



## FTC Sues N-Data for Violating Standards Commitment to IEEE

RICHARD STERN  
rstern@khhte.com

..... The Federal Trade Commission (FTC) announced that it has simultaneously filed suit against Negotiated Data Solutions LLC (N-Data) and settled the case by entering into a consent order with N-Data. The FTC charged N-Data with violating section 5 of the FTC Act by violating a commitment to the IEEE to license NWay Ethernet patents on royalty terms agreed upon with the IEEE, which caused higher prices due to higher royalties to be passed on to

consumers of electronic products. Section 5 of the FTC Act prohibits unfair methods of competition and unfair commercial acts and practices.

### Background

N-Data is a Chicago-based firm that does not manufacture any products. Its business is licensing patents that it has acquired from inventors and other previous holders of patents. (The term "patent troll" is sometimes applied to

such companies, the FTC observed.) The patents involved in this case originally belonged to National Semiconductor Corporation (NSC), but in 1998 it sold them to Vertical Networks, when NSC decided to focus on analog semiconductor technology. (Ethernet is a digital technology.) In 2003, Vertical Networks folded and flipped the patents to N-Data, which decided to monetize them more efficiently by "recouping more value" from them than the original royalty arrangement with the IEEE was yielding.

In 1994, NSC made a commitment to the IEEE in an "assurance letter" that, if the IEEE adopted a standard based on NSC's patented NWay technology, NSC would offer to license the technology for a one-time, paid-up royalty of \$1,000 per licensee to all manufacturers and sellers of products that use the IEEE standard.<sup>1</sup> The IEEE then incorporated NWay into its 802.3 Fast Ethernet standard (see the "NWay Technology" sidebar). Since then, hundreds of millions of computer devices, such as personal computers, switches, routers, DSL and cable modems, wireless LAN access points, and IP phones, have incorporated Fast Ethernet technology (and thus NWay). The inclusion of NWay in the Fast Ethernet standard, and the subsequent adoption of that standard by the industry, effectively eliminated viable auto-negotiation technology alternatives from the marketplace. NWay technology is now the

### NWay Technology

NWay is a telecommunications protocol used with Ethernet networking devices (for example, routers) to provide automatically the highest possible common transmission speed between two different devices. NSC developed the NWay protocol (also known as "auto-negotiation" or "auto-sensing") in 1994 to provide a mechanism to handle connections on local area networks (LANs) between network devices operating with varying connection speeds.

When a connection is made to a network device (known as the "link partner"), the NWay protocol specifies what modes that device uses, sends information about its own capabilities, and automatically configures the highest common performance mode. NWay controls the cable connected to a network device and operates like a rotary switch to select the best operating mode, and then it passes control of the cable to the appropriate technology.

In 1983, when the IEEE first published a version of the 802.3 Ethernet standard, its use was contemplated for LANs built on copper wire, operating at 10 megabits per second (Mbps). By 1993, the IEEE decided that its 802.3 Working Group should develop a copper-wire 100-Mbps system ("Fast Ethernet"). At NSC's urging, and based on its patent assurance letter, the IEEE incorporated NSC's NWay technology into the Fast Ethernet standard, in preference over several other available technologies. The Ethernet standard is now being extended to devices operating at 100 gigabits per second. The worldwide Ethernet device market is forecast to total more than 6.7 million units by 2009.

NWay (Auto-Negotiation) is defined in clause 28 of the 1998 edition of *IEEE Std. 802.3*.

industry standard, and the industry has been locked into using NWay technology at least since 2001.

When N-Data subsequently acquired NSC's NWay patents, it knew of the commitment (assurance letter) and knew that the electronics industry had become committed to the IEEE standard. Nonetheless, N-Data proceeded to demand and collect royalties far in excess of the \$1,000-royalty commitment. The FTC said that when N-Data began demanding the higher royalties, it had already become expensive and difficult for the industry to switch to another standard. Consequently, N-Data was able to demand and levy higher royalties than the industry otherwise would have paid for the use of the technology. The FTC also alleged that the public and consumers would be harmed because of N-Data's conduct for a number of reasons. First, the standardization process would be harmed—firms would become less likely to assist in the development of industry standards, and would become unwilling to rely on such standards even if they were developed. Second, consumers would be forced to pay higher prices because of N-Data's conduct—the higher royalties would be passed on to the public.

N-Data settled the case by accepting an order prohibiting it from enforcing the NWay patents unless it has first offered a patent license in the form of one attached to the FTC's order. That license is based on the terms NSC offered in 1994, before the IEEE incorporated the patented technology into the Ethernet standard: \$1,000 for a paid-up license.

### **N-Data's version of the story**

Although N-Data (reluctantly) knuckled under and signed the agreement with the FTC, it publicly stated its disagreement with the FTC's characterization of N-Data's conduct. On the N-Data Internet website (<http://www.negotiateddata.com/files/N-Data%20Statement%20012308pm.pdf>), the company said: "N-Data is disappointed that the FTC decided to take this

unnecessary and unprecedented action. N-Data [has] at all times acted in good faith in their dealings with the IEEE and with the companies to whom licenses were offered. N-Data believes that the FTC statement and complaint convey an inaccurate impression of what actually occurred." N-Data maintains that its conduct was proper and justifiable because "prior to 2002, IEEE rules did not provide that assurance letters were irrevocable." Furthermore, N-Data argues, the IEEE did not object to the withdrawal of the \$1,000 license: "When [this occurred], the IEEE's Patent Administrator did not object to the departure from the \$1,000 commitment, even while requesting and securing specific changes" to other aspects of the new proposal.

N-Data also takes issue with the FTC's comment that companies such as N-Data are "sometimes referred to as 'patent trolls.'" N-Data says that what it does is to "recoup value for the shareholders, which included prominent venture funds who had invested well over \$100M in" Vertical Networks, the company that bought the patents from NSC and then resold them to N-Data. N-Data also says that it will donate all proceeds from the \$1,000 standard patent license that the consent order requires to nonprofit organizations focused on "environmental responsibility and sustainable development projects."

### **Internal conflict at FTC**

An unusual wrinkle in this case is the disagreement, 3-2, among the five FTC Commissioners over whether this case presented an appropriate vehicle for the invocation of the "unfairness" provisions of section 5 of the FTC Act. Most FTC Act § 5 cases involve violations of the antitrust laws, which § 5 automatically sweeps up. However, § 5 also extends to conduct that does not violate the antitrust laws but is nonetheless "unfair." Defining what business practices are "unfair" without constituting statement violations has been problematic. In a memorandum explaining the

case, the FTC summarized the reasons why N-Data's conduct was "unfair":

*NWay was chosen for the standard on the basis of the assurances made by National to the IEEE 802.3 Working Group. Further, the industry relied, at least indirectly, on National's assurances regarding pricing, and made substantial and potentially irreversible investments premised on those representations. After the standard became successful, and it became difficult, if not impossible, for the industry to switch away from the standard, N-Data took advantage of the investments made by these firms by renegeing on National's commitment. Because it is now no longer feasible for the industry to remove the technologies, the value that N-Data was able to extract from market participants was due to the opportunistic nature of its conduct rather than the value of the patents. ... Here, those who created the standard had no way to anticipate the repudiation of the price commitment before it occurred and, apart from expensive litigation, those locked into the standard had no way to avoid the threatened injury posed by the demands that they faced. Thus, those practicing the standard were locked in. ... Put simply, this is a form of what has been described as "patent hold-up."*

The three commissioners in the majority said the N-Data's conduct was "pernicious" enough to call for FTC action even though they did not think the conduct rose to the level of an antitrust violation. (It is reasonable to predict, however, that some of the computer companies that N-Data mulcted will sue it under the antitrust laws to recover treble their overpayments. The FTC's forbearance has no legal effect on such suits.) According to the majority,

“the cost of ignoring this particularly pernicious problem is too high. Using our statutory authority to its fullest extent is not only consistent with the Commission’s obligations, but also essential to preserving a free and dynamic marketplace.”

But the FTC’s Chairman Majoras disagreed, and argued that “the novel use of our consumer protection authority [under § 5] to protect large corporate members of a standard-setting organization is insupportable.” Majoras contends that § 5 should not be invoked here because “there is no allegation that National engaged in improper or exclusionary conduct to induce IEEE to specify its NWay technology in the 802.3u standard. No one contends that National deceived SSO members at the time of its initial licensing offer in 1994.” Furthermore, “the IEEE’s Patent Administrator did not object to the departure from the \$1,000 commitment,” so that it appears that the IEEE acquiesced in N-Data’s conduct.

The Chairman makes three points. The first is that the FTC should not protect big computer manufacturer corporations under § 5. That is, previously the FTC acted to protect, and it should always confine its protection to, “small businesses, non-profits, churches, and ‘mom and pop’ operations that lack the resources and, in some cases, the experience or understanding to defend themselves adequately against fraud.” Nothing in the statute supports this proposed inequality of enforcement effort (which I find distasteful in tone), and it ignores the fact that N-Data’s price gouging gets passed on from the corporate computer manufacturers to the unincorporated public, as well as harming the standardization process.

The second point is that National committed no improper acts in 1994. That is beside the real point. N-Data cannot take the patents in 2003 and the value that they generate without also taking the obligations that go with the patents. Thus, if I buy your patent, I must take the patent subject to the

## The FTC and Standardization Skulduggery

The FTC has challenged abusive use of patents in standardization in three previous enforcement actions—*In re Rambus, Inc.*, *In re Union Oil Co. of Cal. (In re Unocal)*, and *In re Dell Computer Corp.* For discussions of these proceedings, see these *IEEE Micro Law* columns:

- “Coming Down the Home Stretch in the Rambus Standardization Skulduggery Saga: To Levy or Not to Levy Royalties” (Mar.-Apr. 2007),
- “Standardization Skulduggery Update: UMTS Standard” (Jul.-Aug. 2005),
- “FTC Turns Back Challenge on Patent Coverage” (Jul.-Aug. 2004),
- “Unresolved Legal Questions about Patents and Standard Setting” (Sept.-Oct. 2003),
- “Weird Turn of Events in Continuing Rambus Saga” (Jan.-Feb. 2003),
- “FTC Piles Onto Rambus’ Standardization Skulduggery” (Jul.-Aug. 2002), and
- “Licensing IP Embodied in Standards” (Jul.-Aug. 1999) (discussing Dell case).

In each of these proceedings, unlike the N-Data case, the patent owner concealed the existence of patents covering the standard and deceived the standard-setting organization into incorporating into the standard what turned out to be patented technology. That is the “traditional” form of standardization skulduggery. In the N-Data case, the skulduggery is quite different: renege on the RAND (reasonable and nondiscriminatory) promise of the company that assigned the patents to the present patent owner. The N-Data case represents the FTC’s first challenge to this kind of skulduggery.

licenses that you have already granted; I cannot abrogate them. It is just like buying a house that has a mortgage on it; I cannot with impunity tell the bank that holds the mortgage to take a hike. The IEEE assurance letter is a commitment, known to Vertical and N-Data,<sup>2</sup> on which others foreseeably relied. The commitment is not erased by a change in title to the patents.<sup>3</sup> If that were the law, the door would be open to fraud.

The Chairman’s third point is that it’s all the IEEE’s fault. I leave it to others to opine as to what the Patent Administrator thought he was doing. Regardless of that, however, the patent licensing commitment was not made just to the IEEE or even mainly to the IEEE, for the IEEE was not the prospective target of the assertion of these patent rights; it wasn’t even a prospective licensee. The targets were the users of the standard who acted in reliance on the licensing commitment in embodying the NWay technology into their network products, and they were the intended beneficiaries of the commitment. The IEEE

would not be entitled to sell them down the river, even if the Patent Administrator’s conduct is interpreted as acquiescence in that course (which is open to doubt). The Chairman’s arguments are unsound.

The other dissenting commissioner makes the point that the majority’s solicitude for N-Data—reflected in its unwillingness to explore antitrust enforcement against it and relying instead on section 5 of the FTC Act, to avoid damages liability—may have a hole in its pocket. Most states have “little FTC Acts” that duplicate the substantive provisions of the federal law but (unlike it) provide for damages liability (sometimes double or treble damages) to private parties injured by the violation. It is unclear why the majority’s antidamages solicitude exists, but the dissenting commissioner’s point is well taken. Even if this is not an antitrust violation, the barn door is open once even a violation merely of section 5 of the FTC Act is found.

## References

1. The assurance letter is available at [http://www.negotiateddata.com/files/Grant\\_Letter\\_060794.pdf](http://www.negotiateddata.com/files/Grant_Letter_060794.pdf). It states: "In the event that the IEEE adopts an autodetection standard based upon National's NWay technology, National will offer to license its NWay technology to any requesting party for the purpose of making and selling products which implement the IEEE standard. Such a license will be made available on a nondiscriminatory basis and will be paid-up and royalty-free after payment of a one-time fee of one thousand dollars (\$1,000)."
2. Vertical acknowledged at the time it acquired the patents that it had been informed "that several of the patents may be 'encumbered' by whatever actions [NSC] may have taken in the past with respect to the IEEE standards." The final agreement between Vertical and NSC stated that the assignment is "subject to any existing licenses and other encumbrances that [NSC] may have granted." It further provided, "Existing licenses shall include ... [p]atents that may be encumbered under standards such as an IEEE standard." National stated that the assignment is "subject to any existing licenses and other encumbrances that [National] may have granted." It further provided, "Existing licenses shall include ... [p]atents that may be encumbered under standards such as an IEEE standard." N-Data was also familiar with the assurance letter.
3. Current IEEE policy makes this explicit: Any transfer of intellectual property covered by a letter of

assurance to the IEEE must include language either explicitly binding the transferee to the terms of the letter of assurance or providing notice of the existence of the letter of assurance. The transferee must agree to do the same for each further transfer. Current IEEE policy also explicitly makes letters of assurance irrevocable. Since 2002, the by-laws include this statement: "This assurance shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable during that period."

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