

Domain Name Marketplace Indicators

Version 1.1 Indicator Schema and Taxonomy Guide



Last Updated: 12 October 2023

Project Background

The Domain Name Marketplace Indicators project was initiated in 2016 to track the progress of Goal 2.3 in ICANN's [2016-2020 Strategic Plan](#), which aimed to “support the evolution of domain name marketplace to be robust, stable and trusted”. The project is linked to a targeted outcome in ICANN's [2021-2025 Strategic Plan](#) aiming for “consumer confidence in the evolving domain name marketplace [to] remain strong, as measured by increasing domain name registrations and other indicators”.

To guide in the selection of appropriate metrics that provide meaningful measures of domain name marketplace evolution, ICANN org (‘org’) collaborated closely with a volunteer Advisory Panel to deliberate upon each of the stated strategic goal’s components: robust competition, marketplace stability, and trust. Org considered the feedback provided by the Advisory Panel and developed a draft indicator schema, which was further refined by an independent expert on domain name marketplace metrics with oversight and guidance from both org and the Advisory Panel.

A total of 29 indicators forming part of the project’s version 1.0 [schema](#) and [taxonomy](#) were released across four waves between 2019 and 2022. Prior to the fifth wave of indicator release, org conducted a critical review of the project, by assessing indicator utilization levels alongside the effort required to generate them, with the aim of streamlining the schema and optimizing the efficiency of work for future releases.

The updated Version 1.1 schema, which is detailed in this document, represents the output of this evaluation. The schema is made up of three overarching categories and tracked by a total of 16 indicators relating to dimensions such as registrant choice, registrant domain adoption, service provider marketplace entry and competition, service provider contractual compliance, and industry safeguards.

ICANN org will continue to work with the Community and the project’s Advisory Panel to evaluate additional improvements that might be incorporated into this initiative in the future. The information in this document will be updated as methodologies are further refined and/or as metrics shortlisted for inclusion are updated.

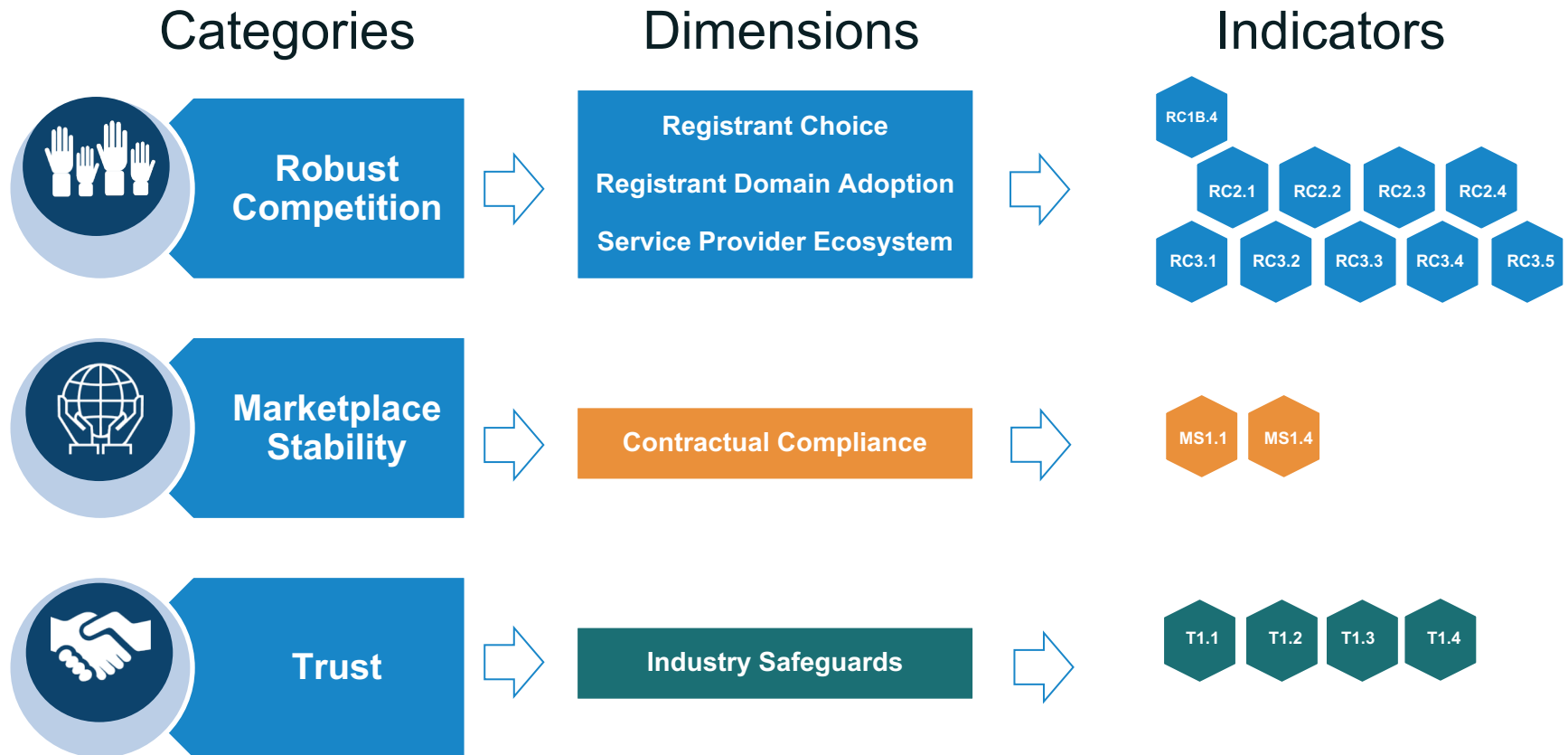
About This Document

This document outlines the categories, dimension definitions, and the 16 indicators that comprise the updated Domain Name Marketplace Indicators (Version 1.1) schema and taxonomy guide. This document also provides rationale for inclusion of indicators within the updated schema, interpretive notes, and suggested means of calculating the indicators to guide in replicating the calculations performed.

For continuity and ease of reference, indicator ID codes from the original Version 1.0 [schema](#) are being retained in this updated output. Historical values for indicators previously published but discontinued under the current schema update will continue to remain accessible via ICANN's [Open Data platform](#).

Version 1.1 Schema at a Glance

The updated Version 1.1 schema is made up of three overarching categories, which are further described in five dimensions, and tracked by a total of 16 indicators.



Robust Competition Category Dimensions and Indicators

Robust Competition (RC) Category Dimensions



RC1

Registrants can register domains across languages



RC2

Registrants are adopting domains across all TLDs.



RC3

The TLD marketplace as a whole is open to new service providers.

Robust Competition (RC) Indicators

Indicator ID	Definition	Rationale for Inclusion	Interpretive Notes / Calculation Method
RC_1B.4	Number and Percentage of distinct gTLD registrar entities with IDN gTLD domain registrations (by script).	Shows choice of registrars by registrants for domains in IDN scripts. Increasing percentages of registrars in relevant scripts indicates an expansion of market actors involved in registrations within IDN gTLDs.	<p>Tracking by distinct registrar entities rather than using a technical definition (e.g., IANA IDs) recognizes registrar entities have different strategies for organizing their managed domains; and (2) data are aggregated to script categories (from a general IDN figure) that are meaningful to registrants.</p> <ol style="list-style-type: none"> 1. Aggregate individual gTLD registrars to distinct gTLD registrar entities. 2. Aggregate IDN gTLDs (those beginning with "xn--") to script based on their punycodes and U-labels. 3. For each script (operationalize by a cluster of IDN gTLDs) count the number of distinct gTLD registrar entities having any domains registered in that script and evaluate the percentage in comparison to the total number of distinct gTLD registrar entities.
RC_2.1	Number of domains (by TLD category).	Shows absolute size of the global marketplace for domain names across broad TLD categories. Tied to registrant demand for domains. Changing values indicates evolving registrant demand for domain name market categories.	<ol style="list-style-type: none"> 1. Collect number of domains in (a) all gTLDs (b) all ccTLDs. 2. Aggregate to TLD categories.
RC_2.2	Net change in number of domains (by TLD category).	Shows changes in the absolute size of the global marketplace for domain names across broad TLD categories. Tied to registrant demand for domains across time periods and TLD categories. Value variation indicates shifts in the marketplace between different TLD categories (e.g., ccTLDs, legacy gTLDs and new gTLDs).	<ol style="list-style-type: none"> 1. Number of domains registered in a TLD in X / Number of domains registered in a TLD in X-Y1 and X-Y2 and X-Y3 2. Aggregate to TLD categories. 3. X = Current; Y1=6M, Y2=12M, Y3=36M; TLD = IDN gTLD or IDN ccTLD

Robust Competition (RC) Indicators

Indicator ID	Definition	Rationale for Inclusion	Interpretive Notes / Calculation Method
RC_2.3	Compound annual growth rate (CAGR) of number of domains (by TLD category).	Shows growth rates in the global marketplace for domain names across broad TLD categories. Tied to registrant demand for domains. Value variation indicates rates of growth across TLD categories and marketplace shifts.	<ol style="list-style-type: none"> 1. $(\text{Total number of domains currently registered in all TLDs} / \text{Total number of domains registered in all TLDs in current date} - X \text{ years})^{1/X} - 1$ 2. Calculate for each TLD category. 3. $X=3$
RC_2.4	Domain name renewal to new registration ratio (by gTLD category).	Shows how demand for domains sustains across years in broad gTLD categories. Tied to registrants' continued registration of domain names. Value maintaining or increasing indicates sustained registrant demand for domains names.	<p>Value maintaining or increasing indicates sustained registrant demand for domain names.</p> <ol style="list-style-type: none"> 1. Collect number of new domain additions and renewals in all gTLDs. 2. Calculate indicator value by considering total count of domain name renewals / total count of new domain name additions. 3. Aggregate counts by gTLD categories and calendar-year time period.
RC_3.1	Number of distinct gTLD registry operator entities (total and new).	Shows the overall number of registry operators masked by a simple count of registries. Tied to ownership patterns and consolidation of registries. Value variation indicates market entries, exits, consolidations, and spinoffs.	<p>Tracking by distinct registry operators rather than using TLDs is important to capture an organizational rather than technical measure of market participation.</p> <ol style="list-style-type: none"> 1. List the total number of distinct gTLD registry operator entities. 2. Based on the delta over prior 6- month reporting period, calculate the change in the number of new distinct gTLD registry operator entities.
RC_3.2	Mean number of gTLD registries per distinct gTLD registry operator entity.	Shows marketplace dynamics for registries. Tied to ownership structures of distinct registry entities and specific relations of registries and managing entities. Value variation indicates market entries, exits, consolidations, and spinoffs.	<p>Looking at changes in the mean provides a simple indicator of consolidation in registry operators. This metric should be interpreted in concert with measures of overall market growth (see RC_2.1) as consolidation is not inconsistent with market growth and competition.</p> <ol style="list-style-type: none"> 1. $\text{Mean} = \text{Total number of gTLD registries} / \text{Total number of distinct gTLD registry operator entities}$.

Robust Competition (RC) Indicators

Indicator ID	Definition	Rationale for Inclusion	Interpretive Notes / Calculation Method
RC_3.3	Number of distinct gTLD registrar entities (total and new).	Shows the overall number of registrar entities masked by a simple counts of registrars. Tied to ownership patterns and consolidation of registrars. Value variation indicates market entries, exits, consolidations, and spinoffs.	Tracking by distinct gTLD registrar entities rather than using a technical definition (e.g., IANA IDs) is important to capture an organizational measure of market participation. <ol style="list-style-type: none"> 1. List the total number of gTLD registrars. 2. Aggregate gTLD registrars to distinct gTLD registrar entities. 3. From this list calculate the number of new distinct gTLD registrar entities.
RC_3.4	Mean number of gTLD registrars per distinct gTLD registrar entity.	Shows marketplace dynamics for registrars. Tied to ownership structures of distinct registrar entities and specific relations of registrars and managing entities. Value variation indicates market entries, exits, consolidations, and spinoffs.	Looking at changes in the mean provides a simple indicator of consolidation in registrars. This metric should be interpreted in concert with measures of overall market growth (see RC_2.1) as consolidation is not inconsistent with market growth and competition. <ol style="list-style-type: none"> 1. Mean = Total number of gTLD registrars / Total number of distinct gTLD registrar entities.
RC_3.5	Number of distinct back-end technology service providers (total and new).	Shows the size of market participation in the upstream side of the domain industry. Tied to number of entities in the marketplace. Value variation indicates market entries, exits, consolidations, and spinoffs.	Tracking the change in numbers provides a useful and simple metric on the number of market participants in this segment. <ol style="list-style-type: none"> 1. List the total number of back-end technology service providers and filter for duplicates. 2. From this list calculate the number of total and new distinct back-end technology service providers.

Marketplace Stability Category Dimension and Indicators

Marketplace Stability (MS) Category Dimension



MS1

Registries and registrars consistently deliver against their contractual obligations and do not contribute to marketplace instability that would result in harm to registrants.

Marketplace Stability (MS) Indicators

Indicator ID	Definition	Rationale for Inclusion	Interpretive Notes / Calculation Method
MS_1.1	Total number of gTLD registry operator and gTLD registrar related complaints.	Shows how registrants view contract fulfillment by registrars and registries. Tied to registrant decisions to file complaints after registry/registrar interaction. Value varies as registrars and registries deliver on obligations.	<ol style="list-style-type: none"> 1. Access update of files titled "Compliance Approach & Process" for Registrars and Registries. 2. Identify "Complaints Received" column and record value.
MS_1.4	Mean registration period for domains (by gTLD category).	Provides information on registrant decisions to commit to domains across gTLD categories. Tied to registrant decision regarding length of period of domain name ownership. Value variation indicates changes in registrant confidence over time.	<p>Length of registration period is associated with registrant expectations of use of domains as well as their long-term value. An increase in the length of registration period would be associated with greater stability.</p> <ol style="list-style-type: none"> 1. $(\text{RegLen1} * \text{Number of New and Renewed Domains for that RegLen1}) \dots (\text{RegLen10} * \text{Number of New and Renewed Domains for that RegLen10}) / \text{Total number of New and Renewed Domains}$ 2. Aggregate to TLD categories. <p>RegLen = 1,2,3,4,5,6,7,8,9,10</p>

Trust Category Dimension and Indicators

Trust (T) Category Dimension



T1

Domain industry demonstrates operational success in safeguarding Internet community interests including registrants, intellectual property holders and law enforcement.

Trust (T) Indicators

Indicator ID	Definition	Rationale for Inclusion	Interpretive Notes / Calculation Method
T_1.1	Number of involuntary gTLD registrar terminations.	Provides information on operational success of safeguards to ensure compliance. Tied to high level of registrar noncompliance resulting in contract termination. Value increasing significantly indicates potential impacts in marketplace trust.	The number of involuntary registrar terminations indicates a rare (but high) level of non-compliance that could contribute to a reduction in market trust, particularly if the number of domains involved is large. <ol style="list-style-type: none"> 1. Access table titled "Formal Notice - Registrars". 2. Select "Terminations" and record values.
T_1.2	Number of involuntary gTLD registry terminations	Provides information on operational success of safeguards to ensure compliance. Tied to high level of registry noncompliance resulting in contract termination. Value increasing significantly indicates potential impacts in marketplace trust.	The number of involuntary registry terminations indicates a rare (but high) level of non-compliance that could contribute to a reduction in market trust, particularly if the sizes of the TLDs involved are large. <ol style="list-style-type: none"> 1. Search for 4.3(b) termination line items and record values 2. Search for Notice of Registry Agreement Termination and record date of termination.
T_1.3	Number of UDRP complaints and percentage of UDRP complaints decided against registrants	Provides information on IP conflicts. Tied to complaint filings and subsequent decisions. Value increasing indicates more potential squatting or more aggressive actions by IP holders.	Because UDRP and URS have different burden of proof standards and are not implemented uniformly across TLDs, it is important to separate these two categories. <ol style="list-style-type: none"> 1. Collect data from UDRP arbitration providers 2. Include variables of case number, commenced date, decision date, and result to ensure each case is unique and determine timing. 3. Aggregate counts by time period.
T_1.4	Number of URS complaints and percentage of URS complaints decided against registrants	Provides information on IP conflicts. Tied to complaint filings and subsequent decisions. Value increasing indicates more potential squatting or more aggressive actions by IP holders.	Because UDRP and URS have different burden of proof standards and are not implemented uniformly across TLDs it is important to separate these two categories. <ol style="list-style-type: none"> 1. Collect data from URS arbitration providers 2. Include variables of case number, commenced date, decision date, and result to ensure each case is unique and determine timing. 3. Aggregate counts by time period.

Appendix

Indicator Standard Definitions

A number of standardized categories are used in the indicator definitions. It may be helpful to refer to these when reviewing indicators.

- gTLD Grouping: Legacy gTLDs, New gTLDs, IDN gTLDs, .brand gTLDs, Geographic gTLDs.
- TLD Grouping: Legacy gTLDs, New gTLDs, IDN gTLDs, .brand gTLDs, Geographic gTLDs, ccTLDs, IDN ccTLDs.
- Languages: Languages in which website terms and conditions are available.
- Back-end technology service provider: Company providing technical services for operating registries and registrars.
- Service provider: Registries + registrars + back-end technology service providers.
- Distinct gTLD registrar: An organizational grouping* referred to as “registrar families” comprised of multiple registrar seats.
- Distinct gTLD registry operator: An organizational grouping* referred to as “registry operator entities contracted as the operator to multiple gTLDs.

Glossary (1)

- **.brand gTLD.** In the New Generic Top-Level Domain Program (New gTLD Program), a designation for a TLD that is operated by and for an entity under its trademarked name as outlined in the entity's Registry Agreement with ICANN. To qualify as a brand TLD, a registry operator must apply for the brand TLD designation and the brand's trademark must be recorded in the Trademark Clearinghouse.
- **Country code top-level domain (ccTLD).** The class of top-level domains reserved for use by countries, territories, and geographical locations identified in the ISO 3166-1 Country Codes list. ccTLDs can base their names on the two-letter country codes defined by the ISO 3166-1 standard (e.g., .jp for Japan, .fr for France, .ke for Kenya), or they can represent a country or territory name in a script other than US-ASCII characters.
- **Domain:** A unique name that forms the basis of the uniform resource locators (URLs) that people use to find resources on the Internet (e.g., web pages, email servers, images, and videos). The domain name itself identifies a specific address on the Internet that belongs to an entity such as a company, organization, institution, or individual.
- **Generic top-level domain (gTLD).** The class of top-level domains that includes general-purpose domains such as .com, .net, .edu, and .org. This class also includes domains associated with the New Generic Top-Level Domain Program (New gTLD Program), which includes names such as .futbol, .istanbul, and .pizza, and names in other alphabets and languages. Some gTLDs, known as sponsored gTLDs, represent a specific community of Internet users. In these cases, the community's sponsor develops the rules and policies specific to the gTLD. Examples include .aero, .coop, and .museum.
- **Geographic gTLD.** New gTLDs qualifying for ICANN classification as "geographic."
- **Internationalized Domain Names (IDNs).** An internationalized label for a domain in the root zone (a top-level domain). The current Label Generation Rules require an IDN TLD to conform to the Internationalized Domain Names in Applications (IDNA) protocol.
- **Legacy gTLD.** Known list of 18 gTLDs: .aero, .asia, .biz, .cat, .com, .coop, .info, .jobs, .mobi, .museum, .name, .net, .org, .post, .pro, .tel, .travel, .xxx.
- **New gTLD.** A program coordinated by ICANN to enable the expansion of the Domain Name System (DNS). The final part of a domain name (e.g., .com, .net, or .org) represents a top-level domain (TLD). Under the New gTLD Program, entities can register TLDs with names such as .futbol, .istanbul, and .pizza, along with names in other alphabets (e.g., Arabic and Cyrillic) and languages (e.g., Chinese, Japanese, Korean).

Glossary (2)

- **Registrant.** An individual or entity who registers a domain name. Upon registration of a domain name, a registrant enters into a contract with a registrar. The contract describes the terms under which the registrar agrees to register and maintain the requested name.
- **Registrar:** An organization through which individuals and entities (registrants) register domain names. During the registration process, a registrar verifies that the requested domain name meets registry requirements, and submits the name to the appropriate registry operator. Registrars are also responsible for collecting required information from registrants and making the information available through WHOIS. After registration, registrants can make updates to their domain name settings through their registrars.
- **Registry operator:** The organization that maintains the master database (registry) of all domain names registered in a particular top-level domain (TLD). ROs receive requests from registrars to add, delete, or modify domain names, and they make the requested changes in the registry. An RO also operates the TLD's authoritative name servers and generates the zone file.
- **Service provider.** Generic reference to a gTLD registry operator, gTLD registrar or reseller.
- **Top-level domain.** A domain at the top of the naming hierarchy of the Domain Name System. In a domain name, the TLD appears after the second-level domain. For example, in the domain name icann.org, the characters org identify the TLD.
- **Uniform Domain Name Dispute Resolution Policy (UDRP).** A policy for resolving disputes arising from alleged abusive registrations of domain names (for example, cybersquatting). The UDRP allows trademark holders to initiate expedited administrative proceedings by filing a complaint with an approved Dispute Resolution Service Provider. The UDRP is one of the Rights Protection Mechanisms that help safeguard intellectual property rights in the Domain Name System.
- **Uniform Rapid Suspension (URS).** An expedited administrative procedure that rights holders can initiate for certain types of domain name disputes. The URS procedure is a tool for quickly addressing clear-cut cases of trademark infringement. The URS is one of the Rights Protection Mechanisms that helps safeguard intellectual property rights in the Domain Name System.
- **WHOIS.** Publicly available directory with information about registered domains. Includes contact information for the gTLD registrant and gTLD registrar.

Deferred Metrics

The following is a list of additional metrics that were shortlisted for inclusion in schema V1.0, but deferred for reconsideration in the future.

- Percentage of domains by use category, (a) not resolving, (b) resolving within the same TLD (c) redirected to another TLD (by TLD category).
- Average uptime for WHOIS services for gTLD registrars and registries (by gTLD category).
- Percentage of businesses using a TLD-specific strategy for branding (by TLD category).
- Number of resellers by ICANN region.
- Percentage of gTLD domains registered via resellers.
- Marketplace concentration of resellers based on number of domains managed (by gTLD category).
- Percentage of domains using privacy/proxy WHOIS services (by gTLD category).
- Percentage of ccTLDs with a functional registration services webpage (by ICANN region).
- Percentage of ccTLDs with bouncing email contact information (by ICANN region).
- Percentage of gTLD registry operators that are also affiliated with a gTLD registrar.
- Marketplace concentration of domain names transactions across all gTLDs.
- Marketplace concentration of distinct gTLD registry operators based on number of TLDs managed (by gTLD category).
- Marketplace concentration of distinct gTLD registry operators based on number of domains managed (by gTLD category).
- Marketplace concentration of distinct gTLD registrar entities based on number of domains managed (by gTLD category).
- Marketplace concentration of distinct back-end technology service providers based on number of TLDs served (by gTLD category).



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