FOOL US ONCE SHAME ON YOU—FOOL US TWICE SHAME ON US:

WHAT WE CAN LEARN FROM THE PRIVATIZATIONS OF THE INTERNET BACKBONE NETWORK AND THE DOmain name system

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Abstract:

Scholars have neglected the privatization of the Internet, despite the obvious significance of the U.S. Government turning control over a powerful new communication medium to the private sector. This article provides a detailed historical study on the transition from a government sponsored backbone network to multiple commercially owned backbone networks. Next we document a number of problems that occurred during these privatizations. Not only have these problems led to a lack of competition in the backbone industry, but also the same types of problems are reoccurring in the ongoing privatization of Domain Name System (DNS).

The three types of problems that occurred in both privatizations, and will likely occur again in future Internet privatizations, unless recognized, can be categorized as follows: problems with procedural fairness in the processes adopted by the government; the government's management of competition during the privatizations; and problems related to the management of the technological infrastructure. In response, we have developed a series of proposals to address existing problems and to prevent these problems from reoccurring in future privatizations.

The specific proposals for the backbone industry are twofold. First, there must be an interconnection policy that ensures all networks non-discriminatory access to the Internet. Second, the government should support the development and use of standardized technologies, which contribute to interconnection, through a new Code-based technological interconnection policy. Such a policy is informed by a guiding principle that new technologies should not amplify network effects and should instead facilitate competition. Thus, we wish to place a discussion of network effects squarely within the discourse on Internet privatization.

To increase competition for the ongoing privatization of the DNS, we have three main proposals. First and most importantly, the U.S. Government must ensure that ICANN is accountable to the Internet

community as a whole and not just business interests. Second, the U.S. Government must ensure that there is more transparency and public input into ICANN's decision-making. Finally, it must be remembered that a privatization is a means to achieve desirable In analyzing the privatizations of the Internet, our analysis is steeped in the theoretical construct of "Code." Throughout this work, we explained how Code could regulate behavior, for example, by affecting competition between backbone providers. However, Code all by itself cannot create competition; instead there must be put into place the requirement of policies that all parties shared common ground rules for all competitors. Thus our analysis shows that both Code and policies are necessary to bring competition to the Internet. Additionally, the privatizations have also highlighted two important roles for the government with respect to Code. First, government must be vigilant in ensuring Code is not implemented which is contrary to our societal interests, such as the maintenance of competition in the marketplace. Second, the government should consider encouraging or mandating the development of Code for vindicating certain societal interests, especially in those areas that the private sector has little interest in.

The results of this study provide insights and evidence about the appropriate role of government in regulating the Internet. While most rulemaking on the Internet is conducted in a decentralized "bottom-up" manner, this approach has its limitations. Some of these limitations include the private sector acting as top-down rule makers; the limited mobility of most individuals to switch between different rule sets; the role of network effects; and how "bottom-up" rulemaking could be contrary to our society's values. Similarly, the history of the privatizations demonstrates the problems the government had with their use of "top-down" rulemaking. The overarching lesson is that both "top-down" and "bottom-up" modes of regulations have their limitations and problems.