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U.S. v. Stolt-Nielsen *and the Economics of Cartels*

Barry C. Harris and Matthew B. Wright discuss a recent court decision that turned on the question of whether a firm's antitrust compliance program effectively deterred collusion. The program changed the incentives of employees to make it unlikely that they would collude. Analysis of the bidding evidence indicates that after the program was enacted, genuine competition occurred for specific contracts that had been subject to a conspiracy.

Standard Setting Organizations and the FTC/DOJ Intellectual Property Conference Report

Robert D. Stoner examines the implications that a recent FTC/DOJ report has for standard setting organizations (SSOs) that face the "holdup" problem. Holdup refers to the ability of patent owners to extract surplus from licensees after a standard has been adopted and licensees have made sunk investments in the chosen technology. He finds that the report is a substantial move beyond the IP Guidelines but still leaves substantial uncertainty concerning antitrust policy towards SSOs.

FCC Inquiry Regarding Tying in Wholesale Video Programming

Although the FCC recently asked for comments on cable network suppliers' alleged practice of selling only packages rather than individual networks, Bruce M. Owen, Michael G. Baumann and Kent W Mikkelsen find that this practice is rare or non-existent. Moreover, they find no reason to believe that this practice harms consumers. Thus, there is no reason for regulatory intervention to stop this practice.

U.S. v. Stolt-Nielsen and the Economics of Cartels

By Barry C. Harris and Matthew B. Wright

For a conspiracy to be effective, firms must be able to raise prices and maintain the price increase. Even where entry is not easy and the colluding firms control a large proportion of capacity in the relevant market, effective collusion can be difficult to maintain. While firms have a collective incentive to coordinate their activities to restrict output and raise prices, firms individually have an incentive to cheat on a cartel agreement. A firm that secretly undercuts a conspiracy stands to benefit, at the expense of other conspiracy members, by increasing its sales and earning higher profits than it would as a member of the conspiracy. Thus, quick detection and punishment of cheating are important to maintaining a conspiracy.

Punishment in this context refers generally to price cutting in response to cheating by other firms on the cartel agreement. When one firm undermines a cartel, the other firms participating in the cartel will lose sales and profits. Cartels therefore tend to break apart when cheating is discovered. Because a timely exchange of information within the cartel can deter such cheating by reducing its potential benefits, communication among firms is generally necessary to maintain an effective cartel.

The economics of cartel behavior influenced the recent federal district court decision in *U.S. v. Stolt-Nielsen S.A*. This case has its genesis in a bid-rigging conspiracy among parcel tanker operators. (Parcel tanker shipping is the ocean transport of bulk liquid cargoes on vessels equipped with numerous compartments designed to carry a variety of different cargo simultaneously.) In late 2002, parcel tanker operator Stolt-Nielsen sought admission to the Antitrust Division's Corporate Leniency Program. Once admitted to the program, Stolt-Nielsen and its employees provided the Division with substantial evidence of the firm's involvement in a customer allocation conspiracy prior to 2002. The Antitrust Division, however, suspended and later revoked its Conditional Leniency Agreement with Stolt-Nielsen, claiming that Stolt-Nielsen had not met the conditions for leniency. Stolt-Nielsen and two of its executives were later indicted for their roles in the parcel tanker conspiracy.

The defendants moved to dismiss the indictments, and in the spring of 2007 a hearing was held on the defendants' motion in Federal District Court in Philadelphia. The primary issue at the hearing was whether Stolt-Nielsen "took prompt and effective action to terminate its part in the anticompetitive activity being reported upon discovery of the activity." In November 2007, Judge Bruce W. Kauffman ruled in favor of the defendants and dismissed the indictments.

In his ruling, Judge Kauffman noted that Stolt-Nielsen instituted a revised antitrust compliance program when concerns were raised about anticompetitive activity within the company. Elements of this program included, *inter alia*, distributing a handbook containing the revised antitrust policy to employees and competitors, requiring employees to sign certifications representing that they would comply with the new policy and report any violations of it, and informing its competitors of the new policy and its intention to comply with it. At the district court hearing, defendant's expert economist testified that the revised policy

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Standard Setting Organizations and the FTC/DOJ Intellectual Property Conference Report

By Robert D. Stoner

Standard setting organizations (SSOs) and their members often face the "holdup" problem. Holdup refers to the ability of patent owners to extract surplus from downstream licensees after a standard has been adopted and licensees have made sunk investments in the chosen technology. The "Intellectual Property Conference Report" recently released by the FTC and DOJ Antitrust Division (IP Report) has important implications for how SSOs may deal with this problem. While the agencies' Intellectual Property Guidelines did not consider how SSOs might address holdup, the IP Report encourages innovative SSO rules and practices. In particular, the IP Report clarifies the agencies' policy towards the most controversial practice SSOs use to deal with the holdup problem, *ex ante* licensing negotiations. This part of the report expands on previous agency business review letters and speeches. Nonetheless, substantial uncertainty remains concerning when that practice may be used.

The IP report states that multilateral *ex ante* licensing negotiations will be considered under the rule of reason and will not be considered a *per se* offense. Such negotiations may lead to the exercise of monopsony power and licensing rates below the competitive level, with potential negative effects on innovation incentives. Nonetheless, the rule of reason is applied because these negotiations may also lead to important offsetting efficiencies by eliminating the possibility of holdup. Unfortunately, the IP Report provides only limited guidance as to when the antitrust authorities are likely to find such multilateral licensing negotiations objectionable under the rule of reason.

In encouraging *ex ante* negotiations, the IP Report appears to assume an *ex ante* world where numerous alternative technologies compete for inclusion in the standard based both on technical merit and on licensing terms. If these conditions do not hold, the agencies might find joint negotiations to be anticompetitive. The IP Report says that joint *ex ante* licensing negotiations may raise competition concerns if (a) the standard incorporates a patented technology that has no viable alternatives; (b) the standard does not enhance the IP holder's market power; and (c) all potential licensees refuse to license that technology except on agreed-upon licensing terms. In these situations, the IP Report finds that "the *ex ante* negotiation among potential licensees does not preserve competition among technologies that existed during the development of the standard but may instead simply eliminate competition among potential licensees for the patented technology."

Setting up such a dividing line basically says that unless efficiencies from *ex ante* multilateral bargaining can be demonstrated, entering into such negotiations may raise antitrust problems. This position seems to assume an anticompetitive outcome unless potential licensees or the SSO show that technologies currently compete and that *ex ante* licensing will preserve that competition. Thus, the rule of reason may be cold comfort to those contemplating the possibility of multilateral *ex ante* negotiations because patent holders and potential licensees will find it difficult to determine whether all the criteria for pro-competitive *ex ante* negotiations are likely to be met.

The IP Report says that a rule of reason analysis will be applied to *ex ante* multilateral discussion, but does not say how that analysis will be carried out. The Report does not even delve in any detail into one of the most difficult issues in this connection: under what conditions the SSO could set an artificially *low* price for IP included in the standard. The IP Report does not describe how any potential for exercise of monopsony power by SSO members might be traded off against likely benefits from reducing the opportunity for holdup. Rather, the IP Report focuses on the risks that the *ex ante* licensing discussions could be a sham (a) by IP holders to cover up naked agreements on the licensing terms they will offer the SSO or (b) by SSO members to cover up naked agreements to fix the prices of the products they sell.

The main procompetitive reason to have multilateral *ex ante* licensing negotiations is to mitigate the market power of patent holders that the SSO may create by incorporating a technology in a standard. Therefore, if the negotiations succeed, SSO members who must license the technology will pay less than if there were no negotiations and they were "held up." How does one distinguish the lowering of licensing rates that comes with lessening the opportunity for holdup from the exercise of "monopsony power" by potential licensees in the SSO? Both the elimination of holdup and the exercise of monopsony power have the same goal-to lower licensing rates. The IP Report sheds little light on this key question.

The IP Report, surprisingly, says little about another much-discussed suggested solution to the holdup problem: the SSO's requiring patent holders to agree in advance to license at a reasonable and nondiscriminatory (RAND) royalty. There has been a great deal of discussion in the recent literature regarding how such rates might be determined and enforced. To some degree, RAND policies could be substitutes for multilateral *ex ante* licensing discussions. While the IP Report mentions a number of suggested approaches to defining RAND rates, it does not comment on their relative merits. More generally, it would have been helpful to hear what the agencies think about the relative usefulness of *ex ante* commitments to RAND rates as opposed to *ex ante* negotiations.

The IP Report's rejection of per se treatment of *ex ante* royalty negotiations in a standard setting context is a substantial move beyond the IP Guidelines. Nonetheless, SSOs and the IP owners who are considering forming SSOs still face significant uncertainty concerning the antitrust treatment of those negotiations.

EI Senior Vice President Robert D. Stoner has worked on a number of matters involving the economics of intellectual property and standard setting.

FCC Inquiry Regarding Tying in Wholesale Video Programming

By Bruce M. Owen, Michael G. Baumann and Kent W Mikkelsen

Certain cable operators (particularly those with small and rural cable systems) claim that program suppliers do not give them the option to purchase only the networks they desire but instead compel them to purchase packages of networks. The Federal Communications Commission (FCC) recently solicited comments concerning this alleged practice of bundling networks at the wholesale level (sales by a program supplier to cable operators), a practice it calls "'take-it-or-leave-it' tying." There is no reason, however, for the FCC to act in response to these claims.

Available empirical evidence shows this practice to be rare or non-existent. Cable network carriage data from Fox, NBC Universal and Viacom show that the number of networks that cable systems take from each of these program suppliers varies widely. For each of these program suppliers, at least 30 percent of the small systems and operators take only one or two networks, with many different choices as to which one or two networks to carry. Fewer than 20 percent of small systems and operators take all networks from any of these suppliers, and no network from any of these suppliers is carried by all small systems or operators. Carriage of networks from other program suppliers follows a similar pattern, according to third-party data.

Even if one assumed that "take-it-or-leave-it" tying occurred, prevailing antitrust standards would find such bundling problematic only if a program supplier has market power. In this case, whether market share is measured by number of networks, number of subscribers receiving networks, network revenues or audience ratings, no program supplier has even 25 percent of the business. Concentration among program sellers is not high. Nor is there evidence that any individual network is a "must have" for cable and satellite operators, in the sense that the operator is not viable or cannot compete without the network. Without both a demonstration of market failure and a reasonable assurance that regulatory intervention would remedy that failure, no good case can be made to force firms away from the market outcome.

Moreover, even if program suppliers did engage in "take-it-or-leave-it" tying, eliminating this practice would not necessarily make cable operators or the consumers they serve better off. If hypothetical wholesale pure bundling were replaced by stand-alone network sales, some operators would benefit by purchasing fewer networks and paying less in total for programming from a particular supplier. Other operators, however, would prefer to purchase all the networks in the bundle at the bundled price but may no longer have this option because it is more expensive to buy the same networks under stand-alone prices. There is no reason to believe that regulatory intervention would improve the market outcome.

From a consumer's standpoint, prohibiting wholesale bundling (if it existed) would change the mix of networks purchased and the prices paid by cable systems. The systems in turn would change the mix of networks they offered their subscribers and the subscription price. This change is likely to make some consumers better off and make others worse off. To illustrate, assume initially that a system facing pure bundling chooses to offer a tier of 20 networks to consumers for $10 a month. If hypothetical wholesale bundling is prohibited, the system facing stand-alone prices may find it most profitable to no longer purchase one of the networks (network A) and simply offer a tier of 19 networks for $9.50. In this case, those consumers that value network A at more than $0.50 are net worse off; those that value network A at less than $0.50 are net better off. Another possibility is that the system drops one of the original 20 networks and replaces it with another network, still charging $10 for the tier. In this case, those consumers that value the network that was dropped more (less) than they value the network that was added are worse (better) off. A prohibition on wholesale bundling would have a myriad of possible effects with an indeterminate impact on consumers as a group.

Some argue that eliminating wholesale packaging of networks may encourage a la carte network sales at the retail level, but that is unlikely. First, "take-it-or-leave-it" tying is now at most a very rare practice,

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EI News and Notes

The Cost of Recording Piracy

Stephen E. Siwek recently completed a study entitled "The True Cost of Sound Recording Piracy to the U. S. Economy." The study, which was released by the Institute for Policy Innovation, discusses the impact of global music piracy on the U. S. economy. The study finds that recording piracy costs the U.S. economy $12.5 billion annually. Such piracy causes U. S. workers to lose over 71,000 jobs and $2.7 billion in earnings and reduces U. S. government tax revenues by $422 million.

U. S. Steel Acquisition of Stelco

The Department of Justice Antitrust Division allowed U.S. Steel's $1.1 billion acquisition of Stelco to proceed without a second request. Both firms made a wide variety of flat-rolled steel products in North America. Joseph W. McAnneny assisted attorneys from Reed Smith in preparing an antitrust defense of the acquisition. They described the relevant markets and showed that the acquisition would lead to substantial cost savings and have no anticompetitive effects. Henry B. McFarland also assisted in preparing the defense.

Aceto Agricultural Chemicals Corp. vs. AMVAC Chemical Corp.

Aceto sued AMVAC for monopolization and attempted monopolization involving pesticides containing phorate. Both firms produce such pesticides. Aceto sued when AMVAC acquired the patent for a phorate dispensing system and allegedly refused to license the system to Aceto. The U.S. District Court in Atlanta cited testimony by William C. Myslinski, who testified for AMVAC on market definition and other issues, in ruling against the plaintiff's request for a preliminary injunction. Alison M. Holt, David D. Smith and Robert D. Stoner assisted with the case. AMVAC was represented by Alston and Bird.

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made price fixing unlikely. By disclosing its revised policy to competitors, Stolt-Nielsen signaled its intention to compete more aggressively. The economics of cartel behavior suggests that Stolt-Nielsen's competitors would be expected to compete more aggressively if they perceived that Stolt-Nielsen was itself less likely to behave cooperatively.

Perhaps most significantly, Stolt-Nielsen's revised policies reduced opportunities and created significant disincentives for Stolt-Nielsen employees to participate in conspiratorial acts. Stolt-Nielsen operated throughout the world, and it shipped in dozens of different trade lanes. In order to make informed decisions about specific shipping contracts, Stolt-Nielsen relied on regional managers and their subordinates, who are familiar with the competitive conditions in specific regions and with the requirements of regional customers, to develop and negotiate bids.

Stolt-Nielsen's revised Antitrust Compliance Policy clearly limited contacts between Stolt-Nielsen employees and competitors to legitimate issues, such as joint bids and sublets. The revised policy also separated Stolt-Nielsen employees with primary responsibility over submission of bids and negotiation of contracts from the small number of high-level executives with authority to initiate or oversee legitimate contacts with competitors. Moreover, by requiring employees to report any violations of the policy, the revised policy raised the expected cost of coordinating a conspiracy within Stolt-Nielsen, because it reduced the likelihood that a coworker would maintain the secrecy of any conspiratorial discussions.

In particular, the policy made it difficult for the high-level Stolt-Nielsen employees who were authorized to talk to competitors to enlist lower-level employees to help carry out a conspiracy. Citing the testimony of the defendant's economic expert, Judge Kauffman noted that "the revised Antitrust Compliance Policy effectively 'severed' the internal company communication pathways-i.e., the links between those who were in contact with competitors and those responsible for bidding-that made it possible for Stolt-Nielsen to implement the customer allocation conspiracy." The evidence indicated that after Stolt-Nielsen revised its antitrust compliance policy, Stolt-Nielsen and its competitors aggressively competed for contracts previously subject to the conspiracy. For example, Stolt-Nielsen bid aggressively on one shipping contract only to have a competitor, the incumbent operator for this contract, undercut Stolt-Nielsen's bid by roughly seven percent. The defendant's economic expert explained that such bidding behavior was not consistent with a well-functioning conspiracy for the contract. The district court cited this contract as one of several examples of robust competition among Stolt-Nielsen and its competitors after Stolt-Nielsen revised its antitrust policy.

EI Principal and Board Chairman Barry C. Harris, who testified on behalf of Stolt-Nielsen in U.S. v. Stolt-Nielsen S.A.*, has consulted or testified in numerous matters related to potential price fixing or bid rigging. EI Principal and Corporate Vice President Matthew B. Wright, who assisted with the analysis in this matter, also has extensive experience in matters involving potential collusion.*

Wholesale Video Programming Continued from Page 3

while cable operators' widespread practice of offering their subscribers multiple networks in a common tier goes back to the beginnings of cable television. Second, there is no systematic mechanism by which bundling at one level implies bundling upstream or causes bundling downstream. Even if wholesale "take-it-or-leave-it" tying took place, it would not preclude cable systems from unbundling content at the retail level. Perhaps more important, even if wholesale packaging were banned, that would not necessarily affect cable systems' packaging to consumers.

Any allegation of tying implies that there are at least two products that could and should be sold separately but are not. In fact, the most basic component of video programming service is an apparently unitary but highly variable package of services called by such names as episode, segment, special, game or movie. Furthermore, video programming is almost always packaged when it is sold to retail distributors. For example, episodes are packaged into series. Series are bundled into daily, weekly, and seasonal schedules, or "channels." Channels, or networks, are packaged into multichannel groups. There is no economic basis for believing that preserving the opportunity of retailers to purchase individual wholesale "channels" of programming would make consumers better off, even if that option appeared to be threatened.

EI Special Consultant Bruce M. Owen and Senior Vice Presidents Michael G. Baumann and Kent W Mikkelsen have worked on scores of regulatory and antitrust matters involving media, including broadcast and cable television, radio, and newspapers. They also have expertise in issues regarding spectrum allocation and telephony.

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