18 December 2013

Russ Weinstein

ICANN

USA

Suite 300

Panel Coordination Manager

Los Angeles, CA 90094-2536

ICANN New gTLD Program

12025 Waterfront Drive



A Telcordia Technologies Company

Merlin House, Station Road, Chepstow, Monmouthshire, NP16 5PB, United Kingdom

Tel: +44 (0) 1291 638400 Fax: +44 (0) 1291 638401

http://www.icc-uk.com

RE: String Similarity Process, Quality Control and Non-Exact Contention Sets

ICANN has previously published the Evaluation Panel Process Documentation for String Similarity at http://newgtlds.icann.org/en/program-status/evaluation-panels

This note provides a summary of the process, quality control mechanisms and some considerations surrounding non-exact contention sets for the string similarity evaluation as requested by ICANN.

1. InterConnect Communications was contracted by ICANN to conduct the string similarity reviewed required by the Applicant Guidebook (AGB). The string similarity reviews were conducted as part of Initial Evaluation (IE) in the new gTLD Program.

2. InterConnect partnered with University College London for linguistic and language expertise. This expertise assisted with the evaluations of IDNs variants as well as ASCII strings. InterConnect had redundant and backup coverage for every applied-for language among all the applied-for strings. The individual evaluators represented a variety of linguistic and professional backgrounds, and included linguists, trade mark attorneys and technical professionals.

3. At the beginning of IE, ICANN assigned all of the applied-for strings, including exact matches, to InterConnect. InterConnect convened an internal "Core Team" whose role was to ensure that the reviews were conducted equally, that quality of the reviews was maintained, conflicts were discovered and dealt with, and that the established process was followed consistently for every string evaluation. The objective of the Core Team was to ensure quality, consistency and fairness across all the string similarity evaluations.

4. A pool of string evaluators was trained to do the individual evaluations. The training consisted of ensuring that the evaluator understood the new gTLD program, the requirements of the String Similarity evaluation and criteria set out in the AGB. Each evaluator went through a conflict of interest process as well as a simulation to assess their readiness to conduct actual reviews.

5. The standard used for string similarity evaluation comes from the AGB: "*String confusion exists where a string so nearly resembles another visually that it is likely to deceive or cause confusion. For the likelihood of confusion to exist, it must be probable, not merely possible that confusion will arise in the mind of the average, reasonable Internet user. Mere association, in the sense that the string brings another string to mind, is insufficient to find a likelihood of confusion.*"





A Telcordia Technologies Company

Merlin House, Station Road, Chepstow, Monmouthshire, NP16 5PB, United Kingdom

Tel: +44 (0) 1291 638400 Fax: +44 (0) 1291 638401

http://www.icc-uk.com

Key features of this standard is that the standard is <u>only about visual confusion</u>, the <u>confusion must</u> <u>be probable and not merely possible</u>, and that a <u>string that brings another string to mind does not</u> <u>meet the standard</u> for a likelihood of confusion. The wording of the test sets the bar for string confusion higher than equivalent tests for "likelihood of confusion" found in, for example, the UDRP or international trademark standards, where factors such as meaning, or phonetic equivalence are included, and therefore excluded all but one of the complex matrix of factors which contribute towards perception (and therefore potential confusion). In interpreting the "average, reasonable Internet user", the evaluators were trained to consider adult users, with no learning or other cognitive difficulties, and who were speakers of the relevant language. Familiarity with the language or script was a decision made following pilot evaluations which showed that those familiar with a particular language or script tended to yield different results compared with those who were unfamiliar.

6. The panel was also provided a set of SWORD scores for each string. Again, from the AGB: "The String Similarity Panel is informed in part by an algorithmic score for the visual similarity between each applied-for string and each of other existing and applied-for TLDs and reserved names. The score will provide one objective measure for consideration by the panel, as part of the process of identifying strings likely to result in user confusion. In general, applicants should expect that a higher visual similarity score suggests a higher probability that the application will not pass the String Similarity review. However, it should be noted that the score is only indicative and that the final determination of similarity is entirely up to the Panel's judgment."

7. The tests that were done for every string by the String Similarity panel are outlined in 2.2.1.1 of the AGB. They included:

- Applied-for gTLD strings against <u>existing TLDs</u> and <u>reserved</u> <u>names</u>;
- Applied-for gTLD strings against other <u>applied-for gTLD</u> <u>strings:</u>
- Applied-for gTLD strings against <u>strings requested as IDN</u> <u>ccTLDs; and</u>
- Applied-for 2-character IDN gTLD strings against:
 - Every other single character.
 - Any other 2-character ASCII string (to protect possible future ccTLD delegations).





A Telcordia Technologies Company

Merlin House, Station Road, Chepstow, Monmouthshire, NP16 5PB, United Kingdom

Tel: +44 (0) 1291 638400 Fax: +44 (0) 1291 638401

http://www.icc-uk.com

8. For every string assigned by ICANN to InterConnect, a workbook was created that contained the string to be evaluated, the list of reserved strings, the list of existing TLDs, the list of ineligible strings, the full list of applied-for strings, the SWORD scores comparisons that scored over 70 for that string, and an evaluation matrix that collected the data from the individual evaluations and the resulting outcome for the string. After careful consideration by the Core Team the 70 percentile was chosen at a level significantly below that which SWORD and human perception of confusability coincided, in order to limit false positives with numerous gTLD applications. The Core Team bore in mind that the comprehensive pairwise comparison against all applied-for strings ensured that all possibilities were considered by the evaluators.

9. Strings were then assigned to individual evaluators after assessing any potential conflict between an individual evaluator and the string applicant and any organization associated with the string. The individual evaluator used the criteria in item 5, above, to assess similarity. Capital and lower case letters were used and a standard set of typical fonts from modern browsers were examined as part of the evaluation. The evaluators completed the workbook and then returned it to the Core Team for quality control, assessment and reporting.

10. Non-Exact Match Contention Sets. The evaluators were given the training and the AGB criteria, and it was left to their judgment to apply the test. On reviewing the results, it is seen that when *ALL* of the following features of a pairwise comparison are evident the evaluators found the string pair to be confusingly similar.

- Strings of similar visual length on the page
- Strings within +/- 1 character of each other
- Strings where the majority of characters are the same and in the same position in each string
- The two strings possess letter combinations that visually appear similar to other letters in the same position in each string
 - For example rn~m & I~I

11. Any string found to be in contention was immediately reassigned to a second evaluator. The second evaluator did not know that an initial evaluation had been made nor did the second evaluator know the results of the initial evaluation. This process ensured that strings found to be in contention had multiple, independent evaluations.





A Telcordia Technologies Company

Merlin House, Station Road, Chepstow, Monmouthshire, NP16 5PB, United Kingdom

Tel: +44 (0) 1291 638400 Fax: +44 (0) 1291 638401

http://www.icc-uk.com

12. If a second string contention evaluation came back to the Core Team with the same results, this was presented to the Core Team for quality control, assessment and reporting. If a second string contention evaluation came back to the Core Team with conflicting results, the string was automatically assigned to a third reviewer. Once again, the third evaluator did not know that an initial and 2nd evaluation had been made nor did the third evaluator know the results of the initial or 2nd evaluation. The Core Team had the liberty to execute as many re-examinations of strings as it needed to get Core Team consensus that the result was ready to report to ICANN.

13. As completed workbooks came back to the Core Team for quality control, assessment and reporting, the Core Team made a decision about whether or not the results of the evaluation were ready to report to ICANN. The Core Team had the option, given any concern that they may have, to either defer reporting or request that a further, independent evaluation be done. This additional evaluation was assigned in the same way as those in contention were assigned: the second evaluator did not know that an initial evaluation had been made nor did the second evaluator know the results of the initial evaluation.

14. The Core Team did not impose its own judgment in the face of consensus amongst evaluators. In situations where evaluators reached different conclusions, the Core Team used the process of careful re-examination by independent evaluators repeatedly. The Core Team had four participants and the result was that, for some strings, as many as eight people did independent reviews of the strings before the Core Team felt prepared to report the results.

15. The Core Team met weekly during IE to process the results of individual evaluations, request re-evaluations, and agree that individual results were ready to report to ICANN. Only after Core Team consensus was reached that the needed level of quality reviews, process consistency, and consistent results were present, were the string similarity results released to be reported to ICANN.

16. The eventual non-exact, confusingly similar strings placed into contention by the panel was small, in part, because this standard (in item 5 and 10 above) is so strong.

Mark McFadden

mark we factly

String Similarity Panel Manager InterConnect Communications

