THE EUROPEAN COMMISSION'S DECISION IN THE *MICROSOFT* CASE: AN ECONOMIC PERSPECTIVE

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The European Commission's Decision in The *Microsoft* Case: An Economic Perspective

by

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The European Commission's 300-page decision in the Microsoft case, issued on March 24, 2004, offers a detailed justification for findings of anti-competitive behavior on two virtually unrelated fronts.[1] First, the Commission ruled that Microsoft had illegally refused to supply proprietary information that Sun Microsystems needed to make Sun's work-group server computers fully interoperable with computers running on Microsoft's current-generation operating systems. Second, the Commission ruled that Microsoft illegally "tied" Windows Media Player to the Windows desktop-PC operating systems, thereby reducing consumer choice in the market for media software.

The Commission imposed a EUR 497 million fine on Microsoft. It also ordered Microsoft (a) to disclose the internal protocols and interfaces needed for current and future interoperability in work-group server products (b) to offer versions of current and future PC operating systems without Windows

Media Player.

The consequences of the decision for Microsoft and, more generally, for the market for operating system software, are uncertain. Consider the media player issue. On the one hand, the market itself could make the remedy irrelevant: it is not clear that computer vendors or computer end-users would ever choose to buy the mandated versions of Windows lacking Windows Media Player. On the other hand, the Commission may extend the legal logic of the media player decision to other capabilities that have been (or could be) incorporated in Microsoft operating system software. And the resulting need to redesign Windows could sharply limit the versatility of the operating system as a platform for software applications.

By the same token, the consequences of requiring Microsoft to license intellectual property to Sun are not clear. The requirement may have little direct effect on the market for servers because the final judgment in the U.S. government's case against Microsoft already required the company to share protocols needed for interoperability, and because few competitors are likely to license protocols only available in Europe. But the precedent could have a chilling effect on innovation by firms with dominant market shares.

It is also worth noting that Microsoft is appealing to the European

[1]European Commission Decision of 24.03.2004, relating a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft). Hereafter, "*Decision*". Downloadable from http://europa.eu.int/comm/competition/antitrust/cases/decisions/37792/en.pdf.

Union's Court of First Instance, opening the possibility that part or all of the decision will be reversed. Then, too, Microsoft has argued that the forced licensing of interoperability information is prohibited by the super-national World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights.[2]

I. THE BACKGROUND

A complaint by Sun Microsystems in December 1998 triggered the case. A full chronology can be found in the Decision, ¶¶ 3-20. The American-based maker of computer hardware and software alleged that Microsoft had violated European Union competition law by refusing to disclose information that would allow Sun computers to interoperate efficiently with Microsoft-equipped computers in "work group server" systems. The Commission issued a first "statement of objections" in August 2000 based on the Sun complaint, and Microsoft responded in November of that year.

Meanwhile, the Commission initiated a separate investigation of Microsoft's behavior in incorporating "media streaming" capabilities in the Windows operating systems. A second statement of objections, issued in August

[2] *The European Commission's Decision in the Microsoft Case and Its Implications for Other Companies and Markets*, Apr. 19, 2004. Download: http://download.microsoft.com/download/5/2/7/52794f65-8784-43cf-8651-c7d9e7d34f90/Comment%20on%20EC%20%20Microsoft%20Decision.pdf.

2001, both broadened the Commission's concerns regarding network interoperability and raised new concerns regarding the incorporation of Windows Media Player in Windows. Microsoft responded in November 2001.[3]

To support its arguments on interoperability, Microsoft submitted statements from some four dozen server customers along with the results of a survey of information technology professionals. The Commission subsequently requested more data from those customers and launched independent surveys of organizations regarding both work-group servers and media players. The market studies led the Commission to issue yet a third statement of objections in Aug. 2003 that "refined and consolidated" the charges made in the first two. *Decision*, ¶ 10. In its October 2003 responses, Microsoft included the results of two additional surveys conducted among corporate information technology professionals.

Add to this mix a host of submissions from other interested parties. A number of Microsoft's competitors (among them Sun, AOL Time Warner, IBM, Novell and RealNetworks) along with major computing industry groups (including the Association for Competitive Technology, the Computer and Communications Industry Association, the Computing Technology Industry Association, and the Free Software Foundation-Europe) were allowed to

[3]RealNetworks, the market leader in media software, had complained about Microsoft's behavior. However, unlike the Sun complaint, the Commission did not acknowledge the role of Microsoft's rival in formulating the statement of objections.

participate.

The Commission held three days of oral hearings in November 2003. And in the run-up to the decision, Microsoft executives, led by CEO Steve Ballmer, and Commission representatives, led by Competition Commissioner Mario Monti, met but failed to arrive at a settlement.[4]

The dates of the European investigation of Microsoft overlapped the government proceedings against Microsoft in the United States, which began with the filing of a civil antitrust suit in 1998 and ended in November 2002 with a final judgment based on a negotiated settlement. Although the U.S. case against Microsoft involved some different actors, many of the issues paralleled the European case. For example, the U.S. courts concluded that Microsoft had broken the law, both by not allowing computer manufacturers to remove access to Microsoft's Internet browser software on Windows PCs and by undermining a potential rival software platform, Sun's Java technologies. As discussed below, the parallels are particularly significant because the European Commission rejected a less intrusive remedy that was part of the U.S. final judgment.

Since the two tracks of the case — interoperability and tying — have little in common, they are analyzed separately below.

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[4] *See* FINANCIAL TIMES, Mar. 18, 2004. Download: http://news.ft.com/servlet/ContentServer?pagename=FT.com/StoryFT/FullStory&c=StoryFT&cid=1079419746010&p=1012571727088.

II. COMPUTER NETWORK INTEROPERABILITY

In modern computer networks, "server" computers provide a host of services to "client" (end-user) computers, storing and transferring data, running various applications (such as e-mail, large databases, and other centralized functions), managing secure access and the like. Most client PCs run on Microsoft Windows operating systems, though tens of millions of desktop computers worldwide do run on other operating systems including the Macintosh OS, Linux and various versions of UNIX. The market for server operating systems is more evenly contested, with Microsoft, Linux, Sun, Novell, HP, IBM, and Apple heading a longer list of competitors.

Operating systems use a mix of public and proprietary software code to facilitate exchanges of information among computers with a variety of operating systems. Since most organizations use more than one server operating system in their networks, it is often in the interest of all operating system vendors to make "interoperability" in heterogeneous networks as seamless and efficient as possible.

Commercial incentives may, however, create a divergence of interests among operating system vendors. According to the Commission, Microsoft withheld interoperability information in the sub-market for work-group server operating systems that perform a relatively narrow set of tasks (file, print, user administration services) for small and medium-size networks. Here, the

Commission ruled, Microsoft had illegally limited interoperability with the goal of inducing owners of heterogeneous networks (notably, those including servers running on operating systems from Sun and Novell) to "migrate" to pure Windows.

A. Details of the Dispute

Regulators and the courts generally have been reluctant to force competitors to disclose proprietary information, and for good economic reasons. Such information constitutes intellectual property, and the prospect that governments may force innovators to license their property (with or without compensation) is a disincentive to innovate in the first place. Thus, most competition policy experts are in accord that the societal benefits of forced disclosure will only exceed the costs of such sharing if, at minimum, four conditions are met:[5]

(1) the intellectual property holder has market power;

(2) the intellectual property is indispensable to becoming or remaining a viable competitor;

(3) the failure to share will exclude all other suppliers from the market; and

(4) the refusal to license prevents the emergence of a new product for which there is potential consumer demand.

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[5]Judgment of the Court, ¶ 38. Download from http://curia.eu.int/jurisp/cgi-bin/form.pl?lang=en&Submit=Submit&docrequire=alldocs&numaff=C-418%2F01&datefs=&datefe=&nomusuel=&domaine=&mots=&resmax=100.

Market definition. Market power can only be assayed in the context of a specific market. Thus the definition of the market that Microsoft allegedly dominated is critical to the case. The Commission claimed one could define a discrete sub-market for server operating systems that provide "file, print, and group and user administration services to relatively small numbers of client PCs linked together in a small- to medium-sized network." *Decision*, ¶ 345. Some 66 percent of work-group servers, as defined by the Commission, run on Microsoft operating systems — more than enough, by the Commission's rule of thumb, to infer that Microsoft dominates the market. *Decision*, ¶ 592

Both good economics and European case law define the borders of a market in terms of substitutability of products. Specifically, lack of *substitutability in demand*: that small changes in price will not lead consumers to switch to products outside the defined market; and lack of *substitutability in supply*: that small changes in price will not induce vendors to offer products outside the defined market as alternatives.

To document substitutability (or, rather, the lack thereof) on the demand side, the Commission points to surveys of organizations with computer networks. In the Commission's own 2003 survey, 70 out of 85 respondents said that one type of server was generally assigned the file, print and administration tasks, and 51 out of 83 respondents believe these tasks inherently "go together. *Decision*, ¶¶ 349, 350. The Commission also notes that Microsoft sells four versions of Windows 2003 Server software, with prices ranging from $399 to more than $10,000. If Windows 2003 Standard Edition (identified by the Commission as the work-group server) was a good substitute for the Enterprise Edition, the Commission argues, why would anyone pay twice as much for the latter? *Decision*, ¶ 382.

With respect to supply substitutability, the Commission acknowledged that most of the code in one edition of an operating system family — for example, the Windows 2000 client operating system along with the three versions of Windows 2000 for servers is identical, no matter what the names on the boxes. But the Commission concludes there still must be barriers to substituting one for another. Otherwise, it would not have taken Microsoft several years to win a substantial share of the low-end server market with code that already existed for client PCs. *Decision*, ¶ 394.

Microsoft, for its part, argues that the Commission's segmentation of the server operating system market is arbitrary. What the Commission calls work-group servers can — and, in practice, do — handle tasks outside the category, while many high-end servers perform services related to work groups. For example, only about one-third of the inexpensive servers running Windows fit in the Commission's market because they perform work-group tasks, but the other two-thirds are running identical versions of Windows server operating systems that can perform those tasks.

Moreover, the fact that operating system vendors charge less for versions of server software that disproportionately perform work-group tasks doesn't imply that the low-priced version of Windows server software defines a market. Expensive versions targeted to servers that handle very high workloads and require exceptional reliability can easily be "detuned" and marketed for the more modest requirements of work groups. Hence there is near-instantaneous supply substitutability from high-end to low-end in server operating systems. And in the relevant market for all server operating systems, Microsoft has only a 27 percent share (or less, calculated as a percentage of license revenues), and is thus unlikely to enjoy market power.[6]

Indispensability. To justify forced disclosure of intellectual property, one must show that it is not possible for rivals to compete without the protected property. The Commission notes that, in the surveys undertaken for the case, customers rate other vendors' servers as superior to Windows by many criteria that are important to them, yet still choose Windows because of the interoperability advantage. It is possible to add software to Windows client PCs within a network to improve the interoperability of heterogeneous networks (Novell's approach); it is also possible to "reverse-engineer" interoperability without violating IP protection rules (the Free Software movement's approach

[6]A. Jorge Padilla, *The Commission's Refusal to Supply Case Against Microsoft: An Overview of the Economic Evidence*, Submission to the European Commission in Case No. COMP/C-3/37,.792 Microsoft, Nov. 30, 2003, ¶ 24.

with Samba software). But according to the Commission, these approaches are inadequate to protect competition because both require some degree of voluntary cooperation on Microsoft's part. *Decision*, ¶¶ 676, 687.

The fact that interoperability is important to network users — and may be difficult and/or expensive to achieve without Microsoft's cooperation — does not in itself constitute an adequate legal or economic justification for forced IP licensing. The intellectual property must be essential to compete. And here, Microsoft argues, the evidence suggests the opposite.

First, Microsoft says, it already documents numerous interfaces that other operating system vendors can use to interoperate with Microsoft clients and servers. What the Commission seeks, according to Microsoft, is for the firm to disclose detailed information that would make it easier for competitors to clone Microsoft's innovative features.

Microsoft contends, moreover, that evidence from the network user surveys suggests that customers are buying Windows servers for a variety of their attributes, and that superior interoperability is not a decisive factor in their choices. The company also points to the Commission's own survey, which finds that 98 out of 102 responding organizations were using multiple server operating systems in their networks.

Foreclosure. The Commission worries that disadvantages in interoperability may prove sufficient to drive Microsoft's competitors out of the work-group server market. It points to the fact that the rapid decline of Novell, Microsoft's most direct competitor in servers used by work groups, coincided with the replacement of Windows NT by Windows 2000, which had new features that were difficult to clone. Novell's share of sales in the category fell from 33.3 percent in 2000 to 23.6 percent in 2002; in the same period, Windows' share rose from 55.6 percent to 66.4 percent. *Decision*, ¶¶ 592, 593.

The Commission concludes, moreover, that the overall success of the Linux operating system in the server market poses little threat to Microsoft in the work-group segment. Indeed, while Linux has a rapidly growing presence in servers, its share of servers intended primarily for work-group functions has been stagnant. IDC, the information technology data company, projects that Linux' future growth in work-group servers will largely come at the expense of Novell. *Decision*, ¶ 609.

According to Microsoft, however, customer surveys show that the decline of sales of Novell's NetWare OS was due to inferior support and lack of investment in the platform — not to interoperability problems. Novell has always used its own methods and protocols for accomplishing network tasks, rather than trying to clone Microsoft's; so the information demanded by the Commission was largely irrelevant to Novell. By the same token, the surveys suggest that Windows is doing well because customers prefer it to competitors' operating systems software for a variety of reasons — not just superior interoperability.

Moreover, Microsoft points out that while although the survey respondents rank NetWare ahead of Linux in interoperability, Linux has been growing (in spite of lack of access to Windows protocols). And it is projected to continue to grow in all areas, (including "work group" tasks) while NetWare has been losing market share. IDC forecasts that Linux's share of the work group server segment will increase to 16 percent in 2007. This projection comes from the same IDC source cited by the Commission. *See* ¶ 507. Microsoft also cites a recent survey by Merrill Lynch. Half of the chief information officers queried said they planned to increase their use of Linux in 2004, and that the most popular use of Linux was "replacement of Windows NT File/Print" — the core work-group server functions. Merrill Lynch, *CIO Survey Results: February 2004 Software Spending Survey*, Mar. 8, 2004, at 7.

New Product. The Commission's decision does not directly address the question of whether Microsoft's refusal to share intellectual property prevents the emergence of a new product for which there is potential consumer demand. However, foreclosure of new product directly figured in the statements of objection, so one may safely assume that the Commission believes that the server case meets the test.

Much depends here on what constitutes a new product. To meet this test for work-group server software, Microsoft argues (a) that competitors would actually have to choose to license the interoperability protocols and (b) that the resulting products would expand the market, rather than simply lead to the substitution of a rival's product for Microsoft's.

In Microsoft's view, neither criteria would be easy to meet. First, the disputed interoperability protocols would only be available for software licensed in Europe. Thus the protocols would have a limited market, and one that would preclude server networks straddling other jurisdictions. Second, Linux developers would not choose to incorporate the protocols because the process would undermine the Free Software licensing model under which Linux is distributed. Third, the products derived from the licenses would somehow have to attract new consumers, rather than cannibalize sales of existing software.

B. Cost and Benefit

There is precedent in European case law for forced licensing of intellectual property. In the 1989 *Magill* case, the European Commission required television broadcasters in Ireland to make program listings available to a company publishing a program guide.[7]

The *Magill* decision was later reviewed and upheld by the European Court of Justice. The Court ruled that the protected material was indispensable to the endeavor. Moreover, it noted that the company wanted the information

[7] *See* Brief Summary of ECJ's *Magill* Decision Judgment of the European Court of Justice, 6 Apr. 1995. Download: http://www.panix.com/~jesse/magill.html .

to create a product for a downstream secondary market, and did not compete directly with the broadcasters that were supplying the protected property. It thus seemed likely to the Court that the costs associated with broadcasters' limited loss of IP rights were smaller than the benefits to consumers in the form of superior access to television listings. Indeed, the IP rights in question seem to have had very modest value.

In the *Microsoft* case, the benefits of forced disclosure to consumers are less apparent because: (a) the arguments for indispensability and foreclosure turn on disputed interpretation of quantitative evidence; (b) the intellectual property in question clearly has significant value; and (c) the products allegedly foreclosed are not new, *per se*. Moreover, in the *Microsoft* case, it is easier to establish that there are costs associated with sharing intellectual property because the forced disclosure would benefit Microsoft's direct competitors rather than sellers in a secondary market in which the firm with market power has little stake.

Two other points are worth noting in this context. First, analyses of both supply and demand factors relevant to proving that Microsoft has market power are complicated by the fact that most server OS software is licensed as part of a hardware-software system. Since the operating system component is a small part of the package (in terms of both production costs and price), analyzing the factors affecting supply and demand for an operating system is problematic.

Second, the underlying economic logic of competition policy is to protect consumers, in large part by preventing sellers with market power from charging what the market will bear. As noted above, the Commission makes use of the fact that Microsoft charges higher prices for some editions of Windows than for others to infer that it has managed to define a market primarily consisting of work-group servers. But the price differences run in the opposite direction one would predict based on market shares. The price of a license for a Windows client operating system (a market in which there is a consensus that Microsoft is dominant) is a modest fraction of the price of Windows for low-end servers (an arena in which Microsoft is a much less commanding presence) and only a tiny fraction of the price of Windows for high-end servers (a segment in which Microsoft has yet a smaller share).

III. INTEGRATING MEDIA SOFTWARE WITH WINDOWS

Two decades ago, operating system software performed limited functions for desktop computers — managing memory, interactions between computation and memory, input and output of data, and the like. But as the capacity of computers rose and the cost of memory storage and processing fell, the developers of operating systems (Microsoft, IBM, Apple and Sun, to name a few) added more features. Along the way, the line between operating system software and applications software (which was not very clear in the first place) grew less distinct. Functions ranging from communications interfaces to e-mail management, which were once sold as stand-alone applications, are now part of every operating system worth noting.

Microsoft's choice of features to add to its operating system, along with it choice of when to add them, has attracted the attention of regulators largely because the company dominates the desktop OS market. For one thing, the addition of functionality makes it much more difficult to sell comparable stand-alone software. More important in this context, the displacement of stand-alone applications that might serve as a platform for other applications — for example, Web-browsing software — may change the broader competitive environment for software. Thus, in the settlement of the U.S. antitrust case against Microsoft, the company agreed to allow computer vendors to disable access to specific functions in Windows that could play a platform role (like Internet Explorer) in order to give competing software a better break in the market.

The European Commission followed a parallel path. Specifically, it investigated the consequences of Microsoft's integration of "media streaming" — the capacity to play audio and video directly from the Internet without first saving the media file on the client computer.

One or more brands of software with media playing capability — RealNetworks RealOne, Apple QuickTime, MusicMatch, etc — come free with essentially all desktop operating systems. Computer users who prefer a different brand — or, more likely, wish to mix the use of several media players to gain access to unique features offered by each — can download second (or third, or fourth) players for free from the Internet. For example, the current generation of MusicMatch and RealOne can record music from CDs using high-quality versions of the well known MP3 audio format, but Windows Media Player and QuickTime cannot unless the user purchases additional software from third parties.

Software developers have ample incentives to give away media players. A free player helps to build a base of users with the capacity to stream media in a proprietary format, making it easier to convince music companies and the like to deliver content in that format. The players can also serve as portals to commercial Websites — for example, sites that sell music downloads. Apple's iTunes software performs a variety of media player functions including CD burning, while providing a platform for the owners of Apple iPod portable playback devices to buy music from the Apple online store. Some vendors also try to generate revenue by selling "premium" versions of their players to those already using the stripped down versions.

Microsoft has included some media software capabilities in Windows since 1992. However, it only added the capability to play audio and video direct from the Internet in 1999, with the release of Windows 98 SE. The resulting impact on the relative use of competing media players — notably RealNetworks' players — is in dispute.

The Commission dates Windows Media Player's breakthrough market success to its integration of streaming capabilities in Windows. *Decision*, ¶ 907. Microsoft denies there is a discontinuity, arguing that the new version of Windows Media Player was widely downloaded and used before it became part of Windows.[8] There is no doubt, however, that, since 1999, the use of Windows Media Player has grown much faster than the use of RealNetworks' players.

The Commission decided that Microsoft's integration of streaming capabilities constituted illegal "tying" — that is, using dominance in one market (PC operating systems) to reduce consumer choice in another (media streaming software). But unlike the U.S. District Court, the Commission required Microsoft to design and license versions of Windows in which the offending functionality is not just turned off, but literally removed.

A. Details of the Dispute

To demonstrate an illegal tie between Windows and Windows Media Player, the Commission agrees it was obliged to show that: (a) Windows is dominant in its market; (b) the two are separate products; (c) if consumers wanted Windows they had to accept Windows Media Player; and (d) the link

[8] David S. Evans, *The Commission's Media Player Case: The Economic Evidence on Forcing Consumers and Foreclosing Competitors*, Submission to the European Commission in Case No. COMP/C-3/37,.792 *Microsoft*, Nov. 30, 2003, ¶¶ 32-36.

between the two products prevents competition in media software. *Decision*, ¶ 794.

Microsoft concedes the first condition: Windows is installed on more than 90 percent of client desktop computers shipped, worldwide. The other preconditions for tying, however, are disputed.

Separate products. The Commission concluded that streaming media players constituted products separate from Windows because many software vendors (including Microsoft) have developed and distributed stand-alone players. The fact that consumers have come to expect that a media player will be bundled with each operating system, the Commission decided, "does not make the two an integrated product any more than a nail gun and the nails of the same brand are a single product." *Decision*, ¶ 811.

For its part, Microsoft argues that the stand-alone test is faulty because it neglects the commercial context. It cites a pun-worthy counterexample from the Commission's own Vertical Guidelines: the fact that there is a separate market for shoelaces doesn't mean that selling shoes with laces constitutes tying. Moreover, the company points out that all media players perform multiple functions, not just media streaming. Indeed, one can distinguish more than a dozen functions, and no single software product delivers just one of them. Evans, *supra*, ¶¶ 8-10.

Forcing. As the Commission notes, there is no way to obtain a post-

1999 version of Windows client operating systems without media-streaming capabilities. But this particular sort of forcing is different than that usually associated with illegal tying.

For one thing, Windows Media Player is distributed free to consumers — as are all the standard media players. It is not possible to infer an explicit price to a single feature of operating system software that embodies some 40 million lines of source code and performs thousands of distinguishable functions. But the fact that Windows Media Player can be downloaded from the Internet at no charge does imply a zero price for the media streaming component.

Equally to the point, consumers are free to ignore Windows Media Player functionality and are thus not "forced" to use the second product. The Commission argues that forcing should not be taken literally in the context of European case law. The relevant objective is to "ensure that competition in the internal market is not distorted." *Decision*, ¶ 836. Thus the Commission focuses on the question of how much of an advantage bundling Windows Media Player with Windows actually gives to Microsoft.

It is understood that RealNetworks, which was once the market leader and is still Microsoft's primary competitor, has the business option of giving computer vendors incentives to bundle its own media player with Windows. But the Commission notes that RealNetworks must compensate them financially to get them to do it. Downloads of RealPlayer are free and readily available from a number of Websites. However, the Commission says that "downloading is viewed as complicated" by less tutored computer users, and is thus not an adequate distribution channel. *Decision*, ¶ 866

In the Commission's view, this explains why the portion of users who employed Windows Media Player more than other media players increased from 22 percent to 45 percent between October 1999 and August 2003, even as the portion of users who favored RealNetworks' RealPlayer fell from 50 percent to 19 percent. *Decision*, ¶ 920

Microsoft responds with statistics that paint a different picture. It notes that downloading a media player takes no more time or expertise than downloading three or four popular songs from the Internet – a hurdle the vast majority of media player users have overcome. Evans, *supra*, ¶ 17. The company also points out that computer users downloaded more than 100 million copies of the latest version of Microsoft's media player software in the first nine months after its release. Evans, *supra*, ¶ 100 Moreover, while RealNetworks is losing ground in relative terms, the rising tide of media player use has carried all boats: RealNetworks has 335 million registered users worldwide – the vast majority of whom obtained the software from the Internet. Evans, *supra*, ¶ 22.

Foreclosure. Most tying cases turn on whether a monopolist's conduct is abusive and is likely to drive competitors from the market. Simply having a better product or a superior distribution channel is not enough. The Commission pinpoints the abuse as the decision to integrate Windows Media Player 6 with Windows in 1999 after distributing it only through downloads for the better part of a year. *Decision*, ¶ 793. This decision, the Commission concludes, led to a sharp increase in the use of Windows Media Player and a sharp decrease in the market share of RealPlayer.

In the Commission's view, the fact that many other media players (including RealPlayer), are still widely used does not undermine the case that the market is being foreclosed: what counts is the trend towards greater use of Windows Media Player at the expense of competing software. That's because the Commission concludes that the market for streaming media software is highly sensitive to "network effects" — positive feedback in which greater use makes a product more valuable to all users and thus leads to even greater use. *Decision*, ¶ 861.

The potential for network effects follows from the fact that digital media are delivered in just a handful of formats, and that once Microsoft's proprietary format reaches critical mass, content providers may decide that it doesn't pay to deliver content in other formats. For an analogy, think back to the 1980s, when video cassette recording "tipped" toward the VHS format, and Sony's competing Betamax format was stranded in a niche market. If regulatory intervention were limited to circumstances in which a single company remained in the market, the Commission says, “a dominant company would actually be given the time to achieve the very objective of tying.” *Decision*, ¶ 946

Microsoft argues, however, that competition is still vital in media players, and that the quantitative impact of network effects (which determine if and when tipping will take place) is hard to predict. Evans, *supra*, ¶ 40. While Windows Media Player is heavily used, surveys suggest that other media players — among them MusicMatch and QuickTime — are doing well, too. Moreover, most users of media players employ more than one, both to ensure access to content stored in different formats and to take advantage of the players' differing strengths. Indeed, the number of media players used by individuals in an average month rose from about 1.5 in Oct. 1999 to 2.3 in July 2003. Evans, *supra*, ¶ 39. Thus, Microsoft contends that users do not have to make a choice: they can play audio and video in multiple formats using free, easily available software.

B. The Remedy

In the settlement of the U.S. antitrust case, Microsoft agreed to facilitate market access for competitors by making it easy for computer vendors (and end-users) to disable entrée to a variety of Windows functions (including Windows Media Player) that potentially could serve as platforms for software applications, and thereby threaten Windows' market dominance. (More extreme remedies — notably, the physical removal of the relevant code — were never suggested by the U.S. Dept. of Justice or the U.S. District Court.) Thus Microsoft argued in the European case that, if tying did exist, the remedy was already in place.

The Commission rejected this argument on two grounds. First, it noted that the U.S. final judgment was aimed at remedying "monopoly maintenance," not tying, and thus a separate remedy would not constitute a second bite of the apple.

Second, it argued that the U.S. approach is inadequate because of the sensitive nature of markets with substantial network effects: as long as each copy of Windows contained code for Windows Media Player that could be turned back on, Windows proprietary media streaming technology would be significantly more attractive to content providers, who could not count on competing technologies to remain competitive. And in the way of network markets, the Commission implied, success would beget success, leaving Windows Media Player as the sole survivor.

Three points are worth noting, here. First, the demonstration that network affects exist in this market does not, in itself, constitute evidence that network effects will prove decisive. Second, the remedy could adversely affect consumers as well as Microsoft. Windows Media Player code is integrated with other Windows code in ways that make its removal very difficult without affecting Windows' capacity to support other applications software from third parties. Future versions of Windows lacking code associated the Window Media Player may thus not run some older software applications, or may run them with some features lost. By the same token, developers of new software will be less able to rely on functionality linked to Windows Media Player, thereby raising the cost and technical difficulty of developing new applications.

The Commission dismisses this second objection, asserting that (a) Microsoft can maintain most of the code on which applications developers rely without retaining the features of Windows Media Player that threaten to tip the media player market, and (b) the benefits associated with preventing foreclosure in media players is greater than the costs of adapting to a world with multiple media player platforms. *Decision*, ¶ 969.

Note too, that the market consequences of the requirement may be much smaller — or much greater — than implied in the Decision. On the one hand, the fact that Microsoft will be obliged to offer versions of Windows without Windows Media Player doesn't mean that computer vendors or end-users will take the company up on the offer. Indeed, neither group has much incentive to license a partially disabled version of the standard operating system — particularly in light of the fact that, under the final settlement of the U.S. case, Microsoft is already obliged to give them the discretion to switch off the offending features at will.

On the other hand, the logic driving the forced removal of Windows

Media Player could easily be applied to other current and future functions of Windows. The Commission has not outlined legal or economic principles that allow one to distinguish Windows Media Player from numerous other features. The Computer & Communications Industry Association, a trade group representing Microsoft's rivals, formally filed a complaint in January 2003 alleging parallel abuses in Web browsing (Internet Explorer), instant messaging (Windows Messenger), and other media features (Movie Maker 2). It also argued that Microsoft should be prevented from achieving dominant positions in software for authentication, digital rights management, handheld device operating systems, smart phones and game consoles.[9]

Thus, if the Commission chose to view these other features the way it views Windows Media Player, Microsoft might be required to make many other features removable. And whether it is even possible to do this without seriously degrading the capacity of Windows to run third-party software applications is a matter of dispute.

IV. THE DECISION IN PERSPECTIVE

In the late 1990s both the Antitrust Division of the U.S. Department of Justice and the European Commission's Competition Directorate General saw the need for more interventionist competition policies — policies that reflected

[9]Computer and Communications Industry Association, *CCIA Complaint Against*

the rise of the “new economy” with its focus on intellectual property and its propensity for “winner-take-all” market outcomes as a result of network effects.

The proceedings in the U.S. antitrust case offered a limited legal test of the new thinking because much of the trial judge’s decision was overturned on unrelated grounds. The European decision, which represents as great a departure from competition-policy-as-usual as the case presented by the DOJ, offers a sharper platform for analysis and judicial review.

In attempting to cope with threats to competition from companies with large market shares, the European Commission seems prepared to sacrifice much of the certainty associated with intellectual property rights as well as much of the productivity associated with integrating new features into existing products. The Commission defends this level of intervention in market outcomes by asserting that any disincentives created for market leaders to innovate are outweighed by the benefits of reducing the risk of driving worthy challengers from the market. As a practical matter, the net impact of the decision may turn on the question of whether consumers will be better off with more vendors of software rather than with less — and, more specifically, whether the benefits of greater choice outweigh the costs of reducing incentives for leading firms to innovate.

Microsoft. Download from: http://www.ccianet.org/ec_complaint/summary.pdf.

