

# White paper on internet domain name expansion

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## Executive summary

This white paper is primarily intended for the members of the Board of ICANN. The paper sets out a case for an expansion of domain names. It considers ICANN core values, previous expansions, alternative means of expansion such as a free-for-all and auctions, and concludes that the optimal solution is a market-driven approach to new domain names based on added value. It calls (in section 3) on ICANN to move forward with only sponsored domain names based on certain principles and guidelines. The advantages of an expansion based only on sponsored domain names are fourfold:

- the creation of distinction,
- an accurate and authenticated WHOIS,
- the elimination of cyber-squatting and fraud,
- searchability.

The paper also concludes that in the development of IDNs, the sponsorship model is recommended.

## 1. Introduction and ICANN's core values

In late 2004, ICANN published a draft strategy for recognizing new generic Top Level Domains (gTLDs), as required by its Memorandum of Understanding (MOU) with the U.S. Department of Commerce. The thoughtful approach laid out by that draft strategy, parsing out relevant issues, and combining inputs from various groups with public comments from Internet stakeholders, is a reasonable way to determine *how* gTLDs registries are to be selected and allocated. However, there is nothing in the draft strategy that addresses *whether* new gTLDs are needed at all. This omission should be remedied and this paper sets out some suggestions.

### **Authorship**

This white paper represents the views of the three commercial user constituencies within ICANN's Generic Names Supporting Organisation (GNSO) – Commercial and Business Users (BC), Internet Connectivity and Service Providers (ICSPC), and Intellectual Property Interests (IPC). The members of these constituencies are at the front-line when a web site does not resolve, when Internet traffic is interrupted, when there is piracy of a domain name or where fraudulent registration takes place.

The white paper takes into account the experience of Internet stakeholders with the previous introduction of gTLDs as well as building on several years of analysis outlined by the constituencies in previous papers (annex 3). Moreover, many of the conclusions were also those of the entire Council as written in its June 2003 report to the ICANN Board.

### **Interpreting ICANN's core values**

A number of ICANN's core values from its by-laws (see annex 3) are relevant to new generic top-level domain names.

Core value 5: "Where feasible and appropriate, depending on market mechanisms to promote and sustain a competitive environment".

- So there is no obligation on ICANN to create new gTLDs but to create "a competitive environment".

Core Value 6. "Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest".

- So new gTLDs should not be regarded as a business opportunity for future registries and registrars but should serve the "public interest". New gTLDs should only be introduced because there is a public interest in the competitive benefits of different types of gTLDs than those currently in existence.

Core value 2: "Respecting the creativity, innovation, and flow of information made possible by the Internet by limiting ICANN's activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination."

- This value favours *sponsored* top-level domains. Top level domains which are sponsored, and so by design cater for interests of specific communities, and are managed by those communities, mean ICANN fulfills this core value and so encourages creativity and innovation.

Core value 3: "To the extent feasible and appropriate, delegating coordination functions to or recognizing the policy role of other responsible entities that reflect the interests of affected parties."

- This core value too favours *sponsored* top-level domains where the policy role is delegated.

In addition to the core values, the U.S. government's statement of policy, which was referenced in the 2004 ICANN draft strategy, does not require ICANN to recognize new gTLDs. Though the MOU requires ICANN to have a strategy regarding new gTLDs, it does not require the rollout of any specific number of gTLDs on any specific timetable.

## **2. What should competition look like in the domain name world?**

### **Competition at the registrar level**

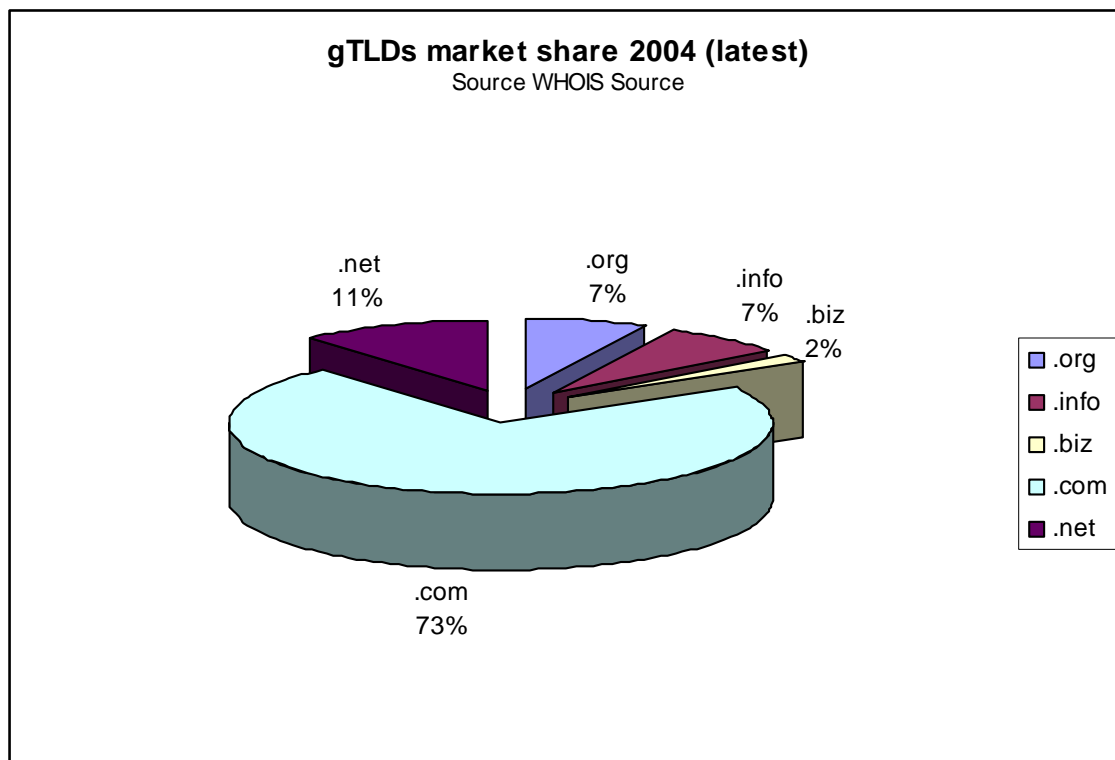
During the creation of the registry/registrar model for ICANN in its early days, the community supported the need initially to create competitive registrars, with a sole source registry model. In 2005 with over 460 accredited registrar agreements, ICANN has succeeded in creating the opportunity for competition at the registrar level. It needs now to ensure that competition flourishes by equitable treatment and contract compliance.

### Competition at the registry level

Each registry is by definition a natural monopoly. Competition at the registry level will be achieved where three conditions are met:

1. there are no unjustified barriers to entry to the market for registry services resulting in a level-playing field for market access leading to a plural supply base,
2. there is no market-distorting supplier dominance which prevents registrants (users) having a fair share of any benefit,
3. market access brings new name types which add value in the eyes of registrants.

The proof of concept round of new gTLDs included both open gTLDs and restricted gTLDs. It was intended that the open gTLDs (.biz .info) would be direct competitors to .com and .net. The new sponsored gTLDs (.museum, .aero .coop) and other gTLDs (.name .pro) attempted to offer new name types.



The gTLDs in the chart above are run by separate registries with the exception of .com and .net which have common ownership. The chart (of market share of today's 46m gTLD registrations) demonstrates that, four years on, the introduction of the unsponsored names .info and .biz did not add significantly to competition at the registry level. It is possible that their failure was being undifferentiated to the existing market offer. They were "me-too" competition in a market where .com .net and .org had first-mover advantage. Typically users did not perceive these names as adding value.

The relatively few sponsored gTLDs (see annex 2) while adding choice and value have as yet too small a market share to make a significant difference with respect to competition. This should be no surprise as the first set of sponsored gTLDs were all in relatively small market sectors (museums, aviation industry and the cooperative

movement). It will be interesting to see what market share the recently awarded .travel achieves given the commercial importance of this sector in business to consumer e-commerce.

The introduction of new gTLDs that are internationalised domain names (IDNs) is another opportunity for competition being achieved by new name types which will add value, so long as plurality of supply is simultaneously present and market access is assured.

### **The recent expansion of unsponsored names has not brought real competition**

The first attempts at creating registry-level competition (.biz .info .name) have not been successful. What is the evidence for this? Recent papers from Summit Strategies (SSI bibliography reference 15) and the OECD (OECD bibliography reference 14) provide data on who registered in .biz .info and .name.

#### 80% of registrants were not new to the market

20% of the respondents were new to the DNS whereas 80% were not. The .name TLD had the highest proportion of new registrants at 44%. The .biz and .info TLDs had the lowest number of new registrants at 16% and 14% respectively. (SSI survey)

#### Many registrations were “defensive” registrations to prevent bad faith use by others

Overall 41% of respondents indicated that their registration was defensive. This breaks down to 52% .biz, 41% .info, and 34% .name. (SSI survey)

#### Most of those who used the new names thought of them as second choice

Very few people were using the new gTLDs unless their first choice was unavailable: 18% .biz, 17% .info, 8% .name. (SSI survey)

#### Me-too competition is not working: registrants still see added value in .com .org and .net

There was a sizable drop in registrations for .com .net and .org when the new gTLDs were introduced in 2002 but the market recovered within a year and has been growing since. (OECD)

“The primary and secondary market for .com (and .org and .net) proved to be resilient. Currently .com names still command the highest values followed by .net, some national domains and .org.” (OECD)

#### ICANN's proof of concept approach has led to consumer confusion

"There were reports of significant confusion among actual and potential registrants, registrars, and the broader community following launch of the new gTLDs as a whole. Some confusion flowed from the nature of the "proof of concept" idea, which was to try different start-up mechanisms and see which of them worked best. Registrars and consumers therefore had to learn about not just one new mechanism, but several, and at nearly the same time". (SSI)

### **3. A market-driven approach to new domain names based on added value**

#### **Five principles should determine all future expansion**

The conclusion of the analysis in the earlier sections is clear. Name space expansion should create added value. Where there is added value there will be user demand because consumers will perceive the value. In this way expansion will enhance choice, competition and be in the public interest. In a global market economy added-value means differentiation and a practical way to achieve this is if all new names meet five principles of added-value:

1	Differentiation	a gTLD must be clearly differentiated from other gTLDs
2	Certainty	a gTLD must give the user confidence that it stands for what it purports to stand for
3	Good faith	a gTLD must avoid increasing opportunities for bad faith entities who wish to defraud users
4	Competition	a gTLD must create value-added competition
5	Diversity	a gTLD must serve commercial and non-commercial users

#### **Build a logical names space by adherence to the principles**

The principles in effect self-determine a taxonomised or directory-style domain name structure. This taxonomised structure over time opens up a range of places where individuals, companies and organisations will find a place they want to be, and where users can easily find them. Based on the principles for all new names and indeed the experience of .biz and .info, it follows that there is little added value in new unsponsored names. There is however considerable added value and advantage in sponsored names.

#### **The four advantages of sponsored names**

##### **1. Sort out the .com box**

Today, a domain name registrant derives no tangible benefits from taking a domain name in the generic name space. With a .com, .biz, .info, one can be a pet food seller, a pediatrician, or propeller manufacturer. Nothing sets the registrant apart. Put another way, there is nothing that distinguishes the registrant from any other domain name holder; hence, there is no choice but to become generic.

By establishing new sponsored TLDs, ICANN has begun sorting out the .com space by introducing logical domains where everyone, the world over, can know exactly what can be found there.

##### **2. An accurate and authenticated WHOIS**

sTLDs are required to establish specific, transparent policies. The foremost of these is that sponsored TLDs must be communities that can be defined in absolute terms, i.e. a perimeter is put around the entire community. This innovation provides a basis for authenticating each registrant. Authentication enables the registry to assure ICANN, law enforcement and other interested parties that it holds a pristine WHOIS database as a result of every registrant's information going through a review process. The result? Resolution of the most vexing issue – WHOIS - that has perplexed ICANN for years.

### 3. Eliminate cyber-squatting and fraud

A sponsored name space eliminates cyber-squatting, fraud and speculation in names, which also leads to the end of defensive registrations. Such policies say that if the registrant does not meet the criteria for a name in a sponsored space, they do not get a domain name in that space. This rules out squatters and speculators. An industry-exclusive space also means that if a bona fide member of the industry chooses to not register their trademarked name in that domain, no one else can claim it (unless another registrant can demonstrate a legal right to that specific domain name). A sponsored top level domain space rids the net of the bad faith elements that have grown with it.

### 4. Searchability

A sponsored TLD can establish a global industry directory that serves both that industry sector as well as Internet users as a whole. A “controlled vocabulary directory” such as the one that has been developed for the .travel registry – which is editable 24/7 by the registrants themselves – will significantly enhance e-commerce for all registrants while providing consumers with the information they want without having to sort through millions of irrelevant search results. Such a directory will match buyers to sellers vastly more effectively than any search engine can do because it is a catalogue of industry information.

#### **All future names should be sponsored**

All new names should be sponsored within the ICANN categorization. New gTLDs should be proposed to ICANN by the registry/sponsor. So long as an application is evaluated to fully comply with the principles and the guidelines, the proposal would be accepted.

#### **The characteristics of a sponsor**

In evaluating future sponsored TLDs, the foremost criterion for the creation of a sponsored TLD must be the interest of a well-defined community that is of reasonable size so as ensure the strict enforcement of the sponsored TLD's charter. Strict verification of credentials and enforcement of the charter should remain a hallmark of any sponsored TLD. The sponsor itself should act as a mechanism for representation of, and accountability to, the community the sponsored TLD is intended to serve.

In short, the sponsor should be a not-for-profit organisation accountable to the sponsored community and tasked with managing the TLD for the benefit of the sponsored community.

To allow for economies of scale and viable business models, there should be no restriction on the same registry providing the back-end to multiple sponsored domains, so long as there is a unique sponsor, free market access and no registry market dominance.

#### **Guidelines for evaluation of applications**

Building upon previous ICANN criteria, annex 1 proposes practical guidelines for evaluating applications. Application evaluators will need to apply these conditions with diligence and rigor in order not to undermine the benefits inherent in sponsored names.

Once the policy was established by the Board, applications could either flow according to external demand, or, if demand was large, the Board could allocate a fixed maximum per year appropriate to stability and ICANN resource constraints. The choice of one name would preclude future non-differentiated choices. Although first-come first-served would apply, there could be a challenge period, whereby another sponsor/registry could file an opposition proceeding within a certain time-frame to an application on grounds of non-compliance with the annex 1 criteria. (This might happen if, for example, there was a disagreement over who represented the proposed sponsored community.)

{Note: there are questions to be asked with respect to sponsored community in the 2004-2005 round of new sponsored TLDs. A number of proposed new sponsored TLDs in this round propose a “community” so large and diffuse that it renders the TLD “open,” not sponsored. Evaluators must be confident to reject any application that does not meet the conditions for a genuine sponsor and a genuine sponsored community. Unfortunately, however, there is no effective definition of a sponsored community. The GNSO Council should consider developing a definition of “sponsored community” that takes into consideration a number of factors essential for effective gate keeping by the sTLD sponsor, such as the size of the sponsored community.}

### **Internationalised domain names (IDNs)**

In a multi-lingual world it makes sense that web content and domain names are also multi-lingual. There should be a close focus on new domain names that are IDNs. There is no reason that the roll-out of IDNs in the generic domain name space be any different with respect to choice, competition, diversity and differentiation than ASCII character set names. The process of introducing IDNs as gTLDs (and in ensuring a standardized approach within the ccTLDs) will need to consider parallel issues to the above. In the development of policies for IDNs, the sponsorship model is recommended.

### **Recommendation to the ICANN Board**

<p>This white paper recommends a market-driven approach to new domain names based on added value. The ICANN Board needs to debate and agree to move forward with only sponsored gTLDs based on the principles and guidelines of annex 1. This expansion should give serious consideration to internationalized domain names.</p>
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The next part (section 4 and 5) of this white paper briefly considers and rejects two alternative models for domain name expansion.

#### **4. The problem with a laissez-faire market approach to new domain names**

##### **- Let a thousand flowers bloom and expect several hundred to die**

The recommended approach in the section above is essentially free market-driven with the market itself being encouraged to create added value through differentiation. The alternative to this model is a free for all – laissez-faire economics. Under this model ICANN would accept any applicant for a new domain name from a pre-qualified registry. This prospect has been described, somewhat ironically, using Mao's phrase to launch the Cultural Revolution, as "let a thousand flowers bloom." Unfortunately, the implications of this mass blooming is that there is an expectation of the downside : ... "and so expect several hundred flowers to die".

An expectation of significant numbers of registry failures in the DNS is against the public interest for the following reasons:

- Consumer protection. Allowing free market investment in a web site/domain with the knowledge that most of the underlying registries will suffer financial collapse is contrary to principles of consumer protection.
- Equity protection. Users buy a domain name to build a web site. They often invest considerable resources in that web site. To see it disappear through no fault of their own should a registry collapse is unnecessarily wasteful.
- Consumer confusion. Forcing users to find an organisation at one moment registered in domain X and then, on the collapse of domain X, having to find it in domain Y is unnecessarily confusing.

In short, any supposed benefit of a 100% laissez-faire approach to new domain names has a disproportionate cost due to the increased likelihood of multiple registry failures.

#### **Summary**

A laissez-faire approach of me-too competition runs the risk of multiple registry failures. The market has already spoken with respect to ICANN's proof of concept with extra unsponsored names and shown it has failed to meet the objective of real competition. Moreover, it has proved to be wasteful by encouraging defensive registrations.

The laissez-faire approach of extra unsponsored names is contrary to the stability of the DNS and contrary to creating competition in the public interest, and therefore contrary to ICANN's core values.



## **5. The problem with an auction model for new domain names**

### **Sell to the highest bidder and hope that they have it right**

ICANN has indicated it may experiment with an auction model for the allocation of new domain names. This follows a suggestion aired though not justified in a 2004 paper from the OECD telecoms working party (bibliography reference 14). The paper compared an auction model to the laissez-faire model but regrettably did not address the quality benefits inherent in the added-value sponsored gTLD model.

On the surface an auction model is more desirable than a 100% laissez-faire approach as the market would decide by price on the viability of success. But the approach has several drawbacks:

- Not so market-driven. An auction model may rely on a third party to dream up the names to auction. Who will that be? ICANN? Who says these will be the right names?
- Introduces bias. A work-around would be to allow the names to be proposed by the first prospective registry and then allow others to bid. But in such a case the latter bidders would always be at a disadvantage with respect to preparedness and their ability to assess the upper limit on a viable auction bid.
- Still no added value. Without the principles of differentiation, certainty and good faith, an auction model has no inherent ability to add value in the public interest.
- Market distortion from market hype. As the global bids for third generation mobile telephony have shown, even experienced companies may be tempted to grossly overbid in an auction model. The Internet has had its share of hype and will continue to do so. The prospect of the “winner’s curse” is real.
- Potential to be anti-competitive. An auction model has the potential to favour the existing dominant players. Given the current failure of competition at the registry level (84% market share by one company) this is not the model to use today.

### **Summary**

In short, any supposed benefit from an auction model for new domain names has a disproportionate cost due to the increased likelihood of market distortions.

Such an approach is contrary to the public interest and therefore contrary to ICANN's core values.

## 6. Annexes

### **Annex 1 – Guidelines for evaluation of new gTLD proposals**

These guidelines assume all new gTLDs will be sponsored and the details of sponsorship will be written down in a charter.

1. **Principles.** Does the application conform to the five principles?

1	Differentiation	<p><b>a gTLD must be clearly differentiated from other gTLDs.</b></p> <p>If a new registry/sponsor proposed a name that promised differentiation which seemed reasonably achievable, that should be sufficient. Whether the applicant subsequently succeeded in achieving true differentiation would be a function of the success of its business model.</p>
2	Certainty	<p><b>a gTLD must give the user confidence that it stands for what it purports to stand for.</b></p> <p>A new gTLD proposal should propose names that assist the Internet end-user to determine the relationship of the name and its stated purpose. However, a name should not be dismissed because it seems esoteric to the general populous so long as there is a defined population to whom it has relevance.</p>
3	Good faith	<p><b>a gTLD must avoid increasing opportunities for bad faith entities who wish to defraud users.</b></p> <p>A new gTLD proposal should avoid names that have the potential to confuse net users because they are typographically similar to, variants of, or derived words from, existing gTLDs. Equally, confusion with popular marketing terminology or brand names should be avoided unless a bona fide rationale for the similarity and a means to address confusion were apparent.</p>
4	Competition	<p><b>a gTLD must create value-added competition.</b></p> <p>A new gTLD should add-value to the domain name system. The purpose of introducing new names is to make the domain name system more useful and more accessible to broader communities of interest and to more end users. A name which seemed to be simply duplicative me-too competition should be avoided.</p>
5	Diversity	<p><b>a gTLD must serve commercial and non-commercial users.</b></p> <p>Similar gTLDs could co-exist if they served different types of users and in that way were differentiated.</p>

2. **Is it sponsored?** Does the application fit the definition of sponsored domains? Does the application demonstrate that the new sTLD string will serve a “sponsored community” as defined by the GNSO?

3. **Community support.** Does the sponsoring entity have broad and documented support from the community who would register in the new domain space?
4. **Diversity.** Is there global diversity in the sponsoring entity and global support for such a TLD?
5. **Sufficient resources.** Has the sponsor provided documentation of sufficient financial and administrative resources to ensure the stable operation of the TLD, even with slower than expected registrations?
6. **Technical competence.** Does the applicant demonstrate fail-safe 24/7 worldwide ability for technical and operational management of the registry?
7. **Risk of failure.** Does the sponsor provide proper documentation of escrow? Is there a process (such as the transfer of the zone file information to another registry) to protect registrants in the event of registry failure?
8. **Registrant Compliance.** Does the sponsor's proposal demonstrate the necessary administrative processes to ensure registrants comply with the defined sTLD policy?
9. **ICANN policies.** Does the sponsor or subsequent registry operator agree to comply with other ICANN consensus policies as appropriate such as WHOIS, UDRP, Deletes, or Transfers?
10. **Sunrise period.** Is there an adequate mechanism to ensure that trademark holders who will be forced to defensively register in the TLD have a "first option" on the relevant domain names, such as a "sunrise period"? Is there an adequate "resolution of disputes" during this process?
11. **Who can register?** What are the rules about who is permitted to register second-level domain names and about what activities are or are not appropriate on the corresponding sites?
12. **Charter compliance.** Does the application include a system to make sure that prospective domain name applicants qualify for registration under the sponsor's charter prior to obtaining a domain name registration?
13. **Charter violation.** What is the mechanism to ensure efficient resolution of violations of the sponsored gTLD's charter? What is the mechanism for removing an offending domain name from the namespace?

## Annex 2 – ICANN gTLD types

Sponsored	Un-sponsored
.museum	.com
.aero	.org
.coop	.net
.travel	.info
.jobs	.name
(.cat)	.biz
(.post)	.pro*
(.mobi)	

**ICANN definition:** A Sponsor is an organization to which ICANN delegates some defined ongoing policy-formulation authority regarding the manner in which a particular sponsored TLD is operated. The sponsored TLD has a Charter, which defines the purpose for which the sponsored TLD has been created and will be operated. The Sponsor is responsible for developing policies on the delegated topics so that the TLD is operated for the benefit of a defined group of stakeholders, known as the Sponsored TLD Community, that are most directly interested in the operation of the TLD. The Sponsor also is responsible for selecting the registry operator and to varying degrees for establishing the roles played by registrars and their relationship with the registry operator.

\*.pro's community model is unique and in some aspects close to a sponsored TLD.

## Annex 3 – Bibliography and references

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