

AAI INVITATIONAL SYMPOSIUM

▪ Systems Competition ▪

Overview

AAI's interest in systems competition issues recognizes the expanding body of legal, economic, management/marketing, sociological, and engineering experience with rivalry within and between systems. Systems comprise simple complementary market relationships (or sets of interrelated markets), linked by interfaces, in a variety of industries. These include key infrastructure sectors such as airlines, telecommunications and agriculture, media, and high-technology areas where intellectual property is particularly important. The growing ubiquity of systems has important implications for competition since rivalry and its benefits are arguably harder to achieve when any single or few systems account for a significant proportion of consumer products or services produced. At the same time, the complexity of systems results in increased challenges for analyzing systems competition issues applying extant understanding of antitrust and competition policy.

As systems become more prevalent and strategic competition plays a more prominent role in their development and maintenance, antitrust will increasingly have to address systems-related issues in merger, monopolization, and even collusion cases. The goal of the conference is to build on existing economic and legal analysis of systems and add other disciplinary perspectives to offer insight into how antitrust enforcement should address the related competitive issues that are arising with increasing frequency in antitrust cases. It is clear that both the FTC and DOJ are already looking at things through a rudimentary systems lens, as we have seen in several cases, including *U.S. vs. Northwest Airlines*, *United Airlines/ US Airways*, and *Monsanto/Delta and PineLand (D&PL)*.

Moreover, systems raise economic and legal issues that are central to AAI's mission. AAI has already dealt extensively with systems-related issues in various cases, including: *Monsanto/D&PL*, *Delta/Northwest*, our analysis of Google/Microsoft/Yahoo, and our investigation into automobile aftermarkets. Systems analysis has been informed by two AAI workshops held at Northeastern University in 2006 and 2008. The AAI's two conferences on monopolization in 2007 focused on emerging issues that may influence our thinking about systems competition. Other projects that have helped inform our approach to systems are the AAI aftermarkets symposium (*Antitrust Bulletin* (2007)), the AAI symposium on complexity published in the *Antitrust Bulletin* (2006), and our Network Access Project and resulting book: *Network Access, Regulation and Antitrust* (published in 2005 by Routledge).

We invite discussion and comments on the following questions that would form the basis of the topics covered in a one-day program. A number of experts—many of which have attended prior workshops—are interested in developing papers for an AAI conference and the *Antitrust Bulletin* has expressed interest in publishing them in a symposium issue.

- **How does insight into how systems are designed and managed help antitrust enforcement address competitive problems?**

Most legal-economic analysis focuses on the *result* of firm behavior involving integration and systemization, as opposed to answering the critical question of *how* systems are designed and managed to promote certain competitive features and outcomes. Multiple disciplinary perspectives are apt to inform antitrust enforcement better than the traditional legal-economic view. Economics looks largely at transactions between buyers and sellers that operate in component markets in a system. A management/marketing view of systems adds the important relational perspective, which focuses on shifting roles of buyers and sellers and strategic M&A to promote certain competitive outcomes. Adding the industrial engineering perspective provides insight, for example, into the degree of modularity employed in a system and whether bottlenecks are “natural” versus “engineered.” A sociological perspective will help examine relationships between economic participants across geographic areas in systems—particularly systems that are global in nature.

A multidisciplinary perspective on systems competition that brings together various types of expertise will allow antitrust enforcement a better understanding of the competitive features and antecedents of systems and the likely outcomes of system-related rivalry. For example, if system architecture allows for “plug-and-play” components, it may enhance receptiveness to the deployment of new technologies, prompting innovation and competition. Systems containing components that are natural monopolies may be developed and managed differently than those systems that are driven by competitive strategies or in response to consumer preferences. Multi-disciplinary insight may also better explain certain transactional arrangements and relational processes between buyers and sellers inside and outside a system and their competitive effects.

- **How does the role of strategic competition contribute to the development of “open” and “closed” systems and therefore antitrust enforcement goals?**

Intellectual property (IP), standard-setting, and bundling are important elements of strategic competition involving systems. Such competition is arguably the key to developing “open” or “closed” systems—a theme that is emerging at the center of the systems competition debate. Systems that are open to rival access will continue to raise traditional intra-system competition issues for antitrust enforcement (e.g., *Kodak*). However, the emergence of systems that are closed to rival access and must compete head-to-head with other rival systems will force a shift in enforcement orientation toward inter-system competition (e.g., *Monsanto/D&PL*).

Understanding the role of strategic competition in the development of open and closed systems will aid antitrust enforcement in determining, for example, if certain behavior is anticompetitive or if intra-system versus inter-system competition is a viable policy goal. For instance, an inquiry could identify the circumstances under which the use of IP to exclude independent service providers constitutes leveraging or a legitimate corollary business practice. We may also better understand when a closed system of original equipment and aftermarket products and services provides benefits to—as opposed to imposing costs on—consumers. Finally, intra-system and inter-system competition and related antitrust issues will likely lead antitrust enforcers to categorize systems with varying degrees of penetrability to rival access. How this categorization should occur could be an important part of our inquiry.

- **Do the traditional tools of antitrust analysis apply to systems issues or should enforcement look to new or different methods to evaluate competitive issues?**

Antitrust analysis of systems must focus on a host of issues, many of which have not been thoroughly explored or developed yet. For example, analysis should consider the firm and its incentives for creating, maintaining, or even deconstructing systems. A host of non-price effects are also likely to be important in the analysis of systems, including: agreements on capacity, advertising, R&D, and patents, and product positioning. Because systems are comprised of multiple complementary markets, antitrust must also focus on pricing relationships, loyalty rebates, cross-product predation, tying and bundling, compatibility, and standards. Moreover, a proper examination of systems competition requires a broader (or additional) focus than on a single, defined market.

Developing tools to answer the variety of antitrust questions that may be straightforward in single market analysis but complex in multi-market contexts should be high priority for enforcement. This is because the multi-market approach required for assessing competitive problems that emerge in systems is apt to suffer from a lack of good economic models, difficult estimation of the tradeoffs between systems benefits and costs, and standards of proof. Systems analysis requires criteria, methodologies, and judgments for defining relevant markets in a multi-market setting.

Other questions to be answered in a systems competition inquiry include when systems are effectively rivals and how many systems are needed for competitive outcomes. Moreover, the inquiry should take on the issue of what constitutes effective remedies in a systems context. For example, remedies will require identifying acceptable candidates for purchasing assets such that the assets form a viable system. Structural remedies may also be difficult to craft because the government is in the difficult situation of guessing at the “winning” set of assets to form a complex, competing system.