ACKNOWLEDGMENTS:
ICANN would like to thank the community members who have participated in the development of the gTLD Marketplace Health Index (Beta) through the Advisory Panel and the public comment forums, and greatly appreciates the ongoing effort of the community Advisory Panel to further refine this Beta report. ICANN also acknowledges the work of Professor Hemant Bhargava, Suran Chair in Technology Management, University of California, Davis, who evaluated the gTLD Marketplace Health Index (Beta) in June 2016. Professor Bhargava’s “An Economic Evaluation of gTLD Performance Metrics” is available at icann.org/en/system/files/files/economic-evaluation-gtld-performance-metrics-20jun16-en.pdf.
gTLD Marketplace Health Index (Beta)

Note: The gTLD Marketplace Health Index (Beta) is intended to serve as a basis for community discussion and collaboration for further developing ICANN’s TLD marketplace metrics. ICANN is in the midst of discussions with the community Advisory Panel concerning all elements of this project—starting with the title, scope of effort and mutual goals of the metrics that shall be included in the next version. ICANN plans to publish current data for these beta version metrics biannually until the next iteration of this resource is complete.

The gTLD Marketplace Health Index presents statistics and trends related to generic top-level domains (gTLDs). ICANN shall continue to publish these statistics semi-annually to track progress against its goal for the domain name marketplace to be robust, stable and trusted. To guide the creation of metrics, ICANN has defined each part of the goal:

Robust Competition:
• Diversity exists in the choice of a service provider, including:
  – Geography
  – Scripts offered
  – Service model*
  – Languages offered*
• The commercial marketplace is thriving – demonstrated by growth in new gTLDs and across all gTLDs.
• The marketplace is open to new players.
• Marketplace competition is perceived to be fair.*
• The marketplace is not dependent on one or a small number of players.*

Marketplace Stability:
• More gTLD registrars and gTLD registry operators are entering the gTLD marketplace than are leaving.
• Service providers are reliable, setting consistent expectations and meeting levels of service for: gTLD registrants, Internet users and the global community (including gTLD registry operators, gTLD registrars, law enforcement and intellectual property holders).*

Trust:
• Service providers, gTLD registry operators, gTLD registrars and gTLD registrants are:
  – Compliant with their contractual obligations
  – Perceived to be trustworthy*

*The gTLD Marketplace Health Index (Beta) does not include metrics for these goals. It is expected that through discussions with the community Advisory Panel concerning elements of this project, these goals and metrics will be refined. See page 14 for a preliminary list of additional proposed metrics for community Advisory Panel consideration.
Robust Competition

Geographic Diversity

The metrics in this section track the geographic diversity of gTLD registry operators and registrars by examining their physical presence in each ICANN region and by legal jurisdiction (as defined by the ISO 3166 standard). Each gTLD registrar and registry operator’s location is determined by the mailing address on record with ICANN. These numbers may not reflect every jurisdiction where an ICANN-accredited gTLD registrar or gTLD registry operator has a physical presence because these entities may have a presence in jurisdictions besides their primary office address. ICANN presents these numbers as a starting point for discussion, and aims to expand these metrics in the future to account for additional contacts within a jurisdiction (e.g. satellite offices, local affiliates, resellers).

Percentage of Distinct ICANN-Accredited gTLD Registrars, by ICANN Region

This metric tracks the percentage of distinct ICANN-accredited gTLD registrars having a primary contact address in the identified ICANN region. In calculating this metric, each gTLD registrar family with a primary contact address in the region is counted once, then added to the number of independent gTLD registrars in the region.
Percentage of Distinct ICANN-Accredited gTLD Registry Operators, by ICANN Region

This metric tracks the percentage of distinct gTLD registry operators having a primary contact address in the identified ICANN region. In calculating this metric, each gTLD registry operator family with a primary contact address in the region is counted once, then added to the number of independent gTLD registry operators in the region.
**Competition**

Several ICANN-accredited gTLD registrars and gTLD registry operators operate independently, while others are part of a large family associated with a single corporate parent. These metrics track the percentage of distinct entities in the gTLD marketplace. In calculating the metrics, each gTLD registrar or gTLD registry operator family is counted once, then added to the number of independent gTLD registrars or gTLD registry operators.
gTLDs – Total *

The metrics in this section track the total number of second-level domain names in existence in gTLDs from 2010 until the second half of 2017, as reported to ICANN in monthly transaction reports. The reporting periods run from January to June (H1) and July to December (H2). Additional metrics track the total number of second-level domain name registrations in internationalized gTLDs (IDNs) until the second half of 2017 and the full year-over-year growth rates in all second-level domain name registrations in gTLDs from 2010-2017.

*Errata: Total registration, add, and delete numbers have been updated slightly from prior versions of this report during multiple measurement periods due to updated data received in resubmitted registry reports.
gTLDs – Additions and Deletions

The following metrics show the rate of new second-level domain name registrations in gTLDs (additions) and second-level domain name deletions (excluding deletions during the add-grace period) over time, as reported to ICANN in monthly gTLD transaction reports. The reporting periods run from January to June (H1) and July to December (H2).

Total second-level domain name additions (below) and deletions (on page 8) are represented by reporting period from 2010 until the second half of 2017, along with the full year-over-year growth rates (2010-2017) for additions and deletions. Second-level domain name additions from 2014 until the second half of 2017 are further analyzed (on page 7) by separating the totals into legacy and new gTLDs (with the year-over-year growth rate for each). Second-level domain name additions from 2014 until the second half of 2017 are further segmented into new gTLD categories, where applicable: IDNs, .brands, and geographic gTLDs, with the year-over-year growth rate for each category.

Second-level domain name deletions from 2014 until the second half of 2017 are shown (on page 9) as a percentage of total second-level names deleted by category. For example, in 2014 H2, the data indicates 10.2 percent of all second-level domain names in gTLDs were deleted, including 1.1 percent of second-level domain names in new gTLDs and 10.4 percent of second-level domain names in legacy gTLDs.
Second-Level Domain Name Additions: Legacy and New gTLDs (in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Legacy gTLDs</th>
<th>New gTLDs - All Categories</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 H1</td>
<td>20,139</td>
<td>1,341</td>
<td>21,480</td>
</tr>
<tr>
<td>2014 H2</td>
<td>19,179</td>
<td>2,317</td>
<td>21,496</td>
</tr>
<tr>
<td>2015 H1</td>
<td>19,730</td>
<td>2,838</td>
<td>22,568</td>
</tr>
<tr>
<td>2015 H2</td>
<td>22,373</td>
<td>6,098</td>
<td>30,472</td>
</tr>
<tr>
<td>2016 H1</td>
<td>21,465</td>
<td>12,515</td>
<td>33,980</td>
</tr>
<tr>
<td>2016 H2</td>
<td>19,195</td>
<td>7,864</td>
<td>27,059</td>
</tr>
<tr>
<td>2017 H1</td>
<td>22,082</td>
<td>7,417</td>
<td>29,499</td>
</tr>
<tr>
<td>2017 H2</td>
<td>20,737</td>
<td>6,086</td>
<td>26,823</td>
</tr>
</tbody>
</table>

Second-Level Domain Name Additions, Legacy & New gTLDs: Year-Over-Year Growth Rates

- 2015/2016: 128.0% increase
- 2016/2017: 5.3% increase

Second-Level Domain Name Additions, IDNs, .brands, Geographic: Year-Over-Year Growth Rates

- 2015/2016: 99.6% decrease
- 2016/2017: 48.5% decrease

Second-Level Domain Name Additions: IDNs, .brands, Geographic

- 2014 H1: 46,734 (IDNs), 200,318 (.brands), 2,617 (Geographic)
- 2014 H2: 44,155 (IDNs), 200,318 (.brands), 2,617 (Geographic)
- 2015 H1: 217,202 (IDNs), 217,202 (.brands), 1,339 (Geographic)
- 2015 H2: 197,194 (IDNs), 197,194 (.brands), 908 (Geographic)
- 2016 H1: 133,336 (IDNs), 179,266 (.brands), 2,386 (Geographic)
- 2016 H2: 101,927 (IDNs), 134,215 (.brands), 1,659 (Geographic)
- 2017 H1: 64,921 (IDNs), 134,215 (.brands), 5,002 (Geographic)
- 2017 H2: 66,288 (IDNs), 134,215 (.brands), 5,002 (Geographic)
Second-Level Domain gTLD Name Deletions (in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>H1</th>
<th>H2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3,507</td>
<td>3,669</td>
</tr>
<tr>
<td>2011</td>
<td>4,037</td>
<td>3,971</td>
</tr>
<tr>
<td>2012</td>
<td>4,427</td>
<td>4,553</td>
</tr>
<tr>
<td>2013</td>
<td>4,569</td>
<td>3,883</td>
</tr>
<tr>
<td>2014</td>
<td>11,793</td>
<td>17,922</td>
</tr>
<tr>
<td>2015</td>
<td>18,578</td>
<td>19,043</td>
</tr>
<tr>
<td>2016</td>
<td>18,855</td>
<td>24,357</td>
</tr>
<tr>
<td>2017</td>
<td>27,340</td>
<td>28,273</td>
</tr>
</tbody>
</table>

Second-Level gTLD Domain Name Deletions:
Year-Over-Year Growth Rates (2010-2017)

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/11</td>
<td>11.6%</td>
</tr>
<tr>
<td>2011/12</td>
<td>12.1%</td>
</tr>
<tr>
<td>2012/13</td>
<td>-5.9%</td>
</tr>
<tr>
<td>2013/14</td>
<td>251.6%</td>
</tr>
<tr>
<td>2014/15</td>
<td>26.6%</td>
</tr>
<tr>
<td>2015/16</td>
<td>14.9%</td>
</tr>
<tr>
<td>2016/17</td>
<td>28.7%</td>
</tr>
</tbody>
</table>
The percentage of deletions for second-level domains in New gTLDs was higher in 2017 H1 due to an unusually large number of monthly deletions for two New gTLD strings during the reporting period.

The percentage of deletions for second-level domains in .brands in 2014 H1 was unusually high due to the small sample size, more deletions than total names under management and an unusually large number of monthly deletions for two .brands during the reporting period.
Marketplace Stability

**gTLD Registrars – Newly Accredited**

This metric tracks the total number of unique gTLD registrars that obtained a new ICANN accreditation during the reporting period. A newly accredited gTLD registrar is counted as distinct if it is not affiliated with an existing gTLD registrar family.

![Number of Distinct gTLD Registrars Accredited](image)

**gTLD Registrars – Deaccredited (Voluntary and Involuntary)**

This metric tracks the total number of ICANN-accredited gTLD registrars that were deaccredited during the reporting period. Deaccreditation includes gTLD registrars that are terminated due to ICANN compliance violations and gTLD registrars that voluntarily terminated their accreditation agreements with ICANN. The subset of gTLD registrars terminated due to ICANN compliance violations is also tracked in a separate metric in the “Trust” section, on page 11.

![Voluntary and Involuntary gTLD Registrar Terminations](image)

1. The total number of voluntary RAA terminations was unusually high in 2013H1 due to a large group of registrars (72) from the same family that elected to terminate. The number reported above is the total number of distinct registrars de-accredited, to normalize for this spike.

2. The total number of registrars that voluntarily terminated an RAA was unusually high for 2017H2 due to a large group of registrars (447) from the same registrar family that elected to terminate. The number reported above is the total number of distinct registrars deaccredited during this period to normalize for this spike.

Note: For every measurement period prior to 2016 H1, the number of gTLD registry agreement terminations (voluntary and involuntary) was zero. For 2016 H2 and 2017 H1, there were five and seven gTLD registry agreement terminations, respectively. Should a metric on gTLD registry agreement terminations be retained as part of the final set of marketplace indicators, such information will be included for presentation in future report editions. An up-to-date list of gTLD registry agreement terminations is available at [icann.org/resources/pages/gtld-registry-agreement-termination](http://icann.org/resources/pages/gtld-registry-agreement-termination).
Trust

gTLD Registrars – Involuntary Terminations

This metric tracks the number of ICANN-accredited gTLD registrars whose accreditation agreements were terminated by ICANN during the reporting period due to ICANN compliance violations.

![gTLD Registrar Terminations for Contractual Violations](image)

Note: During the beta reporting periods, there were no terminations of gTLD registry agreements due to compliance violations to report. Should any such instances occur, and if this metric is retained as part of the final set of marketplace indicators, such information will be included for presentation in future report editions.

Accuracy of WHOIS Records

This metric tracks the accuracy of WHOIS records, as detected by the WHOIS Accuracy Reporting System. For more information, see [whois.icann.org/en/whoisars](http://whois.icann.org/en/whoisars).

**Syntax Accuracy**

WHOIS ARS detects whether the contact information provided in a WHOIS record (email/postal addresses and phone number) is formatted correctly per the contractual requirements of the Registrar Accreditation Agreement. **Examples:** *Is there an “@” symbol in the email address? Is there a country code in the telephone number?*

![Syntax Accuracy](image)

**Operational Accuracy**

WHOIS ARS detects whether the contact information provided in a WHOIS record (email/postal addresses and phone number) is operational. **Examples:** *Does the email go through? Does the phone ring? Will the postal mail be delivered?*

![Operational Accuracy](image)

*These data are presented at a 95 percent confidence interval with an estimated percentage plus or minus approximately two standard errors.*
**UDRP and URS Decisions Against gTLD Registrants**

These metrics track the total number of Uniform Domain Name Dispute Resolution Policy (UDRP) and Uniform Rapid Suspension (URS) decisions issued against gTLD registrants due to trademark infringement, and as a percentage of the total number of UDRP and URS complaints filed.

These metrics are reported on an annual basis. The data for these metrics was collected as part of ICANN’s Competition, Consumer Trust and Consumer Choice metrics reporting project. For more information, see: [www.icann.org/resources/reviews/cct/metrics](http://www.icann.org/resources/reviews/cct/metrics).

**Note:** Annual totals for 2012 and 2013 include only UDRP decisions decided against registrants. Totals for 2014 onwards include both UDRP and URS decisions decided against registrants.

**Errata:** Decisions totals beginning in 2014 have been updated from prior editions of the beta report to reflect decisions that have been issued. Many cases were listed as “pending” in prior versions of this report but have been recently updated with a decision.

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**Total Number of Decisions Decided Against Registrants**

<table>
<thead>
<tr>
<th>Year</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3,573</td>
</tr>
<tr>
<td>2013</td>
<td>3,261</td>
</tr>
<tr>
<td>2014</td>
<td>2,992</td>
</tr>
<tr>
<td>2015</td>
<td>3,292</td>
</tr>
<tr>
<td>2016</td>
<td>3,359</td>
</tr>
<tr>
<td>2017</td>
<td>2,518</td>
</tr>
</tbody>
</table>

---

**Percentage of Decisions Decided Against Registrants**

- **2012:** 89.6%
- **2013:** 96.7%
- **2014:** 69.8%
- **2015:** 75.8%
- **2016:** 73.1%
- **2017:** 78.2%

---

![Figure 25](image1.png)

![Figure 26](image2.png)
**Additions.** The sum of reported second-level domain names added in gTLDs during the relevant reporting period.

**Country code top-level domain (ccTLD).** Two-letter top-level domain that corresponds to a country or dependent territory.

**Deletions.** The sum of reported second-level domain name deletions (outside the add-grace period) in gTLDs during the relevant reporting period.

**Generic top-level domain (gTLD).** Top-level domain not corresponding to a country code.

- **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.
- **Internationalized Domain Names (IDNs).** Internationalized gTLDs. Reported second-level IDN registration numbers do not consider second-level registrations in non-IDN gTLDs or ccTLDs.
- **New gTLD.** All non-legacy gTLDs submitting monthly transaction reports to ICANN.
- **.brand gTLD.** New gTLDs that have been granted a request to adopt “Specification 13” of the ICANN registry agreement.
- **Geographic gTLD.** New gTLDs qualifying for ICANN classification as “geographic.”

**gTLD registrant.** Person or entity holding the rights to a gTLD for a specified period of time.

**gTLD registrar.** ICANN-accredited company that registers gTLDs.

**gTLD registry.** Master database of all domain names registered in each gTLD.

**gTLD registry operator.** Entity that has entered into a Registry Agreement with ICANN. Registry operators set up and maintain the registry for a gTLD.

**Jurisdiction.** Country or dependent territories, as defined in the ISO 3166-1 standard, published by the International Organization for Standardization.

**Service provider.** Generic reference to a gTLD registry operator, gTLD registrar or reseller.

**Top-level domain.** The last segment of a domain name – the portion after the final dot (e.g., .com, .org, .fr).

**Uniform Domain Name Dispute Resolution Policy (UDRP).** Policy to resolve trademark-based disputes over domain name registrations.

**Uniform Rapid Suspension (URS).** Complements the UDRP, allowing faster resolution for clear-cut cases of infringement.

**WHOIS.** Publicly available directory with information about registered domains. Includes contact information for the gTLD registrant and gTLD registrar.

**WHOIS Accuracy Reporting System (ARS).** System developed by ICANN to identify and report on the accuracy of the WHOIS contact data.
gTLD Marketplace Health Index: Additional Topics for Community Discussion

Additional metrics topics have been suggested by members of the community as areas ICANN should consider tracking via the gTLD Marketplace Health Index. The following is a non-exhaustive list of additional areas of interest that could be explored in subsequent versions of the gTLD Marketplace Health Index.

**ROBUST COMPETITION**

- Percentage of second-level domain name registrations by resellers
- Number/percentage of unique gTLD resellers by ICANN region and/or legal jurisdiction
- Concentration index for gTLD registry operators and gTLD registrars
- Geographic distribution of gTLD registrants
- Percentage of gTLD registry operators that are also affiliated with a gTLD registrar
- Renewal rates of second-level domain names
- Survey data on gTLD service provider (gTLD registrar, gTLD registry operator, reseller) languages, models and locations beyond primary offices
- Survey data on perceived marketplace fairness
- Percentage of gTLD registrars offering registrations in IDN gTLDs
- Average number of gTLD registrars that offer each gTLD (average across all gTLDs and segmented by category)
- Metrics related to pricing and impact on registration and renewals; gTLD registry operator and gTLD registrar market share; addition of ccTLD data

**MARKETPLACE STABILITY**

- Number of turnovers in gTLD registry operators
- Availability of gTLD registrar services:
  - gTLD registrar services are reachable and responsive (SLAs)
  - Uptime of gTLD registrar and reseller websites
  - Uptime of gTLD registrar WHOIS service
  - Registrar WHOIS rate limiting
- Uptime of gTLD registry operator (core registry services, per SLAs)
- Price predictability (incidence of reports of unpredictable prices)
- Survey data (from gTLD registrants, Intellectual Property holders, law enforcement and others) regarding levels of service from gTLD registry operators, gTLD registrars and resellers
TRUST

- Number of valid complaints to ICANN regarding malicious activity
- Number of gTLD registrar security breaches reported to ICANN
- Number of valid complaints reported to ICANN regarding misleading information from gTLD registrars and resellers
- Use of DNSSEC for second-level gTLDs
- Number of valid compliance issues with gTLD registry services detected by ICANN SLA monitoring system
- Number of reported cases of phishing
- Incidence of cybercrime
- Incidence of abuse:
  - Number of valid abuse complaints against gTLD registrars involving malicious or abusive registrations
  - Number of unique second-level domain names in gTLDs that had valid abuse complaints filed against them
  - Number of second-level domain names in gTLDs suspended for valid abuse
- Perception of risk (survey-related data)
- Metrics related to second-level gTLD domain names that utilize privacy or proxy registration services