

Notes on Competition metrics for the DNS

IAG-CCT review of the recommendations of the Consumer Trust Working Group.

The Consumer Trust Working Group issued an advisory report on 5 December 2012. The Implementation Advisory Group (IAG-CCT) is asked to evaluate the metrics proposed by the Consumer Trust Working Group, with a view to supporting a future review by the AoC.

ICANN was established in 1998. Among other critical DNS functions, ICANN was to regulate the conditions of competition in the domain name market, particularly as they affect the Registries and Registrars and their effects on the final internet users: registrants and 'consumers'.

Accordingly, competition, consumer trust and consumer choice clearly fall within the central concerns of ICANN and its constituent parts.

The following notes highlight certain aspects of the December 2012 Advice which could usefully be evaluated by IAG-CCT. These comments focus on the conditions of competition between Registries and between Registrars. They also address how these affect consumer choice.

The role of ICANN is crucial to creating and maintaining fair competition at the global level. ICANN must have the information and other tools to continue to regulate the DNS market on an ongoing basis. Objective metrics to be collected by ICANN should serve to monitor the conditions of competition particularly regarding price data and non-discrimination.

1. Competition between Registries:

The conditions of competition between Registries are broadly defined by the Registry Operator Code of Conduct (Appendix B, to the December 2012 advice.)

Taken overall, there would appear to be very little **competition between Registries** in the DNS. There is a degree of consumer choice in the initial decision to register a name. However, historically this has been limited to a choice between .com, and – perhaps – one of the newer gTLDs or the relevant ccTLD. There are exceptions in the form of the few 'generic' ccTLDs.

Price competition between Registries is a minor factor: the cost of registering a domain name is a small part of the overall cost of creating and maintaining websites, e-mail addresses etc. that it is doubtful whether consumer choice – particularly in the commercial sector – is very much influenced by the price of a name at the Registry level. The relevant price is of course, the price charged by the Registrar, which begs the question of Registrars' pricing policies which may override the Registry price, including factors such as promotions, bulk purchases, bundled services or free domains.

In the past, the **quality and reliability** of Registry services might have been a factor in registry-registry competition. However in recent years, the pressure from ICANN and public authorities has tended to standardise the quality of service, including security, in principle at a high level. Thus the quality of Whois data and the implementation of DNSSEC are relevant considerations. However, there are insufficient incentives for Registries and Registrars to improve Quality of Service.

The overriding fact is that once a successful domain, is used for whatever purpose, is very difficult and costly to migrate to a new domain. Domains are not '**portable**' like telephone numbers are (or should be). Registrants are effectively 'captured' permanently by their Registry.

The largest exception to this general picture is the activities of the **speculators and domainers** in the DNS market. These entities apparently do 'invest' in large numbers of domains with a view to re-selling them at a higher price (speculation) or collecting revenue from advertisers (pay per click). These businesses may be more sensitive to competitive pressures, however, there is no sense in which ICANN or the DNS are expected to cater to these businesses.

It would be useful to collect metrics regarding the numbers of such domains registered, the prices paid, how long the domains are retained, and how they are used.

One particularly undesirable consequence of bulk speculative and 'domainer' registrations is the reduction in choice for genuine users of the DNS. Large numbers of domains are in effect 'sterilised' and thus inaccessible to users who would otherwise have a valid reason for registering and using them.

A specific metric to measure the extent of domainer registrations would be useful to gauge the extent of this phenomenon.

2. Competition between Registrars and non-discrimination between Registries

The December 2012 Advice does not refer to any Registrar Code of Conduct, parallel to the Registry Operator Code of Conduct. Thus, while the general rule has been established that a Registry may not discriminate among Registrars, the inverse rule that Registrars may not discriminate among Registries appears not yet to have been codified. **This situation presents a significant limitation of consumer interests and user trust: in effect, Registrars – unless otherwise regulated – are in a position to skew or indeed censor the consumers' options by biasing the presentation of the available domains in favour of their own Registries.**

The longstanding underlying principle of Registry-Registrar separation has been that Registrars should not have an incentive to discriminate between Registries. Thus, the domain name market was opened to competition between accredited Registrars. Following the changes in ICANN policy regarding vertical integration (in practice, backward integration), this principle has effectively been abrogated and a new DNS market structure is evolving. It is not at all clear what changes might result in the future.

The most critical area for the collection and analysis of DNS market metrics, relates to this policy change, because it is *a priori* anti-competitive.

Relevant metrics could include:

- **All the Data.** ICANN should collect and retain all registration data from all Registrars. Including domains, dates, prices, duration/renewals of registrations, classification of registrants etc. Excluding, of course, personal data of individual registrants.

This whole area is a prime candidate for **Big Data Analytics**. We do not know in advance all the questions should be asked and answered and what correlations might emerge in the future.

Analysing the metrics of the policy changes associated with the new gTLD programme will be an ongoing and unpredictable task for the foreseeable future. There is no real alternative but to collect all the data.

For the regulation of competition, price data is essential. ICANN should collect gTLD Registry and Registrar price data systematically, world-wide. From this point of view, the authors of the ICANN Legal Department statement (Appendix C of the December 2012 report) appear to be under some misapprehensions. Non-public **price data need not be published, but it is essential for ICANN** if it is to execute its responsibilities.

Regarding the **operations of the Registrars**, relevant metrics would include:

- which Registries and TLDs are supported by which Registrars?
- how each Registrar presents each TLD on their websites, from the point of view of 'shelf space' and the user experience?
- Whether the presentation or prioritisation of 'shelf space' among available TLDs is fixed, randomly rotated, or adaptable according to different criteria, including payment.
- Whether Registrars give priority, on their websites or within their pricing and service offerings, to TLDs which they own (as vertically integrated Registrars) or with which they are otherwise associated.

Thus, under Measures of Consumer Choice (p.14) a permanent **audit of Registrar websites is called for**, in addition to the Audit of Registry Websites (2.1 and 2.2)

- Regarding **consumer choice**, relevant metrics could include:
 - Data on the registration of domain names in the new gTLDs
 - data on the numbers of domains which have been withdrawn from consumer choice by speculation or bulk registrations.

Regarding **consumer trust**, relevant metrics could include:

- The survey recommended at 1.4 should **include unsolicited advertising as spam**.