

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

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UNITED STATES OF AMERICA,

Plaintiff,

v.

RAYTHEON COMPANY, and  
TEXAS INSTRUMENTS, INC.,

Defendants.

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) Civil No: 1:97CV01515  
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) Filed: July 2, 1997  
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**COMPETITIVE IMPACT STATEMENT**

The United States, pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act ("APPA"), 15 U.S.C. § 16(b)-(h), files this Competitive Impact Statement relating to the proposed Final Judgment submitted for entry in this civil antitrust proceeding.

I. NATURE AND PURPOSE OF THE PROCEEDING

On July 2, 1997, the United States filed a civil antitrust Complaint alleging that the proposed acquisition by Raytheon Company ("Raytheon") of the Defense Systems and Electronics Unit ("DS&E") of Texas Instruments ("TI") would violate Section 7 of the Clayton Act, 15 U.S.C. § 18. The Complaint alleges that Raytheon and TI are the only two firms that are now in a position to develop and produce an essential input required in state-of-the-art military radar systems that will cost the Department of Defense about \$10 billion. These inputs are X-band high power amplifier monolithic microwave integrated circuits ("MMICs"). Raytheon is also a leading producer of radar systems. TI, on the other hand, is an independent supplier of MMICs, often supplying them to Raytheon's radar system competitors.

As described in the Complaint, since X-band high power amplifier MMICs are purchased by domestic radar producers for inclusion in weapon systems sold to the Department of Defense, and there are no foreign producers to which domestic radar producers could reasonably turn to purchase these MMICs, the relevant geographic market is the United States.

The prayer for relief in the Complaint seeks: (1) a judgment that the proposed acquisition would violate Section 7 of the Clayton Act; and (2) a permanent injunction preventing Raytheon from acquiring DS&E.

When the Complaint was filed, the United States also filed a proposed settlement that would permit Raytheon to complete its acquisition of DS&E, but require a divestiture and other terms that will preserve competition in the relevant market. This settlement consists of a Stipulation and Order, Hold Separate and Partition Plan Stipulation and Order, and a proposed Final Judgment.

The proposed Final Judgment orders Raytheon to divest, within one hundred and eighty (180) calendar days after the filing of the Complaint in this matter, or five (5) days after notice of the entry of the Final Judgment by the Court, whichever is later, the MMIC Business (as defined in the Final Judgment) of DS&E to an acquirer acceptable to the Antitrust Division of the Department of Justice ("DOJ") and the Department of Defense ("DoD"). TI's MMIC Business includes its commercial and defense MMICs, a gallium arsenide foundry, and all tangible and intangible assets used by TI in the operation of its MMIC Business. Raytheon is also required to divest the Module Business (as defined in the Final Judgment) of DS&E if a trustee deems the sale of this business is necessary to perfect a sale of the MMIC Business.

Until such divestiture is completed, the terms of the Hold Separate and Partition Plan Stipulation and Order entered into by the parties apply to ensure that the MMIC Business of DS&E shall be maintained as an independent competitor from Raytheon.

The plaintiff and defendants have stipulated that the proposed Final Judgment may be entered after compliance with the APPA. Entry of the proposed Final Judgment would terminate the action, except that the Court would retain jurisdiction to construe, modify, or enforce the provisions of the proposed Final Judgment and to punish violations thereof.

## II. DESCRIPTION OF THE EVENTS GIVING RISE TO THE ALLEGED VIOLATION

### A. The Defendants and the Proposed Transaction

Raytheon is a Delaware corporation headquartered in Lexington, Massachusetts. Raytheon produces aircraft, guided missiles, space vehicles, and defense electronics equipment. It develops and produces high power amplifier MMICs for military radars at its Advanced Device Center in Andover, Massachusetts. In 1996, Raytheon reported total sales of about \$12 billion. Raytheon is also a leading designer and producer of radar systems.

TI is a Delaware corporation headquartered in Dallas, Texas. In 1996, TI reported total sales of about \$13 billion. Its DS&E unit produces guided missiles, electro-optical systems, and defense electronics equipment. DS&E develops and produces high power amplifier MMICs for military radars through its R/F Microwave Business Unit at a facility in Dallas, Texas. In 1996, DS&E reported total sales of about \$1.3 billion.

On January 4, 1997, Raytheon entered into an agreement with TI to purchase DS&E. This transaction, which would, in part, take place in the highly concentrated high power amplifier MMIC market, precipitated the government's suit.

## B. MMIC Market

High power amplifier MMICs are solid state semiconductor components (commonly referred to as "chips") made of gallium arsenide and used in active electronically scanned array ("AESA") radars. MMICs are designed to operate within specified frequency ranges or bands of the microwave spectrum. Military AESA radars demand the highest performance MMICs, typically those operating in that part of the spectrum called the X-band, because this band offers the best combination of all-weather capability and ability to detect low-level targets. Because of the importance of the X-band high power amplifier MMIC to the performance of an AESA radar, the performance of these MMICs is an important selection criterion among competing radar systems.

Raytheon has produced more high power amplifier MMICs and modules than any other firm, and TI is the recognized leader in developing high power amplifier MMICs. The two companies are the only firms capable of developing and producing the high power amplifier MMICs required for military radar bids scheduled for the next two to three years. In the next two to three years, radar programs worth over \$10 billion will be competed. The radars for these programs will all require X-band high power amplifier MMICs. TI and Raytheon are the only firms that have established production processes and proven manufacturing capability for these high power amplifier MMICs.

Raytheon's acquisition of TI's DS&E, including the MMICs Business, would have eliminated competition in the development, production, and sale of X-band high power amplifier MMICs for military radars being developed over the next two to three years. The proposed

acquisition would have resulted in a single supplier with the incentive and ability to raise prices and little or no incentive to minimize cost.

The acquisition also likely would have resulted in a lessening of competition in the market for military radars. Raytheon is not only a supplier of high power amplifier MMICs but is also a major supplier of the radar systems of which these devices are critical components. Prior to announcement of the acquisition, TI had teamed with other radar systems suppliers to develop MMICs that met the required specifications for DoD weapon systems. If it acquired the MMIC Business, Raytheon would have controlled access to all currently viable high power amplifier MMICs. Without access to the latest high power amplifier MMICs, a radar manufacturer would be at a serious disadvantage for upcoming military radar competitions.

Successful entry into the production and sale of high power amplifier MMICs is difficult, time consuming, and costly. Entry requires advanced technology, skilled engineers, and costly customized equipment. A new gallium arsenide foundry costs \$50-100 million and takes at least two years to construct. A potential entrant would have to engage in difficult, expensive, and time consuming research to develop designs and production processes that can economically and reliably produce high power amplifier MMICs. These designs and production processes must be perfected in order to bid successfully for a military radar program.

Because the high power amplifier MMIC is a crucial input of the radar system, there are no reasonable substitutes to which customers could switch in the event of a small, but significant and non-transitory price increase.

### C. Harm to Competition As A Consequence of the Acquisition

Raytheon's acquisition of DS&E's MMIC Business would eliminate competition in the

research, development, and production of high power amplifier MMICs necessary to military weapons systems in the United States.

If Raytheon acquired the MMIC Business of DS&E, the current two producers of high power amplifier MMICs in the United States would be reduced to one. Entry by a new company would not be timely, likely or sufficient to prevent harm to competition.

The Complaint alleges that the transaction would have the following effects, among others: competition generally in the innovation, development, production, and sale of high power amplifier MMICs for military radars in the United States would be lessened substantially; actual and future competition between Raytheon and TI in the development, production and sale of high power amplifier MMICs for military radars in the United States will be eliminated; prices for high power amplifier MMICs for military radars in the United States would likely increase; and competition generally in development, production and sale of military radars in the United States would be lessened substantially.

### III. EXPLANATION OF THE PROPOSED FINAL JUDGMENT

The provisions of the proposed Final Judgment are designed to eliminate the anticompetitive effects of the acquisition of DS&E's MMIC Business by Raytheon.

The proposed Final Judgment provides that Raytheon must divest, within one hundred and eighty (180) calendar days after the filing of the Complaint in this matter, or five (5) days after notice of the entry of the Final Judgment by the Court, whichever is later, the MMIC Business of DS&E to an acquirer acceptable to the DOJ and DoD. If defendants fail to divest the MMIC Business, a trustee (selected by DOJ in consultation with DoD) will be appointed. The trustee will be authorized to sell, in his or her sole discretion, the MMIC Business. In addition,

the trustee shall have the right, in his or her sole discretion, to include in the package of assets to be divested the Module Business, if sale of the Module Business is necessary to perfect a sale of the MMIC Business.

The Final Judgment provides that Raytheon will pay all costs and expenses of the trustee. After his or her appointment becomes effective, the trustee will file monthly reports with the parties and the Court, setting forth the trustee's efforts to accomplish divestiture. At the end of six months, if the divestiture has not been accomplished, the trustee and the parties will make recommendations to the Court, which shall enter such orders as appropriate in order to carry out the purpose of the trust, including extending the trust or the term of the trustee's appointment.

Divestiture of the MMIC Business preserves competition because it will restore the high power amplifier MMIC market to a structure that existed prior to the acquisition and will preserve the existence of an independent competitor. Divestiture will keep at least two producers of high power amplifier MMICs in the market competing for upcoming AESA radar programs, which will preserve and encourage ongoing competition in product innovation and development, production, and sales. Divestiture will also prevent radar system manufacturers from being foreclosed from a critical input and thus will preserve competition in upcoming military radar programs.

#### IV. REMEDIES AVAILABLE TO POTENTIAL PRIVATE LITIGANTS

Section 4 of the Clayton Act (15 U.S.C. § 15) provides that any person who has been injured as a result of conduct prohibited by the antitrust laws may bring suit in federal court to recover three times the damages the person has suffered, as well as costs and reasonable attorneys' fees. Entry of the proposed Final Judgment will neither impair nor assist the bringing

of any private antitrust damage action. Under the provisions of Section 5(a) of the Clayton Act (15 U.S.C. § 16(a)), the proposed Final Judgment has no prima facie effect in any subsequent private lawsuit that may be brought against defendants.

**V. PROCEDURES AVAILABLE FOR  
MODIFICATION OF THE PROPOSED FINAL JUDGMENT**

The United States and defendants have stipulated that the proposed Final Judgment may be entered by the Court after compliance with the provisions of the APPA, provided that the United States has not withdrawn its consent. The APPA conditions entry upon the Court's determination that the proposed Final Judgment is in the public interest.

The APPA provides a period of at least 60 days preceding the effective date of the proposed Final Judgment within which any person may submit to the United States written comments regarding the proposed Final Judgment. Any person who wishes to comment should do so within sixty (60) days of the date of publication of this Competitive Impact Statement in the Federal Register. The United States will evaluate and respond to the comments. All comments will be given due consideration by the Department of Justice, which remains free to withdraw its consent to the proposed Judgment at any time prior to entry. The comments and the response of the United States will be filed with the Court and published in the Federal Register.

Written comments should be submitted to:

J. Robert Kramer II  
Chief, Litigation II Section  
Antitrust Division  
United States Department of Justice  
1401 H Street, N.W., Suite 3000  
Washington, D.C. 20530



The proposed Final Judgment provides that the Court retains jurisdiction over this action, and the parties may apply to the Court for any order necessary or appropriate for the modification, interpretation, or enforcement of the Final Judgment.

#### VI. ALTERNATIVES TO THE PROPOSED FINAL JUDGMENT

The United States considered, as an alternative to the proposed Final Judgment, a full trial on the merits against defendants Raytheon and TI. The United States could have brought suit and sought preliminary and permanent injunctions against Raytheon's acquisition. The United States also considered a settlement involving the licensing of MMIC technology to one or more firms. The United States determined, however, that such a proposal would not fully protect competition for important radar projects over the next several years.

The United States is satisfied that the divestiture of the described assets and the other terms specified in the proposed Final Judgment will encourage viable competition in the research, development, and production of high power amplifier MMICs. The United States is satisfied that the proposed relief will prevent the acquisition from having anticompetitive effects in this market. The divestiture of the MMIC Business and the other proposed terms will restore the high power amplifier MMIC market to a structure that existed prior to the acquisition and will preserve the existence of an independent competitor.

#### VII. STANDARD OF REVIEW UNDER THE APPA FOR PROPOSED FINAL JUDGMENT

The APPA requires that proposed consent judgments in antitrust cases brought by the United States be subject to a sixty-day comment period, after which the court shall determine whether entry of the proposed Final Judgment "is in the public interest." In making that

determination, the court may consider --

(1) the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration or relief sought, anticipated effects of alternative remedies actually considered, and any other considerations bearing upon the adequacy of such judgment;

(2) the impact of entry of such judgment upon the public generally and individuals alleging specific injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial.

15 U.S.C. § 16(e) (emphasis added). As the Court of Appeals for the District of Columbia Circuit recently held, the APPA permits a court to consider, among other things, the relationship between the remedy secured and the specific allegations set forth in the government's complaint, whether the decree is sufficiently clear, whether enforcement mechanisms are sufficient, and whether the decree may positively harm third parties. See United States v. Microsoft, 56 F.3d 1448 (D.C. Cir. 1995).

In conducting this inquiry, "the Court is nowhere compelled to go to trial or to engage in extended proceedings which might have the effect of vitiating the benefits of prompt and less costly settlement through the consent decree process."<sup>1/</sup> Rather,

absent a showing of corrupt failure of the government to discharge its duty, the Court, in making its public interest finding, should . . . carefully consider the explanations of the government in the competitive impact statement and its

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<sup>1</sup> 119 Cong. Rec. 24598 (1973). See also United States v. Gillette Co., 406 F. Supp. 713, 715 (D. Mass. 1975). A "public interest" determination can be made properly on the basis of the Competitive Impact Statement and Response to Comments filed pursuant to the APPA. Although the APPA authorizes the use of additional procedures, 15 U.S.C. § 16(f), those procedures are discretionary. A court need not invoke any of them unless it believes that the comments have raised significant issues and that further proceedings would aid the court in resolving those issues. See H.R. 93-1463, 93rd Cong. 2d Sess. 8-9, reprinted in (1974) U.S. Code Cong. & Ad. News 6535, 6538.

responses to comments in order to determine whether those explanations are reasonable under the circumstances.

United States v. Mid-America Dairymen, Inc., 1977-1 Trade Cas. ¶ 61,508, at 71,980 (W.D. Mo. 1977).

Accordingly, with respect to the adequacy of the relief secured by the decree, a court may not "engage in an unrestricted evaluation of what relief would best serve the public." United States v. BNS, Inc., 858 F.2d 456, 462 (9th Cir. 1988), quoting United States v. Bechtel Corp., 648 F.2d 660, 666 (9th Cir.), cert. denied, 454 U.S. 1083 (1981); see also, Microsoft, 56 F.3d 1448 (D.C. Cir.1995). Precedent requires that

[t]he balancing of competing social and political interests affected by a proposed antitrust consent decree must be left, in the first instance, to the discretion of the Attorney General. The court's role in protecting the public interest is one of insuring that the government has not breached its duty to the public in consenting to the decree. The court is required to determine not whether a particular decree is the one that will best serve society, but whether the settlement is 'within the reaches of the public interest.' More elaborate requirements might undermine the effectiveness of antitrust enforcement by consent decree.<sup>2</sup>

The proposed Final Judgment, therefore, should not be reviewed under a standard of whether it is certain to eliminate every anticompetitive effect of a particular practice or whether it mandates certainty of free competition in the future. Court approval of a final judgment requires a standard more flexible and less strict than the standard required for a finding of liability. "[A] proposed decree must be approved even if it falls short of the remedy the court would impose on

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<sup>2</sup> United States v. Bechtel, 648 F.2d at 666 (internal citations omitted)(emphasis added); see United States v. BNS, Inc., 858 F.2d at 463; United States v. National Broadcasting Co., 449 F. Supp. 1127, 1143 (C.D. Cal. 1978); United States v. Gillette Co., 406 F. Supp. at 716. See also United States v. American Cyanamid Co., 719 F.2d 558, 565 (2d Cir. 1983).

its own, as long as it falls within the range of acceptability or is 'within the reaches of public interest.' (citations omitted)."<sup>3/</sup>

#### VIII. DETERMINATIVE DOCUMENTS

There are no determinative materials or documents within the meaning of the APPA that were considered by the United States in formulating the proposed Final Judgment.


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<sup>3</sup> United States v. American Tel. and Tel Co., 552 F. Supp. 131, 150 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983), quoting United States v. Gillette Co., *supra*, 406 F. Supp. at 716; United States v. Alcan Aluminum, Ltd., 605 F. Supp. 619, 622 (W.D. Ky 1985).

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Dated: July 2, 1997