UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA, Plaintiff, -against- INTERNATIONAL BUSINESS MACHINES CORPORATION, Defendant.	)	Civil Action No. 72-344 (AGS)

UNITED STATES' MEMORANDUM IN SUPPORT OF JOINT MOTION TO MODIFY THE 1956 FINAL JUDGMENT AND RESPONSE TO PUBLIC COMMENTS

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I. INTRODUCTION

This filing sets forth the basis on which the Court should grant the parties' Joint Motion to phase out the 1956 Final Judgment (the "decree") and responds to public comments regarding the Joint Motion. Termination of the decree as proposed in the parties' Joint Motion, in stages ending on July 2, 2001, is in the public interest because the decree is not needed to prevent anticompetitive conduct in the computer industry in the 21st century and the sunset periods provide equitable protection for customers and competitors who have made business decisions in reliance on the decree.

Following IBM's motion to terminate the decree in June 1994, the Government conducted a lengthy, thorough investigation. The Government interviewed or met with over 130 competitors and customers of IBM, industry and economic experts, and other third parties, took depositions of seven IBM executives concerning the firm's post-termination plans, and reviewed more than 120,000 pages of documents submitted by IBM, government agencies, and numerous third parties. We concluded that, while IBM may still have the capability to exercise market power in the market for its System/390 mainframe computer systems with respect to some customers' applications, competition has so greatly increased in the computer industry -- and promises to continue to do so -- that IBM is unlikely to be able to exercise market power against any significant category of equipment customers in 2001, the proposed termination date. Termination of the decree is also unlikely to increase the possibility that IBM could exercise market power in hardware maintenance aftermarkets. In any event, the decree was designed for a different era and may no longer effectively restrain IBM's ability to exercise any market power

it may currently possess, or effectively restrain any residual market power that IBM might retain after 2001.

Based on the results of our investigation, and considering the resources that would be devoted to and the uncertainties of litigating this matter, the Joint Motion is a reasonable settlement that will terminate this litigation 49 years after it began. The Government's economic experts support our conclusion that the proposed modification is reasonable and in the public interest. In Professor Oster's[1] opinion,

> the current sunsetting provisions proposed by the United States Department of Justice are reasonable when seen in the context of the evolution in the structure of the computer industry. In particular, I believe that the evidence suggests that IBM's current ability to exploit customers in the aftermarket is limited and likely to become more so in the period allowed by the sunset provisions of the termination proposal.

Oster Decl. at ¶ 3. Professor Carlton[2] opines that: "(a) terminating the Consent Decree is unlikely to significantly harm consumers; [and] (b) injury to vendors of competing products and services as a result of termination of the Consent Decree will be limited by IBM's self-interest and the termination's sunset provisions." *Carlton Decl*. at ¶ 4.

Sharon M. Oster is the Frederick Wolfe Professor of Economics and Management at the Yale School of Management. Her Declaration in support of the Joint Motion ("Oster Decl.") is attached as Exhibit 1.

Dennis W. Carlton is a Professor of Business Economics at the Graduate School of Business of The University of Chicago, and Executive Vice President of Lexecon, Inc., an economics consulting firm that specializes in the application of economic analysis to legal and regulatory issues. His Declaration in support of the Joint Motion ("Carlton Decl.") is attached as Exhibit 2.

II. PROCEDURAL BACKGROUND

The decree was entered by Judge Edelstein on January 25, 1956. The decree arose out of a complaint filed on January 21, 1952, alleging that IBM had monopolized, attempted to monopolize and restrained trade in the electronic tabulating machine industry, in violation of Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1 & 2. Although the Complaint did not allege any violation in the computer industry, the parties agreed to extend the decree's coverage to computers (defined by the decree as "electronic data processing machines") and tabulating machines.

Many decree provisions were intended to be temporary and expired long ago. Other provisions, relating to tabulating machines, are obsolete and do not apply to any ongoing IBM business. The following provisions, however, were intended to apply perpetually to IBM's computer business and remained in force when IBM filed its motion to terminate:

Section IV enjoined IBM's longstanding lease only policy and requires that IBM sell as well as lease its computers. Its stated purpose is to assure current and prospective IBM customers an opportunity to purchase computers on terms and conditions that are not substantially more advantageous to IBM than the terms and conditions IBM obtains for leases of the same computers. Section IV contains a variety of provisions to aid this purpose. Section IV(c)(2) requires IBM to sell its computers at prices that have a commercially reasonable relationship to the lease charges for the same computers and Section IV(c)(3) requires IBM to establish nondiscriminatory terms for the sale of its computers. Further, Section IV(c)(7) requires IBM to fill lease and sale orders, to the extent administratively practicable, in the order of their receipt.

Section V restricts IBM's ability to re-acquire previously sold IBM computers. Section V(a) enjoins IBM from acquiring IBM computers except as a trade-in or as a credit. IBM, however, is allowed to re-acquire computers that it has leased to a customer. Section V(b) and (c) require IBM to offer to sell at specified prices and for a specified period used IBM computers acquired as trade-ins or for credit.

Section VI prohibits IBM from discriminating against owners of computers in favor of lessees. Section VI(a) requires IBM to provide, without separate charge, the same type of services, except repair and maintenance, that it provides to lessees without separate charge. Section VI(b) requires IBM to offer to computer owners, at reasonable and nondiscriminatory prices, repair and maintenance service for as long as IBM provides such service, provided that the computer has not been altered or connected to another computer in such a manner that its maintenance and repair is impractical for IBM. Section VI(c) requires IBM to offer to computer owners and to persons engaged in the business of providing repair and maintenance services, at reasonable and nondiscriminatory prices, repair and replacement parts for as long as IBM has such parts available for use in its leased computers.

Section VII restrains IBM from requiring that lessees or purchasers of IBM computers disclose to IBM the uses of their computers, from requiring that purchasers have their computers maintained by IBM, and generally, from prohibiting experimentation with, alterations in or attachments to IBM computers.

Section VIII specifies conditions under which IBM could operate its "service bureau business" and required that IBM operate its service bureau business through a subsidiary.

Section IX requires IBM to furnish to owners of IBM computers manuals, books of instructions, and other documents that IBM furnishes to its own repair and maintenance organization, and requires IBM to furnish to purchasers and lessees of IBM computers manuals, books of instruction, and other documents that pertain to the operation and application of such computers.

Section XV enjoins IBM from entering into certain agreements to allocate markets or restrain imports into the United States or exports out of the United States and from conditioning the sale or lease of certain computers upon the purchase or lease of any other computers.

IBM filed its Motion to Terminate the 1956 Consent Decree on June 13, 1994.[3] Several IBM competitors and trade associations, including the Independent Service Network International ("ISNI"), the Computer & Communications Industry Association ("CCIA") and the Computer Dealers and Lessors Association ("CDLA"), moved to intervene as of right, or in the alternative, for permissive intervention under Fed. R. Civ. P. 24(a) and (b). The Court found that none of the proposed intervenors satisfied the eligibility requirements for mandatory or permissive intervention and denied the motions. *United States v. International Business Machines Corp.*, 1995-2 Trade Cas. (CCH) ¶ 71,135 (S.D.N.Y. 1995).

In its Preliminary Statement of Issues (filed on July 19, 1995), the Government announced it would not oppose partial termination of the decree. The Government tentatively consented to terminate Sections V(b) and (c) (requiring IBM to offer used equipment for sale pursuant to certain conditions), Section VIII (service bureaus), and all other provisions of the

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IBM also filed a petition to disqualify Judge Edelstein. In January 1995, the Second Circuit granted the petition and the case was reassigned. *In re International Business Machines Corp.*, 453 F.3d 641 (2d Cir. 1995).

decree as they applied to IBM's personal computer ("PC") and workstation products and services. *United States' Preliminary Statement of Issues* at 1-2. As to these products and services, the Government concluded that the decree was no longer needed to serve the public interest in competition in any relevant computer service, personal computer or workstation market. After public notice and a period for comments, the Court found that partial termination was in the public interest, and on January 17, 1996, entered an Order terminating these portions of the decree.

The decree continued to apply to IBM's mainframe computers (the System/390 line of products and services) and IBM's mid-range computers (the AS/400 line of products and services).[4] Before commencement of full reciprocal discovery, the Government requested, and was permitted, time to investigate the likely impact of decree termination on IBM's System/390 and AS/400 customers and competitors. The Government ultimately concluded that it could not consent to immediate termination, but that it would be in the public interest to phase out the decree gradually.

On July 2, 1996, the United States and IBM stipulated to sunset periods for all remaining decree provisions as they apply to the System/390 and AS/400 families of products and services. The parties agreed to terminate Sections IV(b)(3) and (c)(7) and Section VII(d)(1) immediately upon entry of an Order by the Court. With respect to the AS/400, the parties agreed to terminate:

With respect to the System/390 and AS/400, the parties joined issue regarding: (1) whether the purpose of the decree was to constrain IBM's exercise of market power in computers or to prevent IBM from leveraging its dominant position in the tabulating machine industry into computers; (2) whether IBM, in a contested proceeding, must identify relevant System/390 and AS/400 markets, submarkets and aftermarkets, and prove lack of market power in any relevant market; (3) the significance to this proceeding of *United States v. IBM*, 69 Civ. 200 (S.D.N.Y. 1969); (4) whether the decree applies to System/390 and AS/400 operating system software; (5) whether the decree requires IBM to disclose "interface information;" and (6) the scope of discovery, including whether the Government should be permitted discovery of IBM's practices outside the United States.

(1) Section V(a) immediately upon entry of an Order by the Court; (2) Section IV (except Section IV(c)(3) as it may apply to the provision of operating systems) and Section VI(a) six months after entry of an Order by the Court; and (3) all other provisions of the decree as they apply to the AS/400, including Section IV(c)(3) as it may apply to operating systems, on July 2, 2000. With respect to the System/390 and the remainder of the decree, the parties agreed to terminate all remaining provisions on July 2, 2001. Thus, after July 2, 2001, no portion of the decree will remain in effect.[5]

On July 11, 1996, the Government filed a memorandum explaining why, subject to having an opportunity to evaluate public comments, it had agreed to phase out the decree. Also on July 11, 1996, the Court entered an *Order Directing Publication Of Notice Of Judgment Modification,* implementing procedures to give non-parties notice of, and an opportunity to comment upon, the proposed modification. The Order provided for a 60-day public comment period and an additional 30 days in which the parties could file responses to any public comments received. The 60-day public comment period expired on October 15, 1996, and the parties' responses are now due.

Seven comments were filed, three supporting the Joint Motion and four opposing. The only customer to file a comment supports the Joint Motion. Amdahl Corporation, the leading manufacturer of System/390 plug-compatible mainframes in competition with IBM, and the CCIA also support the Joint Motion as long as the decree is enforced during the sunset periods. Three of the opposing comments are from IBM competitors or trade associations representing IBM competitors in the aftermarket for service and maintenance of System/390 and AS/400

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[5] Attached as Exhibit 3 is a chart outlining the decree and describing the substance and status of each provision.

computers. We also received an anonymous opposing comment.

III. PURPOSE AND HISTORICAL CONTEXT OF THE DECREE[6]

In 1952, IBM was apparently the sole domestic manufacturer of electrical tabulating machines and had about 90 percent of sales of electrical and mechanical tabulating machines. The complaint alleged that IBM had pursued a lease-only strategy that protected its new equipment from competition from used equipment.[7] The Complaint sought to limit IBM's monopoly power in the tabulating industry by requiring IBM to sell as well as lease its tabulating machines.

By 1956, computers were replacing tabulating machines and IBM had begun to adopt the same lease-only policy and to pursue the same or similar tactics for computers as it had for tabulating machines. Although the Complaint did not allege violations in the computer industry, the parties agreed to extend the decree to computers. The Government was concerned that computers would supplant tabulating machines and the failure to include computers would make "the decree obsolete before it is operative." (September 23, 1955, Tr. at 4 (U.S. Selected Docs. Tab 9).) At the January 25, 1956, hearing for entry of the decree, Government counsel explained that, while the Complaint related to tabulating machines, it involved a "dynamic industry" so that

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A simplified description of the purpose and history of the decree is provided here for context. For a detailed description, *see United States Preliminary Statement of Issues*.

The Complaint also alleged that IBM's practices had prevented competition from independent service organizations, independent service bureaus, independent parts manufacturers, and competing manufacturers.

the parties had agreed the judgment should extend to computers. (January 25, 1956, Tr. at 58-59 (U.S. Selected Docs. Tab 11).)

The primary purpose of the decree was "to establish in the United States a used machine market" to compete against IBM's new computers. *(Id*. at 69.) Section IV implements this purpose by requiring that IBM sell as well as lease its computers. The other decree provisions generally were intended to reinforce the sale requirement. For example, the decree encouraged the development of an independent repair and maintenance service industry to support the used equipment market. (*Id.* at 69-70.)[8] An unanticipated consequence of the decree was the development of computer lessors that competed with IBM in financing.

The Government has never charged IBM with violating the decree, although we have investigated a number of complaints. Five investigations are noteworthy here. In 1987, IBM announced plans to close 64 of 87 domestic parts centers open to independent service organizations ("ISOs"). Our investigation of the closings was terminated the following year when IBM negotiated a settlement with the complainants. Second, in 1989-90, the Division investigated whether IBM's refusal to license microcode to "split" machines constituted a violation. The Division concluded it did not, but the court later disagreed in *Allen-Myland, Inc. v. International Business Machines Corp.*, 33 F.3d 194 (3d Cir.), *cert. denied*, 115 S. Ct. 684 (1994). Third, the Division closed its 1993-94 investigation of IBM's service bureau business after concluding that IBM's conduct did not violate Section VIII. Fourth, in 1995, we opened an

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The decree also remedied the allegations in the Complaint that IBM's lease-only policy prevented entry of firms with attaching products (January 25, 1956 Tr. at 73 (U.S. Selected Docs. Tab 11); Complaint ¶ 51 (filed on January 21, 1952)); IBM's control of all "facets" of commerce involving its computers, including the manufacture and sale of the equipment and peripheral attachments, as well as financing and servicing of the equipment, would have required entrants to enter in all of the facets provided by IBM.

investigation to determine whether IBM's Entry Server Offering/Technology Upgrade Option ("ESO/TUO"), a lease/upgrade option, was matched by an equivalent purchase/upgrade option. The investigation is pending.

********** **INFORMATION REDACTED** **********

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Competition and IBM's role in the computer industry have dramatically changed over the past four decades. The computer industry has experienced explosive growth. In the early 1950s, computers were at an early and primitive stage and had few commercial applications. There were only a handful of competitors and U.S. industry revenues were less than $200 million. Remington Rand entered the 1950s as the market leader with its Univac machine, but by 1955, IBM led in computer installations. Today, there are more than 50,000 firms selling computer hardware, software, and services and industry revenues exceed $300 billion annually. Although IBM is still the leading manufacturer of mainframe computers, the industry has fragmented. In addition to alternative mainframe platforms, there are a wide variety of small and mid-sized systems. Increasingly, networks of smaller systems compete with IBM.

The most significant trend in the industry has been the rapid decrease in computer costs, coupled with the rapid increase in computer performance and functionality. The processing capacity of IBM mainframes is generally measured in "millions of instructions per second ("MIPS"). Over the past two decades, the maximum capacity of mainframe computers has risen

from fewer than 10 MIPS to nearly 800 MIPS. At the same time, the price/performance (or price/MIPS) level has improved substantially. Since 1972, the cost per MIP has dropped from $1.3 million to under $50,000. Moreover, IBM's recent introduction of new generation complementary metal-oxide semiconductor ("CMOS") processors has further lowered product and operating costs. Price/performance has been improving at even a more rapid rate among smaller and mid-range computers as a result of developments in microprocessor technology. Small and mid-range computers can now more economically perform many of the functions that formerly required a mainframe.

The hardware maintenance market has also changed dramatically. Historically, customers purchased mainframes or mid-range computers from one manufacturer and obtained maintenance and support from that same manufacturer. Today, most, if not all, large customers purchase both IBM and non-IBM equipment and have installed a wide range of platforms, from networked PCs to large data centers. These customers are increasingly seeking a single-point-of-contact and a single price from one of many possible services that can maintain the full range of their multi-vendor, multi-platform environments.[9] In this multi-vendor environment, only IBM is required to provide its competitors with replacement parts and proprietary technical information and diagnostic tools.

While, IBM was once the predominant player in the computer industry, today many firms influence the course and direction of the computer industry. IBM's industry position has

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Indeed, IBM's principal mainframe service competitor, Decision One, notes the trend toward multi-vendor maintenance providers and has stated that customers with multi-vendor and multi-system environments are reluctant to use original equipment manufacturer ("OEM") service, which they may perceive as favoring the OEM's equipment and not providing as broad a range of multi-vendor services as ISOs offer. Decision One Holdings Corp., Securities and Exchange Commission Form 10-K (for fiscal year ended June 30, 1996).

diminished as the result of effective competition from alternative mainframes, mid-range products and services, the vast improvement in price/performance, and other factors. In fact, five years ago, many industry observers viewing IBM's declining sales, revenues, profits, and employment, declared the mainframe dead and questioned IBM's ability to survive. IBM's competitive response to alternative platforms and client-server computing appears to have reversed many of these trends and earlier reports of IBM's demise appear to have been overstated. But IBM is no longer the dominant player it once was.

Of the many major events in the evolution of the computer industry since the decree was entered, four developments are worth noting here. First, the tabulating machine industry has disappeared. Second, in 1964, IBM introduced the forward-compatible family of mainframe computers beginning with the System/360. Over the years, IBM introduced successive generations to this system. The most recent iteration of IBM's mainframe family is the Enterprise Systems Architecture/390 ("ESA/390") introduced in 1990.[10]

Third, in 1969, the Department initiated a monopolization case against IBM. In opposing consolidation of the 1969 and 1952 cases before Judge Edelstein, the Government in essence acknowledged that the conduct alleged in the 1969 case did not violate the 1956 Decree. The case was dismissed by the Government in 1982, as the Government conceded that it could not prove that IBM's dominance of the computer market was the consequence of illegal monopolization.

IBM manufactured the System/360 family from 1964 to 1971. The System/370 was introduced in 1971 and was manufactured until 1983. In 1983, IBM introduced the System/370 Extended Architecture ("370-XA") which ran until 1987. The Enterprise Systems Architecture/370 ("ESA/370") was manufactured from 1987 to 1990. In 1990, IBM introduced the Enterprise Systems Architecture/390. For convenience, for all of these we use the generic designation "System/390."

Finally, in 1984, IBM resolved an investigation by the European Economic Commission ("EEC") by agreeing to an Undertaking that specified conditions under which IBM would disclose System/390 interface information.[11] In 1995, IBM withdrew from the Undertaking. IBM continues to release interface information, but its future intentions with respect to interface disclosures are unknown.

IV. THE LEGAL STANDARD GOVERNING THE COURT'S PUBLIC INTEREST DETERMINATION

The Government in this action represents the public interest in competition. But while we do not represent third parties who may have benefited from the decree, we recognize that customers and competitors may have made significant investments in reliance on the decree and that important equitable considerations warrant the negotiated sunset periods. *See United States v. American Cyanamid Co.*, 719 F.2d 558 (2d Cir. 1983), *cert. denied sub nom. American Cyanamid Co. v. Melamine Chemicals, Inc.*, 465 U.S. 1101 (1984).

Where the Government has consented to a modification of an antitrust judgment, the court must determine whether it "is in the public interest." *Id.* at 565; *United States v. Loew's Inc.*, 783 F. Supp. 211, 213 (S.D.N.Y. 1992). Although a judgment modification or termination is not subject to the Tunney Act, 15 U.S.C. § 16(e), its reasonableness is judged under the same "public interest" standard that governs a proposed consent decree. *Loew's*, 783 F. Supp. at 213-14; *United States v. Swift & Co.*, 1975-1 Trade Cas. (CCH) ¶ 60,201 at 65,702 (N.D. Ill. 1975);

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[11] Interface information is necessary for the design of compatible System/390 products (e.g., software applications and peripheral hardware) that are sold in competition with IBM. The Government contends that Section IX requires IBM to disclose interface information to purchasers of IBM computers. IBM contends that the decree does not require disclosure.

United States v. General Electric Co., 1977-2 Trade Cas. (CCH) ¶ 61,659 at 72,717 n.1 (E.D. Pa. 1977). Applying this test, a court should not reject a judgment modification unless "it has exceptional confidence that adverse antitrust consequences will result -- perhaps akin to the confidence that would justify a court in overturning the predictive judgments of an administrative agency." *United States v. Western Electric Co.*, 993 F.2d 1572, 1577 (D.C. Cir.), *cert. denied sub nom. Consumer Federation of America v. United States*, 114 S. Ct. 487 (1993). Under this standard, "the court's function is not to determine whether the resulting array of rights and liabilities is the one that will *best* serve society, but only to confirm that the resulting settlement is within the *reaches* of the public interest." *United States v. Microsoft Corp.*, 56 F.3d 1448, 1460 (D.C. Cir. 1995) (emphasis in original) (internal quotations omitted).[12]

The Government has broad discretion in controlling and settling antitrust litigation on terms that will best serve the public interest in competition. *Sam Fox Publishing Co. v. United States*, 366 U.S. 683, 689 (1961). Thus, the court's review should remain narrowly focused, limited to whether the Government has offered a reasoned and reasonable explanation for its consent. *United States v. Bechtel Corp.*, 648 F.2d 660, 666 (9th Cir.), *cert. denied*, 454 U.S. 1083 (1981). Approval should be granted "so long as the resulting array of rights and obligations is within the *zone of settlements* consonant with the public interest *today*." *United States v. Western Elec. Co.*, 900 F.2d 283, 307 (D.C. Cir.), *cert. denied sub nom. MCI*

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[12] Though the *Microsoft* court in *dictum* suggests that a district judge must be even more deferential in reviewing "entry of an initial proposed decree" than in reviewing "the parties' request for approval of a modification," *Microsoft*, 56 F.3d at 1460-61, the court made clear that stipulated modifications deserve considerable deference from the reviewing court. Indeed, the D.C. Circuit observed that "[u]nder our own precedent dealing with uncontested modifications of a consent decree, we have repeatedly said that a district judge must approve such modifications so long as the proposal falls 'within the *reaches* of the public interest.'" *Id.* at 1457-58 (citing *United States v. Western Elec. Co.*, 900 F.2d 283 (D.C. Cir. 1990) (emphasis in original).

Communications Corp. v. United States, 498 U.S. 911 (1990) (emphasis in original); *see Loew's*, 783 F. Supp. at 214; *United States v. Mid-America Dairymen, Inc.*, 1977-1 Trade Cas. (CCH) ¶ 61,508 at 71,980 (W.D.Mo. 1977). Specifically, the Court's inquiry here is simply whether the Government's consent to the five-year phase-out of the decree is a reasoned and reasonable exercise of the Government's prosecutorial discretion in view of the changes in the computer industry in the past 40 years and further changes that are likely to occur by 2001.

No third party has a right to demand that the proposed modification be rejected or amended simply because a different modification would better serve its private interests. The United States -- not a third party -- represents the public interest in Government antitrust cases. *See*, e.g., *Bechtel Corp.*, 648 F.2d at 660, 666; *United States v. Associated Milk Producers, Inc.*, 534 F.2d 113, 117 (8th Cir.), *cert. denied sub nom. National Farmers' Organization, Inc. v. United States*, 429 U.S. 940 (1976).

The settlement of this litigation enables "the Department of Justice to reallocate necessarily limited [enforcement] resources," *Microsoft*, 56 F.3d at 1459, and brings the public, and interested third parties, the certain benefit of some measure of relief when no such certainty could exist if the litigation were to continue. *Id.* at 1461. Had this matter proceeded to a hearing, tremendous Government, judicial and private resources would have been expended and the result, we believe, would have likely been similar to that negotiated by the parties.

The Government made a thorough investigation of the computer industry, analyzed the competitive benefits of continuing the decree, and assessed the costs and risks of litigating. The Joint Motion reflects the Antitrust Division's considered, predictive judgment that the decree should not continue indefinitely into the next century.

V. THE GOVERNMENT CONDUCTED A THOROUGH TWO-YEAR INVESTIGATION OF LIKELY EFFECTS OF DECREE TERMINATION

To develop a factual record to assess the likely effects of decree termination, the Government obtained from IBM more than 100,000 pages of documents, including its strategic business plans and high-level documents analyzing System/390 and AS/400 markets and IBM's competitors.[13] *See Tierney Declaration.* at ¶ 5.[14] IBM also made available for deposition seven corporate witnesses who testified regarding IBM's plans in the event of decree termination and inefficiencies imposed upon IBM by the decree. These depositions also covered IBM's current plans and various background issues to provide context to the deponents' testimony. *Id.* at ¶ 7.

The Antitrust Division also solicited the views of IBM's customers and competitors and the opinions of industry and economic experts. Division staff interviewed 93 customers from the following industry segments:

Airlines	7
Banks/Financial Institutions	14
Communications	20
Federal Government	8
Health Care	5
Insurance	6
Manufacturing	28
Other	5

Although IBM initially opposed the Government's discovery efforts, IBM ultimately produced information related to: (1) relevant System/390 and AS/400 markets and aftermarkets; (2) IBM's market power in any relevant market; (3) IBM's ability to exercise or increase any market power it may have; and (4) costs or inefficiencies imposed upon IBM by the decree.

James J. Tierney is a trial attorney in the Computers and Finance Section of the Antitrust Division. His Declaration ("*Tierney Decl.*") is attached as Exhibit 4.

Id. at ¶ 2. In most cases, the Division interviewed the company's head computer procurement official and information system manager. The Division interviewed approximately 30 of IBM's competitors, as follows:

Original Equipment Manufacturers	9
Independent Service Organizations	4
Leasing/Financing Companies	14
Outsourcing Companies	2
Other	1

Id. at ¶ 3. Twenty-one IBM competitors and customers voluntarily submitted documents and 10 federal agencies produced over 20,000 pages of documents and tapes. *Id.* at ¶ 5.

In addition, we held extensive meetings or interviews with third-party industry experts and economic experts. *Id*. at ¶ 4. We also received and reviewed about a dozen written submissions from IBM customers and other third parties. *Id.* at ¶ 6.

VI. COMPETITIVE ANALYSIS OF RELEVANT SYSTEM/390 AND AS/400 PRODUCTS AND SERVICES

The System/390 and AS/400 are "platforms" or "systems." Each platform is an integrated combination of various types of hardware, software and services. The System/390 and AS/400 have three main components. The first component is a central electronic complex ("CEC"). The CEC is made up of one or more central processing units ("CPUs"), main memory and channels. Channels link the CEC to the second component of a system, the peripheral products. Peripheral products include tape drives, disk drives, printers, communications, controllers and display terminals. The final major component of a platform is the operating system. Operating system software contains instructions for both the associated hardware (the CEC and the peripheral products) and applications software.

Three operating systems -- MVS, VSE and VM -- run on the System/390 and are sold in product suites referred to as OS/390. The AS/400 operating system is known as OS/400. IBM is the sole supplier of the operating systems for both the System/390 and AS/400. The operating system is typically leased to the customer and IBM retains the right to adjust monthly licensing fees on short notice. The operating system is the key to the platform. Products and services that can be used with IBM operating systems are, for purposes of competitive analysis, within the platform. Thus, a mainframe computer manufactured by Amdahl that runs OS/390 software competes within the System/390 platform.

In general, the System/390 and AS/400 differ in terms of processing power and functionality and legacy heritage.[15] The System/390 and its operating system are the latest successor to a long line of upwardly-compatible systems first introduced in the mid-1960s. IBM estimates that more than a trillion lines of specialized code have been custom-written for the System/390 platform. In contrast, the AS/400 was introduced in 1988 and is not a direct descendent of any other IBM product. The AS/400 lacks the volume and range of legacy applications found in the System/390. Many AS/400 applications are packaged off-the-shelf products.

In terms of functionality, the System/390 is distinguished from the AS/400 and other non-mainframe platforms by its high processing capacity (MIPS), security, memory capacity, data storage and handling, 24 hour-a-day, 365 days-a-year reliability, and scalability (the ability to serve hundreds or thousands of simultaneous users). The System/390 is generally used to

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A legacy system refers to a mainframe or mid-range platform that has been in existence for a long time and has had a large number of specialized applications custom-designed to run on the platform.

meet very large-scale business requirements for data processing, data storage, and communications and for applications of every description, *e.g.*, transaction processing and reservations systems.

With this general background, we turn to the task of defining relevant markets in which IBM competes. A relevant market is comprised of those "commodities reasonably interchangeable by consumers for the same product." *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956). Relevant to our market analysis is whether a product is unique or has close substitutes, as to which there are substantial cross-elasticities of demand. *See Hayden Pub. Co. v. Cox Broadcasting Corp*., 730 F.2d 64, 70-71 (2nd Cir. 1984).

Once relevant markets have been defined, the next step is to determine whether decree termination would enable IBM to exercise or augment power in any relevant market. Market power is defined as the ability to raise prices above those that would be charged in a competitive market or to reduce output below competitive levels. *Broadway Delivery Corp. v. United Parcel Service of America, Inc.*, 651 F.2d 122, 127 (2nd Cir.), *cert. denied*, 454 U.S. 968 (1981); *N.C.A.A. v. Board of Regents of Univ. of Oklahoma*, 468 U.S. 85, 109 n.38 (1984). This Circuit considers a number of factors in determining whether market power exists, including "the strength of competition, the probable development of the industry, and consumer demand." *Hayden,* 730 F.2d at 68-69.

Guided by these principles, we analyzed the AS/400 and System/390 equipment markets (the equipment markets or primary markets) as well as markets for replacement parts and

maintenance of these computers (the hardware maintenance aftermarkets).[16]

We conclude that the AS/400 is sold in the competitive mid-range market and, therefore, decree termination is unlikely to permit IBM to wield or acquire market power. With respect to mainframes, the evidence suggests that the System/390 platform by itself is a relevant product market and that IBM may have some degree of market power with respect to a significant number of System/390 customers. Our investigation, however, found that IBM faces significant intra-platform competition from plug-compatible mainframes in addition to significantly increasing competition from alternative platforms. We anticipate that IBM's ability to exercise market power will steadily diminish during the sunset period. In the System/390 and AS/400 maintenance aftermarkets, we conclude that IBM may possess some degree of market power, but that several factors lessen IBM's ability to exercise that power, including competition in primary equipment markets and a variety of factors affecting the aftermarkets.

A. The AS/400 Faces A Competitive Market

An assessment of competition in the computer industry begins with a traditional structural analysis. International Data Corporation ("IDC") maintains widely cited and relied upon data based on quantity of units shipped annually for all computer models ranging from low-end PCs to high-end mainframes, by manufacturer and by platform. IDC categorizes the mainframe, mid-range and server platforms as "large," "medium" and "small" based on functionality and price. Large systems cost in excess of $1 million, medium systems from

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IBM also faces competition from leasing companies that finance System/390 and AS/400 hardware. Leasing companies finance both new and used equipment and play a significant role in maintaining markets for used System/390 and AS/400 CPUs. Numerous firms offer plug-compatible peripheral equipment that competes with IBM System/390 and AS/400 peripheral equipment.

$100,000-$1 million; and small systems below $100,000.[17]

Various models and configurations of the AS/400 fall into either the small or medium category. Using IDC 1994 data, presented below are market shares based on dollar value of shipments for small and medium platforms:[18]

SMALL		**MEDIUM**	
Company	%	Company	%
IBM (AS/400)	23	IBM (AS/400)	35
IBM (RS/6000)	18	IBM (S/390)	23
HP	18	HP	9
Sun	10	AT&T	4
DEC	9	DEC	4
Compaq	8	Unisys	4
AT&T	2	DG	4
Motorola	2	Tandem	3
Others	10	Others	14

These data illustrate that the AS/400 faces real competition. IBM competes against traditional mid-range vendors, such as Hewlett-Packard ("HP") and Digital Equipment Corporation ("DEC") and PC-based local area networks (LANs") and UNIX[19] based servers, including Sun Microsystems ("Sun"), Tandem, Compaq, and others. The AS/400 also faces

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Segmenting the computer market by price, as does IDC, does not necessarily define a meaningful market for competitive analysis. For one thing, the range of functionality is quite broad.

These market share estimates are dollar-weighted shipments based on list or "street" prices and do not necessarily reflect revenue received by the manufacturer. IBM shares are reported separately for System/390, AS/400 and RS/6000 (UNIX) products. Share estimates are for multiuser systems, which include servers, mid-range computers and mainframes and exclude workstations and PCs.

UNIX is a multiuser, multitasking operating system developed by AT&T in 1969. UNIX, written in the "C language," is more portable -- that is, less machine-specific -- than other operating systems. Because UNIX can run on a wider variety of hardware than other operating systems, the term has become synonymous with "open systems." In an open system, various computer platforms can be connected and interoperate.

competition from used AS/400 equipment.

Customer and competitor interviews confirm that there are competitive alternatives to the AS/400. Most customers considering the purchase of a mid-range platform view the AS/400 and platforms offered by HP, Sun and other computer manufactures as substitutes for one another. No competitors complained that decree termination would permit IBM to exercise market power in the equipment market in which the AS/400 competes. Professor Oster has also analyzed the structure of the AS/400 market and concludes that IBM faces substantial competition from a number of alternative systems. *Oster Decl.* at ¶ 8.

B. IBM's Market Power In The System/390 Equipment Market Is Limited And Diminishing

The IBM System/390 falls into IDC's medium and large categories. Below are the market shares based on 1994 IDC segments by price range:

MEDIUM		**LARGE**	
Company	%	Company	%
IBM (AS/400)	35	IBM (S/390)	65
IBM (S/390)	23	Amdahl	16
HP	9	Hitachi	9
AT&T	4	Unisys	2
DEC	4	Cray	2
Unisys	4	Other	6
DG	4		
Tandem	3		
Others	14		

Many existing IBM customers interviewed did not view alternative mainframe platforms

or mid-range platforms as direct substitutes in the near term for the System/390. These customers indicated that they are, to varying degrees, "locked-in" to the System/390 platform in the sense that it would be prohibitively expensive to stop using the System/390 and switch all their applications to an alternative system in a brief time period. *See Allen-Myland,* 33 F.3d 194. A smaller group of System/390 customers indicated that they are locked-in to the System/390 platform because it is the only platform that can offer the functionality they require.

Clearly, the closest substitutes, and the only complete substitutes, for new System/390 purchases are the plug-compatible mainframes sold by Amdahl and Hitachi Data Systems that operate with IBM's System/390 operating system and used IBM System/390 equipment. Through its operating system, IBM controls about 80 percent of the System/390 mainframe platform, including the plug-compatible manufacturers ("PCMs"). PCMs, dependent on the IBM operating system, are structurally positioned to lag behind IBM's developments and, therefore, are not well-positioned to increase their market share substantially. Nonetheless, IBM clearly recognizes the competitive impact of PCMs.

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If the System/390 platform is the relevant market for analysis, IBM clearly has significant market power. However, a forward-looking analysis should not narrowly focus only

on the System/390 platform, but also must take into account existing and increasing competition from alternative platforms for many customer applications. Although for many customers it is not economical to switch all System/390 applications to an alternative platform, alternative mainframe platforms that run on non-IBM operating systems (*e.g.*, Unisys and Cray) and, most importantly, alternative mid-range platforms that run on either proprietary or UNIX operating systems (*e.g.*, HP, Tandem, Data General, Silicon Graphics, DEC and AT&T) compete with IBM for new applications and older existing applications that can be economically migrated off the mainframe. *See Carlton Decl.* at ¶ 11.

Professor Oster's review of IBM's marketing documents indicates that "IBM is quite sensitive to the competitive pressure imposed by [alternative platforms] on its behavior." *Oster Decl*. at ¶ 8. Our review of IBM's documents also confirms that the System/390 faces increasingly vigorous competition from alternative mainframe and mid-range platforms.

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Although a significant number of IBM customers do not view the System/390 and alternative platforms as direct and complete substitutes, alternative platforms increasingly compete vigorously to displace System/390 computing capacity and capture particular applications. The cost of switching away from the System/390 has not deterred a growing group of customers from moving to alternative platforms. **********
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********** More importantly, System/390 customer interviews and IBM planning documents establish that most System/390 customers are switching an increasing number of applications off the System/390 and from the outset are installing new applications that once would have been run on the System/390 on alternative platforms. The widely anticipated continuation of these trends toward full and partial migration off the System/390 through the sunset period should dissipate any market power IBM may now have

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with respect to these System/390 customers. *See Oster Decl*. ¶¶ 8-9; *Carlton Decl.* ¶¶ 11, 20.

C. AS/400 And System/390 Aftermarkets

Also relevant to the competitive analysis are the aftermarkets for AS/400 and System/390 replacement parts and hardware maintenance. Original equipment manufacturers ("OEMs") and ISOs are IBM's primary competitors in the AS/400 hardware maintenance market. IBM faces substantial competition on the AS/400 platform from OEMs such as DEC, and from numerous national, regional and local ISOs. In the System/390 equipment maintenance market, Decision One is the largest full-service System/390 ISO and IBM's only significant competitor. Decision One maintains only IBM mainframe equipment; Amdahl and Hitachi face no competition from ISOs for the maintenance of their plug-compatible CPUs. IBM maintains a substantial amount of all System/390 computers that are not under warranty. As to parts, there is a substantial supply of used replacement parts, particularly for older equipment; however, IBM can control the availability of new replacement parts and the availability of certain critical refurbished parts that can cost several hundred thousand dollars. Also relevant to this analysis is competition posed by multi-vendor service providers and a customer's ability to consider the life-cycle cost of a system at the time of purchase.

As discussed above, IBM does not have market power in the AS/400 market, and its market power in the System/390 market -- already substantially diminishing -- will diminish further over the sunset period. Even without market power in the AS/400 and System/390 primary equipment markets, however, IBM theoretically could exercise market power in the maintenance aftermarkets.

The complexities of aftermarket competition were discussed in *Eastman Kodak Co. v. Image Technical Services. Inc.*, 504 U.S. 451 (1992). Kodak sold photocopiers and micrographic equipment in what may have been a competitive equipment market. According to alleged facts assumed for the purpose of Kodak's summary judgment motion, after ISOs entered the market, Kodak adopted policies limiting their access to replacement parts. Because of Kodak's restrictive policies, ISOs were unable to obtain suitable parts and many were forced out of business. The ISOs brought an antitrust action alleging that Kodak violated Section 1 by tying the sale of service to the sale of replacement parts and violated Section 2 by unlawfully monopolizing the market for the sale of service for the Kodak machines.

As to the Section 1 claim, the Court rejected, as a legal presumption, the economic theory that competition in the equipment foremarket precludes any finding of monopoly power in parts and service aftermarkets. The plaintiff had alleged that Kodak was able to charge higher prices and provide poorer service by eliminating ISOs who serviced Kodak copiers. The Court held that this factual assertion could not be defeated on summary judgment by a purely theoretical argument. Consequently, the Court rejected as a matter of law the contention that the defendants' lack of market power in the primary equipment market automatically precluded the possibility of market power in aftermarkets and found that there was a "question of fact whether information costs and switching costs foil the simple assumption that the equipment and service markets act as pure complements to one another." *Id.* at 477.

Consistent with *Kodak*, the Government in this matter looked to the evidence in assessing whether IBM can exercise power in aftermarkets for parts and service. The evidence establishes that IBM's ability to exploit its aftermarket customers is limited by a number of factors,

including competition in the equipment market and the fact that life-cycle costing information is readily available and widely used by purchasers.

1. Customer Lock-In And Switching Costs

Customer lock-in -- the customer's ability to switch to alternative platforms -- is a relevant factor to assessing IBM's ability to exercise power in maintenance aftermarkets. Customers can be effectively locked-in as a result of investments they have made in a platform, including expenditures on hardware, software and training.

> If the cost of switching is high, consumers who already have purchased the equipment, and are thus "locked-in," will tolerate some level of service-price increases before changing equipment brands. Under this scenario, a seller profitably could maintain supracompetitve prices in the aftermarkets if the switching costs were high relative to the increase in service prices, and the number of locked-in customers were high relative to the number of new purchasers.

Id. at 476.

AS/400 and System/390 customers are, to varying degrees, locked-in to their respective platforms by their investments in hardware, applications software and training. Switching off the AS/400 is easier and less costly than switching off the System/390, because more applications are off-the-shelf products that can more easily be migrated to other platforms.

For aftermarket analysis, System/390 customers can be categorized into two groups. The first group is composed of customers with "unlocked applications." This group includes new customers (*e.g.*, new companies or companies just establishing an in-house computer capability) who are unlocked in the sense that they have no existing IBM equipment. This group also includes existing System/390 customers seeking new applications or who have legacy applications that can be economically and functionally migrated off the System/390 to

alternative platforms. This group may also have a number of applications that cannot be performed except on a System/390. Customers with unlocked applications represent a large and increasing share of the demand for System/390 capacity. The second group consists of customers with only "locked-in" applications that can not be easily migrated to alternative platforms and customers who have no plans to purchase new applications that could run on an alternative platform. These customers are locked-in to the System/390 platform. Customers comprising this second group account for a small and declining share of IBM's sales. *Carlton Decl*. at ¶ 12.

According to Professor Carlton, increasing competition in the primary equipment market will protect customers in the first group -- new customers and existing customers purchasing new applications or migrating old applications -- from any attempt by IBM to exercise market power in the maintenance aftermarket. *Id*. at ¶¶ 4, 20. Professor Carlton notes that there is vigorous and growing competition between the System/390 and alternative platforms for new applications and old applications for which the customer has a choice either to retain on the System/390 or migrate to an alternative platform. Based on competition from alternative platforms, Professor Carlton concludes:

> Any attempt by IBM to raise significantly the price of repair parts and maintenance service, all else equal, would result in these [unlocked] users choosing computer systems offered by other vendors. As I have explained, IBM competes currently and intends to make sales to these unlocked users. Therefore, IBM is constrained in its aftermarket pricing.

Id. at ¶ 20. Professor Oster agrees that competition from alternative platforms constrains IBM's behavior. She concludes that IBM's market power in the aftermarkets is constrained by its interest in limiting the migration of unlocked applications to other platforms, and she anticipates

that this constraint is likely to increase during the sunset periods. *Oster Decl*. at ¶¶ 9, 16-17.

Interviews with customers support Professor Carlton's and Oster's conclusions. Most System/390 customers plan to move at least some applications off the mainframe or are considering mainframe and alternative platforms when purchasing new applications.

2. Life-Cycle Costing

The Court in *Kodak* observed that for competition in an equipment market to effectively constrain aftermarket pricing, customers at the time of purchase must be able to perform accurate life-cycle pricing to inform themselves of the total cost of the package of equipment, service, and parts. *Kodak,* 504 U.S. at 473. The Court found that many of Kodak's customers were not sophisticated purchasers, that life-cycle pricing information was difficult for them to obtain and that life-cycle costs were difficult to calculate. The AS/400 and System/390 markets have none of these characteristics.

Unlike the customers for copiers described by the court in *Kodak*, System/390 and AS/400 customers tend to be relatively sophisticated and well-informed customers who consider and are experienced in calculating life-cycle costs. For example, typical System/390 customers are large corporations with in-house computer procurement officers and data processing managers. *Oster Decl*. at ¶¶ 13-14; *see Carlton Decl*. at ¶¶ 9, 20. These customers consider multiple factors in choosing among computer platforms and negotiate effectively with vendors. *Oster Decl*. at ¶ 14. The magnitude of an AS/400 or System/390 purchase also creates an incentive for customers to carefully consider the lifetime costs when making acquisition

decisions. *Id*. at ¶ 13. Purchasers tend to pay particular attention to aftermarket costs because the aftermarket portion of the total costs of owning and operating a System/390 or AS/400 platform are substantial.

Life-cycle costing information is not difficult to obtain, nor is life-cycle cost difficult to calculate. Indeed, during the procurement process, many customers routinely request, and vendors provide, life-cycle cost information. *Id.* at ¶ 14. In addition, numerous consultants aggressively compete to supply customers with this information. *Id*.

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AS/400 and System/390 customers are also able to enter into long-term contracts with IBM that provide protection against aftermarket price increases. *Oster Decl*. at ¶ 26. The typical IBM contract runs three to five years. Thus, virtually all existing contracts will expire during the sunset period. Customers, with full awareness that the decree will terminate, may protect themselves from being overcharged by negotiating service contracts at the time of purchase and by long-term contracts that cover service and parts *Id*; *Carlton Decl*. at ¶ 21. Indeed, IBM today offers contractual protection to its aftermarket customers by offering an option of a single transaction price for the anticipated life of its new CMOS System/390 processors. IBM's Entry Server Offering, if exercised by the customers, caps the cost of hardware, CPU upgrade, operating system software, software upgrades, and hardware and software maintenance.

In *Kodak,* the Court stated that in the mid-1980s, "consumers, such as the Federal Government, have purchasing systems that make it difficult to consider the complete cost of the 'package' at the time of purchase." *Kodak*, 504 U.S. at 475. Current federal procurement practices, however, have improved greatly since the *Kodak* court considered the 1984-85 micrographic and copying equipment industry. Today, the Government uses the same contract to acquire mainframe and mid-range computers and maintenance. *McGalliard Declaration.* at ¶ 6.[21] It is also common practice in mainframe and mid-range computer acquisitions to evaluate the total life-cycle costs of the system, including maintenance and requirements for electricity, cooling and space. *Id.* at ¶ 6, 15. Government solicitations require vendors to submit life-cycle cost information, and the Government has available a variety of sources to evaluate the reasonableness of a vendor's life-cycle costs, including numerous commercial market research firms (*e.g.*, Computer Price Watch, Meta Group, and Gartner Group), industry publications (*e.g.*, *Computer World*, *Datamation* and *Federal Computer Week*) and commercial consulting firms (*e.g.*, Electronic Data Systems, Booz-Allen & Hamilton and Anderson Consulting). *Id*. at ¶¶ 8-11. Private sector computer purchasers have access to the same or equivalent information sources. *Id*. at ¶¶ 8, 11, & 15.

The sophistication of customers and the availability of life-cycle information enable aftermarket customers to identify opportunistic pricing behavior by IBM. *Oster Decl.* at ¶ 23.

James W. McGalliard is a project manager at the Federal Systems Integration and Management Center (FEDSIM). FEDSIM is an office of the General Services Administration and provides federal agencies with a wide-range of information resources and management services, including assistance in the acquisition of mainframe and mid-range computers. McGalliard's declaration in support of the Joint Motion ("McGalliard Decl.") is attached as Exhibit 5.

Customers can also use past service prices charged by IBM and service prices charged by others as benchmarks to determine whether or not they are being exploited by IBM. *Id*.

Kodak involved a defendant who relied only upon an economic theory that taught that foremarket competition restrains the exercise of market power in aftermarkets without submitting evidence. Here, the evidence is that access to information and increasing foremarket competition over the sunset periods will protect IBM customers from the exercise of market power in the aftermarkets. According to Professor Oster, "the evidence suggests that IBM's current ability to exploit customers in the aftermarket is limited and likely to become more so in the period allowed by the sunset provisions of the termination proposal." *Oster Decl.* at ¶ 3.

D. IBM's Ability To Exercise Market Power Is Constrained By A Variety Of Factors

The second group of System/390 aftermarket customers -- those with only locked-in applications and no plans to purchase new applications or migrate old ones -- may not fully benefit from primary market competition and the availability of life-cycle prices. These customers, however, are protected by a variety of other factors that will remain effective after the sunset periods expires. And IBM's market power, all present evidence indicates, will continue to erode before that date. Several factors suggest that IBM is not likely to exercise any market power that might remain after the decree's termination.

1. Lock-In Is Eroding

To the extent IBM wields market power because of lock-in, by the year 2001 these effects will be significantly alleviated by IBM's strategy to move toward more open systems. IBM is making its System/390 operating systems -- MVS, VSE and VM -- "POSIX-compliant." POSIX is the set of industry standard interfaces for UNIX, the non-IBM operating system of choice for unlocked applications. Software programs written with POSIX interfaces are more easily ported from the System/390 to POSIX-compliant UNIX-based platforms offered by alternative platform vendors. *Carlton Decl* at ¶ 15; *See Oster Decl*. at ¶ 9 .

Customer demand has pushed, and will continue to push, IBM toward making OS/390 more open so that applications may be more easily moved from the System/390 to UNIX platforms. Professor Oster finds that the continuation of this trend will, over the sunset period, reduce the lock-in problem:

> [I]t is reasonable to assume that IBM will continue to be pushed to undertake strategic investments to make its applications more open. This in turn will result in a reduction over time of the lock-in problem. Thus, I would expect that the residual power which IBM retains as a consequence of its legacy software will diminish over time as new software becomes more open.

Id. at ¶ 20. Professor Carlton reaches the similar conclusion that IBM's movement toward a more open environment demonstrates that IBM will not exercise market power over customers with locked-in applications. *Carlton Decl. at* ¶ 31.

2. IBM's Strategic Concern For Its Reputation Further Limits IBM's Ability To Exploit Its Installed Base

Adopting a strategy to exploit primary and aftermarket customers would harm IBM's reputation and further encourage existing customers to migrate unlocked applications off the

mainframe and new customers to seek other vendors. *Oster Decl*. at ¶ 22; *Carlton Decl*. at ¶ 23.

********** **INFORMATION REDACTED** ********** ********** Indeed, Professor Oster, in her widely used text, *Modern Competitive Analysis*, cites IBM as the classic example of the competitive benefits of reputation in attracting customers. *Id.* Professor Carlton also identifies IBM's reputation as one of its major strategic assets, and explains why reputational concerns restrain IBM's ability to exercise market power:

> IBM recognizes that a reputation for harming its customers in the aftermarket will adversely affect its ability to compete for new customers and applications. For customers that make decisions about the likely costs of a vendor's system on the basis of past experience, reputation plays a large role in the formation of expectations about future costs. If IBM acquires a reputation for overcharging locked-in customers, that reputation could adversely affect its ability to make sales to unlocked customers or even to customers in other markets.

Carlton Decl. at ¶ 23.

IBM's concern for its reputation should protect locked-in System/390 customers (those customers with no plans to purchase new applications or migrate old applications off the mainframe). Many locked-in customers purchase a wide variety of computer equipment from IBM and other companies. IBM would jeopardized its relationship with these customers if it acquired a reputation for overcharging in the aftermarket. *Id*.

3. IBM's Business Plans Are Inconsistent With A Strategy To Exploit Its Primary Market And Aftermarket Customers

In view of the competitive factors discussed, it is unsurprising that IBM's recent high-level strategy and planning documents reveal that IBM has decided not to exploit its ever

narrowing circle of locked-in System/390 customers, but instead, plans to offer better-quality and lower-priced equipment in order to attract the more numerous customers able to select PCMs and alternative platforms.

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In response to competition from alternative platforms for new and unlocked applications, IBM lowered the cost of the System/390 platform. IBM has modified its software pricing practices and introduced its new CMOS technology, which together have drastically reduced the cost of System/390 computing. IBM's efforts to make the System/390 attractive relative to alternative platforms is inconsistent with a strategy to exploit its installed base. *Carlton Decl.* at ¶¶ 14-15.

Second, although IBM could change course upon decree termination, its current practices suggest that it recognizes that its equipment sales may be enhanced by the availability of efficient providers of AS/400 and System/390 products and services. For example, IBM

voluntarily supplies independent software vendors ("ISVs") with the information they need to develop IBM-compatible applications and systems software, even though many of these products directly compete with IBM products. Post-decree, IBM may adopt the same strategy with respect to PCMs and ISOs. "Thus, even after termination of the Consent Decree, IBM may continue to make the necessary information and parts available to third parties so that they may continue to keep abreast of newer IBM products and compete with IBM for the service and maintenance of IBM mainframes." *Id.* at ¶ 30.

Finally, IBM has a history of responding to customer demands. For example, IBM's attempt to discontinue VSE and transition customers to MVS failed in the face of customer resistance. Customers today have computers from multiple vendors and place a premium on maintenance providers who can service multi-vendor, multi-platform environments. IBM may not be able to eliminate ISOs given increasing customer demand for multi-vendor service providers. *Oster Decl*. at ¶ 24; *see Carlton Decl*. at ¶ 13.

E. The Proposed Sunset Periods Further Protect Customers And Competitors

The proposed four-year sunset for the AS/400 and five-year sunset for the System/390 further protects IBM's customers and competitors. *See Cyanamid*, 719 F.2d at 566. A phase-out period protects IBM customers and competitors by affording opportunities to enter into new contracts and make plans in anticipation of a post-decree marketplace. A phase-out period is also necessary for equitable reasons to protect AS/400 and System/390 customers and IBM competitors who have made business investments and other decisions in reliance on the decree.

Whether IBM can exercise any substantial market power over mainframe computers into

the next century is very doubtful. While System/390 computing capacity continues to grow, so does the capacity of UNIX-based mid-range systems and the number of applications that can migrate from the System/390. Indeed, IBM has increasingly positioned the System/390 as a competitive alternative in the fast-growing client-server environment. These trends almost certainly will continue, and the sunset periods will enable IBM's competitors and customers to prepare for the period when IBM's conduct will no longer be constrained by the decree.

Because the markets in which IBM competes are becoming increasingly competitive, it is difficult to predict precisely the extent to which any customers will be locked-in to the System/390 platforms after decree termination. We assume, however, that there may be some number of customers who will remain locked-in after decree termination. Any locked-in customers should continue to be protected by the competitive alternatives offered by PCMs and the substantial inventories of skills, replacement parts and used equipment that will be available well past the sunset periods. *Carlton Decl*. at ¶ 32.

The sunset provisions also protect investments made by IBM competitors that may be adversely affected by decree termination. Leasing companies, PCMs, and ISOs have made substantial investments in skills and inventories of computers and parts. The sunset provisions will permit the continued growth of the used equipment market and assure the continued availability of interface information, replacement parts and maintenance information and thereby permit these firms to continue after the sunset period expires. *Id* . Importantly, ISOs will have the opportunity to acquire the skills and replacement parts to service IBM's new generation CMOS processor. *Id*.

The sunset provisions are not intended to encourage competitors to recoup their

investments and exit the industry, although they are free to do so. Rather, the purpose of the sunset periods is to allow IBM's competitors a reasonable period of time to re-design and re-focus their operations to develop some competitive advantage over IBM in a post-decree era. *Oster Decl*. at ¶ 28; *Carlton Decl*. at ¶ 33.

F. The Decree May Not Effectively Restrain IBM's Exercise Of Market Power

Designed for a different era, the decree may not effectively restrain IBM's ability to exercise any market power which it may currently possess, or any residual market power remaining after 2001. Both the AS/400 and System/390 can function with only a proprietary IBM operating system. IBM currently leases its operating systems and, subject to contractual limitations, may increase its operating system software licensing fee. The decree prevents IBM from discriminating between lessees and purchasers, but does not limit IBM's software royalties. IBM, therefore, can currently raise its monthly licensing fee to extract monopoly profits from its locked-in customers. Thus, "[i]f the Consent Decree places few if any restrictions on IBM's software pricing policies beyond the nondiscrimination requirement between lease and ownership, then IBM already may be able to price operating systems in a way which harms locked-in users." *Id.* at ¶ 28.

IBM might also be able to exploit any AS/400 and System/390 customer in the hardware maintenance aftermarket, today as in 2001, if it were so inclined, without resorting to exclusion of ISOs in violation of the decree. The decree does not limit the price IBM charges for parts, but simply requires that IBM charge ISOs the same price for replacement parts that it charges its own maintenance organization. Thus, IBM already has the ability to extract monopoly prices in

the aftermarket by increasing the price it charges for parts. Any overcharge IBM imposes upon itself it automatically recoups. Professor Oster observes that "IBM controls the price it can charge to the independent service organizations for parts used in repair work. As such, to the extent IBM has market power, it can set those prices at above-competitive-levels." *Oster Decl*. at ¶ 25.

VII. RESPONSE TO COMMENTS

A. Favorable Comments

The Government received three comments supporting the joint motion.[22] These comments came from Computer Service Corporation ("CSC"), the CCIA, and Amdahl.

CSC commended the Government for reaching a settlement that allows customers and competitors of IBM to "have a fairer opportunity to adjust as necessary to meet changes in these [AS/400 mid-range and System 390 mainframe] markets."[23] CSC is the only customer that filed comments. Through a subsidiary it also competes with IBM in outsourcing services.

Amdahl has been IBM's leading PCM mainframe competitor since introducing the first System/390 plug-compatible mainframe in 1975. Amdahl supports the proposed modification, but believes the sunset provisions should be tolled if IBM violates the decree prior to 2001.

Additionally, David Poisson, the president of the Computer Dealers and Lessees Association ("CDLA"), which earlier had moved to intervene and vehemently opposed IBM's June 1994 motion, described the Joint Motion as a "key victory" that "will allow CDLA members to reposition [their] sales and leasing practices in alignment with market forces and will enable competition between these independent resellers and IBM when the decree finally expires." *Data Trends*, July 17, 1996, 1996 WL 5803004. CDLA subsequently issued a press release headlined "Computer Leasing Trade Body Declares Victory In Its Dispute With IBM," 1996 WL 10472463, July 5, 1996 (attached as Exhibit 6). CDLA's counsel also referred to the proposed modification as "a significant victory for CDLA and for consumers. . . ." (p. B4, *The Wall Street Journal*, July 3, 1996 (attached as Exhibit 7).

CSC's comment was not filed with the court. A copy is attached as Exhibit 8.

Amdahl notes that the Federal Trade Commission has adopted this policy. Amdahl believes that it is particularly appropriate here since IBM and the Government disagree as to the meaning of several provisions in the decree. Such a provision need not be imposed now. We do not believe that this is a basis for departing from our normal enforcement policy of a final termination date with respect to judgment terminations but the Government will take appropriate action if IBM violates the decree during the sunset period. The Court will retain jurisdiction over this case and if IBM violates the decree, the court may then exercise its equitable power appropriately.

CCIA is a trade association comprised of 27 companies, many of which are manufacturers or providers of computer products in competition with IBM. CCIA has a "significant interest" in continuing essential provisions of the consent decree and sought intervenor status. CCIA supports the judgment modification, provided that the Government is vigilant in enforcing the decree. A number of CCIA's members produce computer systems and products that are compatible and interfacible with IBM mainframe computer systems. CCIA interprets Section IX of the decree to require IBM to furnish its members with System/390 interface information and believes that enforcement of its interpretation is essential inasmuch as IBM has withdrawn from its 1984 Undertaking with the EEC to make interface information available. IBM disputes that Section IX requires it to provide System/390 information but its practice has been to provide interface information. The Government assures CCIA and the Court that we shall be vigilant in enforcing the decree throughout the sunset period.

B. Unfavorable Comments

The Justice Department received four unfavorable comments, three from IBM competitors or trade associations representing IBM competitors and one anonymous comment.[24] Except for the anonymous comment, these comments claim termination will harm competition for service in AS/400 and System/390 aftermarkets.

1. COHR, Inc.;
Association of Service and Computer Dealers International ("ASCDI"); and
Anonymous

COHR is a leading ISO in the healthcare field with about 1,500 customers. COHR believes that competition in the primary market of computer equipment may sometimes have an effect in the maintenance aftermarket, but in many cases, it will not. COHR quotes *Kodak* for the proposition that "one cannot presume that competition in the sale of equipment will ensure competitive results in the maintenance aftermarkets" and then asserts that effective competition in the sale of System/390 systems "does not even exist yet." COHR maintains that there is effective competition in the sale of nearly all the high technology equipment for which it provides maintenance and management service, yet only with the recent emergence of ISOs did costs fall by about 25 percent. We addressed the *Kodak* argument previously at Section VI *supra.* The effect of emerging ISOs on terms and quality of service provided by OEMs may be competitively beneficial, as COHR maintains. If these benefits are valued by customers and if the OEMs sell their equipment in competitive markets, OEMs will be forced by customer

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[24] The anonymous comment appears to be written by the same person who submitted an anonymous comment last year concerning the termination of the Final Judgment as it applied to IBM products outside the AS/400 and System/390 families of products. The comment does not appear to have been filed with the court. A copy is attached as Exhibit 9.

demands not to cut off ISOs. Indeed, the recent growth of ISOs in this industry may be testimony to the difficulties OEMs face in limiting competition from ISOs.

ASCDI is a trade association representing computer dealers, brokers, lessors, and ISOs who primarily deal in the market for new and used IBM machines and plug-compatible peripherals. ASCDI first claims that the Court's January 17, 1996, Order terminating the decree with respect to products other than the AS/400 and System/390 was not in the public interest because the ISO industry "is not the independent competitive force contemplated by the drafters of the Final Judgment" owing to its symbiotic dependence on IBM for parts. ASCDI's comment with respect to the Court's January 17th Order is nearly a year late. Interestingly, it does not allege that IBM has blocked competition from ISOs in the ten months since termination of these portions of the decree.

ASCDI believes that IBM's history shows that it will eliminate ISO access to parts, operating system upgrades, and other items necessary to the service of IBM machines after the decree terminates in 2001. IBM's behavior from 1930s to the 1950s, when it enjoyed an unchallenged monopoly in the electrical tabulating machine market, is not a useful predictor of its behavior in the computer industry after the year 2001. In recent years, IBM's dominance of the computer industry has greatly diminished, and, as discuss in greater detail in Section VI *supra*, a variety of constraints limit IBM's ability to exploit its aftermarket position.

ASCDI also objects to the immediate termination of Section IV(c)(7), which requires IBM to produce machines in the chronological order in which orders are received. Section IV(c)(7) was intended to ensure that IBM did not discriminate against purchasers in favor of lessees. We found no support for retention of this provision during our customer interviews and

some evidence that it has imposed some inefficiencies on IBM. Similarly, ASCDI predicts that the termination of Section V(a), which limits IBM's right to acquire used machines, and Section VI(a), which requires IBM to offer purchasers the same service it provides to lessees of machines, will enable IBM to discriminate against purchasers and to acquire used machines, a needed source of used parts for ISOs.

We disagree that termination of these provisions will make a "mockery" of the sunset periods. IBM cannot move to a lease-only policy or discriminate against purchasers of System/390 machines under the sunset provisions and is unlikely to do so with respect to AS/400 customers because it faces substantial competition. It is equally unlikely that IBM will expend its resources acquiring the vast inventory of used equipment. Such behavior is contrary to IBM's business incentives and we found virtually no support for ASCDI's predictions during our industry interviews.

We also received an anonymous one-page letter that urges that the "consent decree must continue and be strengthened" since IBM "has shown no remorse or fairness" in the way it does business. Specifically, IBM "bundles" hardware, software, and service so that customers do not know true hardware costs. The comment also alleges that former IBM employees have been "planted" with customers who favor IBM against its competitors. The substance of this comment is not supported by our industry interviews and also raises matters outside of the 1956 Decree.

2. Independent Service Network International ("ISNI")

ISNI is a trade association of about 200 ISOs that service various high-tech equipment manufactured by others, including copiers, computers, micrographic equipment, and medical equipment. ISNI earlier unsuccessfully sought intervenor status in this proceeding.

ISNI submitted a lengthy comment in which it argues that the decree is still needed to constrain IBM's market power in the System/390 market and that the parties have failed to establish that competition in the mid-range market will constrain IBM's market power in the AS/400 service aftermarket. It also contends that the minimal harm to IBM imposed by retention of the decree is outweighed by the extreme hardships customers and ISOs will suffer in the event of termination. ISNI believes that *Cyanamid* requires the Court to undertake a full and independent analysis of the proposed decree modification, including fact-finding concerning the state of the relevant markets.

ISNI claims that post-decree, IBM will still have the power to tie sales of service to sales of replacement parts. ISNI believes that, as in *Cyanamid*, the Court is being asked to approve a consensual modification of a consent decree premised on an economic theory that is inconsistent with Supreme Court precedent. Specifically, ISNI points out that economic theory teaching that competition in the equipment foremarket constrains the exercise of market power in derivative aftermarkets was an insufficient basis for summary judgment in *Kodak*, *supra*, when the plaintiff alleged facts showing an actual exercise of market power.

ISNI further contends that the balancing of the equities favors continuation of the decree since the Government has not shown that the decree harms competition. Furthermore, IBM has shown minimal losses from inefficiencies from operation of the decree and has formed no

business plans upon its termination, but ISOs have invested hundreds of millions of dollars in the AS/400 and System/390 platforms. In this connection, ISNI proposes that the decree should not be terminated "unless and until third party entrants become fully viable without benefit of provisions of the decree."

In the alternative, ISNI suggests that, if the Court approves the proposed judgment modification, it make the following amendments:

1. With respect to AS/400s, ISNI believes that the six-month limit on making sales terms substantially equivalent to lease terms could permit IBM only to lease AS/400s. Consequently, ISNI asks either that the sunset period for Section IV(c) be extended to four years or that Section VII(c) be amended to prohibit IBM from preventing "any purchasers or lessees" from dealing with ISOs.

2. Since IBM may interpret the immediate elimination of Section IV(c)(7) (requiring production orders to be filled in order of receipt) as permitting it to put parts orders for ISOs at the end of the list, or otherwise disadvantage ISOs who need to fill customers' orders promptly, the Court should either not order immediate termination or confirm that other provisions prevent IBM from discriminating against customers who deal with ISOs.

3. ISNI believes that the immediate termination of Section IV(b)(3), which requires IBM to sell, and not just lease, "special purpose" computers, could be construed to permit IBM only to lease nearly all System/390s, since most System/390s are customized to the requirements of a particular customer.

RESPONSE

Where the Government opposes termination, the court must resolve a continuing controversy between the parties. To prevail on a termination motion the Government opposes, the defendant, in most cases, must prove that the basic purposes of the decree have been fully achieved. *Rufo v. Inmates of the Suffolk County Jail*, 502 U.S. 367 (1992); *United States v. Eastman Kodak Co.*, 63 F.3d 95 (2d Cir. 1995). Throughout its comment, ISNI intermixes the standard in cases where the Government opposes modification or termination with that for cases in which modification or termination is consensual. In cases such as this, where the Government consents to a proposed modification, the court has a more limited role. There is no continuing controversy between the decree parties and the purpose of the court's review is to ensure that the Government has carried out its duty to represent the public interest in competition. Thus, the court should determine whether the Government has offered a reasoned and reasonable explanation of why termination is in the public interest. *Loews*, 783 F. Supp. at 214. The reasonableness of the Government's consent to terminate or modify is judged under the same public interest standard that is applied when a decree is presented to a court for approval. *Swift*, 1975-1 Trade Cas. at 65,702; *United States v. General Electric Co.*, 1977-2 Trade Cas. (CCH) 72,717. Courts properly defer to the Government's judgment in consenting to termination where

it offers a reasonable explanation and there is no showing, as there has been none here, of Government bad faith or malfeasance.[25] *See, e.g., Sam Fox Publishing*, 366 U.S. at 689; *Bechtel*, 648 F.2d at 666.

ISNI relies primarily on *Cyanamid* in claiming that this Court must undertake a "full analysis" requiring proof by the Government that market conditions at the time the decree was entered no longer obtain. As part of its contention that *Cyanamid* requires the Court to develop an extensive evidentiary record in this proceeding, ISNI claims that: "It is incumbent upon the Government and IBM to carry this burden of proof and show that IBM no longer has this market power [in the provision of repair parts and repair and maintenance services for the System/390 and AS/400]." In a case of this complexity, and indeed in most Government antitrust cases, this would impose an enormous burden on the Government and the courts. *Cyanamid* should not be understood as requiring virtually the same burden of proof in a consensual decree modification proceeding that is required in a contested proceeding.[26]

At issue in *Cyanamid* was whether the defendant should be released from Part XI of that decree which required it to make annual purchases from competitors. The provision permitted the defendant to be relieved of the purchasing requirement "upon a showing by Cyanamid to the satisfaction of [the] Court that the effect of such relief will not be substantially to lessen

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Even in the landmark AT&T case, where the district court afforded less deference to the Government's discretion because of the court's familiarity with the case and its issues resulting from a decade's close supervision of the decree, the standard in deciding whether to grant an uncontested judgment modification was that the court may reject the proposal only if "it has exceptional confidence that adverse consequences will result -- perhaps akin to the confidence that would justify a court in overturning the predictive judgments of an administrative agency." *United States v. Western Electric*, 993 F.2d 1572, 1577 (D.C. Cir.), *cert. denied*, 114 S. Ct. 487 (1993).

In the past 25 years, the Government has consented to over 140 antitrust decree terminations (about 35 in this District) and to over 225 antitrust decree modifications (about 50 in this District). *Tierney Decl.* at ¶ 8.

competition or tend to create a monopoly in any line of commerce in any section of the country." This is a very unusual consent decree provision.[27] Although the Government believed that the Appellate Court erred, the Government determined that the decision did not warrant plenary review because it "construes language that appears in only a few government antitrust decrees" and "does not conflict with any decision of this [Supreme] Court or any other court of appeals." *Brief for the United States in its Opposition to Defendant's Certiorari Petition* at 6, *United States v. American Cyanamid Co*., 719 F.2d 558 (2d Cir. 1983) *cert. denied sub. nom. American Cyanamid Co., v. Melamine Chemicals, Inc., 465 U.S. 1101 (1979)* (No. 83-1085). Indeed, the court of appeals stated that the issue was "whether the district court erred in applying a 'public interest' standard to decide whether to terminate Part XI of the decree *which provided its own higher standard*, simply because the government consented to the termination." (emphasis added). *Cyanamid*, 719 F.2d at 559.[28] The IBM decree contains no such separate, explicitly higher standard. The proposed modification and termination meets the public interest test as it has been applied by hundreds of district courts in approving consensual judgment modifications and terminations. Applying the "higher standard" test to all consensual modifications and terminations, as ISNI urges, would enormously burden the courts, the Government, numerous defendants, and would remove control of Government litigation from the executive branch. *Cyanamid* involved a unique decree, unique facts, and does not stand for the broad application urged by ISNI.

This is the language of Section 7 of the Clayton Act, 15 U.S.C. § 18. Very few Government consent decrees have contained a similar termination standard.

The Court of Appeals also ruled that the district court erred in declining to order a phase-out of the decree after having found that one would have been desirable. Here, the parties have agreed to a reasonable phase-out period.

ISNI's reliance on *Cyanamid* is misplaced for other reasons. While the court in *Cyanamid* viewed the district court's decision as having forsaken the legal theory under which the case was filed in 1952 for current economic theory -- the Appellate Court believed that economic theory disfavoring challenges to vertical mergers motivated the Government's acquiescence to the decree termination in *Cyanamid* -- we do not ask this court to reject the theory on which this case was filed. Our consent to the modification of the 1956 decree follows a lengthy and thorough investigation of the effect on competition.

ISNI relies on *Kodak* in urging that even if the System/390 and AS/400 systems are sold in competitive equipment markets, the Court cannot find that the modification and termination of the decree is in the public interest unless the parties prove that IBM will be unable to exercise market power in spare parts and repair aftermarkets after the decree terminates in 2001. This is an extreme misreading of the public interest standard and also a misreading of *Kodak*.

As discussed, *Kodak* held that evidence of anticompetitive effects could not be overcome on summary judgment by a purely theoretical argument. ISNI, which has provided no evidence that IBM can or will exercise market power in service aftermarkets, stands *Kodak* on its head by presuming in this proceeding that IBM (and all manufacturers of proprietary equipment that requires aftermarket service) can exercise market power in aftermarkets.[29]

ISNI may also have a fundamental misunderstanding of the purposes of this decree. If, in 1956, IBM had sold mid-range computers and personal computers in a competitive market, there is little chance that the Government would have filed suit to require IBM to deal with ISOs that competed with IBM in service aftermarkets. Yet, ISNI seems to believe that the purpose of this decree should be to require IBM perpetually to deal with ISOs since, as ISNI stated in the affidavit attached to its Motion To Intervene: "*Each* manufacturer therefore almost always has power in the market for the maintenance of its own equipment" (emphasis added, *Betzner Affidavit* at ¶ 19). In other words, what ISNI is saying is that it is impossible for the parties to meet the burden of proof ISNI would impose on us.

IBM must continue to provide parts to ISOs during the sunset periods. If, after the expiration of the sunset periods, IBM decides not to deal with ISOs, they still may seek antitrust and other remedies for the cut-off.[30] Thus, after decree termination, IBM will be in the same position as its equipment competitors.

IBM's ability to exercise market power in service markets, if it has any, should continue to erode before 2001. We recognize, however, that as long as customers have made substantial investments in equipment and software that lock them into proprietary IBM systems, IBM, like any other systems manufacturer, can conceivably exercise "market power" in its licensing of operating system software, sale of parts, and, ISNI's concern, possibly tying the sale of parts to the sale of service. While IBM may now be able to exercise some market power in System/390, and possibly AS/400, maintenance aftermarkets, industry changes, IBM's marketing and business strategies and customer access to life-cycle costing information make any IBM exploitation of locked-in customers less and less likely. *See* Section VI, *supra*.

During our interviews, many customers expressed confidence that they have leverage in negotiating with IBM. This confidence appears well-founded. Customers increasingly have non-IBM alternatives and can and do engage in life-cycle pricing. IBM also has reputational reasons for not wanting to exploit customers who have some applications locked-in to the System/390 platform. If IBM creates the perception that it is exploiting System/390 customers,

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As ISNI noted, *Kodak* was returned to the district court where the plaintiff won a substantial judgment. It is now working upward through appellate review and should be decided before the sunset period expires.

it will cause more System/390 applications to migrate and will encourage customers to invest more heavily in non-IBM equipment and alternative platforms.[31] *See* Section VI(D)(2), *supra*.

None of the three specific modifications proposed by ISNI is necessary. First, ISNI's concern that IBM may begin in six months only to lease AS/400s is unrealistic. AS/400 systems are sold in a competitive market and IBM would be foolish to ignore customer preferences. Second, following the termination of the sequential production requirement of Section IV(c)(7), if IBM were to put ISO's purchase orders at the end of its production lists or otherwise disadvantage ISOs in filling orders, its behavior will violate the nondiscrimination provision of Section VI(c) of the Final Judgment. Finally, IBM cannot take its System/390 systems out from under the decree by simply designating them "special purpose" computers pursuant to Section IV(b)(3). Such conduct would blatantly violate the purpose and letter of the 1956 decree.

VIII. CONCLUSION

The proposed staged termination set forth in the parties' Joint Motion is a reasoned and reasonable settlement of this 44-year litigation in the public interest. The computer industry today has vastly changed since l956. IBM no longer dominates the industry and any remaining

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Also, as noted in Section VI(F), *supra*, the decree may not now prevent IBM from exploiting aftermarkets, should it so desire. The decree does not prevent IBM from charging monopoly prices for replacement parts, as long as lessees, purchasers, and ISOs are treated comparably. Similarly, IBM could impose monopoly license terms for its System/390 and AS/400 operating systems under the decree.

power it has clearly will continue to dissipate. The five-year termination also affords equitable protection to customers and competitors who have made business decisions in reliance on the l956 decree.

Respectfully submitted,

_____

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U.S. Department of Justice

November 13, 1996

CERTIFICATE OF SERVICE

This is to certify that a copy of the *United States' Memorandum in Support of its Motion to Terminate the 1956 Final Judgment and Response to Public Comments* was served by Messenger to the following counsel of record on November 13, 1996:

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