**Updating existing SLAs and setting new ones:**

One of the outcomes of the IANA stewardship transition was the creation of a set of Service Level Expectations (SLEs) that the IANA Functions Operator is expected to meet in its performance of the Naming function. The SLEs eventually became SLAs per the IANA Naming Function agreement.

In their monitoring of performance, the Customer Standing Committee (CSC) identified that some of the SLAs were set at a much lower rate than actual historical trends. The CSC recognized that certain SLAs may need to be modified, but according to the contract, such changes could not take place until a year had passed, giving the CSC twelve (12) months of reports to reflect on. (CSC Meeting 6, 16 January 2017).

The CSC first defined the process for tracking missed SLAs to determine if the metric required re-adjustment or if it was a sign of operational issues. The CSC determined to begin “tracking” a missed SLA on its second occurrence. In addition, if the CSC was assured that the SLA metric did require a change, on the CSC reports these missed SLAs would be flagged with “the CSC determined that these exceptions are no cause for concern. No consistent problems were identified and no further action is needed.”

ICANN, PTI and the CSC worked to develop the new “*Process for Amending the IANA Naming Service Level Agreements”.* The process provides for how to determine if an SLA should be modified, and the method for doing so with appropriate consultation and agreement levels. This process contains safeguards and mechanisms to ensure that due diligence will be followed in making changes to the SLAs.

None of the requirements in the process for amending IANA Naming SLAs override any obligations within the IANA Naming Functions Contract.

The CSC, ICANN and PTI have also developed the “*Procedure for Modifying the Process for Amending the IANA Naming Service Level Agreements”*. This procedure provides a mechanism for reviewing the SLA change process itself, if it requires adjustments realized while in operation.

As of February 2019, the CSC has identified some SLAs that need to be amended and additional new ones to be created.

**SLAs considered for change by the CSC:**

1. Technical Check – Retest
2. Technical Check – Supplemental

Technical Check includes two metrics needing to be changed. The Technical Check (Retest) and Technical Check (Supplemental). The threshold for these metrics was set to 3 minutes and 1 minute consecutively. Missing the SLA for both of these metrics relates to time spent waiting for responses from nameservers that ultimately were unreachable (i.e. time waiting to timeout, multiplied by retries.) A guiding general principle in the SLAs developed for monitor performance is that SLA time should be attributed to the party responsible, meaning that the SLA should not be missed if the data being tested is bad and as such more time needs to be allocated for the technical check to be completed.

**Recommended new thresholds:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Metric | Current SLA | Actual Performance | Adjusted SLA | Explanation | Implementation Details |
| Technical Check – Retest | 3 minutes | 3-8 minutes | 10 minutes | No impact on customer and better reflection of historical trend | The SLA Dashboard is already tracking this SLA. However, PTI needs some implementation time to apply the new threshold. |
| Technical Check - Supplemental | 1 minute | 3-8 minutes | 10 minutes | No impact on customer and better reflection of historical trend | The SLA Dashboard is already tracking this SLA. However, PTI needs some implementation time to apply the new threshold. |

1. ccTLD Creation/Transfer – Validation and Reviews

A ccTLD creation or transfer request requires full documentation, with many requests not meeting the documentation requirements at initial submission. Requests are also sent to the ICANN Board for review, and with so few successful requests (3-6 per year), a monthly metric of the overall processing time is not appropriate. Due to the low volume, the CSC decided that this category needed to be tracked for a longer period before a realistic metric could be proposed.

The CSC has previously discussed changing this SLA to be measured differently. Some of the ideas discussed were to increase the overall target from 60 days to 90 days, measure the data annually instead of monthly due to low volume, or measure performance based on a rolling basis for the last one calendar year. After discussing the pros and cons of each, the CSC seemed to converge on the rolling method for the last one calendar year. (CSC Meeting 14, 15 September 2017).

In analyzing the data from March 2016 to now, IANA staff believe that none of the three measurements above are true measures of performance of this type of request given the low volume and complexity and variedness of the quality of the request submission. It makes more sense to break this SLA into several SLAs to monitor the process at different stages. Given these factors, we suggest that the CSC consider new SLA types as follows:

* + 1. Tracking the number of interactions with the customer as an indication of the quality of the request
    2. Amount of staff processing time when the request is waiting on staff after each interaction
    3. Amount of time it takes to create any reports needed for review by external parties.

In the next year, the IANA services will undertake a project to modernize our documentation and create an easier form for customers to interact with when submitting a delegation request. As such, we propose to leave the ccTLD creation/Transfer SLA as is for now until these new mechanisms are in place.

**New SLAs identified by the CSC:**

Publication of IDN tables or Label Generation Ruleset (LGR)

While the IDN tables or LGR (hereinafter referred to as LGR) were originally published on icann.org, the IANA Naming Function Contract required maintenance of this repository, and it was therefore in the CSC’s purview to monitor maintenance. It was determined that a metric should be applied to LGR maintenance but new metrics/change to metrics could not take place until there was an SLA change process. At the same time, it was determined that publishing LGR processing data in the PTI report would give more visibility to the current processing times for LGRs so the CSC opted to publish the LGR data while working on a process to introduce new SLAs. (CSC Meeting 9, 19 April 2017). The publication of the LGR data in the PTI Report was confirmed for the June 2017 report (CSC Meeting 12, 17 July 2017).

The LGR request lifespan consists of the submission of the request; a staff review of the request against the formatting and presentation requirements listed at <https://www.iana.org/help/idn-repository-procedure>, which can result in a remediation or clarification request to the submitter; confirmation of the validated submission by the TLD’s authorizer; and implementation of the request.

The proposed SLAs below reflect the fact that the submission, validation, and implementation of requests for LGR publication and modification are currently manual processes. In addition, the total number of LGRs to be published or modified for a single request can range from a single entry to more than one thousand.

**Summary of new SLAs for Publication of LGRs considered by the CSC:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Metric | Threshold | Type | Breach | Period | Mechanism | Implementation details |
| Validation and Reviews: Time to confirm that a submission is well-formed or send it back for remediation. | ≤ 5 days | Max | 90% | Month | Publish in dashboard | The SLA Dashboard is already tracking this information however no SLA has been defined. Once a threshold is defined, PTI needs implementation time to apply the threshold. |
| Implementation: Time from when the request is ready for implementation until the request completion. | ≤ 7 days | Max | 90% | Month | Publish in dashboard | The SLA Dashboard is already tracking this information however no SLA has been defined. Once a threshold is defined, PTI needs implementation time to apply the threshold. |

In addition, the IANA SLA Dashboard will continue to provide the following informational data on IDN Table or LGR overall request volumes and processing times:

|  |  |  |
| --- | --- | --- |
| Data | Mechanism | Implementation Details |
| Requester Clarification: The number of times a clarification or remediation was required from the requester. | Publish in dashboard | None. SLA Dashboard is already tracking this data. |
| Time per Actor: Average time taken for staff processing, requester clarification, administrative contact authorization and regulatory checks | Publish in dashboard | None. SLA Dashboard is already tracking this data. |
| Request Volumes: Total number of LGRs added or modified. | Publish in dashboard | None. SLA Dashboard is already tracking this data. |

**Next steps:**

1. ICANN to Complete the Amendment to the IANA Naming Functions Contract <https://www.icann.org/public-comments/iana-naming-amend-2019-01-07-en>.
2. CSC, PTI and ICANN to Follow the Process for Amending the IANA Naming Service Level Agreements to amend the SLAs as described above.
3. PTI to implement amended and new SLAs as described above.