

BENCHMARKING OF REGISTRY OPERATIONS

Summary of Feedback from the Community

(15 February 2010 – 1 April 2010)

INTRODUCTION

Four comments were received on this document during the public comment period from 15 February 2010 to 1 April 2010.

The comments and analysis have been organized according the following areas:

- A. Study scope
- B. Survey demographics
- C. Registry growth and operations cycles
- D. Registry delineation
- E. Use of data
- F. Financial considerations

Source: The original report is at <http://icann.org/en/topics/new-gtlds/benchmarking-report-15feb10-en.pdf>. The text of the comments may be found at <http://forum.icann.org/lists/benchmarking-15feb10/>.

KEY POINTS

- While the survey was not designed to contain a statistically significant sample, it does represent a cross-section of operators in terms of size, outsourcing, business models, and time in operation.
- The survey results are presented in aggregate to protect the confidentiality of the data of individual participants.
- The report is a supporting document only, with no specific financial threshold numbers intended for incorporation into the Applicant Guidebook. The evaluators will be expected to review and validate the financial information for all applications. The benchmarking data will be used by evaluators as a reference, and is likely to be most useful in helping to identify areas where more questions need to be asked of the applicant.
- An emphasis on registry continuity and the protection of registrants has led to new failover protections in the draft new gTLD registry agreement: requirements to perform annual continuity testing, establish a backup provider, and maintain funding to cover continuity of critical registry functions in the event of a failure.

SUMMARY OF COMMENTS

A. Study Scope

Sample size; aggregation of data

It is questionable how useful the information in this report really is: it is a very narrow sampling (it would have been interesting to see some discussion of why a sampling this small was considered statistically valid); only averages are included for the statistics discussed, and without knowing what some of the other statistical measures are, especially the standard deviation, it is impossible to make any sense or draw any conclusions based on information about averages. The report is not nearly as useful as such a report would need to be in determining what the reasonable variants in conditions might be for various economic zones. *A. Doria (30 March 2010).*

Sample size; conclusions

The survey's value would have been much greater if (1) a larger sample had been used; (2) the data was more clearly presented; and (3) all relevant information collected had been presented. Also, the caution regarding extrapolating or drawing conclusions from the study does not appear until page 3 of the executive summary. Prior to that point the summary speaks of "findings" and does in fact appear to draw conclusions based on admittedly unscientific data. *INTA Internet Committee (1 April 2010).*

Overall percentages

In some cases KPMG asked questions in the survey but did not provide clear answers to them in the report. It also did not provide an overall number for the percentage of respondents that outsourced at least one of the following: network and infrastructure; systems design and development; and/or registry administration. Information was divided into a large number of categories when it would have been helpful to see an aggregate total. This is an important factor in Internet security and integrity and more definitive numbers would have been valuable. *INTA Internet Committee (1 April 2010).*

Conclusions

Caution must be exercised in trying to extrapolate widespread conclusions from a study of such limited scope. ICANN should emphasize that the quantitative data in the study should not be taken as scientific and definitive. It would be prudent for ICANN to now proceed with a more thorough study that is more representative of the TLD space and looks more closely at answering the issues raised in the study. *INTA Internet Committee (1 April 2010).*

Benefits of the benchmarking study

A study of benchmark registry operations will help to define scope for new TLD contracts, help ICANN to promote stability, security and competition within the new TLDs, and may help prospective applicants wanting to know more about operating their own TLD zone. The BC looks forward to future reporting built upon this initial framework and a defined structure that evolves with the market expansion. *BC (1 April 2010).*

Analysis

Some comments expressed doubt as to the value of the data based on survey results given that the data comes from a small sample of TLDs. While the survey was not designed to contain a statistically significant sample, it does represent a cross-section of operators in terms of size, outsourcing, business models, and time in operation. All gTLDs (a small number to start out with) and a random sample of ccTLDs were invited to participate to round out the data while maintaining an efficient scale in the exercise. A larger-scale survey of all registries would be a somewhat more valuable product. However, this would involve significantly more time and resources, and it is not clear that the models emerging from the data in such a study would be markedly different, as the sample used contained a cross-section of TLDs.

Presentation of data only in aggregate is by design and was agreed upon with participants ahead of publication. This was done to alleviate some participants' concerns around protecting the confidentiality of their individual data for obvious competitive reasons. While providing the universe of all data collected along with the spread and standard deviation may have provided even greater benefit to the reader of the report, the relatively small sample size, as well as the overarching requirement to protect participants' individual data dictated that data be presented only in averages.

A comment correctly indicated that some preliminary findings suggested by the data were highlighted in the introduction in the conclusion labeled as findings. One reason for publishing the report was to test these assumptions based on public review of the same data. ICANN has not taken these findings to the level of conclusions or recommendations for changes to the Applicant Guidebook, the evaluation criteria, or the procedures. The intention with the cautionary note on page 3 is to advise against the data being used outside the context of this study to draw conclusions, for example, to form the basis of a policy position.

A comment noted the lack of an overall number for the percentage of respondents that outsourced at least one of the following: network and infrastructure; systems design and development; and/or registry administration. This is presumed to be in relation to the chart on page 14, which breaks down the sample according to size and level of outsourcing. Across the models, 54% or 7 of 13 TLDs outsourced at least one of those functions.

Finally, a comment expresses concern that the survey was not useful for determining what reasonable variants in conditions might be for various economic zones. Note that this was not one of the objectives of the study. It is understood that costs of certain functions vary according to particular regions or countries, and this is reflected in the design of the evaluation process to be flexible and avoid setting fixed numerical levels that are appropriate. In the case of an application from an area where many functions could be operated for a lower cost than in other parts of the world, the evaluators would most likely observe that the estimates were lower than those typically seen. There is no expectation that such an application would be rejected. Rather, it would trigger an inquiry by the evaluators into the reason for the discrepancy, in this case the fact that costs were lower overall for that applicant.

A follow-up survey is not planned in the short term. However, it is likely that a similar exercise will need to be undertaken in a few years time so that the data available to the evaluators is up to date and takes into account the latest conditions in the environment.

B. Survey Demographics

The BC would have liked to have seen more participants for this study. Caution is taken regarding the influence of ccTLD data in the study as ccTLDs tend to operate differently and under different contractual obligations than gTLDs. Will the inclusion of ccTLD data in this study be a valid barometer for new gTLDs? The study mentions that ccTLDs were chosen at random. Perhaps ccTLDs that mimic gTLDs should be chosen. BC takes notice as to how the Demographics (4) slide reinforces the notion that smaller registries do outsource greater critical elements of their operations. The view through this lens should always be considered with future decisions of gTLD expansion. The outsourcing of compliance within registries should be further investigated by ICANN to understand any risks or exposures. *BC (1 April 2010)*.

The demographic section has no indication of the sampling's relationship to GNP or other economic indicators for the region within which the business is located (this would be especially relevant regarding discussion of costs in less developed regions). *A. Doria (30 March 2010)*.

Analysis

It is understood that ccTLDs operate differently from gTLDs in a policy and contractual context. However, there is some value in the data in terms of technical operations and financial resources needed to sustain these operations—the needs are similar and the data is quite relevant.

The suggestion to describe demographics in terms of GNP of the regions of countries involved is interesting. However, several participants agreed to provide data on condition of anonymity, and inclusion of this data in the report could have led to disclosure of the participants that was not intended.

A comment noted that there could be a risk in a registry outsourcing compliance functions. The survey question about outsourcing compliance included both technical and contractual compliance. It would include a registry operator that outsourced its technical functions (and thus, compliance with technical requirements) to a subcontractor as well as a registry operator that engaged a third party to monitor compliance with any other contractual requirements. In all cases, the registry operator contracted with ICANN is responsible for compliance with all provisions of the agreement.

C. Registry Growth and Operations Cycles

Registry failure

Given the rough number of possible applicants at 500, these types of metrics do provoke the notion of TLDs that could possibly fail. At what point in the operations cycle would they tend to fail? Has ICANN and the community adequately addressed a failing registry? *BC (1 April 2010)*.

Demand

Data indicates that demand for registrations within the new gTLD extensions may not be as high as originally projected. A number of the extensions discussed in the report had peak monthly registrations that were quite low. It is unclear why the survey only asked for peak monthly registrations as opposed to average monthly registrations and total overall registrations. *INTA Internet Committee (1 April 2010)*.

Trademark infringement concerns

The INTA Internet Committee is particularly concerned about the apparent finding of a strong correlation between the relative first month registration volumes and the ultimate peak volume for the most recently observed peak noted on page 1 of the executive summary. This points to the initial high volume of registrations that has accompanied the introduction of many of the new gTLDs in the past; many of those registrations may be completed by third parties whose registrations infringe trademarks and harm consumers. New gTLD introduction may cause trademark owners to register numerous names solely for defensive purposes, at a high cumulative cost to brand owners. *INTA Internet Committee (1 April 2010).*

Continuity planning

The BC would prefer to see near 100% adoption across all aspects of continuity planning. *BC (1 April 2010).*

Analysis

A comment expressed concern about registries failing in an environment with many gTLDs, and suggested that there may be a point at which a registry is most likely to fail. This is difficult to address since there is not an accepted definition of what “failure” means for a TLD. Failure defined in terms of loss of service to registrants has occurred only rarely, so it is difficult to identify a common point where failure is likely. However, ICANN shares the concern about the impact of possible gTLD failures. Transition procedures for both emergency and non-emergency situations are expected to be posted along with draft version 4 of the Applicant Guidebook. Concern about continuity and particularly the protection of registrants is also the reason for stronger failover protections in the draft new gTLD registry agreement than have been employed in previous agreements: requirements to perform annual continuity testing, to establish a backup provider, and to maintain funding to cover continuity of critical registry functions in the event of a failure.

Regarding demand, a comment states that “data indicates that demand for registrations within the new gTLD extensions may not be as high as originally projected.” It has been the case in the past that some new gTLDs have not reached the volume of registrations projected initially. Several factors affecting registration volume have been discussed within the community through the years, and some later gTLDs introduced were closer to their targets. This is part of the experience gained in early rounds of new gTLD introductions. Because growth has historically been difficult to project, there is a new emphasis on continuity and registrant protection in the new gTLD evaluation process rather than a reliance on fulfillment of the applicant’s expectations.

Regarding why the survey only asked for peak registrations, this information was not gathered through the survey but rather through the gTLD registry reports to ICANN, which are posted on a monthly basis. Data by month for each gTLD registry is available at <http://www.icann.org/en/tlds/monthly-reports/index.html> and in an aggregate format via the ICANN dashboard, <http://forms.icann.org//idashboard/public/>.

Regarding an apparent correlation between volume of registrations and possible cybersquatting registrations in start-up, the nature of registration transactions in various registry phases has

been studied in other fora but was not part of this study. Work on trademark protection issues in new gTLDs, including ways to reduce the need for defensive registrations and costs incurred by trademark holders, has been taking place in connection with the implementation of the New gTLD Program for some time, and final proposals in this regard are expected to be included in draft version 4 of the Applicant Guidebook.

ICANN agrees with the comment that there should be broad coverage across TLDs in terms of continuity planning. This is the reason that continuity planning is reflected in the evaluation criteria and in ongoing requirements in the registry agreement.

D. Registry Delineation

While the report is a constructive first step in providing financial metrics, further delineation of registry sizes and an expanded survey base would be useful. *M. Palage (1 April 2010)*.

Perhaps the study would benefit from having small, medium, and large categories defined. *BC (1 April 2010)*.

Dot brand or single registrant gTLDs were not taken into account in the study. Operating models for this type of gTLD may vary greatly from more typical models. Perhaps this gTLD type was relatively unknown at the time of this study. *BC (1 April 2010)*.

Technical and network architecture

BC agrees with the initial form of reporting but would prefer to see more precise delineation between small and large registries. *BC (1 April 2010)*.

Analysis

Several comments expressed interest in seeing the registry models further segregated by size. “Slicing” the data at different points and presenting with more granularity of sizes (for example, small/medium/large) was considered; however, it became difficult to find a rationale for particular division points and subdivided an already small sample into even smaller “categories” of one or two TLDs. The data as laid out with more granular divisions did not provide additional insight into the existing models than was evident with the simplified large vs. small/in-house vs. outsourced structure used in the report.

There are no “dot brand” types of TLDs in existence that could have been included in the study, but the comment is correct in that the study did not set out to select participants according to business model.

E. Use of Data

Will ICANN be incorporating any of the financial numbers into the DAG (e.g., question 50 of the current DAG) to better educate/inform potential applicants as to the cost of running a registry, or will this remain an ancillary document incorporated only by reference with no specific financial threshold numbers incorporated in to the DAG? *M. Palage (1 April 2010)*.

The BC is eager to know how the results of this study will be reflected in DAGv4 and how it may influence the application and selection process. *BC (1 April 2010)*.

What guidance will ICANN provide to evaluators in connection with prospective applicants that fall short of the financial benchmarks in this document? Since there will be multiple evaluator teams, would it not be prudent for ICANN to provide a standard objective set of criteria for applicants that deviate from those benchmarks? *M. Palage (1 April 2010)*.

Analysis

Some comments sought clarity on how the data presented in the report would be used in the implementation and evaluation processes. The report is a supporting document only, with no specific financial threshold numbers intended for incorporation into the Applicant Guidebook. The evaluators will be expected to review and validate the financial information for all applications. The benchmarking data will be used by evaluators as a reference, and is likely to be most useful in helping to identify areas where more questions need to be asked of the applicant.

Regarding the suggestion to provide a standard set of criteria for applications in which one or more areas are inconsistent with the benchmarked data, this was considered. As noted above, it is possible for the data in a particular application to show divergence from the ranges and averages reflected in the benchmark data; however, it would be extremely difficult to construct criteria in advance to cover every possible circumstance where this might occur. The intention of providing the benchmark data is to give a reference point to evaluators as an indication that a deeper inquiry may be needed on an application.

The evaluation process is flexible by design: the process must provide for an objective evaluation framework, but allow for adaptation according to the differing models applicants will present.

F. Financial Considerations

Registry costs

Would DNSSEC costs be a greater percent allocation for all new TLDs, as this will be a base requirement for the new TLD? Of note is that roughly US\$1 million in operating costs can be expected for a “small” registry and data indicates that 50% of gTLDs underestimated initial costs projections. What can be done to educate applicants? *BC (1 April 2010)*.

The study posits that running a small registry, which most new gTLD registries are likely to be, will cost a higher dollar amount than previously stated. If a registry is not adequately funded, it could put the integrity and security of the Internet at risk and may have negative implications for brand owners. ICANN should spend more time to determine the likely costs involved in running a small registry, and once determined, integrate these improved estimates into the application process, both to educate potential applicants as to what is required, as well as to ensure the selection process adequately takes into account the required funding. *INTA Internet Committee (1 April 2010)*.

Capital expenditure

The BC notes that US\$750K is a minimum startup projection that can only leverage a strategy of outsourcing. This is the cheapest approach and could possibly be the least path of resistance. All policy decisions made should be mindful of this use case. *BC (1 April 2010)*.

Evaluation of affiliated entities

For multiple TLD strings filled by affiliated/related entities, how will the evaluators weigh these benchmark criteria (e.g., if subsidiaries A through E apply for five separate TLD strings, but the parent only meets the benchmark financial requirements for a total of three strings, how will the evaluators proceed)? *M. Palage (1 April 2010)*.

Reserves and failure scenarios

Could a recommendation of two years of operating capital be a favorable requirement? *BC (1 April 2010)*.

There are risks to the DNS from entities that may choose to run a registry but may later go bankrupt or cease operations. This is a potential risk with existing registries and will be a considerable one with the new gTLDs. Using data from the established registries in the survey, the following is true: at the start of operating a registry, 82% of respondents had less than 1 year of reserves, and even today only 20% of respondents have less than 1 year of reserves. Only 27% of respondents identified and contractually engaged a transition services provider. *INTA Internet Committee (1 April 2010)*.

Could ICANN provide the community details about any subsequent discussions ICANN staff have had with registries (and which registries were consulted) addressing the amount of the financial instrument? If ICANN decides to deviate from the benchmark levels provided in the initial KPMG survey, will ICANN staff do so unilaterally after independent consultation with these registry operators, or will they engage KPMG to do a supplemental survey? *M. Palage (1 April 2010)*.

Given the high threshold of these financial numbers, does ICANN envision any program whereby a public sector gTLD applicant would be able to post a reduced financial security instrument if it had the support of a local/relevant government? *M. Palage (1 April 2010)*.

Analysis

Regarding the data indicating that the costs of registry operations in some cases exceeded initial expectations, a set of comments emphasized the need to educate applicants concerning cost levels. The comments about educating potential applicants are well-founded and this concern is one reason for publishing this study. ICANN also continues to take care to ensure that information on the various financial responsibilities of a registry is clearly laid out in the Applicant Guidebook, and part of additional communications. Suggestions for other enhanced educational opportunities are welcomed.

A comment suggests that ICANN should spend more time to determine the likely costs involved in running a small registry: the study provides an indication of these costs, but the actual amounts will vary depending on the circumstances of the application. Estimates based on the study will not be incorporated as strict requirements into the evaluation criteria, however. All applicants must provide detail and justification for their estimated costs, and will benefit from having some information available on current conditions in the industry. In the new gTLD process, unlike previous evaluation processes, the applicant is required to have a form of reserve funding that will cover continuing operations of critical registry functions for a particular period. This is so that existing registrants in the TLD, including users of brands, are protected.

Regarding the assumption that many applicants will build registry models around the lowest-cost use case, this is possible, but the financial evaluation panels are charged with looking at the basis and assumptions for the applicant's estimates. Additionally, the evaluation process pays particular attention to consistency across the financial and technical portions across the application so that, for instance, a technical plan and scale that was not adequately provided for by the financial estimates would likely result in greater scrutiny and additional inquiries to the applicant.

A comment asks how financial benchmark data will impact the evaluation process where entities are applying for multiple gTLDs. Note that the benchmarks are data about current registry operations. There are no numerical requirements for new gTLD applicants, only the requirement that projected costs be substantiated and funded. If, for example, an applicant for five gTLDs could only show funding sufficient to operate the functions of three, this would trigger a deeper inquiry into the description of costs and whether the entity could reasonably sustain the operation of five TLDs based on the amounts proposed.

Comments correctly identify risk to the DNS due to the uneven amounts of reserves in place across TLDs in the survey sample. The reason that new financial reserve and transition requirements are being instituted in the new gTLD evaluation process and registry agreement is to help mitigate this risk.

A comment inquires whether it would be reasonable to change the financial instrument requirement to two years of funding for registry operations rather than three. This is being considered by ICANN as the critical registry functions and the mechanics of the financial instrument are being refined for the next draft of the Applicant Guidebook. It is possible that the objectives of ensuring continuity and registrant protection can still be met with a slightly reduced reserve requirement.

A comment inquires whether applicants with government support might be eligible for reduced financial instrument requirements. It is not currently anticipated that there would be a lesser provision in cases where the applicant has government support. Public sector entities are subject to bankruptcy and other failures and there is still a need for protection of existing registrants in that event.

Regarding question 50 and the financial instrument requirement, a comment suggests that staff has engaged in discussions on the amount of this requirement with current registries, and requests more detail on those discussions. Note that in the evaluation process, it is for the applicant, not ICANN, to determine what the costs for the critical functions will be: a specific amount is not required. As for the suggestion that ICANN is in active discussion with registries regarding the right number, it would be more accurate to say that some registries have approached ICANN with comment about the numbers in the study. ICANN has not sought assistance from registries in ascertaining a number to be used as a financial instrument requirement.

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