# 2023 GLOBAL AMENDMENT TO REGISTRAR ACCREDITATION AGREEMENTS

This 2023 Global Amendment to Registrar Accreditation Agreements (this “**2023 Amendment**”), effective as of 7 August 2023, amends the registrar accreditation agreements listed on Schedule A (the “**Applicable Registrar Agreements**”) entered into between Internet Corporation for Assigned Names and Numbers, a California nonprofit public benefit corporation (“**ICANN**”), and the Applicable Registrars party to such Applicable Registrar Agreements. This 2023 Amendment is made and is effective pursuant to Section 7.4 of the Applicable Registrar Agreements. Capitalized terms used and not defined in this 2023 Amendment will have the respective meanings given thereto in the Applicable Registrar Agreements.

WHEREAS, the Applicable Registrar Agreements may be amended pursuant to the requirements of and process set forth in Section 7.4 of the Applicable Registrar Agreements;

WHEREAS, ICANN and the Working Group have consulted in good faith regarding the form and substance of this 2023 Amendment;

WHEREAS, ICANN has publicly posted this 2023 Amendment on its website for no less than 30 calendar days and has provided notice of this 2023 Amendment to the Applicable Registrars in accordance with Section 7.6 of the Applicable Registrar Agreements;

WHEREAS, ICANN and the Working Group have considered the public comments submitted on this 2023 Amendment during the Posting Period;

WHEREAS, on 30 April 2023, this 2023 Amendment was approved by the ICANN Board of Directors;

WHEREAS, on 20 March 2023, this 2023 Amendment received Registrar Approval;

WHEREAS, on 8 June 2023, ICANN provided the Applicable Registrars with notice that this 2023 Amendment was an Approved Amendment (the “2023 Amendment Notice Date”); and

WHEREAS, pursuant to Section 7.4.3 of the Applicable Registrar Agreements, this 2023 Amendment will, without any further action by ICANN or the Applicable Registrars, be effective and deemed an amendment to the Applicable Registrar Agreements on 7 August 2023 (the “2023 Amendment Effective Date”), the date that is 60 calendar days from the 2023 Amendment Notice Date.

NOW, THEREFORE, in consideration of the above recitals acknowledged herein by reference, this 2023 Amendment will be deemed an effective amendment to each of the Applicable Registrar Agreements as of the 2023 Amendment Effective Date.

1. Section 1.15 is hereby amended and restated in its entirety as follows:

1.15“RDDS Accuracy Program Specification” means the RDDS Accuracy Program Specification attached hereto, as updated from time to time in accordance with this Agreement.

1. Section 1.16 is hereby amended and restated in its entirety as follows:

1.16“RDDS Specification” means the Registration Data Directory Services Specification attached hereto, as updated from time to time in accordance with this Agreement.

1. Section 1.17 is hereby amended and restated in its entirety as follows:

1.17“Registered Name” refers to a domain name within the domain of a gTLD, whether consisting of two (2) or more (e.g., john.smith.name) levels, about which a gTLD Registry Operator (or an Affiliate or subcontractor thereof 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 zone file (e.g., a registered but inactive name).

1. Section 1.18 is hereby amended and restated in its entirety as follows:

1.18“Registered Name Holder” means the holder of a Registered Name.

1. Section 1.19 is hereby amended and restated in its entirety as follows:

1.19The word “registrar,” when appearing without an initial capital letter, refers to a person or entity that contracts with Registered Name Holders and with a Registry Operator and collects registration data about the Registered Name Holders and submits registration information for entry in the Registry Database.

1. Section 1.20 is hereby amended and restated in its entirety as follows:

1.20“Registrar Approval” means the receipt of either of the following approvals:

1.20.1 The affirmative approval of Applicable Registrars accounting for 90% of the Total Registered Names Under Management by the Applicable Registrars; provided that, for purposes of calculating the Total Registered Names Under Management by Applicable Registrars, the Total Registered Names Under Management by each Applicable Registrar Family shall not exceed the Total Registered Names Under Management of the Applicable Registrar Family that is the fifth largest Applicable Registrar Family (measured by number of Registered Names Under Management), both for purposes of the numerator and the denominator; or

1.20.2 The affirmative approval of 50% plus one of the Applicable Registrars that participate in the process to approve or disapprove (i.e. vote for or against, but not abstain or otherwise fail to vote) a proposed amendment under Section 6, and the affirmative approval of Applicable Registrars accounting for 66.67% of the Total Registered Names Under Management by all Applicable Registrars; provided that, for purposes of calculating the Total Registered Names Under Management by Applicable Registrars, the Total Registered Names Under Management by each Applicable Registrar Family shall not exceed the total Registered Names Under Management of the Applicable Registrar Family that is the fifth largest Applicable Registrar Family (measured by number of Registered Names Under Management), both for purposes of the numerator and the denominator. An example of these calculations is set forth in Appendix 1 attached hereto.

1. Section 1.21 is hereby amended and restated in its entirety as follows:

1.21“Registrar Services” means the services subject to this Agreement provided by a registrar in connection with a gTLD, and includes contracting with Registered Name Holders, collecting registration data about the Registered Name Holders, and submitting registration information for entry in the Registry Database.

1. Section 1.22 is hereby amended and restated in its entirety as follows:

1.22“Registry Data” means all Registry Database data maintained in electronic form, and shall include gTLD Zone-File Data, all data used to provide Registry Services and submitted by registrars in electronic form, and all other data used to provide Registry Services concerning particular domain name registrations or nameservers maintained in electronic form in a Registry Database.

1. Section 1.23 is hereby amended and restated in its entirety as follows:

1.23“Registry Database” means a database comprised of data about one or more DNS domain names within the domain of a registry that is used to generate either DNS resource records that are published authoritatively or responses to domain-name availability lookup requests or RDDS queries, for some or all of those names.

1. Section 1.24 is hereby amended and restated in its entirety as follows:

1.24A “Registry Operator” is the person or entity then responsible, in accordance with an agreement between ICANN (or its assignee) and that person or entity (those persons or entities) or, if that agreement is terminated or expires, in accordance with an agreement between the US Government and that person or entity (those persons or entities), for providing Registry Services for a specific gTLD.

1. Section 1.25 is hereby amended and restated in its entirety as follows:

1.25“Registry Services,” with respect to a particular gTLD, shall have the meaning defined in the agreement between ICANN and the Registry Operator for that gTLD.

1. Section 1.26 is hereby amended and restated in its entirety as follows:

1.26A “Reseller” is a person or entity that participates in Registrar’s distribution channel for domain name registrations (a) pursuant to an agreement, arrangement or understanding with Registrar or (b) with Registrar’s actual knowledge, provides some or all Registrar Services, including collecting registration data about Registered Name Holders, submitting that data to Registrar, or facilitating the entry of the registration agreement between Registrar and the Registered Name Holder.

1. Section 1.27 is hereby amended and restated in its entirety as follows:

1.27“Restricted Amendment” means (i) an amendment of the Consensus Policies and Temporary Policies Specification or (ii) the term of this Agreement as specified in Section 5.1, as such term may be extended pursuant to Section 5.2.

1. Section 1.28 is hereby amended and restated in its entirety as follows:

1.28A Registered Name is “sponsored” by the registrar that placed the record associated with that registration into the registry. Sponsorship of a registration may be changed at the express direction of the Registered Name Holder or, in the event a registrar loses Accreditation, in accordance with then-current ICANN Specifications and Policies.

1. Section 1.29 is hereby amended and restated in its entirety as follows:

1.29“Specifications and/or Policies” include Consensus Policies, Specifications (such as the RDDS Accuracy Program Specification) referenced in this Agreement, and any amendments, policies, procedures, or programs specifically contemplated by this Agreement or authorized by ICANN’s Bylaws.

1. Section 1.30 is hereby amended and restated in its entirety as follows:

1.30“Term of this Agreement” begins on the Effective Date and continues to the earlier of (a) the Expiration Date, or (b) termination of this Agreement.

1. Section 1.31 is hereby amended and restated in its entirety as follows:

1.31“Total Registered Names Under Management” means the total number of Registered Names sponsored by all Applicable Registrars as reflected in the latest monthly reports submitted to ICANN by Registrars.

1. Section 1.32 is hereby amended and restated in its entirety as follows:

1.32“Whois Accuracy Program Specification” refers to the RDDS Accuracy Program Specification and is included in this Section 1 for purposes of external documents linking to this Agreement using this definition.

1. A new Section 1.33 is hereby added as follows:

1.33“Working Group” means representatives of the Applicable Registrars and other members of the community that the Registrar Stakeholder Group appoints, from time to time, to serve as a working group to consult on amendments to the Applicable Registrar Agreements (excluding bilateral amendments pursuant to Section 6.9).

1. Section 3.2.1.4 is hereby amended and restated in its entirety as follows:

3.2.1.4 Unless automatically generated by the registry system, the identity of Registrar;

1. Section 3.3.1 is hereby amended and restated in its entirety as follows:

3.3.1 At its expense, Registrar shall provide an RDAP Directory Service (as defined in the RDDS Specification) (accessible via both IPv4 and IPv6) providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar in any gTLD. Until otherwise specified by a Consensus Policy, such data shall consist of the following elements as contained in Registrar's database:

1. Section 3.3.4 is hereby amended and restated in its entirety as follows:

3.3.4 Registrar shall abide by any Consensus Policy that requires registrars to cooperatively implement a distributed capability that provides query-based RDDS search functionality across all registrars. If the RDDS service implemented by registrars does not in a reasonable time provide reasonably robust, reliable, and convenient access to accurate and up-to-date data, Registrar shall abide by any Consensus Policy requiring Registrar, if reasonably determined by ICANN to be necessary (considering such possibilities as remedial action by specific registrars), to supply data from Registrar's database to facilitate the development of a centralized RDDS database for the purpose of providing comprehensive Registrar RDDS search capability.

1. Section 3.3.8 is hereby amended and restated in its entirety as follows:

3.3.8 Registrar shall meet or exceed the requirements set forth in the RDDS Specification.

1. A new section 3.3.9 is hereby added as follows:

3.3.9 Until the WHOIS Services Sunset Date (as defined in the RDDS Specification), Registrar shall, at its expense, provide web-based WHOIS and, with respect to any gTLD operating a “thin” registry, a port 43 WHOIS service (each accessible via both IPv4 and IPv6) providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar in any gTLD. Until otherwise specified by a Consensus Policy or a Temporary Policy, such data shall consist of at least the elements described in Subsection 3.3.1.1 through 3.3.1.8 as contained in Registrar's database and in the format set forth in Subsection 1.4 of the RDDS Specification.

1. Section 3.4.3 is hereby amended and restated in its entirety as follows:

3.4.3During the Term of this Agreement and for two (2) years thereafter, Registrar shall make the data, information and records specified in this Section 3.4 available for inspection and copying by ICANN upon reasonable notice. In addition, upon reasonable notice and request from ICANN, Registrar shall deliver copies of such data, information and records to ICANN in respect to limited transactions or circumstances that may be the subject of a compliance-related inquiry; provided, however, that such obligation shall not apply to requests for copies of Registrar’s entire database or transaction history. Such copies are to be provided at Registrar’s expense. In responding to ICANN’s request for delivery of electronic data, information and records, Registrar may submit such information in a format reasonably convenient to Registrar and acceptable to ICANN so as to minimize disruption to Registrar’s business. In the event Registrar believes that the provision of any such data, information or records to ICANN would violate applicable law or any legal proceedings, ICANN and Registrar agree to discuss in good faith whether appropriate limitations, protections, or alternative solutions can be identified to allow the production of such data, information or records in complete or redacted form, as appropriate. ICANN shall not disclose the content of such data, information or records except as expressly required by applicable law, any legal proceeding or Specification or Policy.

1. Section 3.5 is hereby amended and restated in its entirety as follows:

3.5 Rights in Data. Registrar disclaims all rights to exclusive ownership or use of the data elements listed in Subsections 3.2.1.1 through 3.2.1.3 for all Registered Names submitted by Registrar to the Registry Database for, or sponsored by Registrar in, each gTLD for which it is Accredited. Registrar does not disclaim rights in the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and Subsections 3.3.1.3 through 3.3.1.8 concerning active Registered Names sponsored by it in each gTLD for which it is Accredited, and agrees to grant non-exclusive, irrevocable, royalty-free licenses to make use of and disclose the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 for the purpose of providing a service or services (such as a RDDS service under Subsection 3.3.4) providing interactive, query-based public access. Upon a change in sponsorship from Registrar of any Registered Name in each gTLD for which it is Accredited, Registrar acknowledges that the registrar gaining sponsorship shall have the rights of an owner to the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 concerning that Registered Name, with Registrar also retaining the rights of an owner in that data. Nothing in this Subsection prohibits Registrar from (1) restricting bulk public access to data elements in a manner consistent with this Agreement and any Specifications or Policies or (2) transferring rights it claims in data elements subject to the provisions of this Subsection 3.5.

1. Section 3.7.5.7 is hereby amended and restated in its entirety as follows:

3.7.5.7In the event that a domain which is the subject of a UDRP dispute is deleted or expires during the course of the dispute, the complainant in the UDRP dispute will have the option to renew or restore the name under the same commercial terms as the registrant. If the complainant renews or restores the name, the name will be placed in Registrar HOLD and Registrar LOCK status, the RDDS contact information for the registrant will be removed, and the RDDS entry will indicate that the name is subject to dispute. If the complaint is terminated, or the UDRP dispute finds against the complainant, the name will be deleted within 45 days. The registrant retains the right under the existing redemption grace period provisions to recover the name at any time during the Redemption Grace Period, and retains the right to renew the name before it is deleted.

1. Section 3.7.6 is hereby amended and restated in its entirety as follows:

3.7.6 Registrar shall not insert or renew any Registered Name in any gTLD registry in a manner contrary to (i) any Consensus Policy stating a list or specification of excluded Registered Names that is in effect at the time of insertion or renewal, or (ii) any list of names to be reserved from registration as required by the specific Registry Operator for which Registrar is providing Registrar Services.

1. Section 3.7.7 is hereby amended and restated in its entirety as follows:

3.7.7Registrar shall require all Registered Name Holders to enter into an electronic or paper registration agreement with Registrar including at least the provisions set forth in Subsections 3.7.7.1 through 3.7.7.12, and which agreement shall otherwise set forth the terms and conditions applicable to the registration of a domain name sponsored by Registrar. The Registered Name Holder with whom Registrar enters into a registration agreement must be a person or legal entity other than Registrar, provided that Registrar may be the Registered Name Holder for domains registered for the purpose of conducting its Registrar Services, in which case Registrar shall submit to the provisions set forth in Subsections 3.7.7.1 through 3.7.7.12 and shall be responsible to ICANN for compliance with all obligations of the Registered Name Holder as set forth in this Agreement and Specifications and Policies. Registrar shall use commercially reasonable efforts to enforce compliance with the provisions of the registration agreement between Registrar and any Registered Name Holder that relate to implementing the requirements of Subsections 3.7.7.1 through 3.7.7.12 or any Consensus Policy.

1. Section 3.7.8 is hereby amended and restated in its entirety as follows:

**3.7.8** Registrar shall comply with the obligations specified in the RDDS Accuracy Program Specification. In addition, notwithstanding anything in the RDDS Accuracy Program Specification to the contrary, Registrar shall abide by any Consensus Policy requiring reasonable and commercially practicable (a) verification, at the time of registration, of contact information associated with a Registered Name sponsored by Registrar or (b) periodic re-verification of such information. Registrar shall, upon notification by any person of an inaccuracy in the contact information associated with a Registered Name sponsored by Registrar, take reasonable steps to investigate that claimed inaccuracy. In the event Registrar learns of inaccurate contact information associated with a Registered Name it sponsors, it shall take reasonable steps to correct that inaccuracy.

1. Section 3.8 is hereby amended and restated in its entirety as follows:

3.8Domain-Name Dispute Resolution. During the Term of this Agreement, Registrar shall have in place a policy and procedures for resolution of disputes concerning Registered Names. Until ICANN adopts an alternative Consensus Policy or other Specification or Policy with respect to the resolution of disputes concerning Registered Names, Registrar shall comply with the Uniform Domain Name Dispute Resolution Policy (“UDRP”) identified on ICANN's website (https://www.icann.org/consensus-policies), as may be modified from time to time. Registrar shall also comply with the Uniform Rapid Suspension (“URS”) procedure or its replacement, as well as with any other applicable dispute resolution procedure as required by a Registry Operator for which Registrar is providing Registrar Services.

1. Section 3.12.2 is hereby amended and restated in its entirety as follows:

3.12.2Any registration agreement used by reseller shall include all registration agreement provisions and notices required by the ICANN Registrar Accreditation Agreement and any ICANN Consensus Policies, and shall identify the sponsoring registrar or provide a means for identifying the sponsoring registrar, such as a link to the ICANN Registration data lookup tool (https://lookup.icann.org).

1. Section 3.16 is hereby amended and restated in its entirety as follows:

3.16Link to Registrant Educational Information. ICANN has published an educational webpage summarizing the terms of the Registrar Accreditation Agreement and related Consensus Policies(as of the date of this Agreement, located at: [https://](https://www.icann.org/resources/pages/benefits-2013-09-16-en)[www.icann.org/resources/pages/](https://www.icann.org/resources/pages/benefits-2013-09-16-en)[benefits-2013-09-16-en](https://www.icann.org/resources/pages/benefits-2013-09-16-en)). Registrar shall provide a link to such webpage on any website it may operate for domain name registration or renewal clearly displayed to its Registered Name Holders at least as clearly as its links to policies or notifications required to be displayed under ICANN Consensus Policies. ICANN may, in consultation with registrars, update the content and/or URL for this website.

1. Section 3.18.2 is hereby amended and restated in its entirety as follows:

3.18.2Registrar shall establish and maintain a dedicated abuse point of contact, including a dedicated email address and telephone number that is monitored 24 hours a day, seven days a week, to receive reports of Illegal Activity by law enforcement, consumer protection, quasi-governmental or other similar authorities designated from time to time by the national or territorial government of the jurisdiction in which Registrar is established or maintains a physical office. Well-founded reports of Illegal Activity submitted to these contacts must be reviewed within 24 hours by an individual who is empowered by Registrar to take necessary and appropriate actions in response to the report. In responding to any such reports, Registrar will not be required to take any action in contravention of applicable law.

1. Section 4.1 is hereby amended and restated in its entirety as follows:

4.1Compliance with Consensus Policies and Temporary Policies. During the Term of this Agreement, Registrar shall comply with and implement all Consensus Policies and Temporary Policies in existence as of the Effective Date found at https://www.icann.org/consensus-policies, and as may in the future be developed and adopted in accordance with the ICANN Bylaws, provided such future Consensus Policies and Temporary Policies are adopted in accordance with the procedures and relate to those topics and subject to those limitations set forth in the Consensus Policies and Temporary Policies Specification to this Agreement.

1. Section 5.5.2.1.3 is hereby amended and restated in its entirety as follows:

5.5.2.1.3with actual knowledge (or through gross negligence) permitted Illegal Activity in the registration or use of domain names or in the provision to Registrar by any Registered Name Holder of inaccurate registration data; or

1. Section 5.5.2.1.4 is hereby amended and restated in its entirety as follows:

5.5.2.1.4failed to comply with the terms of an order issued by a court of competent jurisdiction relating to the use of domain names sponsored by Registrar;

1. Section 5.6 is hereby amended and restated in its entirety as follows:

5.6Termination Procedures. This Agreement may be terminated in circumstances described in Subsections 5.5.1 through 5.5.6 above only upon fifteen (15) days written notice to Registrar (in the case of Subsection 5.5.4 occurring after Registrar's failure to cure), with Registrar being given an opportunity during that time to initiate arbitration under Subsection 5.8 to determine the appropriateness of termination under this Agreement. This Agreement may be terminated immediately upon notice to Registrar in circumstances described in Subsections 5.5.7 and 5.5.8.

1. Section 5.7.4 is hereby amended and restated in its entirety as follows:

5.7.4 If Registrar acts in a manner that ICANN reasonably determines endangers the stability or operational integrity of the Internet and upon notice does not immediately cure, ICANN may suspend this Agreement for five (5) working days pending ICANN's application for more extended specific performance or injunctive relief under Subsection 7.1. Suspension of the Agreement under this Subsection may, at ICANN’s sole discretion, preclude Registrar from (i) providing Registration Services for gTLDs delegated by ICANN on or after the date of delivery of such notice to Registrar and (ii) creating or sponsoring new Registered Names or initiating inbound transfers of Registered Names for any gTLDs. Registrar must also post the statement specified in Subsection 5.7.3.

1. Section 5.8 is hereby amended and restated in its entirety as follows:

5.8Resolution of Disputes Under this Agreement. Subject to the limitations set forth in Section 6 and Section 7.4, disputes arising under or in connection with this Agreement, including (1) disputes arising from ICANN's failure to renew Registrar's Accreditation and (2) requests for specific performance, shall be resolved in a court of competent jurisdiction or, at the election of either party, by an arbitration conducted as provided in this Subsection 5.8 pursuant to the International Arbitration Rules of the American Arbitration Association (“AAA”). The arbitration shall be conducted in English and shall occur in Los Angeles County, California, USA. Except as set forth in Section 7.4.5, there shall be one (1) arbitrator agreed by the parties from a list of AAA arbitrators, or if parties do not agree on an arbitrator within fifteen (15) days of the AAA request that the parties designate an arbitrator, the AAA shall choose and appoint an arbitrator, paying due regard to the arbitrator’s knowledge of the DNS. The parties shall bear the costs of the arbitration in equal shares, subject to the right of the arbitrator to reallocate the costs in their award as provided in the AAA rules. The parties shall bear their own attorneys' fees in connection with the arbitration, and the arbitrator may not reallocate the attorneys' fees in conjunction with their award. The arbitrator shall render its decision within ninety (90) days of the conclusion of the arbitration hearing. In the event Registrar initiates arbitration to contest the appropriateness of termination of this Agreement by ICANN pursuant to Section 5.5 or suspension of Registrar by ICANN pursuant to Section 5.7.1, Registrar may at the same time request that the arbitration panel stay the termination or suspension until the arbitration decision is rendered. The arbitration panel shall order a stay: (i) upon showing by Registrar that continued operations would not be harmful to consumers or the public interest, or (ii) upon appointment by the arbitration panel of a qualified third party to manage the operations of Registrar until the arbitration decision is rendered. In furtherance of sub-clause (ii) above, the arbitration panel is hereby granted all necessary authority to appoint a qualified third-party to manage the operations of Registrar upon Registrar’s request and if the panel deems it appropriate. In selecting the third-party manager, the arbitration panel shall take into consideration, but shall not be bound by, any expressed preferences of Registrar. Any order granting a request for a stay must be issued within fourteen (14) days after the filing of the arbitration. If an order granting a request for a stay is not issued within fourteen (14) days, ICANN has the right to proceed with the termination of this Agreement pursuant to Section 5.5 or suspension of Registrar pursuant to Section 5.7.1. In the event Registrar initiates arbitration to contest an Independent Review Panel's decision under Subsection 4.3.3 sustaining the ICANN Board of Director's determination that a specification or policy is supported by consensus, Registrar may at the same time request that the arbitration panel stay the requirement that it comply with the policy until the arbitration decision is rendered, and that request shall have the effect of staying the requirement until the decision or until the arbitration panel has granted an ICANN request for lifting of the stay. In all litigation involving ICANN concerning this Agreement (whether in a case where arbitration has not been elected or to enforce an arbitration award), jurisdiction and exclusive venue for such litigation shall be in a court located in Los Angeles, California, USA; however, the parties shall also have the right to enforce a judgment of such a court in any court of competent jurisdiction. For the purpose of aiding the arbitration and/or preserving the rights of the parties during the pendency of an arbitration, the parties shall have the right to seek temporary or preliminary injunctive relief from the arbitration panel or in a court located in Los Angeles, California, USA, which shall not be a waiver of this arbitration agreement.

1. Section 7.3.2 is hereby amended and restated in its entirety as follows:

7.3.2 To the extent that an entity acquires a Controlling interest in Registrar’s stock, assets or business, Registrar shall provide ICANN notice within seven (7) days of such an acquisition. Such notification shall include a statement that affirms that Registrar meets the Specification or Policy on Accreditation criteria then in effect, and is in compliance with its obligations under this Agreement. Within thirty (30) days of such notification, ICANN may request additional information from Registrar establishing compliance with this Agreement, in which case Registrar must supply the requested information within fifteen (15) days. Any disputes concerning Registrar's continued Accreditation shall be resolved pursuant to Section 5.8.

1. Section 7.4.3 is hereby amended and restated in its entirety as follows:

7.4.3 If, following the conclusion of the Discussion Period, an agreement is reached on the Proposed Revisions, ICANN shall post the mutually agreed Proposed Revisions on its website for public comment for no less than thirty (30) calendar days (the “Posting Period”) and provide notice of such revisions to all Applicable Registrars in accordance with Section 7.6. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registrars). Following the conclusion of the Posting Period, the Proposed Revisions shall be submitted for Registrar Approval and approval by the ICANN Board of Directors. If such approvals are obtained, the Proposed Revisions shall be deemed an Approved Amendment by the Applicable Registrars and ICANN, and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days’ notice from ICANN to Registrar.

1. Section 7.4.4.4. is hereby amended and restated in its entirety as follows:

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

1. Section 7.4.5.1 is hereby amended and restated in its entirety as follows:

7.4.5.1If an Arbitration Notice is sent, the mediator’s definition of issues, along with the Proposed Revisions (be those from ICANN, Registrars or both) shall be posted for public comment on ICANN’s website for a period of no less than thirty (30) calendar days. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registrars), and information regarding such comments and consideration shall be provided to a three (3) person arbitrator panel. Each party may modify its Proposed Revisions before and after the Posting Period. The arbitration proceeding may not commence prior to the closing of such public comment period, and ICANN may consolidate all challenges brought by registrars (including Registrar) into a single proceeding. Except as set forth in this Section 7.4.5.1, the arbitration shall be conducted pursuant to Section 5.8.

1. Section 7.4.5.2 is hereby amended and restated in its entirety as follows:

7.4.5.2No dispute regarding the Proposed Revisions may be submitted for arbitration to the extent the subject matter of the Proposed Revisions (i) relates to Consensus Policy, (ii) falls within the subject matter categories set forth in Section 1.2 of the Consensus Policies and Temporary Policies Specification , or (iii) seeks to amend any of the following provisions or Specifications of this Agreement: Sections 2, 4 and 6; subsections 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.9, 3.14, 3.19, 3.21, 5.1, 5.2 or 5.3; and the Consensus Policies and Temporary Policies Specification, Data Retention Specification, RDDS Accuracy Program Specification, Registration Data Directory Services (RDDS) Specification or the Additional Registrar Operation Specification.

1. Section 7.4.5.5 is hereby amended and restated in its entirety as follows:

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

1. Section 7.6 is hereby amended and restated in its entirety as follows; provided, however, that the notice information for each of the Applicable Registrars shall remain as set forth in each of the Appliable Registrar Agreements or as updated pursuant to the terms of Section 7.6:

7.6 Notices and Designations. Except as provided in Section 4.4 and Section 6, all notices to be given under this Agreement shall be given in writing at the address of the appropriate party as set forth below, unless that party has given a notice of change of address in writing. Each party shall notify the other party within thirty (30) days of any change to its contact information. Any written notice required by this Agreement shall be deemed to have been properly given when delivered in person, when scheduled for delivery by internationally recognized courier service, or when delivered by electronic means followed by an affirmative confirmation of receipt by the recipient’s email server. For any notice of a new Specification or Policy established in accordance with this Agreement, Registrar shall be afforded a reasonable period of time after notice of the establishment of such Specification or Policy is e-mailed to Registrar and posted on the ICANN website in which to comply with that specification, policy or program, taking into account any urgency involved. Notices and designations by ICANN under this Agreement shall be effective when written notice of them is deemed given to Registrar.

If to ICANN, addressed to:

Attention: Registrar Accreditation Notices
Internet Corporation for Assigned Names and Numbers
12025 Waterfront Drive, Suite 300

Los Angeles, California 90094-2536 USA
Telephone: +1 310 823-9358
With a required copy to: General Counsel
Email: (As specified from time to time)

1. The “WHOIS ACCURACY PROGRAM SPECIFICATION” is hereby renamed the “RDDS ACCURACY PROGRAM SPECIFICATION.”
2. The first paragraph of Section 1 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

1.Except as provided for in Section 3 below, within fifteen (15) days of (1) the registration of a Registered Name sponsored by Registrar, (2) the transfer of the sponsorship of a Registered Name to Registrar, or (3) any change in the Registered Name Holder with respect to any Registered Name sponsored by Registrar, Registrar will, with respect to RDDS information and the corresponding customer account holder contact information related to such Registered Name:

1. Section 1.f.i of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

1.f.ithe email address of the Registered Name Holder (and, if different, the Account Holder) by sending an email requiring an affirmative response through a tool-based authentication method such as providing a unique code that must be returned in a manner designated by Registrar, or

1. Section 1.f.ii of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

1.f.iithe telephone number of the Registered Name Holder (and, if different, the Account Holder) by either (A) calling or sending an SMS to the Registered Name Holder’s telephone number providing a unique code that must be returned in a manner designated by Registrar, or (B) calling the Registered Name Holder’s telephone number and requiring the Registered Name Holder to provide a unique code that was sent to the Registered Name Holder via web, email or postal mail.

1. Section 2 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

2.Except as provided in Section 3 below, within fifteen (15) calendar days after receiving any changes to contact information in RDDS or the corresponding customer account contact information related to any Registered Name sponsored by Registrar (whether or not Registrar was previously required to perform the validation and verification requirements set forth in this Specification in respect of such Registered Name), Registrar will validate and, to the extent required by Section 1, verify the changed fields in the manner specified in Section 1 above. If Registrar does not receive an affirmative response from the Registered Name Holder providing the required verification, Registrar shall either verify the applicable contact information manually or suspend the registration, until such time as Registrar has verified the applicable contact information. If Registrar does not receive an affirmative response from the Account Holder, Registrar shall verify the applicable contact information manually, but is not required to suspend any registration.

1. Section 3 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

3.Except as set forth in Section 4 below, Registrar is not required to perform the above validation and verification procedures in Section 1(a) through 1(f) above, if Registrar has already successfully completed the validation and verification procedures on the identical contact information and is not in possession of facts or knowledge of circumstances that suggest that the information is no longer valid.

1. Section 4 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

4.If Registrar has any information suggesting that the contact information specified in Section 1(a) through 1(f) above is incorrect (such as Registrar receiving a bounced email notification or non-delivery notification message in connection with compliance with ICANN’s Whois Data Reminder Policy or otherwise) for any Registered Name sponsored by Registrar (whether or not Registrar was previously required to perform the validation and verification requirements set forth in this Specification in respect of such Registered Name), Registrar must verify or re-verify, as applicable, the email address(es) as described in Section 1(f) (for example by requiring an affirmative response to a Whois Data Reminder Policy notice). If, within fifteen (15) calendar days after receiving any such information, Registrar does not receive an affirmative response from the Registered Name Holder providing the required verification, Registrar shall either verify the applicable contact information manually or suspend the registration, until such time as Registrar has verified the applicable contact information. If, within fifteen (15) calendar days after receiving any such information, Registrar does not receive an affirmative response from the customer paying for the Registered Name, if applicable, providing the required verification, Registrar shall verify the applicable contact information manually, but is not required to suspend any registration.

1. Section 5 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

5.Upon the occurrence of a Registered Name Holder's willful provision of inaccurate or unreliable contact details as described in Subsection 3.7.7.1 of the Registrar Accreditation Agreement, its willful failure promptly to update information provided to Registrar, or its failure to respond for over fifteen (15) calendar days to inquiries by Registrar concerning the accuracy of contact details associated with the Registered Name Holder's registration, Registrar shall either terminate or suspend the Registered Name Holder’s Registered Name or place such registration on clientHold and clientTransferProhibited, until such time as Registrar has validated the information provided by the Registered Name Holder.

1. Section 6 of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:

6. The terms and conditions of this Specification shall be reviewed by ICANN in consultation with the Registrar Stakeholder Group on or about the first anniversary of the date that the form of the 2013 Registrar Accreditation Agreement is first executed by a registrar.

1. The “REGISTRATION DATA DIRECTORY SERVICE (WHOIS) SPECIFICATION” is hereby renamed the “REGISTRATION DATA DIRECTORY SERVICES (RDDS) SPECIFICATION.”
2. Section 1 of the Registration Data Directory Services (RDDS) Specification is hereby deleted in its entirety and replaced with the following:

1. **Registration Data Directory Services.**

1.1. **Definitions**.

1.1.1. **“Registration Data Access Protocol**”or “**RDAP**” is an Internet protocol that provides “RESTful” web services to retrieve registration metadata from Domain Name Registries and Regional Internet Registries.

1.1.2. “**RDAP Directory Services**” or “**RDAP-RDDS**” refers to a Registration Data Directory Service using the RDAP described in RFC 7481, RFC 7482, RFC 8521, RFC 9082 and RFC 9083, and its successor standards.

1.1.3. “**WHOIS-RDDS**” and “**Whois Data Directory Services**” refers to a Registration Data Directory Service using the RDAP described in STD 95 (https://www.rfc-editor.org/refs/ref-std95.txt), and its successor standards.

1.1.4. “**Registration Data Directory Services**” or “**RDDS**” refers to the collective of WHOIS Data Directory Services and RDAP Directory Services.

1.1.5. “**RDAP Ramp-Up Period**” means the period that ends 3 February 2024.

1.1.6. “**WHOIS Services Sunset Date**” means the date that is 360 days after the expiration of the RDAP Ramp-Up Period, provided that ICANN and the Registrar Stakeholder Group in the RAA may mutually agree to postpone the WHOIS Services Sunset Date. If either the Chief Executive Officer of ICANN (“CEO”) or the Chairperson of the Registrar Stakeholder Group (“Chair”) desires to discuss postponing the WHOIS Services Sunset Date, the CEO or Chair, as applicable, shall provide written notice to the other person, which shall set forth in reasonable detail the proposed postponement.

**1.2 RDAP Directory Services**

1.2.1. Registrar shall implement the most recent version of the RDAP Technical Implementation Guide and RDAP Response Profile posted at https://icann.org/gtld-rdap-profile. Registrar will implement new versions of the RDAP Technical Implementation Guide and RDAP Response Profile no later than one hundred eighty (180) calendar days after notification from ICANN.

1.2.2 Registrar shall provide lookup query support for:

1.2.2.1. domain information as described in the section “Domain Path Segment Specification” of RFC 9082; and

1.2.2.2. help information as described in the section "Help Path Segment Specification" of RFC 9082.

1.2.3. ICANN reserves the right to specify alternative formats and protocols approved as “Internet Standards” (as opposed to Informational or Experimental standards) through the applicable IETF processes with respect to registration data. Upon such specification, ICANN shall: (a) work collaboratively with gTLD registries and ICANN-accredited registrars to define all operational requirements necessary to implement the applicable standard; and (b) if applicable, initiate negotiations to define all reporting requirements (if any), and reasonable service level requirements commensurate with similarly situated services.

1.3 **WHOIS Data Directory Services**

1.3.1 Until the WHOIS Services Sunset Date, Registrar will operate a WHOIS service in accordance with Subsection 3.3.9 of the Registrar Accreditation Agreement.

1.3.2 The format of responses shall follow a semi-free text format outlined below, followed by a blank line and a legal disclaimer specifying the rights of Registrar, and of the user querying the database.

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

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

1.3.5. Subject to the Interim Registration Data Policy for gTLDs as adopted by the ICANN Board in May 2019 and any other applicable Consensus and Temporary Policies, the fields specified in Subsection 1.4 below set forth the minimum output requirements.

1.4. **Domain Name Data:**

1.4.1.1. **Query format:** whois –h whois.example-registrar.tld EXAMPLE.TLD

1.4.1.2. **Response format:**

Additional data elements can be added at the end of the text format outlined below. The data element may, at the option of Registrar, be followed by a blank line and a legal disclaimer specifying the rights of Registrar, and of the user querying the database (provided that any such legal disclaimer must be preceded by such blank line).

Domain Name: EXAMPLE.TLD

Registry Domain ID: D1234567-TLD

Registrar WHOIS Server: whois.example-registrar.tld

Registrar URL: http://www.example-registrar.tld

Updated Date: 2009-05-29T20:13:00Z

Creation Date: 2000-10-08T00:45:00Z

Registrar Registration Expiration Date: 2010-10-08T00:44:59Z

Registrar: EXAMPLE REGISTRAR LLC

Registrar IANA ID: 5555555

Registrar Abuse Contact Email: email@registrar.tld

Registrar Abuse Contact Phone: +1.1235551234

Reseller: EXAMPLE RESELLER[[1]](#footnote-1) Domain Status: clientDeleteProhibited[[2]](#footnote-2)https://icann.org/epp#clientDeleteProhibited
Domain Status: clientRenewProhibited https://icann.org/epp#clientRenewProhibited
Domain Status: clientTransferProhibitedhttps://icann.org/epp#clientTransferProhibited

Registry Registrant ID: 5372808-ERL[[3]](#footnote-3)

Registrant Name: EXAMPLE REGISTRANT[[4]](#footnote-4)

Registrant Organization: EXAMPLE ORGANIZATION

Registrant Street: 123 EXAMPLE STREET

Registrant City: ANYTOWN

Registrant State/Province: AP[[5]](#footnote-5)

Registrant Postal Code: A1A1A1[[6]](#footnote-6)

Registrant Country: AA

Registrant Phone: +1.5555551212

Registrant Phone Ext: 1234[[7]](#footnote-7)

Registrant Fax: +1.5555551213

Registrant Fax Ext: 4321

Registrant Email: EMAIL@EXAMPLE.TLD

Registry Admin ID: 5372809-ERL[[8]](#footnote-8)

Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE

Admin Organization: EXAMPLE REGISTRANT ORGANIZATION

Admin Street: 123 EXAMPLE STREET

Admin City: ANYTOWN

Admin State/Province: AP

Admin Postal Code: A1A1A1

Admin Country: AA

Admin Phone: +1.5555551212

Admin Phone Ext: 1234

Admin Fax: +1.5555551213

Admin Fax Ext: 1234

Admin Email: EMAIL@EXAMPLE.TLD

Registry Tech ID: 5372811-ERL[[9]](#footnote-9)

Tech Name: EXAMPLE REGISTRANT TECHNICAL

Tech Organization: EXAMPLE REGISTRANT LLC

Tech Street: 123 EXAMPLE STREET

Tech City: ANYTOWN

Tech State/Province: AP

Tech Postal Code: A1A1A1

Tech Country: AA

Tech Phone: +1.1235551234

Tech Phone Ext: 1234

Tech Fax: +1.5555551213

Tech Fax Ext: 93

Tech Email: EMAIL@EXAMPLE.TLD

Name Server: NS01.EXAMPLE-REGISTRAR.TLD[[10]](#footnote-10)

Name Server: NS02.EXAMPLE-REGISTRAR.TLD

DNSSEC: signedDelegation

DNSSEC: unsigned

URL of the ICANN

Whois Inaccuracy Complaint Form: <https://www.icann.org/wicf/>

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

1.4.2. The format of the following data fields: domain status, individual and organizational names, address, street, city, state/province, postal code, country, telephone and fax numbers (the extension will be provided as a separate field as shown above), email addresses, date and times must conform to the mappings specified in EPP RFCs 5730-5734 so that the display of this information (or values returned in WHOIS responses) can be uniformly processed and understood.

**1.5.** **WHOIS Data Directory Services after the WHOIS Services Sunset Date.** If Registrar continues to offer Whois Data Directory Services after the WHOIS Services Sunset Date, then Registrar shall comply with the following:

1.5.1. If Registrar continues to offer a WHOIS Data Directory Service available via port 43, Registrar shall do so in accordance with RFC 3912.

1.5.2. Personal Data included in registration data must be redacted in accordance with ICANN Consensus Policies and Temporary Policies;

1.5.3. Registrar must adhere to the requirements related to additional fields of the Consistent Labeling and Display Consensus Policy if they choose to add data fields.

1.5.4. If Registrar provides less registration data in Whois Data Directory Services than that available in the RDAP Directory Services, Registrar must add the following disclaimer in the WHOIS Data Directory Services output footer: “The registration data available in this service is limited. Additional data may be available at https://lookup.icann.org.”

1.5.5. After the WHOIS Services Sunset Date, in the event of a conflict between the WHOIS Data Directory Service requirements and the requirements of Consensus Policies or any Temporary Policy effective after the WHOIS Services Sunset Date, the Consensus Policies or Temporary Policy shall control, but only with respect to subject matter in conflict.

1.5.6. Until such time that updates are made and effective for Consensus Policies and procedures pursuant to the Phase 1 GNSO Consensus Policy recommendations of the Expedited Policy Development Process on the Temporary Specification for gTLD Registration Data, adopted by the ICANN Board in May 2019, as of the WHOIS Services Sunset Date, the following terms in such policies will be interpreted as follows:

1.5.6.1. “WHOIS”, “Whois”, “Whois service”, “Publicly accessible WHOIS”, and variations thereof shall be interpreted to refer to RDDS as defined in this Specification.

1.5.6.2. “Whois data”, “WHOIS information”, “Whois contact information”, “Whois query data”, “WHOIS output”, “Whois entry”, and variations thereof shall be interpreted to refer to registration data as referenced in this Specification.

1.6. **Cooperation with Transition Studies.** If ICANN initiates or commissions a study on the transition of Whois Data Directory Services to RDAP Data Directory Services, Registrar shall reasonably cooperate with such study, including by delivering to ICANN or its designee conducting such study, both quantitative and qualitative data related to its experience with its transition from Whois Data Directory Services to RDAP Data Directory Services. If the data request is beyond what the Registrar collects in the ordinary course of its operations and beyond the data that Registrar is required to collect and provide to ICANN pursuant to this Agreement, Registrar should voluntarily cooperate to provide the requested information or provide an explanation to ICANN why the Registrar is not able to provide the requested information. The terms of this section do not require Registrar to provide data to ICANN that is beyond what Registrar is obligated to provide ICANN pursuant to other sections of this Agreement. Any data delivered to ICANN or its designee pursuant to this Specification that is appropriately marked as confidential shall be treated as confidential information of Registrar, provided that, if ICANN or its designee aggregates and makes anonymous such data, ICANN or its designee may disclose such data to any third party. Following completion of the transition study for which Registrar has provided data, ICANN will destroy all data provided by Registrar that has not been aggregated and made anonymous.

1. Section 2.1 of the Registration Data Directory Services (RDDS) Specification is hereby amended and restated in its entirety as follows:

2.1  **Definitions**

2.1.1. **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.

2.1.2. **Probes.** Network hosts used to perform tests (see below) that are located at various global locations.

2.1.3. **RTT.** Round-Trip Time or RTTrefers 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.

2.1.4. **SLR.** Service Level Requirement is the level of service expected for a certain parameter being measured in a Service Level Agreement (SLA).

1. Section 2.2 of the Registration Data Directory Services (RDDS) Specification is hereby deleted in its entirety and replaced with the following:

**2.2.** **Service Level Agreement Matrix**

2.2.1. Registrar shall meet or exceed each of the following SLRs related to the RDAP-RDDS\* services:

|  |  |  |
| --- | --- | --- |
|  | **Parameter** | **SLR (monthly basis)** |
| **RDAP-RDDS\*** | RDAP availability | ≤ 864 min of downtime (≈ 98%) |
| RDAP query RTT | ≤ 4000 ms, for at least 95% of the queries |
| RDAP update time | ≤ 60 min, for at least 95% of the probes |

\* These SLRs for RDAP-RDDS are not mandatory until the expiration of the RDAP Ramp-Up Period.

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

2.2.3. Until the WHOIS Services Sunset Date, Registrar shall meet or exceed each of the following SLRs related to the WHOIS Data Directory Services:

|  |  |  |
| --- | --- | --- |
|  | **Parameter** | **SLR (monthly basis)** |
| **WHOIS-RDDS** | WHOIS-RDDS availability | ≤ 864 min of downtime (≈ 98%) |
| WHOIS-RDDS query RTT | ≤ 4000 ms, for at least 95% of the queries |
| WHOIS-RDDS update time | ≤ 60 min, for at least 95% of the probes |

2.2.4. **RDDS**

2.2.4.1. **RDAP-RDDS**

2.2.4.1.1. **RDAP Availability.** Refers to the ability of the RDAP-RDDS service for Registrar to respond to queries from an Internet user with appropriate data from the relevant registrar system. If 51% or more of the RDAP testing Probes see the RDAP-RDDS service as unavailable during a given time, the RDAP-RDDS service will be considered unavailable.

2.2.4.1.2. **RDAP-query RTT.** Refers to the RTT of the sequence of packets from the start of an RDAP-RDDS testing probe's TCP connection to its end, including the reception of the HTTPS response for only one HTTPS request. If the RTT is 5 times or more the corresponding SLR/performance specifications, the RTT will be considered undefined.

2.2.4.1.3. **RDAP Update Time.** Refers to the time measured from the receipt of an EPP confirmation to a transform command on a domain name, host or contact, up until at least 51% of the RDAP-RDDS testing Probes detect the changes made.

2.2.4.1.4. **RDAP test**. Means one query sent to a particular IP address of one of the servers of the RDAP-RDDS service. Queries shall be about existing objects in the registrar 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 RDAP test are: a number in milliseconds corresponding to the RDAP-query RTT or unanswered.

2.2.4.1.5. **Measuring RDAP parameters**. Every 5 minutes, RDAP-RDDS probes will select one IP address from all the public-DNS registered "IP addresses" of the servers of the RDAP-RDDS service of Registrar being monitored and make an "RDAP test". If an RDAP test result is unanswered, the corresponding RDAP-RDDS service will be considered as unavailable from that Probe until it is time to make a new test.

2.2.4.1.6. **Collating the results from RDAP-RDDS Probes**. The minimum number of verifiably working RDAP-RDDS 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.

2.2.4.1.7. **Placement of RDAP-RDDS Probes**. ICANN will use commercially reasonable efforts to deploy probes for measuring RDAP parameters in data centers with carrier grade connectivity in each of the ICANN geographic regions.

2.2.4.2. **WHOIS-RDDS.** Until the WHOIS Services Sunset Date, Registrar shall comply with the provisions of this Subsection 2.2.4.2.

2.2.4.2.1. **WHOIS-RDDS availability.** Refers to the ability of all the WHOIS-RDDS services for Registrar to respond to queries from an Internet user with appropriate data from the relevant registrar system. If 51% or more of the WHOIS-RDDS testing probes see any of the WHOIS-RDDS services as unavailable during a given time, the WHOIS-RDDS will be considered unavailable.

2.2.4.2.2. **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.

2.2.4.2.3. **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 Registrar 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 .

2.2.4.2.4. **WHOIS-RDDS query RTT**. Refers to the collective of “**WHOIS query RTT**” and “**Web-based-** **WHOIS query RTT**”.

2.2.4.2.5. **WHOIS-RDDS update time**. Refers to the time measured from the receipt of an EPP confirmation to a transform command on a domain name, host or contact, up until the servers of the WHOIS-RDDS services reflect the changes made.

2.2.4.2.6. **WHOIS-RDDS test.** Means one query sent to a particular “**IP address**” of one of the servers of one of the WHOIS-RDDS services. Queries shall be about existing objects in the registrar 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 WHOIS-RDDS test are: a number in milliseconds corresponding to the **RTT** or unanswered.

2.2.4.2.7. **Measuring** **WHOIS-RDDS parameters.** Every 5 minutes, WHOIS-RDDS probes will select one IP address from all the public-DNS registered “**IP addresses**” of the servers for each WHOIS-RDDS service of Registrar being monitored and make an “WHOIS-**RDDS test**” to each one. If an “WHOIS-**RDDS test**” result is unanswered, the corresponding WHOIS-RDDS service will be considered as unavailable from that probe until it is time to make a new test.

2.2.4.2.8. **Collating the results from** **WHOIS-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.

2.2.4.2.9. **Placement of** **WHOIS-RDDS probes.** ICANN will use commercially reasonable efforts to deploy probes for measuring WHOIS-RDDS parameters in data centers with carrier grade connectivity in each of the ICANN geographic regions.

1. The introductory paragraph of Specification on Privacy and Proxy Registrations is hereby amended and restated in its entirety as follows:

Until the date ICANN implements a Privacy and Proxy Accreditation Program as referenced in Section 3.14 of the Registrar Accreditation Agreement, Registrar agrees to comply, and to require its Affiliates and Resellers to comply, with the terms of this Specification. This Specification may not be modified by ICANN or Registrar.

1. Section 1.2 of the Specification on Privacy and Proxy Registrations is hereby amended and restated in its entirety as follows:

1.2 “Privacy Service” is a service by which a Registered Name is registered to its beneficial user as the Registered Name Holder, but for which alternative, reliable contact information is provided by the P/P Provider for display of the Registered Name Holder’s contact information in the Registration Data Directory Service (RDDS) or equivalent services.

1. Section 1.3 of the Specification on Privacy and Proxy Registrations is hereby amended and restated in its entirety as follows:

1.3 “Proxy Service” is a service through which a Registered Name Holder licenses use of a Registered Name to the P/P Customer in order to provide the P/P Customer use of the domain name, and the Registered Name Holder's contact information is displayed in the Registration Data Directory Service (RDDS) or equivalent services rather than the P/P Customer’s contact information.

1. Section 2 of the Specification on Privacy and Proxy Registrations is hereby amended and restated in its entirety as follows:

2. Obligations of Registrar. For any Proxy Service or Privacy Service offered by Registrar or its Affiliates, including any of Registrar's or its Affiliates’ P/P services distributed through Resellers, and used in connection with Registered Names Sponsored by Registrar, Registrar and its Affiliates must require all P/P Providers to follow the requirements described in this Specification and to abide by the terms and procedures published pursuant to this Specification.

1. Section 2.4.5 of the Specification on Privacy and Proxy Registrations is hereby amended and restated in its entirety as follows:

2.4.5 The circumstances under which the P/P Provider will reveal and/or publish in the Registration Data Directory Service (RDDS) or equivalent service the P/P Customer’s identity and/or contact data; and

1. Section 1.1.6 of the Data Retention Specification is hereby amended and restated in its entirety as follows:

1.1.6. Data elements in any RDDS service notwithstanding if the data is redacted in the free public available RDDS response;

1. Section 1.2.1 of the Data Retention Specification is hereby amended and restated in its entirety as follows:

1.2.1. Information regarding the means and source of payment reasonably necessary for Registrar to process the Registration transaction, or a transaction number provided by a third party payment processor;

1. Sections 1-26 of the Registrar Information Specification are hereby deleted and replaced in their entirety as follows:

1. Full legal name of Registrar.

2. Legal form of Registrar (e.g., LLC, Corporation, Government Body, Intergovernmental Organization, etc.).

3. The jurisdiction in which Registrar’s business is registered for legal and financial purposes.

4. Registrar’s business registration number and the name of the authority that issued this number.

5. Every business name and/or trade name used by Registrar.

6. Provide current documentation demonstrating that Registrar entity is legally established and in good standing. For proof of establishment, provide charter documents or other equivalent document (e.g., membership agreement) of the entity. If Registrar is a government body or organization, provide a certified copy of the relevant statute, governmental decision or other instrument under which the government body or organization has been established. With respect to an entity other than a government body or organization, where no such certificates or documents are available in Registrar's jurisdiction, an affidavit drafted and signed by a notary public or a legal practitioner duly qualified in the courts of Registrar's jurisdiction, declaring that the organization is established and in good standing, must be provided.

7. Correspondence address for Registrar.\* This address will be used for contractual purposes, and Registrar must be able to accept notices and service of legal process at this address. No Post Office boxes are allowed.

8. Primary phone number where Registrar can be reached for contractual purposes.

9. Primary Fax number where Registrar can be reached for contractual purposes.

10. Primary Email address where Registrar can be reached for contractual purposes.

11. If the location or address of Registrar’s principal place of business is different from the address provided in 7, provide details including address, phone number, fax number and email address.\* Provide ICANN with current documentation demonstrating that Registrar is legally entitled to do business in the principal place of business.

12. Any other addresses where Registrar will be operated or managed, if different from either its principal place of business or correspondence address provided above. (If so, please explain.) Provide ICANN with current documentation demonstrating that Registrar is legally entitled to do business in each location identified.

13. Primary contact name:

Title

Address

Phone number

Fax number

Email address

14. URL, and Location of Port 43 WHOIS server. After the WHOIS Services Sunset Date, the location of Port 43 WHOIS server is only required to be provided if Registrar continues to offer Whois Data Directory Services.

15. One Registered Name sponsored by Registrar in any gTLD to be used by ICANN in monitoring port 43 WHOIS and RDAP. Regardless of the requirements in Section 3.17 of the Agreement, Registrar shall notify ICANN immediately of any change to this data. A failure to respond with registration data for this Registered Name in port 43 WHOIS and RDAP will be considered a failed RDAP and WHOIS-RDDS test.

**Ownership, Directors and Officers Information**

16. Full name, contact information, and position of any persons or entities owning at least 5% of the ownership interest in Registrar’s current business entity. For each person listed, please specify such person’s percentage ownership.

17. Full name, contact information, and position of all directors of Registrar.

18. Full name, contact information, and position of all officers of Registrar.\* (Officer names and positions must be publicly displayed.)

19. Full name, contact information, and position of all senior management and other key personnel overseeing the provision of Registrar Services.

20. For every person or entity mentioned in the answers to questions 16 to 19, indicate if that person or entity:

a) within the past ten years, has been convicted of a felony or of a misdemeanor related to financial activities, or has been judged by a court to have committed fraud or breach of fiduciary duty, or has been the subject of a judicial determination that is similar or related to any of these;

b) within the past ten years, has been disciplined by any government or industry regulatory body for conduct involving dishonesty or misuse of funds of others;

c) is currently involved in any judicial or regulatory proceeding that could result in a conviction, judgment, determination, or discipline of the type specified in items 20(a) or 20(b); or

d) is the subject of a disqualification imposed by ICANN.

Provide details if any of the above events in (a)-(d) have occurred.

21. List all Affiliated Registrars, if any, and briefly describe the Affiliation.

22. For any entities listed in item 21, must provide information required in items 1-14 above.

23. List the ultimate parent entity of Registrar, if applicable.\*

**Other**

24. Does Registrar or any of its Affiliates offer any Privacy Service or Proxy Service (as such terms on defined in the Specification on Privacy and Proxy Registrations)? If yes, list the entities or individuals providing the Privacy Service or Proxy Service.

25. For any entities listed in item 24, provide information required in 1-14 above.

26. Does Registrar utilize or benefit from the services of Resellers?

27. If yes, provide a list of all such Resellers known to Registrar. The information specified in this item 27 shall be made available to ICANN upon request. At such time as ICANN develops a secure method for the receipt and retention of such information, such information shall thereafter be provided to ICANN in accordance with Section 3.17 of the Agreement.

\* Items marked with “\*” must also be published on Registrar’s website.

1. Section 1 of the Additional Registrar Operation Specification is hereby amended and restated in its entirety as follows:

**1.** **DNSSEC**

Registrar must allow its customers to use DNSSEC upon request by relaying orders to add, remove or change public key material (e.g., DNSKEY or DS resource records) on behalf of customers to the Registries that support DNSSEC. Such requests shall be accepted and processed in a secure manner and according to industry best practices. Registrars shall accept any public key algorithm and digest type that is supported by the TLD of interest and appears in the registries posted at: <https://www.iana.org/assignments/dns-sec-alg-numbers/dns-sec-alg-numbers.xml> and https://www.iana.org/assignments/ds-rr-types/ds-rr-types.xml. All such requests shall be transmitted to registries using the EPP extensions specified in RFC 5910 or its successors.

Registrar must show the DNSSEC-signed status of the domain name in the RDAP Directory Service. Registrar must show the DNSSEC parameters stored in Registrar database in the RDAP Directory Service.

1. Section 3 of the Additional Registrar Operation Specification is hereby amended and restated in its entirety as follows:

**3.** **IDN**

If Registrar offers Internationalized Domain Name (“IDN”) registrations, all new registrations must comply with RFCs 5890, 5891, 5892, 5893 and their successors. Registrar shall also comply with the IDN Guidelines at https://www.icann.org/en/topics/idn/implementation-guidelines.htm which may be amended, modified, or superseded from time to time. Registrar must use the IDN tables published by the relevant registry.

1. The “Registrants’ Benefits and Responsibilities” is hereby renamed the “Registrants’ Benefits and Responsibilities specification.”
2. Section 3 of the “Domain Name Registrants’ Rights” section of the Registrants’ Benefits and Responsibilities Specification is hereby amended and restated in its entirety as follows:

3. You shall not be subject to false advertising or deceptive practices by your Registrar or through any proxy or privacy services made available by your Registrar. This includes deceptive notices, hidden fees, and any practices that are illegal under the consumer protection law of your residence.

1. Section 4 of the “Domain Name Registrants’ Responsibilities” section of the Registrants’ Benefits and Responsibilities Specification is hereby amended and restated in its entirety as follows:

4. You must provide accurate information for publication in directories such as the RDAP service, and promptly update this to reflect any changes.

1. The introductory paragraph of the Compliance Certificate is hereby amended and restated in its entirety as follows:

Pursuant to Section 3.15 of Registrar Accreditation Agreement (the “Agreement”), dated \_\_\_\_\_\_\_\_\_\_, 20\_\_, by and between the Internet Corporation for Assigned Names and Numbers, a California non-profit, public benefit corporation (“ICANN”), and [Registrar Name], a [Organization type and jurisdiction] (“Registrar”), the undersigned certifies, in his/her capacity as an officer of Registrar and not in his/her individual capacity, on behalf of Registrar as follows:

**Schedule A**

Applicable Registrar Agreements – Identified by IANA Number

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 | 128 | 437 | 637 | 707 | 840 |  |
| 9 | 130 | 440 | 638 | 708 | 841 |  |
| 13 | 131 | 444 | 642 | 709 | 845 |  |
| 14 | 134 | 447 | 645 | 719 | 846 |  |
| 15 | 140 | 448 | 646 | 731 | 847 |  |
| 30 | 141 | 450 | 647 | 734 | 848 |  |
| 48 | 143 | 452 | 648 | 735 | 850 |  |
| 49 | 144 | 453 | 650 | 743 | 851 |  |
| 52 | 146 | 455 | 652 | 748 | 853 |  |
| 57 | 151 | 456 | 653 | 750 | 854 |  |
| 64 | 168 | 460 | 654 | 751 | 855 |  |
| 65 | 186 | 463 | 655 | 752 | 856 |  |
| 66 | 226 | 465 | 656 | 753 | 858 |  |
| 68 | 228 | 466 | 658 | 754 | 859 |  |
| 69 | 244 | 468 | 659 | 755 | 861 |  |
| 73 | 249 | 469 | 661 | 762 | 862 |  |
| 74 | 269 | 470 | 662 | 763 | 863 |  |
| 76 | 270 | 471 | 663 | 771 | 864 |  |
| 78 | 277 | 472 | 664 | 776 | 866 |  |
| 79 | 291 | 474 | 666 | 777 | 867 |  |
| 81 | 292 | 600 | 667 | 780 | 868 |  |
| 82 | 299 | 601 | 670 | 781 | 869 |  |
| 83 | 303 | 603 | 671 | 782 | 870 |  |
| 84 | 320 | 604 | 672 | 785 | 871 |  |
| 85 | 353 | 605 | 675 | 792 | 872 |  |
| 86 | 360 | 606 | 682 | 809 | 873 |  |
| 87 | 379 | 607 | 695 | 816 | 874 |  |
| 88 | 380 | 609 | 696 | 817 | 875 |  |
| 91 | 381 | 612 | 697 | 818 | 876 |  |
| 93 | 401 | 615 | 698 | 819 | 877 |  |
| 99 | 411 | 617 | 699 | 820 | 878 |  |
| 100 | 412 | 619 | 700 | 826 | 879 |  |
| 106 | 413 | 620 | 701 | 828 | 880 |  |
| 111 | 418 | 625 | 702 | 829 | 881 |  |
| 112 | 420 | 626 | 703 | 831 | 882 |  |
| 113 | 430 | 634 | 704 | 835 | 883 |  |
| 120 | 431 | 635 | 705 | 836 | 884 |  |
| 123 | 433 | 636 | 706 | 839 | 885 |  |
| 886 | 959 | 1035 | 1082 | 1143 | 1187 |  |
| 887 | 961 | 1036 | 1083 | 1144 | 1188 |  |
| 889 | 965 | 1037 | 1084 | 1145 | 1189 |  |
| 894 | 967 | 1038 | 1085 | 1147 | 1190 |  |
| 895 | 968 | 1040 | 1086 | 1148 | 1191 |  |
| 896 | 970 | 1042 | 1091 | 1149 | 1192 |  |
| 898 | 971 | 1043 | 1093 | 1150 | 1193 |  |
| 899 | 973 | 1044 | 1096 | 1151 | 1194 |  |
| 900 | 974 | 1045 | 1098 | 1152 | 1195 |  |
| 902 | 975 | 1046 | 1099 | 1153 | 1196 |  |
| 903 | 976 | 1047 | 1100 | 1154 | 1197 |  |
| 910 | 980 | 1048 | 1101 | 1157 | 1198 |  |
| 912 | 981 | 1049 | 1102 | 1158 | 1199 |  |
| 913 | 985 | 1050 | 1104 | 1159 | 1200 |  |
| 914 | 986 | 1051 | 1105 | 1160 | 1201 |  |
| 915 | 987 | 1052 | 1106 | 1161 | 1202 |  |
| 917 | 996 | 1053 | 1107 | 1162 | 1203 |  |
| 918 | 997 | 1054 | 1108 | 1163 | 1204 |  |
| 919 | 1001 | 1055 | 1109 | 1164 | 1205 |  |
| 920 | 1003 | 1056 | 1110 | 1165 | 1206 |  |
| 921 | 1005 | 1057 | 1111 | 1166 | 1207 |  |
| 922 | 1008 | 1058 | 1112 | 1167 | 1208 |  |
| 923 | 1009 | 1059 | 1113 | 1168 | 1209 |  |
| 926 | 1010 | 1060 | 1114 | 1169 | 1210 |  |
| 931 | 1011 | 1061 | 1115 | 1170 | 1211 |  |
| 932 | 1012 | 1062 | 1117 | 1171 | 1212 |  |
| 933 | 1013 | 1063 | 1118 | 1172 | 1213 |  |
| 934 | 1014 | 1064 | 1119 | 1173 | 1214 |  |
| 935 | 1019 | 1065 | 1120 | 1175 | 1215 |  |
| 937 | 1022 | 1066 | 1121 | 1176 | 1216 |  |
| 938 | 1023 | 1067 | 1122 | 1177 | 1217 |  |
| 939 | 1024 | 1068 | 1123 | 1178 | 1218 |  |
| 940 | 1025 | 1069 | 1124 | 1179 | 1219 |  |
| 944 | 1026 | 1070 | 1125 | 1180 | 1220 |  |
| 945 | 1027 | 1071 | 1126 | 1181 | 1221 |  |
| 946 | 1028 | 1072 | 1127 | 1182 | 1222 |  |
| 947 | 1029 | 1075 | 1128 | 1183 | 1223 |  |
| 948 | 1031 | 1076 | 1129 | 1184 | 1224 |  |
| 955 | 1033 | 1077 | 1130 | 1185 | 1225 |  |
| 957 | 1034 | 1078 | 1132 | 1186 | 1226 |  |
| 1227 | 1282 | 1332 | 1392 | 1480 | 1557 |  |
| 1228 | 1283 | 1333 | 1396 | 1481 | 1559 |  |
| 1229 | 1284 | 1336 | 1403 | 1483 | 1560 |  |
| 1230 | 1285 | 1337 | 1407 | 1485 | 1563 |  |
| 1231 | 1286 | 1341 | 1408 | 1489 | 1564 |  |
| 1232 | 1287 | 1342 | 1409 | 1491 | 1566 |  |
| 1233 | 1288 | 1343 | 1411 | 1492 | 1567 |  |
| 1234 | 1289 | 1344 | 1417 | 1493 | 1568 |  |
| 1235 | 1290 | 1345 | 1418 | 1494 | 1569 |  |
| 1239 | 1291 | 1346 | 1420 | 1495 | 1570 |  |
| 1241 | 1292 | 1347 | 1424 | 1499 | 1571 |  |
| 1249 | 1293 | 1348 | 1426 | 1500 | 1572 |  |
| 1250 | 1294 | 1349 | 1432 | 1501 | 1573 |  |
| 1251 | 1295 | 1350 | 1434 | 1502 | 1574 |  |
| 1252 | 1296 | 1351 | 1435 | 1503 | 1575 |  |
| 1253 | 1297 | 1352 | 1436 | 1505 | 1576 |  |
| 1254 | 1298 | 1353 | 1441 | 1506 | 1577 |  |
| 1255 | 1299 | 1354 | 1443 | 1509 | 1578 |  |
| 1256 | 1300 | 1355 | 1444 | 1515 | 1579 |  |
| 1257 | 1301 | 1356 | 1446 | 1518 | 1580 |  |
| 1262 | 1302 | 1357 | 1448 | 1519 | 1582 |  |
| 1263 | 1303 | 1358 | 1449 | 1525 | 1583 |  |
| 1264 | 1304 | 1359 | 1452 | 1526 | 1586 |  |
| 1265 | 1305 | 1360 | 1454 | 1527 | 1587 |  |
| 1266 | 1306 | 1362 | 1456 | 1529 | 1588 |  |
| 1267 | 1307 | 1364 | 1460 | 1531 | 1591 |  |
| 1268 | 1308 | 1366 | 1462 | 1533 | 1593 |  |
| 1269 | 1309 | 1367 | 1463 | 1534 | 1594 |  |
| 1270 | 1310 | 1372 | 1464 | 1535 | 1595 |  |
| 1271 | 1311 | 1373 | 1465 | 1536 | 1596 |  |
| 1272 | 1312 | 1375 | 1466 | 1537 | 1597 |  |
| 1273 | 1313 | 1376 | 1467 | 1538 | 1599 |  |
| 1274 | 1314 | 1378 | 1469 | 1539 | 1600 |  |
| 1275 | 1316 | 1379 | 1470 | 1540 | 1601 |  |
| 1276 | 1318 | 1381 | 1472 | 1541 | 1603 |  |
| 1277 | 1326 | 1383 | 1474 | 1542 | 1605 |  |
| 1278 | 1327 | 1387 | 1475 | 1547 | 1606 |  |
| 1279 | 1328 | 1388 | 1476 | 1553 | 1607 |  |
| 1280 | 1330 | 1390 | 1478 | 1555 | 1608 |  |
| 1281 | 1331 | 1391 | 1479 | 1556 | 1609 |  |
| 1610 | 1666 | 1720 | 1769 | 1809 | 1849 |  |
| 1611 | 1668 | 1721 | 1770 | 1810 | 1850 |  |
| 1612 | 1669 | 1722 | 1771 | 1811 | 1851 |  |
| 1613 | 1670 | 1723 | 1772 | 1812 | 1852 |  |
| 1614 | 1671 | 1724 | 1773 | 1813 | 1853 |  |
| 1615 | 1672 | 1725 | 1774 | 1814 | 1854 |  |
| 1616 | 1673 | 1726 | 1775 | 1815 | 1855 |  |
| 1617 | 1675 | 1727 | 1776 | 1816 | 1856 |  |
| 1618 | 1677 | 1728 | 1777 | 1817 | 1860 |  |
| 1619 | 1678 | 1729 | 1778 | 1818 | 1861 |  |
| 1620 | 1679 | 1730 | 1779 | 1819 | 1862 |  |
| 1621 | 1680 | 1731 | 1780 | 1820 | 1863 |  |
| 1625 | 1681 | 1732 | 1781 | 1821 | 1864 |  |
| 1630 | 1682 | 1733 | 1782 | 1822 | 1865 |  |
| 1632 | 1683 | 1734 | 1783 | 1823 | 1866 |  |
| 1633 | 1684 | 1737 | 1784 | 1824 | 1867 |  |
| 1636 | 1685 | 1738 | 1785 | 1825 | 1868 |  |
| 1637 | 1686 | 1739 | 1786 | 1826 | 1870 |  |
| 1638 | 1687 | 1740 | 1787 | 1827 | 1871 |  |
| 1639 | 1688 | 1741 | 1788 | 1828 | 1872 |  |
| 1640 | 1689 | 1744 | 1789 | 1829 | 1873 |  |
| 1641 | 1690 | 1745 | 1790 | 1830 | 1875 |  |
| 1642 | 1691 | 1749 | 1791 | 1831 | 1894 |  |
| 1643 | 1692 | 1750 | 1792 | 1832 | 1895 |  |
| 1644 | 1693 | 1751 | 1793 | 1833 | 1896 |  |
| 1645 | 1694 | 1752 | 1794 | 1834 | 1897 |  |
| 1647 | 1695 | 1755 | 1795 | 1835 | 1898 |  |
| 1649 | 1696 | 1756 | 1796 | 1836 | 1899 |  |
| 1651 | 1697 | 1757 | 1797 | 1837 | 1900 |  |
| 1652 | 1700 | 1758 | 1798 | 1838 | 1901 |  |
| 1653 | 1701 | 1759 | 1799 | 1839 | 1902 |  |
| 1654 | 1705 | 1760 | 1800 | 1840 | 1903 |  |
| 1655 | 1708 | 1761 | 1801 | 1841 | 1904 |  |
| 1656 | 1710 | 1762 | 1802 | 1842 | 1905 |  |
| 1659 | 1712 | 1763 | 1803 | 1843 | 1907 |  |
| 1660 | 1715 | 1764 | 1804 | 1844 | 1908 |  |
| 1661 | 1716 | 1765 | 1805 | 1845 | 1909 |  |
| 1663 | 1717 | 1766 | 1806 | 1846 | 1910 |  |
| 1664 | 1718 | 1767 | 1807 | 1847 | 1912 |  |
| 1665 | 1719 | 1768 | 1808 | 1848 | 1913 |  |
| 1914 | 1955 | 1995 | 2035 | 2075 | 2115 |  |
| 1915 | 1956 | 1996 | 2036 | 2076 | 2116 |  |
| 1916 | 1957 | 1997 | 2037 | 2077 | 2117 |  |
| 1917 | 1958 | 1998 | 2038 | 2078 | 2118 |  |
| 1919 | 1959 | 1999 | 2039 | 2079 | 2119 |  |
| 1920 | 1960 | 2000 | 2040 | 2080 | 2120 |  |
| 1921 | 1961 | 2001 | 2041 | 2081 | 2121 |  |
| 1922 | 1962 | 2002 | 2042 | 2082 | 2122 |  |
| 1923 | 1963 | 2003 | 2043 | 2083 | 2123 |  |
| 1924 | 1964 | 2004 | 2044 | 2084 | 2124 |  |
| 1925 | 1965 | 2005 | 2045 | 2085 | 2125 |  |
| 1926 | 1966 | 2006 | 2046 | 2086 | 2126 |  |
| 1927 | 1967 | 2007 | 2047 | 2087 | 2127 |  |
| 1928 | 1968 | 2008 | 2048 | 2088 | 2128 |  |
| 1929 | 1969 | 2009 | 2049 | 2089 | 2129 |  |
| 1930 | 1970 | 2010 | 2050 | 2090 | 2130 |  |
| 1931 | 1971 | 2011 | 2051 | 2091 | 2131 |  |
| 1932 | 1972 | 2012 | 2052 | 2092 | 2132 |  |
| 1933 | 1973 | 2013 | 2053 | 2093 | 2133 |  |
| 1934 | 1974 | 2014 | 2054 | 2094 | 2134 |  |
| 1935 | 1975 | 2015 | 2055 | 2095 | 2135 |  |
| 1936 | 1976 | 2016 | 2056 | 2096 | 2136 |  |
| 1937 | 1977 | 2017 | 2057 | 2097 | 2137 |  |
| 1938 | 1978 | 2018 | 2058 | 2098 | 2138 |  |
| 1939 | 1979 | 2019 | 2059 | 2099 | 2139 |  |
| 1940 | 1980 | 2020 | 2060 | 2100 | 2140 |  |
| 1941 | 1981 | 2021 | 2061 | 2101 | 2141 |  |
| 1942 | 1982 | 2022 | 2062 | 2102 | 2142 |  |
| 1943 | 1983 | 2023 | 2063 | 2103 | 2143 |  |
| 1944 | 1984 | 2024 | 2064 | 2104 | 2144 |  |
| 1945 | 1985 | 2025 | 2065 | 2105 | 2145 |  |
| 1946 | 1986 | 2026 | 2066 | 2106 | 2146 |  |
| 1947 | 1987 | 2027 | 2067 | 2107 | 2147 |  |
| 1948 | 1988 | 2028 | 2068 | 2108 | 2148 |  |
| 1949 | 1989 | 2029 | 2069 | 2109 | 2149 |  |
| 1950 | 1990 | 2030 | 2070 | 2110 | 2150 |  |
| 1951 | 1991 | 2031 | 2071 | 2111 | 2151 |  |
| 1952 | 1992 | 2032 | 2072 | 2112 | 2152 |  |
| 1953 | 1993 | 2033 | 2073 | 2113 | 2153 |  |
| 1954 | 1994 | 2034 | 2074 | 2114 | 2154 |  |
| 2155 | 2195 | 2235 | 2275 | 2476 | 2537 |  |
| 2156 | 2196 | 2236 | 2276 | 2482 | 2538 |  |
| 2157 | 2197 | 2237 | 2277 | 2483 | 2539 |  |
| 2158 | 2198 | 2238 | 2278 | 2484 | 2540 |  |
| 2159 | 2199 | 2239 | 2279 | 2485 | 2541 |  |
| 2160 | 2200 | 2240 | 2281 | 2486 | 2542 |  |
| 2161 | 2201 | 2241 | 2282 | 2487 | 2543 |  |
| 2162 | 2202 | 2242 | 2283 | 2504 | 2544 |  |
| 2163 | 2203 | 2243 | 2284 | 2505 | 2545 |  |
| 2164 | 2204 | 2244 | 2285 | 2506 | 2546 |  |
| 2165 | 2205 | 2245 | 2286 | 2507 | 2547 |  |
| 2166 | 2206 | 2246 | 2287 | 2508 | 2548 |  |
| 2167 | 2207 | 2247 | 2288 | 2509 | 2549 |  |
| 2168 | 2208 | 2248 | 2329 | 2510 | 2550 |  |
| 2169 | 2209 | 2249 | 2330 | 2511 | 2551 |  |
| 2170 | 2210 | 2250 | 2331 | 2512 | 2552 |  |
| 2171 | 2211 | 2251 | 2332 | 2513 | 2553 |  |
| 2172 | 2212 | 2252 | 2333 | 2514 | 2554 |  |
| 2173 | 2213 | 2253 | 2334 | 2515 | 2555 |  |
| 2174 | 2214 | 2254 | 2335 | 2516 | 2556 |  |
| 2175 | 2215 | 2255 | 2336 | 2517 | 2557 |  |
| 2176 | 2216 | 2256 | 2337 | 2518 | 2558 |  |
| 2177 | 2217 | 2257 | 2338 | 2519 | 2559 |  |
| 2178 | 2218 | 2258 | 2339 | 2520 | 2560 |  |
| 2179 | 2219 | 2259 | 2340 | 2521 | 2561 |  |
| 2180 | 2220 | 2260 | 2341 | 2522 | 2562 |  |
| 2181 | 2221 | 2261 | 2342 | 2523 | 2563 |  |
| 2182 | 2222 | 2262 | 2343 | 2524 | 2564 |  |
| 2183 | 2223 | 2263 | 2344 | 2525 | 2565 |  |
| 2184 | 2224 | 2264 | 2345 | 2526 | 2566 |  |
| 2185 | 2225 | 2265 | 2346 | 2527 | 2567 |  |
| 2186 | 2226 | 2266 | 2347 | 2528 | 2568 |  |
| 2187 | 2227 | 2267 | 2348 | 2529 | 2569 |  |
| 2188 | 2228 | 2268 | 2349 | 2530 | 2570 |  |
| 2189 | 2229 | 2269 | 2350 | 2531 | 2571 |  |
| 2190 | 2230 | 2270 | 2351 | 2532 | 2572 |  |
| 2191 | 2231 | 2271 | 2352 | 2533 | 2573 |  |
| 2192 | 2232 | 2272 | 2353 | 2534 | 2574 |  |
| 2193 | 2233 | 2273 | 2374 | 2535 | 2575 |  |
| 2194 | 2234 | 2274 | 2475 | 2536 | 2576 |  |
| 2577 | 2617 | 2657 | 2697 | 2737 | 2777 |  |
| 2578 | 2618 | 2658 | 2698 | 2738 | 2778 |  |
| 2579 | 2619 | 2659 | 2699 | 2739 | 2779 |  |
| 2580 | 2620 | 2660 | 2700 | 2740 | 2780 |  |
| 2581 | 2621 | 2661 | 2701 | 2741 | 2781 |  |
| 2582 | 2622 | 2662 | 2702 | 2742 | 2782 |  |
| 2583 | 2623 | 2663 | 2703 | 2743 | 2783 |  |
| 2584 | 2624 | 2664 | 2704 | 2744 | 2784 |  |
| 2585 | 2625 | 2665 | 2705 | 2745 | 2785 |  |
| 2586 | 2626 | 2666 | 2706 | 2746 | 2786 |  |
| 2587 | 2627 | 2667 | 2707 | 2747 | 2787 |  |
| 2588 | 2628 | 2668 | 2708 | 2748 | 2788 |  |
| 2589 | 2629 | 2669 | 2709 | 2749 | 2789 |  |
| 2590 | 2630 | 2670 | 2710 | 2750 | 2790 |  |
| 2591 | 2631 | 2671 | 2711 | 2751 | 2791 |  |
| 2592 | 2632 | 2672 | 2712 | 2752 | 2792 |  |
| 2593 | 2633 | 2673 | 2713 | 2753 | 2793 |  |
| 2594 | 2634 | 2674 | 2714 | 2754 | 2794 |  |
| 2595 | 2635 | 2675 | 2715 | 2755 | 2795 |  |
| 2596 | 2636 | 2676 | 2716 | 2756 | 2796 |  |
| 2597 | 2637 | 2677 | 2717 | 2757 | 2797 |  |
| 2598 | 2638 | 2678 | 2718 | 2758 | 2798 |  |
| 2599 | 2639 | 2679 | 2719 | 2759 | 2799 |  |
| 2600 | 2640 | 2680 | 2720 | 2760 | 2800 |  |
| 2601 | 2641 | 2681 | 2721 | 2761 | 2801 |  |
| 2602 | 2642 | 2682 | 2722 | 2762 | 2802 |  |
| 2603 | 2643 | 2683 | 2723 | 2763 | 2803 |  |
| 2604 | 2644 | 2684 | 2724 | 2764 | 2804 |  |
| 2605 | 2645 | 2685 | 2725 | 2765 | 2805 |  |
| 2606 | 2646 | 2686 | 2726 | 2766 | 2806 |  |
| 2607 | 2647 | 2687 | 2727 | 2767 | 2807 |  |
| 2608 | 2648 | 2688 | 2728 | 2768 | 2808 |  |
| 2609 | 2649 | 2689 | 2729 | 2769 | 2809 |  |
| 2610 | 2650 | 2690 | 2730 | 2770 | 2810 |  |
| 2611 | 2651 | 2691 | 2731 | 2771 | 2811 |  |
| 2612 | 2652 | 2692 | 2732 | 2772 | 2812 |  |
| 2613 | 2653 | 2693 | 2733 | 2773 | 2813 |  |
| 2614 | 2654 | 2694 | 2734 | 2774 | 2814 |  |
| 2615 | 2655 | 2695 | 2735 | 2775 | 2815 |  |
| 2616 | 2656 | 2696 | 2736 | 2776 | 2816 |  |
| 2817 | 2857 | 2897 | 3245 | 3289 | 3329 |  |
| 2818 | 2858 | 2898 | 3246 | 3290 | 3330 |  |
| 2819 | 2859 | 2899 | 3247 | 3291 | 3331 |  |
| 2820 | 2860 | 2900 | 3252 | 3292 | 3332 |  |
| 2821 | 2861 | 2901 | 3253 | 3293 | 3333 |  |
| 2822 | 2862 | 2902 | 3254 | 3294 | 3334 |  |
| 2823 | 2863 | 2903 | 3255 | 3295 | 3335 |  |
| 2824 | 2864 | 2904 | 3256 | 3296 | 3336 |  |
| 2825 | 2865 | 2905 | 3257 | 3297 | 3337 |  |
| 2826 | 2866 | 2906 | 3258 | 3298 | 3338 |  |
| 2827 | 2867 | 2908 | 3259 | 3299 | 3339 |  |
| 2828 | 2868 | 2910 | 3260 | 3300 | 3340 |  |
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| 3370 | 3410 | 3450 | 3490 | 3530 | 3570 |  |
| 3371 | 3411 | 3451 | 3491 | 3531 | 3571 |  |
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| 3374 | 3414 | 3454 | 3494 | 3534 | 3574 |  |
| 3375 | 3415 | 3455 | 3495 | 3535 | 3575 |  |
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| 3378 | 3418 | 3458 | 3498 | 3538 | 3578 |  |
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| 3392 | 3432 | 3472 | 3512 | 3552 | 3592 |  |
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| 3395 | 3435 | 3475 | 3515 | 3555 | 3595 |  |
| 3396 | 3436 | 3476 | 3516 | 3556 | 3596 |  |
| 3397 | 3437 | 3477 | 3517 | 3557 | 3597 |  |
| 3398 | 3438 | 3478 | 3518 | 3558 | 3598 |  |
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| 3400 | 3440 | 3480 | 3520 | 3560 | 3600 |  |
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| 3402 | 3442 | 3482 | 3522 | 3562 | 3602 |  |
| 3403 | 3443 | 3483 | 3523 | 3563 | 3603 |  |
| 3404 | 3444 | 3484 | 3524 | 3564 | 3604 |  |
| 3405 | 3445 | 3485 | 3525 | 3565 | 3605 |  |
| 3406 | 3446 | 3486 | 3526 | 3566 | 3606 |  |
| 3407 | 3447 | 3487 | 3527 | 3567 | 3607 |  |
| 3408 | 3448 | 3488 | 3528 | 3568 | 3608 |  |
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| 3641 | 3681 | 3721 | 3765 | 3818 | 3870 |  |
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| 3645 | 3685 | 3725 | 3774 | 3824 | 3874 |  |
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| 3898 | 3938 | 3979 | 4019 | 4059 | 4099 |  |
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| 3902 | 3942 | 3983 | 4023 | 4063 | 4103 |  |
| 3903 | 3943 | 3984 | 4024 | 4064 | 4104 |  |
| 3904 | 3944 | 3985 | 4025 | 4065 | 4105 |  |
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| 3914 | 3954 | 3995 | 4035 | 4075 | 4115 |  |
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| 4147 |  |  |  |  |  |  |

1. Data element may be deleted, provided that if the data element is used, it must appear at this location. [↑](#footnote-ref-1)
2. Note: all applicable statuses must be displayed in the Whois output. [↑](#footnote-ref-2)
3. May be left blank if not available from Registry. [↑](#footnote-ref-3)
4. For the Registrant, Admin and Tech contact fields requiring a “Name” or “Organization”, the output must include either the name or organization (or both, if available). [↑](#footnote-ref-4)
5. All “State/Province” fields may be left blank if not available. [↑](#footnote-ref-5)
6. All “Postal Code” fields may be left blank if not available. [↑](#footnote-ref-6)
7. All “Phone Ext”, “Fax” and “Fax Ext” fields may be left blank if not available. [↑](#footnote-ref-7)
8. May be left blank if not available from Registry. [↑](#footnote-ref-8)
9. May be left blank if not available from Registry. [↑](#footnote-ref-9)
10. All associated nameservers must be listed. [↑](#footnote-ref-10)