

# ICANN New gTLDs Implementation Discussion

## Introduction and Overview

10 April 2008

*Note: this document is a summary and compilation of information provided by ICANN staff to the Board concerning the proposed implementation of the GNSO's New gTLD recommendations. This summary has been edited to remove confidential and privileged information. Also, it includes information provided to the Board over the past several months, and therefore some of it is out of date. The ICANN Board has not approved this document and has not taken any final decisions with respect to the implementation of new gTLDs. This is provided for GNSO information and discussion only and is not intended to represent any final decisions by ICANN.*

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## Introduction

ICANN currently has before it a set of policy recommendations produced by the GNSO relating to the introduction of new generic top-level domains (gTLDs). This paper provides an overview of the context for the implementation of the recommendations.

For each of the implementation topics, this paper includes:

- Implementation Vision (staff description of the implementation model of the recommendation under discussion);

- **Steps Taken** (implementation work done to date that will support or belie the “implementability” of that recommendation); and
- **Open Matters** (describing work to be done or issues to be resolved in determining the manner in which a recommendation will be implemented in the final model).

The GNSO’s Committee on the Introduction of New gTLDs devoted nearly two years to policy development work on new gTLDs, and was able to achieve consensus concerning several complex issues on which there had been significant division at the outset of the process. Significant compromise and in-depth analysis by the Council, along with continuous community input, have led to a general acceptance that these recommendations represent the best and most workable approach to facilitating a responsible expansion of the gTLD namespace.

The GNSO Council voted on the recommendations as a set on 6 September 2007, as set out in the Final Report. The recommendations were approved by a supermajority, with 19 votes in favour, one vote against, three abstentions, and three absent. Full minutes of the meeting are available at <http://gns0.icann.org/meetings/minutes-gns0-06sep07.shtml>.

## **Implementation Vision – Transparency, Timeliness, Planning**

In parallel with the GNSO’s policy development work, ICANN staff has been developing an implementation framework for the introduction of new gTLDs. The reasoning for this parallel development is two-fold. First, there is a sense of urgency among the Internet community that this project be brought to fruition. Second, regular participation and formal writings from staff were used to inform, test and facilitate the policy development work of the council.

During the policy deliberations, ICANN submitted formal communications to the GNSO concerning the draft policy recommendations and participated actively in many face-to-face policy development discussions. The purpose of these communications was to provide advice to the council regarding the implementability of the draft recommendations and pose questions to the council

for consideration. This staff participation was intended to contribute to a complete, workable set of policy recommendations. (See reports at, <http://gnso.icann.org/drafts/GNSO-PDP-Dec05-StaffMemo-14Nov06.pdf> and <http://gnso.icann.org/drafts/PDP-Dec05-StaffMemo-19-jun-07.pdf>).

ICANN's implementation planning is particularly informed by the GNSO's Recommendation 1 in which ICANN is seeking to design a process for the introduction of new gTLDs that meets the standards of fairness, transparency, and nondiscrimination. As noted above, this use of transparent and predictable criteria is critical to these goals, and the development of the new sets of criteria to be used is one of the most significant pieces of work associated with implementation.

Recommendation 1 requires that ICANN describe in detail the entire application and evaluation criteria and processes in the draft Request for Proposals (RFP) when it is published. It also requires that the draft RFP be published in a way to raise worldwide awareness of the New TLD process. This will require outreach to each government and country, and significant publication using paid and unpaid media sources.

It is also a primary goal that the process be as timely and efficient as possible. Therefore, the process under development contains two main phases:

- **Initial Evaluation Period.** To address a majority of the applications: a relatively brief evaluation process when each application will be reviewed to determine whether it meets pre-defined, objective technical and business criteria. If an applicant meets the criteria, there have been no formal objections, and there are no competing applications for the same TLD string, the application will be approved in a timely manner at the end of the initial evaluation period. It is anticipated that most applications will pass the initial evaluation.
- **Extended Evaluation Period.** If an application presents complexities requiring additional technical or business model evaluation, or if there have been formal objections raised on narrow, allowable grounds from a party with standing to do so, or if there are competing applications for the

new TLD string, there will be an extended evaluation period during which these issues can be resolved in the appropriate forum.

The evaluation and dispute resolution processes will be discussed in further detail in subsequent reports.

### **Steps Taken**

As noted above, staff has maintained a positive level of interaction with the GNSO Committee throughout the policy development process, particularly surrounding the impact and operational issues associated with each of the recommendations. Internally, a cross-functional staff team has developed a comprehensive project plan detailing the deliverables to be completed across the organization to lead to the establishment of a long-term new gTLD program.

Major milestones within the project plan that have been completed to date include:

- Drafted a detailed process map for processing and evaluating applications.
- Created a project organisation, plan and schedule that includes identification of responsible parties and identifies interdependencies.
- Developed a work breakdown structure that identifies all the work to be done and issues to be resolved in order to launch the first TLD round.
- Drafted a staff technical paper describing the factors to be considered for the GNSO policy recommendation that a TLD string should not affect DNS stability.
- With outside legal counsel, developed draft legal standards and dispute resolution procedures for objections that a string should be excluded on the basis of the GNSO recommendations. The legal research supporting this proposal considered law of many jurisdictions in all regions of the world.
- Drafted a New gTLDs Communications Plan as part of the project plan to ensure that global stakeholders are informed about developments in this area.

- Drafted a New gTLD Interface Specification defining the online tool that applicants and evaluators will use to submit, manage and process evaluation criteria and application materials.
- Released a Statement of Work to those technical people with whom ICANN has been working on an algorithm to address the policy recommendation that a TLD string should not be confusingly similar to an existing TLD or a reserved name.
- Through a comprehensive selection process, partnered with Deloitte (Brussels) and Interisle (Boston) to develop, in accordance with ICANN leadership, certain aspects of the evaluation criteria and the integration of the evaluation criteria and dispute resolution processes developed by ICANN into the RFP.
- Drafted a preliminary version of the baseline registry contract for internal review.
- Developed basic process flow, general rules and a framework for resolving string contention that includes an opportunity for mediation, comparative analysis and, potentially, auctions.
- Issued a request for interest by, and have begun to interview, potential Dispute Resolution Service Providers.

## **Open Matters and Issues**

Staff continues to develop the application and evaluation process in accordance with the project plan. Accomplishments described above, mostly in draft form, must be finalized. Significant work is left in:

- Making final the draft documents listed above through a series of reviews, consultations with appropriate advisory committees, simulations and, where applicable, public comment.
- Augmenting the communications plan to consider when and how information about the implementation plan is to be made public.
- Developing a process for resolving string contention. The detailed implementation will include comparative evaluation.

- Costing the entire process and developing application fee structures.

## String Confusion

*Recommendation 2: Strings must not be confusingly similar to an existing top-level domain or a Reserved Name.*

### ***Implementation Vision***

The first objective in successfully implementing this recommendation is to establish consistent and clear definitions in regard to the phrase “confusingly similar.” ICANN notes that the word “confusing” is itself a subjective term. Accordingly, ICANN is working to limit the amount of subjectivity involved.

The only type of similarity that ICANN itself will address in the context of a gTLD application process would be visual (for example, .ORG and .0RG). The process will allow for third parties to raise objections that the proposed string will create a likelihood of confusion based on other factors such as the various meanings or pronunciations of TLD strings.

Putting this recommendation into practice requires devising a test or series of tests to determine whether two TLD strings are confusingly similar to one another, i.e., between a proposed string and: an existing TLD, a reserved name, and another proposed TLD.

It will also be necessary for the testing mechanism to be capable of assessing visual similarity between and among ASCII and IDN strings.

Given the goal for determinations of confusingly similar strings to be made by a process that is objective and repeatable, the optimal type of test would be a formula or algorithm. A mathematical tool is a clear way to demonstrate, and then follow, a process. The algorithm would assign a numerical score when comparing two strings: the more similar the strings, the higher the score. All pairs of strings with scores higher than a pre-determined level would be labeled “confusingly similar.” Examples of similar applications that might be adopted for this purpose are spell-checks, search engines and optical character recognition programs.

If a suitable algorithm can be identified, the algorithm would be made public prior to the opening date for TLD application submissions. Applicants could test their strings against existing strings for similarity. The test of applications against other applications will be immediate and unbiased. An algorithm-based evaluation application will have the side benefit of easily testing the different combinations of TLD strings against each other. In the case of many strings, 'A' might be similar to 'B' and 'B' might be similar to 'C' without 'A' being similar to 'C'. In the case of several hundred TLD evaluations, an algorithm-based application could test the different combinations of pair and sort the order in which the contention should be resolved.

In the event that an algorithm or similar mechanism cannot be identified, ICANN will address the confusingly similar policy recommendation by utilizing a dispute resolution procedure and standards that would provide decisions on this issue. The analysis likely will borrow heavily from the procedure and standards that will be used in conjunction with Recommendation 3. Confusingly similar disputes would arise out of the objection-based process. Unfortunately, this solution would be more expensive than the algorithmic approach.

IDNs further add to the complexity of both solutions. Spell check, search engines and optical character recognition programs exist for the different scripts, as do linguistic experts who would comprise the dispute resolution panels.

### ***Steps Taken***

Staff has contacted and consulted with mathematics experts, spell-check program developers, fuzzy string search and search engine software developers, linguistic experts, and others in order to investigate the feasibility of the algorithm approach. The opinions of many consulted indicated that this approach is feasible and existing products may be adapted for the purpose here. Based on these discussions and the information obtained to date, staff has written a statement of work defining the approach and sent the document to ten targeted firms/individuals who have expressed interest.

In parallel with this research, staff has also engaged legal counsel and other advisors to draft procedures and standards to be used in creating an objection-based, dispute resolution process associated with this recommendation.

## ***Open Matters***

Staff expects that the completion of the research mentioned above will inform the identification of the most effective approach to confusing similarity. ICANN technical staff will evaluate the different technical approaches after receiving proposals from qualified firms and individuals.

While ten interested parties are actively discussing ICANN's statement of work, the most notable spell check, search engine or other technology companies (i.e., those that may provide the best means to this end) have not enlisted in this effort. ICANN will continue to widen participation in this effort during the coming weeks.

## **Technical Instability**

*Recommendation 4: Strings must not cause any technical instability.*

### ***Implementation Vision***

In staff's proposed implementation, parameters for TLDs that might introduce "technical instability" will be available through the RFP provided to applicants. The parameters will be sufficiently clear that applicants can easily determine whether their suggested TLD will meet the published criteria prior to applying. In preparation for the final version of this section of the RFP, ICANN will release a technical paper that includes definitions and guidelines for community and Technical Advisory Committee comment, with a particular emphasis on discussion with the technical community.

The limitations placed on new TLDs for stability reasons will be:

- LDH rules. Labels must start with a letter, end with a letter or digit, and have as interior characters only letters, digits, and hyphen. (RFC 1035)
- Length restrictions. Labels must be 63 characters or less. (RFC 1035)
- Digits. Top-level labels should not be made up entirely of digits, to avoid confusion with IP addresses.
- Tagged names. Hyphens should not be in the third and fourth character positions in the label, unless the label is an IDN string (Punycode).



Many well-known file extensions, such as .exe, and .pdf, might be requested as TLDs. Investigation and consultation to date indicate that the use of file extensions as TLDs will not directly affect DNS stability, nor would such a TLD, typed into the address bar of a computer, result in unexpected results for users.

An objective of the paper is that a public discussion on the proposed implementation (for the technical instability considerations applicable to new gTLD applications) will promote understanding and acceptance in the community. This discussion is particularly applicable to whether file extensions should be excluded.

A process for evaluating special cases, where a proposed string may cause technical instability in areas other than those addressed in the guidelines, will also be used. These can be referred to a panel with the appropriate expertise.

### ***Steps Taken***

Staff has drafted the definition of technical stability and associated rules to be provided to potential applicants. This paper will be published so that the final implementation will be informed by the technical expertise of advisory committee members and other members of the technical community.

In formulating this draft, staff has consulted with prominent browser and operating system developers regarding what TLDs might affect DNS stability, including the list in the first section of this paper and whether commonly used file extensions might affect stability if used as TLDs.

Another issue related to technical instability is the question of how many new TLDs can be introduced into the root zone without adverse effects on the security and stability of the DNS. The staff paper discusses this and breaks the problem into two separable issues: (1) how many TLDs can the root zone accommodate without disruption to stability from a purely technical basis; and (2) how many TLDs can be competently processed by ICANN and outside processes for insertion into the root zone?

The answer to the first is a large number. As a point of reference, think of the number of files in the .COM zone. The answer is, of course, more complex. This will be discussed in the paper that will be issued shortly. As to the second issue,

ICANN is undertaking an operational readiness review in order to determine how many root zone additions can be processed. The review will focus on the “most affected” functions of ICANN: IANA, Registry Liaison, Legal and Finance.

If the number of TLDs that can be accommodated is less than the expected demand, a discussion of metering applications in some way will be necessary. This will be the subject of a later paper.

## ***Open Matters***

In order to complete the implementation of this recommendation ICANN staff will:

- Publish a technical paper that describes specifics of the implementation including which TLDs might negatively affect stability; discusses the possible exclusion of commonly used file extensions; and indicates how many TLDs can be accommodated in the root zone.
- Take public comment and consult with ICANN technical advisory committees regarding the paper contents in order to arrive at a final implementation strategy.
- Complete an operational readiness review that will provide a roadmap for ensuring adequate infrastructure is established to process and manage an increased number of TLDs and indicate limits to the number of TLDs that can be processed.

ICANN expects to consult with a range of key technical groups and parties in the process of developing appropriate parameters, so that the result is informed by the expertise of the broader community.

## **Reserved Names**

*Recommendation 5: Strings must not be a Reserved Word.*

### ***Implementation Vision***

Staff will employ a standard “Reserved Names List” that is publicly available to applicants so that implementation of this recommendation will be a simple

administrative review of each application against the list. It is also possible to design the online application system in such a way that a reserved name entered in the Proposed TLD field would automatically be rejected.

The Reserved Names List will be taken from the output of the GNSO's Reserved Names Working Group (see <http://gnso.icann.org/issues/new-gtlds/final-report-rn-wg-23may07.htm>). Major categories of reserved names at the top level are:

- ICANN/IANA names (e.g., IANA-SERVERS, CCNSO)
- Single-character names (e.g., 4, K)
- Nic/Whois/Www (own category)
- Two-letter names (e.g, KS, CE)
- Numerical strings (e.g., 231, 9930044)

A process will be developed by which modifications to the Reserved Names List can be requested and considered.

The GNSO's Reserved Names Working Group did not recommend a reservation on geographical names. The GNSO envisioned that a government or public authority could file a formal objection to a TLD application if it did not support the use of a country, territory, or place name by a given applicant, which would trigger a dispute resolution process.

The GAC's Principle 2.2 states that: "ICANN should avoid country, territory, or place names, and country, territory, or regional language or people descriptions, unless in agreement with the relevant governments or public authorities" (see [http://gac.icann.org/web/home/gTLD\\_principles.pdf](http://gac.icann.org/web/home/gTLD_principles.pdf)). Staff has discussed the possibility of establishing support of the relevant governments/public authorities as one of the criteria used as part of the evaluation process *to a country name*, so that an applicant that did not have the support would be rejected.

The GNSO's Reserved Names Working Group also made recommendations regarding reserved names at the second level in new gTLDs.

## ***Steps Taken***

Staff has produced an implementation document discussing the Reserved Names Working Group's recommendations (see <http://gnso.icann.org/drafts/icannimplementation-doc-gnso-rswg-04sep07.pdf>). In designing the evaluation and dispute resolution processes, staff is working to ensure that sensitivities around geographic names are taken into account.

## ***Open Matters***

The GAC's Los Angeles communiqué (see <http://gac.icann.org/web/communiqués/gac29com.pdf>) states that:

“After initial analysis the GAC draws attention to the fact that the proposal does not properly take into account paragraph 2.2 in the *GAC principles regarding new gTLDs*, in particular on the avoidance of country names. In practice some countries would not be in a position to avail themselves of the proposed objection mechanism especially those not participating in ICANN activities. The GAC will monitor the implementation of the new gTLD policy and the new gTLD application round and will provide further input as necessary. GAC members also agree to reflect on the need to provide advice on the final report by the GNSO on the introduction of new generic top level domains.”

In consideration of reserved names in the new gTLD process, staff is working to develop an approach that would accommodate possible concerns with government participation in a dispute resolution process and looks forward to further input from the GAC. An alternative to participation in the dispute resolution process that will be included in the implementation would be that government support would be required for applications for TLDs that represent country names.

ICANN understands that the delegation of country names is a significant issue associated with the introduction of new gTLDs, and ICANN is continuing to work on solutions that are broadly acceptable to all stakeholders.

## **Morality or Public Order**

*Recommendation 6: Strings must not be contrary to generally accepted legal norms relating to morality and public order that are recognized under international principles of law.*

### ***Implementation Vision***

The GNSO recommendations regarding criteria for TLD strings include this recommendation that strings must not be contrary to generally accepted legal norms relating to morality or public order that are recognized under international principles of law. An associated recommendation is that ICANN should design and implement dispute resolution and challenge processes in order to implement the “morality or public order” recommendation.

This paper concerns the standards by which strings can be measured against these criteria. The process/procedure itself will be addressed by a separate paper. The discussion below of a specific set of standards is to demonstrate a set of circumstances under which this policy recommendation can be implemented.

Staff’s proposed implementation of this GNSO recommendation (that also matches GNSO discussions of this issue) is an objection-based process, in which parties with standing may file a formal objection to a proposed TLD string on certain specific grounds. An allegation that a proposed TLD string violates generally accepted legal norms relating to morality and public order that are recognized under international principles of law would be one of those grounds.

A formal objection on this basis would trigger a dispute resolution process, administered by a qualified dispute resolution service provider. The dispute resolution provider would then conduct a review and issue a decision based on a set of pre-established standards.

In order to implement this recommendation, ICANN is attempting to develop clear standards to be employed by the dispute resolution provider to resolve disputes arising from objections to a string based on this policy recommendation.

Because any party could potentially be harmed by the introduction of a TLD that violates this type of accepted legal norms, it is anticipated that standing to file a formal objection on this basis will be wide; essentially any party can claim to be harmed by violation of this criteria.

### ***Steps Taken***

The general principles guiding ICANN in the establishment of dispute resolution standards are:

- Everyone has the right to freedom of expression; and
- Such freedom of expression may be subject to certain narrowly interpreted exceptions that are necessary to protect other important rights.

These principles set forth both the general rule that guarantees freedom of expression and the qualification that there are a limited number of circumstances where that freedom must yield to other rights that are viewed as equally important. Articles 19 and 20 of the International Covenant on Civil and Political Rights express both of these general principles.

ICANN's legal counsel has done a survey of the public policy limits upon freedom of expression that exist under the laws of a diverse sample of countries from all regions of the world. From this analysis, a core set of rules or standards was identified. Of course, every country poses unique issues with respect to morality and human rights. For example, just the use of certain words may violate the law in some countries, while those same words are commonplace in other countries. Words that have religious connotations also can have extremely different meanings in different parts of the world. Thus, ICANN is working to achieve consensus around certain criteria.

The review of the laws from different countries has indicated that implementation of Recommendation 6 will require careful effort. There will be a presumption in favor of allowing a proposed TLD, but that presumption may be overcome because freedom of expression may be subject to certain narrow exceptions that are necessary to protect other rights. Examples of such exceptions might include: incitement to violent lawless action; incitement to or promotion of

discrimination; and promotion of child pornography or other sexual abuses. ICANN continues to work to identify other potential exceptions that are necessary to protect “morality and public order.”

## **Legal Rights of Others**

*Recommendation 3: Strings must not infringe the existing legal rights of others that are recognized or enforceable under generally accepted and internationally recognized principles of law.*

### ***Implementation Vision***

The GNSO recommendations include criteria for TLD strings including this recommendation that strings must not infringe the existing legal rights of others that are recognized or enforceable under generally accepted and international principles of law.

An associated recommendation is that ICANN should design and implement dispute resolution and challenge processes in order to implement this recommendation.

This paper concerns the standards by which strings will be measured against these criteria. The process/procedure itself will be addressed by a separate paper. This discussion is to demonstrate a set of circumstances under which this policy recommendation can be implemented. The matter before the Board now is not whether to approve this set of standards but rather to approve the Policy Recommendations.

Staff’s proposed implementation of the GNSO’s recommendations is an objection-based process, in which parties with standing may file a formal objection to a proposed TLD string on certain specific grounds, in this case, that an allegation that a proposed TLD string violates existing legal rights of others that are recognized or enforceable under generally accepted and internationally recognized principles of law.

A formal objection on this basis would trigger a dispute resolution process, administered by a qualified dispute resolution service provider. The dispute resolution provider would then review the circumstances and issue a determination based on a set of pre-established standards.

In order to implement this recommendation, ICANN must develop clear standards to be employed by the dispute resolution provider to resolve disputes arising from objections to a string based on this policy recommendation.

Because it is the rights holder who would be harmed by the introduction of a TLD that results in this type of infringement, it is anticipated that only that rights holder will have standing to file a formal objection in this case.

In practice, it is anticipated that most objections on this ground would relate to claims of infringement of intellectual property (in particular, trademark rights as noted in the recommendation). Objections based on other types of rights most likely would be filed on other grounds, although the approach to this recommendation could be expanded in scope in relation to the implementation of other recommendations. Infringement of freedom of expression rights or claims of defamation were deemed not workable as an implementation of this recommendation.

Trademarks are distinctive signs, used to differentiate between identical or similar goods and services offered by different producers or services providers (WIPO definition, <http://www.wipo.int/trademarks/en/>). When trademark analysis is conducted regarding a determination of infringement, the inquiry revolves around whether two marks are so alike that their respective origins are unclear. If the consuming public will likely be confused, mistaken or deceived about the source of a product or service sold using the mark in question, then “likelihood of confusion exists,” and the mark is deemed infringed.

The “likelihood of confusion standard” is widely used and accepted and has also been adopted in UDRP proceedings. To date, UDRP case law has provided a large body of precedent. A high-level review of trademark standards around the world has indicated a set of factors that are commonly used in testing for “likelihood of confusion.”

Many of the “likelihood of confusion” factors used globally would be applicable to the gTLD process. In determining likelihood of confusion in the context of gTLDs, the Dispute Resolution Provider would focus on the evaluation of a set of factors, with no single factor being determinative, and the relative importance of the factors being case specific. In practice, many courts use a set of factors listed



above collectively to determine whether the collective use of a word or phrase can coexist.

Below is a preliminary set of factors (using examples from decisions under UDRP) that is an intersection of the laws of different jurisdictions and most relevant to the gTLD process:

- (i) Whether the proposed gTLD is similar in appearance, phonetic sound or meaning to an existing gTLD or trademark.
- (ii) The strength of the mark. The greater the public recognition of a phrase, word or letters as a source identifier, the more likely that similar phrase, words or letters will be confusing.
- (iii) Whether the proposed gTLD is already being used as a trademark by another individual or entity.
- (iv) Similarities between the dominant portions of the proposed gTLD and an existing gTLD or trademark.
- (v) Likelihood of association based on the concept of origin of the source. What is called to mind a mark when a person sees the gTLD?
- (vi) Intent of the junior user/accused's bad faith.
- (vii) Whether the applicant has rights or legitimate interests to the gTLD.
- (ix) Defenses

## ***Open Matters***

### **Multiple languages**

Objections based on a confusingly similar trademark could raise language issues, especially if it is accepted that similarity as to the meaning of words will be taken into consideration. For example, *presto* may be regarded as confusingly similar to *subito* in Italian, but not in German. One way to handle this resulting "confusion" would be to take into consideration the language which is the official language in the applicant's country, the objector's country, and/or in the

country(ies) of the audience to which the new gTLD is aimed. In practice, the applicant would have to provide that information when filing its application.

### **Qualifications of Dispute Resolution Provider**

Because the “likelihood of confusion” test is a nuanced inquiry, ICANN should ensure that the DRP panelists are capable of conducting such an inquiry in an effective manner.