

## **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.
2. 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.
3. 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).
4. 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.
5. Section 1.19 is hereby amended and restated in its entirety as follows:
  - 1.19 The 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.
6. 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.

7. 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.

8. 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.

9. 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.

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

1.24 A “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.

11. 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.

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

1.26 A “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.

13. 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.

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

1.28 A 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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).

20. 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;

21. 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:

22. 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.

23. 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.

24. 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.

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

3.4.3 During 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.

26. 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.

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

3.7.5.7 In 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.

28. 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.

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

3.7.7 Registrar 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.

30. 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.

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

3.8 Domain-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.

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

3.12.2 Any 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>).

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

3.16 Link 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://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.

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

3.18.2 Registrar 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.

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

4.1 Compliance 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.

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

5.5.2.1.3 with 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

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

5.5.2.1.4 failed 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;

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

5.6 Termination 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.

39. 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.

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

5.8 Resolution 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.

41. 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.

42. 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.

43. 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.

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

7.4.5.1 If 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.

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

7.4.5.2 No dispute regarding the Proposed Revisions may be submitted for arbitration to the extent the subject matter of the Proposed Revisions (i) relates to Consensus Policy, (ii) falls within the subject matter categories set

forth in Section 1.2 of 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.

46. 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.

47. 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 Applicable 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)

48. The "WHOIS ACCURACY PROGRAM SPECIFICATION" is hereby renamed the "RDDS ACCURACY PROGRAM SPECIFICATION."
49. 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:
50. Section 1.f.i of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:
  - 1.f.i the 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
51. Section 1.f.ii of the RDDS ACCURACY PROGRAM SPECIFICATION is hereby amended and restated in its entirety as follows:
  - 1.f.ii the 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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.

57. The "REGISTRATION DATA DIRECTORY SERVICE (WHOIS) SPECIFICATION" is hereby renamed the "REGISTRATION DATA DIRECTORY SERVICES (RDDS) SPECIFICATION."

58. 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<sup>1</sup>  
Domain Status: clientDeleteProhibited<sup>2</sup><https://icann.org/epp#clientDeleteProhibited>  
Domain Status: clientRenewProhibited <https://icann.org/epp#clientRenewProhibited>  
Domain Status: clientTransferProhibited<https://icann.org/epp#clientTransferProhibited>  
Registry Registrant ID: 5372808-ERL<sup>3</sup>  
Registrant Name: EXAMPLE REGISTRANT<sup>4</sup>  
Registrant Organization: EXAMPLE ORGANIZATION  
Registrant Street: 123 EXAMPLE STREET  
Registrant City: ANYTOWN  
Registrant State/Province: AP<sup>5</sup>  
Registrant Postal Code: A1A1A1<sup>6</sup>  
Registrant Country: AA  
Registrant Phone: +1.5555551212  
Registrant Phone Ext: 1234<sup>7</sup>  
Registrant Fax: +1.5555551213  
Registrant Fax Ext: 4321  
Registrant Email: EMAIL@EXAMPLE.TLD  
Registry Admin ID: 5372809-ERL<sup>8</sup>  
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<sup>9</sup>  
Tech Name: EXAMPLE REGISTRANT TECHNICAL  
Tech Organization: EXAMPLE REGISTRANT LLC

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<sup>1</sup> Data element may be deleted, provided that if the data element is used, it must appear at this location.

<sup>2</sup> Note: all applicable statuses must be displayed in the Whois output.

<sup>3</sup> May be left blank if not available from Registry.

<sup>4</sup> 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).

<sup>5</sup> All “State/Province” fields may be left blank if not available.

<sup>6</sup> All “Postal Code” fields may be left blank if not available.

<sup>7</sup> All “Phone Ext”, “Fax” and “Fax Ext” fields may be left blank if not available.

<sup>8</sup> May be left blank if not available from Registry.

<sup>9</sup> May be left blank if not available from Registry.

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<sup>10</sup>  
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>."

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<sup>10</sup> All associated nameservers must be listed.

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.

59. 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 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.
- 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).

60. 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:

	<b>Parameter</b>	<b>SLR (monthly basis)</b>
<b>RDAP-RDDS*</b>	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)
<b>WHOIS-RDDS</b>	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.

61. 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.

62. 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.

63. 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.

64. 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.

65. 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

66. 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;

67. 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;

68. 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 are 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.

69. 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.

70. 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.

71. The “REGISTRANTS’ BENEFITS AND RESPONSIBILITIES” is hereby renamed the “REGISTRANTS’ BENEFITS AND RESPONSIBILITIES SPECIFICATION.”
72. 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.
73. 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.
74. 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

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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
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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
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2606	2646	2686	2726	2766	2806
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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
2829	2869	2911	3261	3301	3341
2830	2870	2913	3262	3302	3342
2831	2871	2916	3263	3303	3343
2832	2872	2917	3264	3304	3344
2833	2873	2918	3265	3305	3345
2834	2874	3216	3266	3306	3346
2835	2875	3219	3267	3307	3347
2836	2876		3268	3308	3348
2837	2877	3221	3269	3309	3349
2838	2878	3222	3270	3310	3350
2839	2879	3223	3271	3311	3351
2840	2880	3224	3272	3312	3352
2841	2881	3225	3273	3313	3353
2842	2882	3226	3274	3314	3354
2843	2883	3227	3275	3315	3355
2844	2884	3230	3276	3316	3356
2845	2885		3277	3317	3357
2846	2886	3232	3278	3318	3358
2847	2887	3233	3279	3319	3359
2848	2888	3234	3280	3320	3360
2849	2889	3235	3281	3321	3361
2850	2890	3236	3282	3322	3362
2851	2891	3237	3283	3323	3363
2852	2892	3238	3284	3324	3364
2853	2893	3240	3285	3325	3365
2854	2894	3242	3286	3326	3366
2855	2895	3243	3287	3327	3367
2856	2896	3244	3288	3328	3368

3369	3409	3449	3489	3529	3569
3370	3410	3450	3490	3530	3570
3371	3411	3451	3491	3531	3571
3372	3412	3452	3492	3532	3572
3373	3413	3453	3493	3533	3573
3374	3414	3454	3494	3534	3574
3375	3415	3455	3495	3535	3575
3376	3416	3456	3496	3536	3576
3377	3417	3457	3497	3537	3577
3378	3418	3458	3498	3538	3578
3379	3419	3459	3499	3539	3579
3380	3420	3460	3500	3540	3580
3381	3421	3461	3501	3541	3581
3382	3422	3462	3502	3542	3582
3383	3423	3463	3503	3543	3583
3384	3424	3464	3504	3544	3584
3385	3425	3465	3505	3545	3585
3386	3426	3466	3506	3546	3586
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3388	3428	3468	3508	3548	3588
3389	3429	3469	3509	3549	3589
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3391	3431	3471	3511	3551	3591
3392	3432	3472	3512	3552	3592
3393	3433	3473	3513	3553	3593
3394	3434	3474	3514	3554	3594
3395	3435	3475	3515	3555	3595
3396	3436	3476	3516	3556	3596
3397	3437	3477	3517	3557	3597
3398	3438	3478	3518	3558	3598
3399	3439	3479	3519	3559	3599
3400	3440	3480	3520	3560	3600
3401	3441	3481	3521	3561	3601
3402	3442	3482	3522	3562	3602
3403	3443	3483	3523	3563	3603
3404	3444	3484	3524	3564	3604
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3407	3447	3487	3527	3567	3607
3408	3448	3488	3528	3568	3608

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3627	3667	3707	3747	3801	3855
3628	3668	3708	3748	3802	3856
3629	3669	3709	3749	3803	3857
3630	3670	3710	3750	3804	3858
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3638	3678	3718	3759	3813	3866
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3641	3681	3721	3765	3818	3870
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3907	3947	3988	4028	4068	4108
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