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A little over a year ago, in January 2008, the Federal Trade Commission (“FTC”) announced a settlement with Negotiated Data Solutions (“N-Data”) regarding the firm’s patent licensing practices in relation to the Ethernet standard for computer networking. That announcement has prompted a number of responses, both positive and negative, not so much because of the specifics of the case but rather because of the broader questions it raised. I highlight a few of these questions below, along with their policy implications.

First, a bit of background to set the stage for the key issues at play. In 1994, while the Ethernet standard was still under development at the Institute of Electrical and Electronics Engineers (“IEEE”)—a period referred to as “ex ante” in standards lingo—the patents’ original owner, National Semiconductor, publicly announced it would license its patents for a one-time fee of \$1000. The standard was later defined to include National’s patented technology. When the patents covering that technology changed hands in 1998, however, the new assignee, Vertical Networks, identified some 64 companies that relied on the patents to implement the Ethernet standard but that had not yet taken any license or paid the nominal \$1000 licensing fee. Vertical, and later N-Data

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when it gained possession of the patents from Vertical, sought to license these firms on different terms, refused their offers to belatedly take a license at the flat rate of \$1000, and began suing for infringement. The key issue before the FTC, then, was what commitments travel with a patent relevant for a standard as the patent is sold or reassigned?

The FTC's answer, at least in this one case, was that the licensing promise National made to IEEE was tied to the patents, not just to the firm making the offer. Thus, the Commission argued that the original promise of \$1000 lump sum license fees formed a binding commitment for Vertical and then for N-Data, both of whom knew of National's license offer before they acquired the patents. More precisely, the FTC claimed that renegeing on the ex ante licensing promise constituted an unfair business practice under §5 of the FTC Act. The Commission's stipulated order therefore mandated that N-Data license the patents for a one-time fee of \$1000, as initially promised by National.

These facts are simple enough, but the settlement raises a host of thorny issues. First, note that the FTC did not make any antitrust claims. There was no determination that N-Data's conduct had violated either the Sherman or the Clayton Act. Nor was there even any charge of deceptive behavior, the claim that had underpinned the Commission's earlier cases on patent licensing in standard setting (namely, *Dell*, *Unocal*, and, most famously, *Rambus*). While the FTC has occasionally relied on §5 for more expansive claims than are feasible under either of the antitrust acts, and it has a clear track record of pursuing behaviors within standard setting contexts that have the potential to subvert

competition, it had never before based its entire argument on “unfair” practices per §5. Many observers have therefore seen the *N-Data* case as a dramatic departure in policy, signaling an intensified program of policing intellectual property licensing within standard setting without regard to anticompetitive behavior or the acquisition of market power through deception. But as then-Chairman Majoras lamented in her dissenting statement in *N-Data*, this approach has no limiting principles. The “unfair business practice” moniker can be applied so broadly that it suggests no obvious boundaries.

Related to the lack of antitrust claims, the allegations in the *N-Data* matter involved business-to-business transactions—and sophisticated businesses at that—and did not directly implicate end consumers. The FTC maintained that failing to abide by an ex ante licensing promise distorted the standard setting process because other members of the standard setting body may have made their decisions on which technologies to support for inclusion in the Ethernet standard, at least in part, on National’s \$1000 license offer. After the standard was defined, firms implementing the standard may have been “locked in” to the chosen technologies so that switching to other possible alternatives may have been too costly. Thus, the Commission wrote “The process of establishing a standard displaces competition; therefore, bad faith or deceptive behavior that undermines the process may also undermine competition in an entire industry, raise prices to consumers, and reduce choices.” The link between higher licensing prices for the *N-Data* patents and higher prices for end consumers buying products compliant with the Ethernet standard was simply assumed. As a matter of economics, however, the extent to which an input cost like patent licensing fees affects downstream prices is a

complex determination depending on a number of factors, including the relative size of the input cost for the component at hand as compared to total costs and the degree of competition in the end market. While the Commission may have been able to make a solid argument that more expensive licenses for N-Data's patents could reasonably be expected to lead to appreciably higher consumer prices for goods implementing the Ethernet standard, it did not do so. That the FTC extracted the settlement with N-Data without any evidence on consumer harm only exacerbates concerns regarding an overbroad application of §5.

A case can be made for some sort of antitrust agency oversight on issues of lock-in and ex post patent license hold up in standard setting. And there seems to be a need to clarify the obligations entailed in ex ante promises made to a standard setting body, including the more general reasonable and non-discriminatory ("RAND") licensing commitments that most such organizations request of their members. If RAND commitments did not travel with the patents for which they were made, patent holders could have incentives to game the standard setting process: promise RAND or offer precise licensing terms ex ante in order to sway other members into supporting the technology for inclusion, then spin off the patents to a separate patent holding firm ex post to skirt the constraints of the promise. That said, it cannot be optimal policy to view every ex ante promise made to a standard setting body as immutable for all time, with any breach leading to allegations of "unfair method of competition" and agency intervention. Surely some of these disputes fall under the category of simple contract disputes among sophisticated businesses. Along these lines, the newly named Chairman,

Jon Leibowitz has stated that the FTC should not play “national nanny” or “mediate between firms that can generally protect themselves where consumers are not at risk.”

The Commission would have done well to recall that admonition in the *N-Data* case.

A key fact in the *N-Data* matter is that some 64 firms never bothered to take National up on its \$1000 license offer. In other words, a great many of the IEEE members implementing the Ethernet standard simply ignored National’s patents, choosing to infringe rather than pay the nominal \$1000 fee. This consideration, however, apparently played little role in the FTC’s analysis. But if license promises are held in force for patent holders years after they are made, shouldn’t there be an equivalent obligation for licensees—that they be obligated to take a license within a reasonable time frame? This is the flip side of patent hold up: licensee hold out. If the worse consequence for infringing a patent is having to pay the licensee fee that was offered years ago ex ante, there is very little incentive indeed to ever take a license. It’s the classic “heads I win (get away with infringement and pay nothing), tails you lose (I get sued for infringement but pay only what I would have had I taken the license ex ante).” If we want to ensure the continued participation of innovative firms in the standard setting process, we must do better than this.

The many years that passed between National’s initial offer and *N-Data*’s licensing assertions also raises another point: how does the value of a patent change over time? When technologies are first developed their viability and commercial potential are often quite uncertain. As a result, early licensees may pay lower licensing fees to reflect the uncertainties and the shared risk between the licensee and licensor. This structure is

analogous to that for financial instruments, whose pricing is tied to risk: riskier investments require higher payoffs. If firms implementing the standard are free to wait years before they take a license, knowing full well that the patents are implicated in the standard, the commercial risk is borne entirely by the patent holder. If the product is successful, the implementers will eventually be licensed; if it's not, the patent holder receives no remuneration for its investment at all, even though the members of the standard felt it had value ex ante. A regime of this sort creates serious hurdles for innovators considering R&D investments for new standards and thus may reduce overall innovation investments—or at a minimum reduce innovative firms' incentives to participate in cooperative standard setting.

This last point is especially important for so-called non-practicing entities (“NPEs”). These are upstream specialists who hold but do not practice their patents. Licensing revenues represent the sole or primary source of income for an NPE. Vertically integrated firms, however, can choose to license for nominal fees, as National did, knowing that they can earn their full profits on the downstream market. Simply because such firms charge nominal (or no) license fees, or don't bother to enforce the nominal fees that they announce, does not mean, however, that consumer prices are automatically lower. What matters are overall profits. It is a business decision for vertically-integrated firms whether to pursue an active licensing program, as say IBM does, or whether to focus earnings on the downstream level. When upstream specialists enter the market, they tend to charge higher licensing fees as they don't receive the payments in kind in the form of cross licensing that vertically-integrated firms do. But the focus on explicit fees

generally involves rent shifting from producers who rely on the upstream firm's intellectual property to the patent holder. Whether end consumer prices are affected at all is an empirical question that should be addressed on a case by case basis.

In relation to specialists charging higher explicit fees, it is important to note that IEEE did not object to Vertical Network's letter seeking to alter the licensing terms that National Semiconductor had initially offered—indeed, the standard setting body posted Vertical's letter on its website. If the standards body involved didn't protest the change in terms it is difficult to see the case for agency intervention. Indeed, as the business models practiced by firms participating in standard setting efforts continues to diversify, and as it becomes more common for patents to change hands over time, standard setting bodies have every incentive to set their rules to limit strategic behaviors on both sides of the licensing negotiation table. This is best done at the standards body level, so as to reflect the specific makeup and industry realities at hand, to maintain incentives for broad participation, and to encourage continued investments in innovation.

The bottom line, then, is a balanced view to ex ante license commitments. Yes, in general those commitments ought to travel with the patents in order to prevent any blatant game playing by patent holders. That said, reasonable restrictions should apply. An ex ante commitment should not run in perpetuity; some sort of evenhanded time limit should apply. It might also make sense for business models to play a role: taking the full value of a license, counting any cross licenses and other-in-kind concessions, could well imply a higher outright price when explicit fees comprise the sole terms. Finally, and most importantly, antitrust agencies should intervene only when consumer harm is at stake.

Large sophisticated companies that deal with intellectual property (“IP”) licenses on a regular basis, especially those within standard setting bodies who have the organizations’ bylaws to employ for any changes that make sense for the group as a whole, do not need such protection.