renewal of one year for the name. In connection with that extension, PIR will charge a Renewal Fee for the requested extension as provided in item 2 above. The transfer shall result in an extension according to the renewal request, subject to a ten-year maximum on the future term of any domain-name registration. The Renewal Fee shall be paid in full at the time of the transfer by the ICANN-Accredited Registrar receiving sponsorship of the domain name.

4. Bulk Transfers. For a bulk transfer approved by ICANN under Part B of the Transfer Policy, Registrar shall pay PIR US \$0 (for transfer of 50,000 names or fewer) or US \$50,000 (for transfers of more than 50,000 names).

- **5. Restore Fee**. Registrar shall pay PIR a fee (the "Restore Fee") per Registered Name restored during the Redemption Grace Period; provided that PIR reserves the right, in its sole discretion, to lower such fee based on extenuating circumstances. The current Restore Fee as of the Effective Date is US\$40 per Registered Name Restored.
- **6. Excess Deletion Fee.** PIR may charge registrars a fee (the "Excess Deletion Fee") for each Registered Name deleted within the five day add grace period (as specified in Appendix 7, Section 3.1.1 of the Registry Agreement, "Grace Period Deletes") in the event Grace Period Deletes with respect to the relevant time period as determined by PIR are in excess of ninety percent (90%) of the total number of initial registrations made by the registrar over that time period. The time period shall be one calendar month. The Excess Deletion Fee shall be US\$.05 (five cents) per Grace Period Delete.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013		
1:32:01 PM		
Style Name: JD Color With Moves		
Original Filename:		
Original DMS:iw://IRI/IRI/51587/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51587/2		
Changes:		
Add	3	
Delete	3	
Move From	0	
Move To	0	
<u>Table Insert</u>	0	
Table Delete	0	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	6	

ORG Agreement Appendix 10 Service Level Agreement (SLA) (8 December 2006)

1. Definitions. Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to them in Section 6 of Appendix 7 to the Registry Agreement.

2. Credits.

2.1 C1 If availability of C1 class services does not meet C1 Service Levels in any given calendar month, Registry Operator will credit Registrar according to this calculation;

$$C = (amv/t)*sle$$

Where:

\boldsymbol{c}	=	number of Transactions to be credited to Registrar for the calendar month.
amv	=	average month's volume (previous four calendar months total Transaction volume/4 months).
<i>ŧ</i>	=	time period, number of minutes per month averaged over number of days in previous four calendar months (for example, if previous four months had 30, 31 , 30 , 31 days, these time period = $(30 + 31 + 30 + 31)/4 * 24$ hours * 60 minutes = $43,920$ minutes).
sle	=	service level exception. The number of Unavailable minutes minus the number of SLA acceptable Unavailable minutes.



ORG Agreement Appendix 10
Service Level Agreement (SLA)

Registry Operator and ICANN agree to engage in good faith negotiations to replace this

Appendix 10 with a Service Level Agreement equivalent to that of the Service Level

Agreement for new gTLD registry operators within 90 days after the final new gTLD Registry

Agreement has been approved by the ICANN Board of Directors.

Definitions

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

2. <u>Service Level Agreement Matrix</u>

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

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

3. **DNS**

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

- resolution RTT" 5 times higher than the corresponding SLR, will be considered unanswered. The possible results to a DNS test are: a number in milliseconds corresponding to the "DNS resolution RTT" or, undefined/unanswered.
- 3.8. Measuring DNS parameters. Every minute, every DNS probe will make an UDP or TCP "DNS test" to each of the public-DNS registered "IP addresses" of the name servers of the domain name being monitored. If a "DNS test" result is undefined/unanswered, the tested IP will be considered unavailable from that probe until it is time to make a new test.
- 3.9. Collating the results from DNS probes. The minimum number of active testing probes to consider a measurement valid is 20 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 3.10. <u>Distribution of UDP and TCP queries</u>. DNS probes will send UDP or TCP "DNS test" approximating the distribution of these queries.
- 3.11. Placement of DNS probes. Probes for measuring DNS parameters shall be placed as near as possible to the DNS resolvers on the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

4. **RDDS**

- 4.1. RDDS availability. Refers to the ability of all the RDDS services for the TLD, to respond to queries from an Internet user with appropriate data from the relevant Registry System. If 51% or more of the RDDS testing probes see any of the RDDS services as unavailable during a given time, the RDDS will be considered unavailable.
- 4.2. WHOIS query RTT. Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the WHOIS response. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.
- 4.3. Web-based-WHOIS query RTT. Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the HTTP response for only one HTTP request. If Registry Operator implements a multiple-step process to get to the information, only the last step shall be measured. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.
- 4.4. RDDS query RTT. Refers to the collective of "WHOIS query RTT" and "Web-based- WHOIS query RTT".
- 4.5. RDDS update time. Refers to the time measured from the reception of an EPP confirmation to a transform command on a domain name, host or contact, up until the servers of the RDDS services reflect the changes made.

- 4.6. RDDS test. Means one query sent to a particular "IP address" of one of the servers of one of the RDDS services. Queries shall be about existing objects in the Registry System and the responses must contain the corresponding information otherwise the query will be considered unanswered. Queries with an RTT 5 times higher than the corresponding SLR will be considered as unanswered. The possible results to an RDDS test are: a number in milliseconds corresponding to the RTT or undefined/unanswered.
- 4.7. Measuring RDDS parameters. Every 5 minutes, RDDS probes will select one IP address from all the public-DNS registered "IP addresses" of the servers for each RDDS service of the TLD being monitored and make an "RDDS test" to each one. If an "RDDS test" result is undefined/unanswered, the corresponding RDDS service will be considered as unavailable from that probe until it is time to make a new test.
- 4.8. Collating the results from RDDS probes. The minimum number of active testing probes to consider a measurement valid is 10 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 4.9. Placement of RDDS probes. Probes for measuring RDDS parameters shall be placed inside the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

<u>5.</u> <u>**EPP**</u>

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

includes the sending of a transform command plus the reception of the EPP response for only one EPP transform command. It does not include packets needed for the start or close of either the EPP or the TCP session. EPP transform commands are those described in section 2.9.3 of EPP RFC 5730. If the **RTT** is 5 times or more the corresponding SLR, the **RTT** will be considered undefined.

- 5.5. EPP command RTT. Refers to "EPP session-command RTT", "EPP query-command RTT" or "EPP transform-command RTT".
- 5.6. **EPP test**. Means one EPP command sent to a particular "**IP address**" for one of the EPP servers. Query and transform commands, with the exception of "create", shall be about existing objects in the Registry System. The response shall include appropriate data from the Registry System. The possible results to an EPP test are: a number in milliseconds corresponding to the "**EPP command RTT**" or undefined/unanswered.
- 5.7. Measuring EPP parameters. Every 5 minutes, EPP probes will select one "IP address" of the EPP servers of the TLD being monitored and make an "EPP test"; every time they should alternate between the 3 different types of commands and between the commands inside each category. If an "EPP test" result is undefined/unanswered, the EPP service will be considered as unavailable from that probe until it is time to make a new test.
- 5.8. Collating the results from EPP probes. The minimum number of active testing probes to consider a measurement valid is 5 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.
- 5.9. Placement of EPP probes. Probes for measuring EPP parameters shall be placed inside or close to Registrars points of access to the Internet across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

6. Emergency Thresholds

The following matrix presents the emergency thresholds that, if reached by any of the services mentioned above for the TLD, may (at ICANN's discretion) cause the emergency transition of the TLD as specified in Section 3.6 of this Agreement.

Critical Function	Emergency Threshold
DNS Service (all servers)	4-hour total downtime / week
DNSSEC proper resolution	4-hour total downtime / week
<u>EPP</u>	24-hour total downtime / week
RDDS	24-hour total downtime / week
(WHOIS/Web-based	
WHOIS)	
Data Escrow	Breach of the Registry Agreement caused by data escrow.

7. Emergency Escalation

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

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

7.1. Emergency Escalation initiated by ICANN

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

7.2. Emergency Escalation initiated by Registrars

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

7.3. Notifications of Outages and Maintenance

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

If Registry Operator declares an outage, as per their contractual obligations with ICANN, on

services under a service level agreement and performance requirements, it will notify the ICANN emergency operations department. During that declared outage, ICANN's emergency operations department will note and suspend emergency escalation services for the monitored services involved.

8. Covenants of Performance Measurement

- 8.1. No interference. Registry Operator shall not interfere with measurement Probes, including any form of preferential treatment of the requests for the monitored services.

 Registry Operator shall respond to the measurement tests described in this Appendix as it would do with any other request from Internet users (for DNS and RDDS) or registrars (for EPP).
- 8.2. ICANN testing registrar. Registry Operator agrees that ICANN will have a testing registrar used for purposes of measuring the SLRs described above. Registry Operator agrees to not provide any differentiated treatment for the testing registrar other than no billing of the transactions. ICANN shall not use the registrar for registering domain names (or other registry objects) for itself or others, except for the purposes of verifying contractual compliance with the conditions described in this Agreement.
- 8.3. Publishing of SLA measurements. Registry Operator agrees that ICANN may publish on its website for each SLR whether Registry Operator met the applicable performance measurement as set forth in this Appendix 10 ("Threshold Measurements"). Additionally, ICANN agrees that it shall use commercially reasonable efforts to provide Registry Operator with a monthly report within twenty (20) calendar days following the end of each calendar month, describing in reasonable detail each of the performance measurements and testing performed by ICANN during such month with regard to the TLD and the SLRs described in this Appendix 10 (such reports and the data set forth therein, the "Measurements Data"). Except for Threshold Measurements, ICANN shall not publish Registry Operator's Measurements Data until Registry Operator provides written consent to ICANN to publish the Measurements Data, which such consent shall be binding on Registry Operator. In the event that Registry Operator disputes the Measurements Data, ICANN shall publish the Registry Operator's response to such Measurements Data alongside the Measurements Data itself.

Example:

Registry Operator records 15 minutes of service level exception beyond the time periods-contemplated by the SLA. The current amv is 30,000 total names registered and time period was-43,920 minutes. As such, Registry Operator will credit Registrar for 10.25 Transactions at the then Current Pricing Level.

2.2 C2 — If availability of C2 class services does not meet C2 Service Levels in any given calendar month, Registry Operator will credit Registrar according to this calculation;

Where:

$\boldsymbol{\epsilon}$	=	number of Transactions to be credited to Registrar for the calendar month.
amv	=	average month's volume (previous four calendar months total Transaction volume/4 months).
ŧ	=	time period, number of minutes per month averaged over number of days in previous four calendar months (see example in Subsection 2.1).
sle	=	service level exception. The number of Unavailable minutes minus the number of SLA acceptable Unavailable minutes.
60%	=	priority adjustment.

Example:

Registry Operator records 15 minutes of service level exception beyond the time periods contemplated by the SLA. The current amv is 30,000 total names registered and time period was 43,920 minutes. As such, Registry Operator will credit Registrar for 6.15 Transactions at the then Current Pricing Level.

2.3 C3 — If availability of C3 services does not meet C3 Service Levels in any given calendar month, Registry Operator will credit Registrar according to this calculation;

$$C = (amv/t)*sle * 30%$$

Where:

<i>C</i>	=	number of Transactions to be credited to Registrar for the calendar month.
amv	=	average month's volume (previous four calendar months total Transaction volume/4 months).
#	=	time period, number of minutes per month averaged over number of days in previous four calendar months (see example in Subsection 2.1).
sle	=	service level exception. The number of Unavailable minutes minus the number of SLA acceptable Unavailable minutes.
30%	=	priority adjustment.

Example:

Registry Operator records 15 minutes of service level exception beyond the time periods contemplated by the SLA. The current amv is 30,000 total names registered and the time period was 43,920 minutes. As such, Registry Operator will credit Registrar for 3.07 Transactions at the then Current Pricing Level.

2.4 Degraded Performance If the performance of the transactive systems (OpenXRS API, Whois) does not meet the performance expectations outlined in Service Levels over the calendar month in question, Registry Operator will credit Registrar according to this calculation;

$$C = (amv/t)*sle * 7.5%$$

Where:

<i>C</i>	=	number of Transactions to be credited to Registrar for the calendar month.
amv	=	average month's volume (previous four calendar months total Transaction volume/4 months).
<i>ŧ</i>	=	time period, number of minutes per month averaged over number of days in previous four calendar months (see example in Subsection 2.1).
sle	=	service level exception. The number of Degraded Performance minutes.
7.5%	=	priority adjustment.

Example:

Registry Operator records 15 minutes of service level exception beyond the time periods contemplated by the SLA. The current amv is 30,000 total names registered and time period was 43,920 minutes. As such, Registry Operator will credit Registrar for 0.77 Transactions at the then Current Pricing Level.

2.5 Receipt of Credits — In order for Registrars to claim credits, the following procedure must be followed:

2.5.1 Issue a Request for SLA Credits.

The claiming Registrar must make a request for credits to Registry Operator within 7 days of the SLA violation claiming that it experienced downtime or degraded performance in excess of what is outlined in Appendix 7.

2.5.2 Provide documentation to indicate SLA violation.

A Registrar must provide documentation in the form of either:

- 2.5.2.1 Registrar initiated notification(s) to the Registry Operator of a down time that exceeded SLA limits, 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 closing ticket includes this); or
- 2.5.2.2 Notification from the Registry Operator (with trouble ticket number attached) of down-time or degraded performance. The closing ticket(s) should be included as well in order to-determine the total downtime (unless the closing ticket includes this).

2.5.2.3 Confirmation of SLA violation:

Upon the request of the Registry Operator, the claiming Registrar must provide reasonably available server and/or application logs demonstrating a violation of the SLA limits. The Registrar is expected to demonstrate response times from point of entry into the registry server complex to point of exit from the registry server complex. This will exclude any time taken by establishing a TCP connection, the SSL handshake and EPP/RRP logon to the registry.

2.5.3 Justification of Volume.

In order to calculate credits, the Registrar should include volume figures for the past four (4) calendar months, and a certification that these numbers accurately reflect the LEAST registration activity that would be covered during the affected SLA outage.

2.5.4 Receipt of Credit.

When the above steps have been completed to the Registry Operator's satisfaction, the Registry Operator shall provide notification of the number of credits that will be entered in the Registrar's account balance and that can be used immediately toward registrations in the Registry. Under no circumstances shall credits be applied when the availability problems are caused by network providers and/or the systems of individual Registrars.

3. Responsibilities of the Parties.

- 3.1 The affected ICANN-Accredited Registrar shall assist Registry Operator by reporting each occurrence of alleged Service Unavailability to Registry Operator customer service help desk in the manner required by Registry Operator (i.e., e-mail, fax or telephone) in order for an occurrence to be treated as Service Unavailability for purposes of this SLA. Registry Operator 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 classed as Unavailability.
- 3.2 Registry Operator will perform monitoring from internally located systems as a means to verify that the conditions of the SLA are being met.
- 3.3 The SLA will be reconciled on a quarterly basis.
- 3.4 The Registrar will have the option to choose which of the credit calculations described in Section 2 of the SLA will apply where service level credit overlaps occur. There can be several types of credits over the same calendar month, but the Registrar can only claim one type of refund for each event.
- 3.5 Registry Operator will not attempt to discern what discount levels were in effect at the specific time of a service level exception, but rather use the discount level in effect at the time the credits issue. All service level credits will be paid out using the appropriate discounts and rate levels reflected by the then current rate schedule.

- 3.6 The Registrar may, under reasonable terms and conditions, audit the reconciliation records for the purposes of verifying service level performance. The frequency of these audits will be no more than once every six month period during the term of the Registry Registrar Agreement between Registry Operator and the Registrar.
- 3.7 Incident trouble tickets must be opened within a commercially reasonable period of time.
- 3.8 In the event that Service Unavailability affects all Registrars, the Registry Operator shall use-commercially reasonable efforts to open a blanket trouble ticket and immediately notifying all Registrars of the trouble ticket number and details.
- 3.9 Both Registrar and the Registry Operator agree to use reasonable commercial good faith efforts to establish the cause of any alleged Service Unavailability. If it is mutually determined to be a Registry Operator problem, the issue will become part of the Unplanned Outage Time.
- 3.10 Registrars must inform the Registry Operator in writing or by opening a ticket any time their estimated volume of transactions (excluding check domain commands), will exceed their previous calendar month's volume by more than 25%. In the event that a Registrar fails to inform Registry Operator of a forecasted increase of volume of transactions of 25% or more and the Registrar's volume increases 25% or more over the previous month, and should the total volume of transactions added by the Registry Operator for all Registrars for that month exceed the Registry Operator's actual volume of the previous month's transactions by more than 20%, then the Registrar(s) failing to give such notice will not be eligible for any SLA Credits in that Monthly Timeframe. Registrars shall provide their forecasts at least 30 days prior to the first day of the next calendar month. In addition, the Registry Operator agrees to provide monthly transaction summary reports starting no later than 60 days after the Commencement of Service Date.
- 3.11 The Registry Operator will notify Registrar of Planned Outages outside the Planned Outage Period at least 7 days in advance of such Planned Outage. In addition, Registry Operator will use reasonable commercial good faith efforts to maintain an accurate 30 day advance schedule of possible upcoming Planned Outages.
- 3.12 The Registry Operator will update the Whois Service on a near real-time basis. During normal operation, all registration and information updates sent from a Registrar to the Registry are stored in the primary database set (database A). The information in database A is replicated to a backup-database set at regular intervals, normally within five (5) minutes. The Whois Service uses replicated databases as its source of information. The time lag in the Whois information update is determined by the database replication interval. The Registry Operator will notify Registrars in advance when changes to the Whois Service update schedule occur.
- 3.13 The Registry Operator will initiate the addition, deletion or other modification of DNS zone information to its DNS service within 5 minutes after a Transaction. The Registry Operator will notify Registrar in advance when changes to the schedule occur. The Registry Operator will notify Registrars regarding any scheduled maintenance and unavailability of the TLD nameservers.

- 3.14 The Registry Operator will use commercially reasonable efforts to restore the critical systems of the System within 24 hours in the event of a force majeure and restore full system functionality within 48 hours. Outages due to a force majeure will not be considered Service Unavailability.
- 3.15 The Registry Operator will provide Service Availability percentages during each Monthly-Timeframe as listed in Section 6(A)4.1 Service Level Matrix of Appendix 7.

4. Miscellaneous.

- 4.1 This Appendix is not intended to replace any term or condition in the Registry-Registrar-Agreement.
- 4.2 Dispute Resolution will be handled pursuant to the arbitration provisions of the Registry Registrar Agreement.

Summary Report: Litera Change-Pro ML IC 6.5.0.313 Document Comparison done on 6/3/2013		
2:05:19 PM		
Style Name: JD Color With Moves		
Original Filename:		
Original DMS:iw://IRI/IRI/51064/1		
Modified Filename:		
Modified DMS: iw://IRI/IRI/51064/4		
Changes:		
Add	1	
Delete	58	
Move From	0	
Move To	0	
Table Insert	1	
Table Delete	4	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	64	