forwarders pursuant to section 19 of the Shipping Act of 1984 (46 U.S.C. app. 1718 and 46 CFR Part 510).

Persons knowing of any reason why any of the following applicants should not receive a license are requested to contact the Office of Freight Forwarders, Federal Maritime Commission, Washington, DC 20573.

International Transportation Consultants, Ltd., d/b/a I.T.C., Ltd., 1551–53 Carmen Drive, Elk Grove Village, IL 60007

Officers: Wladimir Leonartowicz, President, Marc Leonartowicz, Vice President

Dated: April 28, 1998.

Joseph C. Polking,

Secretary.

[FR Doc. 98–11680 Filed 5–1–98; 8:45 am]

BILLING CODE 6730–01–M

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

Sunshine Act Meeting

TIME AND DATE: 9:00 a.m. (EDT), May 11, 1998.

PLACE: 4th Floor, Conference Room, 1250 H Street, N.W., Washington, D.C.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. National Finance Center record keeping.
2. Congressional/agency/participant liaison.
3. Benefits administration.
4. Investments.
5. Participant communications.
6. Approval of the minutes of the April 13, 1998, Board member meeting.
7. Thrift Savings Plan activity report by the Executive Director.
8. Approval of the update of the FY 1998 budget and FY 1999 estimates.
9. Investment policy review.
10. Review of KPMG Peat Marwick audit report: ''Pension and Welfare Benefits Administration Review of Capacity Planning and Performance Management of the Thrift Savings Plan at the United States Department of Agriculture, National Finance Center.''
11. Status of audit recommendations.

CONTACT PERSON FOR MORE INFORMATION: Thomas J. Trabucco, Director, Office of External Affairs, (202) 942–1640.

Dated: April 29, 1998.

Roger W. Mehle,

Executive Director, Federal Retirement Thrift Investment Board.

[FR Doc. 98–11819 Filed 4–29–98; 4:56 pm]

BILLING CODE 6760–01–M

FEDERAL TRADE COMMISSION

[File No. 981–0040]

Digital Equipment Corporation; Analysis to Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices of unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint that accompanies the consent agreement and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before July 6, 1998.

ADDRESSES: Comments should be directed to: FTC/Office of the Secretary, Room 159, 6th St. and Pa. Ave., N.W., Washington, D.C. 20580.

FOR FURTHER INFORMATION CONTACT: William Baer or Willard Tom, FTC/H–374, Washington, D.C. 20580 (202) 326–2932 or 326–2786.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and Section 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of sixty (60) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for April 23, 1998), on the World Wide Web, at ''http://www.ftc.gov/os/actions97.htm.'' A paper copy can be obtained from the FTC Public Reference Room, Room H–130, Sixth Street and Pennsylvania Avenue, N.W., Washington, D.C. 20580, either in person or by calling (202) 326–3627. Public comment is invited. Such comments or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with Section 4.9(b)(6)(ii) of the Commission's Rules of Practice (16 CFR 4.9(b)(6)(ii)).

Analysis To Aid Public Comment

I. Introduction

The Federal Trade Commission (''Commission'') has accepted from Digital Equipment Corporation (''Digital'') an Agreement Containing Consent Order (''Proposed Consent Order''). The Proposed Consent Order is designed to remedy anticompetitive effects likely to occur in three product markets as a result of the acquisition by Intel Corporation (''Intel'') of certain assets of Digital. The Order requires that Digital License its Alpha microprocessor technology to two Commission-approved companies to ensure that there are independent suppliers and developers of Alpha. The Order ensures that Intel will not have exclusive control over the technology, and that Alpha will remain competitive.

II. Description of the Parties and the Transaction

Digital is a Massachusetts corporation headquartered in Maryland, Massachusetts, with sales of approximately $13 billion and net income of over $140 million for the fiscal year ended June 28, 1997. Digital manufactures and sells computer systems, and develops, manufactures, and sells microprocessors based on its proprietary 64-bit [1] Alpha architecture.

The Alpha microprocessor is widely regarded as among the highest performing general purpose microprocessors available and is the only non-Intel microprocessor architecture that can run the Windows NT operating system in ''native'' mode.[2] Digital is the largest consumer of Alpha chips, which it uses in its computer systems.

Intel Corporation (''Intel''), a Delaware corporation headquartered in Santa Clara, California, is the world's leading semiconductor manufacturer. Intel reported 1996 sales of approximately $20.8 billion and net income of more than $5 billion. Intel supplies a broad

[1] The number of bits generally correlates with the amount of data that a microprocessor can process during one clock cycle. Intel's current Pentium microprocessors have a 32-bit architecture (known as IA–32), while Digital's alpha chip has a 64-bit architecture.

[2] Windows and Windows NT are operating systems. Operating systems are a type of software that acts as an intermediary between applications software and the microprocessor. An operating system runs in ''native'' mode when it is specifically written to interact optimally with the particular microprocessor architecture. Microsoft, the developer of Windows NT, today supports only two microprocessor architectures—Intel's and Digital's—to run Windows NT in native mode. Other microprocessor architectures today must use translation software in order to run Windows NT, significantly reducing performance and speed.

line of semiconductor devices used as computer system components, including x86-compatible microprocessors[3] such as the Pentium line, which are used primarily in conjunction with Microsoft's Windows and Windows NT operating systems. Intel has been working with other companies to develop a 64-bit microprocessor (currently known by the project name Merced) with a new 64-hit architecture (known as IA–64), which is intended to extend Intel's current x86 architecture and compete with Digital's Alpha architecture.

The proposed transaction resolves three pending lawsuits between Digital and Intel relating to microprocessor intellectual property and technology rights. Digital initiated that litigation in May 1997, claiming the Intel infringed ten Digital patents by making and selling Intel Pentium chips. Intel countersued, claiming, among other things, that Digital is infringing nine Intel patents by making and selling Alpha microprocessors.

On October 26, 1997, the parties agreed to settle the litigation and grant each other broad patent cross-licenses. Intel would also buy Digital's microprocessor production facilities (such a facility is known in industry parlance as a ''fab'') for net book value (approximately $650 million). In addition, Intel agreed to produce Alpha microprocessors for supply exclusively to Digital. Digital agreed to endorse publicly these IA–64 architecture and design some Digital computer systems based on Intel 64-bit microprocessors. Digital will retain the intellectual property rights and design assets for Alpha, including the design engineers who conduct research and development for the Alpha architecture.

III. Competitive Concerns

A. Relevant Markets

The draft Complaint alleges three relevant markets: (1) The manufacture and sale of high-performance, general-purpose microprocessors that are capable of running the Windows NT operating system in native mode; (2) the manufacture and sale of all general-purpose microprocessors and (3) the design and development of future generations of high performance, general-purpose microprocessors.

The Complaint alleges that microprocessors designed to run the Windows NT Operating system and its complementary application programs constitute a relevant antitrust product market. The demand for microprocessors is determined indirectly by the demand for operating systems, which is determined in part by the software applications that run on those systems. Applications are designed for specific operating systems; operating systems can optimally run application programs only when the operating system is written for the microprocessor architecture (so that the microprocessor runs native on that operating (system). Consumers cannot readily switch between computer systems that use different microprocessor architectures, because in most cases such a switch also requires changing the operating system and application programs, an expensive proposition and one that may not yield the same level of functionality enjoyed by consumers on their former systems.

Windows NT is currently written in two versions, so that only the Alpha microprocessor and the Intel-based microprocessors can run it in native mode.[4] Windows NT will also be compatible with Merced, Intel's 64-bit chip, which will not be commercially available until 1999. Thus, consumers using software optimized for use with Windows NT must choose between Intel-based and Alpha-based systems. Thus, if the price of Alpha and high-end Intel microprocessors were to increase by 5 percent, consumers using Windows NT would not readily switch to computer systems built with alternative microprocessors.

The Complaint also alleges that a second relevant product market includes all general-purpose microprocessors, a category that includes devices based on the Intel and Alpha architectures, as well as microprocessors based on other rival architectures such as those developed by Hewlett-Packard (PA–RISC), Sun Microsystems (SPARC), IBM (PowerPC), and Silicon Graphics (MIPS). Because only Alpha and Intel microprocessors can optimally run Windows NT, however, these two microprocessors are the closest substitutes in this broader, differentiated product market.

Finally, the Complaint alleges that the transaction will reduce competition in the innovation market for the design of microprocessors. Intel and Digital are two of a very few competitors developing next-generation, high-performance microprocessors. Computer makers choose microprocessors based, in part, on the ''roadmap'' provided by each microprocessor manufacturer—that is, the manufacturer's projection of future expected increases in performance and functionality for successive generations of microprocessors based on the same architecture. Roadmaps therefore provide an essential element of microprocessor competition. Intel and Digital compete for sales to computer manufacturers, based on their roadmaps, and they use each other's roadmaps as benchmarks for developing next-generation products to leapfrog the performance of the rival company's chips.

B. Barriers to Entry

The Complaint alleges there are significant barriers to entry in the market, including incurring large sunk costs to build a fab and design a microprocessor, overcoming the network externalities and Intel's installed base, obtaining Microsoft support to obtain Windows NT-compatibility, building a reputation as a reliable microprocessor manufacturer and innovator.

Building a new microprocessor facility requires the expenditure of substantial fixed and sunk costs and takes many years. A new entrant must also design the microprocessor, an expensive and lengthy process.

Most important, a successful entrant would need to convince computer system manufacturers to design their systems around the new microprocessor. Entrants, however, face a significant ''Catch-22'' in this endeavor because of ''network externalities.'' Externalities exist where consumers place more value on a particular technology (microprocessor, operating system, peripherals, applications, etc.) that is more widely adopted than other technologies. Software developers and computer system manufacturers are unwilling to support a new microprocessor technology unless they first see that it enjoys consumer interest. Because of these network externalities and reputational effects, however, consumers are unwilling to switch to a new microprocessor technology unless they first see that it has compatible operating systems, software, and peripherals. In this environment, consumer and industry expectations about the degree to which a manufacturer will be able to get network externalities and reputational effects working for it in the near future are critical.

The importance of these expectations is illustrated by Intel's recent marketing efforts on behalf of the Merced, its new 64-bit microprocessor. Even though

[3] ''X–86 architecture'' generally refers to the original line of Intel microprocessor products for personal computers and includes successive generations such as the 8096, 286, 386, 486 and the Pentium family of chips.

[4] *See* fn. 2.

Merced has yet to be tested and will not be available for more than a year, Intel has already successfully obtained commitments from a large share of the software vendors and computer system manufacturers to write software and build computers for it.

C. Competitive Effects

Intel has market power in both relevant microprocessor product markets. Intel accounts for nearly 90 percent of dollar sales and nearly 85 percent of unit sales of microprocessors for Windows NT and for nearly 90 percent of dollar sales and 80 percent of unit sales of general-purpose microprocessors. No firm other than Intel accounts for more than 4 percent of dollar sales of microprocessors or for more than 10 percent of unit sales of microprocessors. Finally, the competitive significance of other high-performance microprocessors—such as Hewlett-Packard's PA–RISC, Sun Microsystems' SPARC, PowerPC from the Motorola/IBM/Apple venture, and Silicon Graphics' MIPS microprocessors—has been declining.

The transaction also threatens to increase concentration significantly in the relevant innovation market. Digital and Intel are two of the most significant innovation competitors in the design and development of high-performance microprocessors. Even with its comparatively small share of the relevant markets, the Alpha architecture (because of Alpha's superior processing performance) represents the most significant threat to Intel's continued market dominance. Intel's documents refer repeatedly to the competitive threat posed by Alpha, which is acknowledged by many as possibly the best performing and fastest microprocessor in the world. Innovation and actual competition between the two companies is likely to increase in the future because of the growing popularity of Microsoft's Windows NT operating system, which currently supports only Digital's Alpha and Intel's advanced microprocessors. As the demand for and functionality of Windows NT grow, the competition between the Alpha and Intel architecture is likely to intensify.

On these facts, it is clear that an acquisition of Digital by Intel would substantially lessen competition. Although the transaction at issue here does not involve an outright acquisition of Alpha technology, it nevertheless threatens competition in the relevant markets. Under the terms of the settlement, Intel will acquire Digital's Alpha fabrication plant (known as Fab 6) and will produce Alpha chips for Digital. Digital will retain its Alpha intellectual property and design team and is, therefore, only receiving ''foundry'' services (that is, a supply agreement where one company manufactures the product for another) from Intel. The parties will also end the patent litigation and sign a patent cross-license agreement.

The proposed transaction has positive implications for the future of Digital's Alpha systems. The supply agreement frees Digital from operating a plant that it was not able to utilize efficiently. Because Intel manufactures a vast line of semiconductor products, it can utilize the plant more efficiently than Digital. As a result, overall manufacturing costs will go down and, under the Digital-Intel agreement, those cost reductions will be passed on to Digital. Under the agreement, Digital will also be able to bring the next generation of Alphas—based on an improved .18 micron process technology—to market earlier than it would have absent the transaction.

Digital's move to this ''fabless'' business model of operation is not unprecedented. Other successful companies—like Sun Microsystems, Inc. and Silicon Graphics—have designed high performance microprocessors while relying on third-party foundries for manufacturing. None of the other fabless microprocessor companies, however, placed manufacturing in the hands of such a dominant competitor.

Because of this unique characteristic, the proposed transaction creates the opportunity for Intel to slow down or otherwise impair the supply of Alpha microprocessors, harming competition in the relevant markets. In particular, the transaction presents a risk that Intel will not provide the necessary level of coordination between the design and manufacturing processes, and that Intel may take other steps to reduce quality and slow the supply of Alpha microprocessors to Digital. Every foundry arrangement requires design engineers and manufacturing process engineers to coordinate their efforts. The development of a microprocessor involves conforming that design to the process technology and vice-versa. The Digital-Intel settlement separates these functions and provides no incentive for Intel to ''tweak'' its own processes to conform to Digital's products.

Furthermore, the transaction as proposed threatens the continued viability of Digital's sales of Alpha to the ''merchant market.'' [5] As part of this transaction, Digital is selling off most of its semiconductor business to Intel and thus will have no economic need for a marketing staff, which includes people who market Alpha to other computer system manufacturers. Without a marketing staff to service and pursue the merchant market, the loss of competition would be significant.[6] Computer system manufacturers using Alpha microprocessors have pioneered the opening of new market segment for Alpha-based systems, such as media graphics. With the expected growth of Windows NT, Alpha and Intel should go head-to-head in competition in these market segments for these systems. The uncertainty created by the proposed transaction, had it not been addressed by the proposed consent, could have reduced competition between Intel and Alpha processors, resulting in higher prices, reduced consumer choice, and lower rates of innovation.

The Complaint concludes that, unless remedied, the transaction is likely to create uncertainty regarding the future competitive viability of Alpha, thereby maintaining and enhancing Intel's market power, which could result in increased prices and reduced quality and innovation in each of the relevant markets for the following reasons: (1) By making it less likely that Digital would maintain the sales force to continue ''merchant market'' sales of Alpha microprocessors and other products to other computer system manufacturers, it would reduce competition between Intel and Digital for such sales; and (2) putting Digital's supply of Alpha solely in the hands of Intel would give Intel the opportunity to delay production of Alpha microprocessors, impede the development of new generations of Alpha microprocessors, and otherwise undermine the competitiveness of Alpha. In these ways, according to the Complaint, the consummation of the proposed transaction, without any changes, would violate Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, and Section 7 of the Clayton Act, as amended, 15 U.S.C. 18.

IV. The Proposed Consent Order

The Commission has entered into an agreement containing a Proposed Consent Order with Digital in settlement of the draft Complaint. The Proposed Consent Order is designed to preserve Alpha's future viability by ensuring alternative sources for production,

[5] Merchant market means sales of separate microprocessor chips to computer system manufacturers, who then use them as a component in their own computer systems.

[6] As explained more fully below, as part of this consent agreement, Digital will be licensing Alpha to Samsung, a company that plans to sell the Alpha chip in the merchant market through a U.S. subsidiary.

marketing, and development of Alpha products. The Proposed Consent Order requires Digital to enter into or to continue certain licensing arrangements and alliances with Advanced Micro Devices, Inc. (''AMD''), Samsung Electronics Co., Ltd. (''Samsung''), or some other Commission-approved licensee, and to be begin the process of certifying International Business Machines, Inc. (''IBM''), or some other Commission-approved company, to become an Alpha foundry. The purpose of these provisions is to establish two licensees and another foundry as providers and developers of Alpha devices, independent of Intel.

The Proposed Consent Order binds Digital to comply with the terms of agreements it already has entered into with Samsung. Under those agreements, Samsung will obtain an architectural license and technical support. Furthermore, Digital will grant to Samsung a non-exclusive AlphaPowered trademark license and the assistance and support necessary to enable Samsung to enter rapidly and expand the merchant market segment for Alpha products.[7] Under the current version of the Samsung-Digital agreement, Samsung will be creating a U.S. subsidiary, to be known as the Alpha Volume Company, that plans to market Alpha chips to the merchant market segment. Furthermore, Digital has committed to purchase substantial volumes of its Alpha products needs at a competitive price from Samsung, thus reducing its reliance on Intel.

The Proposed Consent Order also requires Digital to enter into a broad license with AMD, or a Commission-approved licensee, that includes a license to the Alpha architecture and software tools that enable AMD to develop microprocessors compatible with the Alpha architecture. Digital must provide technical and engineering support until AMD is capable of independently developing and producing products based on the Alpha architecture, but in no event for more than two years.

The licenses with AMD and Samsung (or two other Commission-approved companies) are architectural licenses, meaning that the license is to the Alpha architecture, as defined by convention in Digital's official reference manual. Under such license, the licensee is free to create its own implementations and derivative works—that is, to design original chips around the architecture—with the one caveat that it maintain backward compatibility with the existing Alpha architecture.[8] In this way, a licensee will have every incentive to develop the merchant market aggressively because it will have the ability to create Alpha-derivative innovations that can give it profitable ''design wins''—that is, agreements with computer system manufacturers by which the computer system manufacturers will design a computer line around the licensee's chip. These architectural licenses also provide assurance to customers who commit to the Alpha architecture because the licenses provide independent sources of supply and innovation for these microprocessors.

The Proposed Consent Order also requires Digital to enter into an agreement, subject to Commission approval, with IBM or some other Commission-approved company to evaluate that company as a potential foundry for Alpha parts and to inform that foundry partner of the steps necessary to become a qualified supplier of Alpha products. Submission of that agreement is required within six months of Commission approval of the Proposed Consent Order. Alternatively, the Proposed Consent Order permits Digital to demonstrate why such an agreement is unnecessary.

Samsung is a leading supplier of DRAM technology, is considered to have excellent manufacturing quality, and will receive marketing assistance from Digital. Samsung is already in the merchant market and the Order should empower Sumsung to further its marketing efforts in this important segment. AMD is the leading challenger to Intel for x86-compatible microprocessors and already a major merchant market supplier, with excellent design capabilities. Though AMD does not yet produce Alpha chips, it should have every ability to do so. AMD is a major supplier of microprocessors and should have significant incentives to develop an Alpha-based business because it does not otherwise have a 64-bit architecture capable of challenging the upcoming Intel IA–64 architecture. IBM is an established high-performance microprocessor foundry, likely to be capable of producing Alpha products. All three of these companies, or other licensees, help to ensure adequate and independent supplies of Alpha microprocessors.

V. Opportunity for Public Comment

The Proposed Consent Order has been placed on the public record for sixty (60) days for receipt of comments by interested persons about both the appropriateness of the relief provided herein as well as the suitability of Samsung, AMD, and IBM as licensees who can ensure alternative sources for the manufacture, marketing, and development of Alpha products. Comments received during this period will become part of the public record. After sixty days, the Commission will again review the Proposed Consent Order and the comments received and will decide whether it should withdraw from the Proposed Consent Order or make it final.

By accepting the Proposed Consent Order subject to final approval, the Commission anticipates that the competitive problems alleged in the Complaint will be resolved. The purpose of this analysis is to invite public comment on the Proposed Consent Order, including the proposed licenses and alliances, to help the Commission determine whether to make final the Proposed Consent Order contained in the agreement. This analysis is not intended to constitute an official interpretation of the Proposed Consent Order, nor is it intended to modify the terms of the Proposed Consent Order in any way.

By direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 98–11798 Filed 5–1–98; 8:45 am]

BILLING CODE 6750–01–M

[7] The Proposed Consent Order also includes provisions for an ''Interim Trustee'' (i.e., an auditor) and a licensing trustee. The Interim Trustee provision assures early assessment and monitoring of Digital's agreements with the licensees and continuing monitoring and reporting to the Commission of how the provisions are working. The licensing trustee provision is triggered if the parties to a licensing agreement fail to agree within the requisite time.

[8] An architectural integrity provision in the Order preserves backward compatibility for existing applications written to exploit the architecture, and to make designing easier for applications developers that have not yet ported applications to Alpha. If Digital fails to innovate and improve the performance of the Alpha architecture, however, the Order allows AMD to modify the base architecture without Digital approval.

GENERAL SERVICES ADMINISTRATION

Notice of Availability (NOA); Record of Decision (ROD); Immigration and Naturalization Service (INS) Lease Construction and Consolidation, Dade County, Florida

April 23, 1998.

This is the Record of Decision (ROD) for the GSA Proposed Action, which is to lease a building to be constructed at 9300–9499 NW 41st Street in Western Dade County, Florida. This building would consolidate the INS District