

# Allocation Methods for Single-Character Domain Names: Issues

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#### Abstract

Managing the design of an allocation mechanism for single-letter and single-digit domain names will entail coordinating functions across various competencies. To rely on a standard auction mechanism for the allocations would be a historic setback for the domain name industry, as successful mechanism design is all in the details. These issues are explored in more detail below.

#### Introduction

Before developing a mechanism for allocating single-character domain names, we must compile a list of activities that need to be coordinated, identify the various abilities and areas of knowledge the activities require, and then select a project manager—ICANN or another body—that has these competencies. These will certainly cover a wide range, with technology, marketing, mechanism design, and protection of stakeholder interests all being involved.

Below I outline some of the issues related to stakeholder interests and mechanism design.

#### **Stakeholder Interests**

- 1. Determining the objectives of the auction. There are four plausible objectives, and these are not necessarily mutually exclusive:
  - a. Extracting the highest possible value from the sales.
  - b. Protecting and validating IP, as a number of U.S. federal trademarks exist on various domains, notably v.com by Yahoo! Inc. 1
  - c. Minimizing irrational biding exuberance.<sup>2</sup>
  - d. Resolving potential feature-related conflicts between the seller (the domain name community) and buyers. For example, sellers might prefer features favoring open auctions (for example, having sequential auctions for the domain names, not simultaneous auctions) because that way the sellers could learn more about how various bidders value a domain name.
- 2. Addressing what to do with sale proceeds. Plausible uses are:
  - a. Improving Internet infrastructure.
  - b. Supporting ccTLDs of developing countries.

<sup>&</sup>lt;sup>1</sup> Are "0.com" and "O.com" confusingly similar?

<sup>&</sup>lt;sup>2</sup> Technically this is the "winner's curse."

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- c. Lowering registration fees.
- d. Distributing proceeds to existing domain name owners.
- e. Developing a three-regime domain name registration mechanism.<sup>3</sup>

3. Prior to launch, it is imperative that potential buyers and sellers know about the auction and that they know it will be safe. Of course, it is also necessary that the auctions really are safe—that is, buyers must be allocated the domain names they win, and they must have their private information safeguarded.

### **Allocation Mechanisms**

In theory, the objective is to award each domain name to the entity that values it most. The most obvious way to do this is to use an *English Auction*, as popularized by eBay. But, in practice, a mechanism design works only if its rules are tailored to specific desirable objectives, and if the designer can predict how participants will actually respond to the rules. Thus, the design we choose must be created specifically for allocating single-character domain names.

The biggest attraction of Internet auctions is that buyers do not all have to be at the same place to participate. Moreover, they don't have to place bids at the same time or wait for the last minute to bid. 4 Nevertheless, live domain auctions, including those for expired domain names, are flourishing. We must decide whether live auctions are desirable for domain name buyers, and whether they are therefore desirable for single-character domains buyers in particular.

It is important to get the design right in the first place. The current on-line advertising auctions went through a number of iterations, but auctioning the single-character domain names is a onetime process with no room for experimentation. Moreover, when switching costs are too high or, say, the bidding process is too complicated, a new superior mechanism may not be adopted. Ease of use and a straightforward bidding process are vital. Google's<sup>5</sup> current auction design, by which sponsored ads are ranked, is not necessarily optimal. In fact it has two undesirable features, <sup>6</sup> and some alternative designs present clear advantages in certain areas.

The team in charge of allocation design should have a deep understanding of the theoretical design issues, be intimately familiar with the domain industry, and be able to draw on the successes and failures of previous onetime auction design implementations.

<sup>&</sup>lt;sup>3</sup> See Alex Tajirian, "Toward A Three-Regime Domain Registration: Generic, Idea, IP," DomainMart.

<sup>&</sup>lt;sup>4</sup> In live auctions, there are strategic and tactical reasons to bid at the last minute that are not driven by irrational bidding exuberance ("winner's curse").

<sup>&</sup>lt;sup>5</sup> Yahoo's current advertising-allocation auction mechanism falls within the same class of auctions but is

<sup>&</sup>lt;sup>6</sup> Technically, the mechanism does not have equilibrium in dominant strategies and truth-telling is not an equilibrium.