

Export Control Program Description And Licensing Policy

The revision of export controls on computers will continue to be a high priority for the Administration as improvements in computer technology continue to enhance system performance. Major revisions occurred in February 1994, and again in January 1996. In April 1998, an independent study was completed under a contract funded by the Commerce Department to review computer system improvements and the parameters for measuring performance. The United States Government is reviewing the results of this study for its implications for U.S. export control policy.

Congress added provisions to the National Defense Authorization Act for Fiscal Year 1998 (NDAA), which President Clinton signed on November 18, 1997, requiring exporters to notify the Department of Commerce of their intent to export or reexport high performance computers (HPCs) with a performance capability of between 2,000 and 7,000 million theoretical operations per second (MTOPS) to end-users in countries known in the Export Administration Regulations (EAR) as Tier 3 countries. On February 3, 1998, Department of Commerce revised the EAR through a *Federal Register* notice to implement this new legal requirement. Under the new procedures, the Secretaries of Commerce, Defense, Energy and State, and the Director of the Arms Control and Disarmament Agency have ten days to review each notification. If no agency raises a specific objection to the proposed export or reexport, the exporter may ship. If an agency objects to the transaction, the United States will require a license application. The law also requires the Department of Commerce to perform post-shipment visits on exports of HPCs with a performance capability over 2,000 MTOPS to Tier 3 countries, whether or not a license was required.

The controls in force during 1998, listed by Tier group limits and requirements, are as follows (See Appendix IV for a list of the countries in each Tier group):

Computer Country Tier 1 -- The first level of the sliding scale allows exports to most of the industrialized democracies to proceed without prior government review (i.e. export under a license exception), and with no limitation on MTOPS. Exporters are required to maintain records of shipments. Reexport and retransfer restrictions also apply.

Computer Country Tier 2 -- The second level applies to countries with low risk proliferation and export control records. There is no prior government review for exports of up to 10,000 MTOPS. Reexport and retransfer restrictions apply. Exports above 10,000 MTOPS to these countries require prior government review (an export license).

Computer Country Tier 3 -- The third level applies to countries posing proliferation or other security risks. Licenses are required for computers with a capability above 2,000 MTOPS for

military and proliferation end-uses and users, and at 7,000 MTOPS for all other end-uses and users. As stated above, prior government review under the “NDAA” notification process, is now required for all exports of computers between 2,000 and 7,000 MTOPS intended for civil end users and uses. These computers may be exported without a license, provided no reviewing government agency raises an objection within the first ten days of the reviewing process. If an objection is raised, a license is required. Exporters are required to provide a written report to the government within 30 days of the export of a computer without a license. Using this information and licensing data, the government will perform post-shipment visits on exports of HPCs over 2,000 MTOPS to Tier 3 countries, regardless of whether a license was issued. Reexport and retransfer restrictions apply.

Computer Country Tier 4 -- The fourth level applies to terrorism-supporting countries (Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria). The President decided to continue to deny high performance computers to these destinations. A license is required from Commerce to export or reexport to any end-user in Syria computers with a CTP greater than or equal to 6 MTOPS. Cuba, Iran, Iraq, Libya, North Korea and Sudan are subject to comprehensive trade embargoes and hence U.S. government authorization is required for exports of any computer, regardless of MTOP level, to Cuba, Libya, Iran, Iraq, North Korea, and Sudan, and for reexport of computers with a CTP equal to or above 6 MTOPS to Iran.¹ (The Department of the Treasury's Office of Foreign Assets Control administers these trade embargoes. However, to avoid duplication in license requirements, Commerce and Treasury have allocated licensing responsibility in many instances. Commerce exercises licensing responsibility for exports and reexports to Cuba and North Korea and for reexports to Libya; Treasury exercises licensing responsibility for exports and reexports to Iran and Iraq and for exports to Libya.) Applications to export or reexport controlled computers to designated terrorist supporting countries will generally be denied.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of the computer controls is to prevent the transfer or diversion of computers to end-users who might make unauthorized use of such computers. The controls demonstrate the degree of U.S. concern over illegitimate access to such machines, and assist the United States in its efforts to obtain multilateral cooperation consistent with the U.S.-Japan HPC Agreement.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving the Intended Foreign Policy Purpose. The widespread availability of high performance computers and related technology, and the speed with which the technology level of these items changes and becomes more diffuse, suggest there is a decreasing probability that U.S. export controls will achieve their desired objective.
2. Compatibility with Foreign Policy Objectives. United States policy is to restrict the flow

of goods and technology that would compromise U.S. security and foreign policy interests. Extensive U.S. leadership and participation in various multilateral control groups demonstrate the U.S. commitment in this regard.

3. Reaction of Other Countries. In 1998, the United States and the United Kingdom were the only countries to object to a proposal in the Wassenaar Arrangement to decontrol all computers with performance below 4000 MTOPS. The remaining 31 Wassenaar members supported this decontrol, and some proposed decontrolling computers with even higher performance.

4. Economic Impact on U.S. Industry. In FY 1998, the Department of Commerce approved 75 licenses for high performance computers, valued at \$59.2 million. Of these, eight (8) licenses with a value of \$1.5 million were approvals of “NDAA” notifications for Tier 3 countries that were “objected to” for shipment without a license, and became export license applications. Commerce denied six (6) license applications for high performance computers, valued at \$3.3 million in FY 1998. Three (3) of these denials, at a value of \$1 million, were for “NDAA” notifications that were “objected to” and became license applications. License approvals for Tier III countries routinely take more than ninety days, and as computer performance levels continue to increase, we can expect to see increases in the burden placed on U.S. exporters.

5. Enforcement of Control. Changes in computer technology have increased the difficulty of enforcing these controls. As computers grow smaller, cheaper, more powerful and as maintenance and support requirements decrease, it will become easier to obtain or divert these systems. Very large computers at the higher end of performance remain controllable.

C. Consultation with Industry

The Department of Commerce, through its Information Systems Technical Advisory Committee and the President’s Export Council Subcommittee on Export Administration, has discussed with industry the effect of high performance computer controls. Industry has repeatedly urged that improvements in performance be taken into account in adjusting computer export policy. We are working closely with industry before and during implementation of new reporting requirements under “NDAA”. The Computer industry has expressed in other fora its concerns that the implementation of additional controls on the exports of HPCs could hamper U.S. industry’s ability to conduct legitimate trade and hurt its competitiveness relative to other producer nations who do not have such unique controls in place.

D. Consultation with Other Countries

The United States has actively consulted our allies and friends to ensure that they understand the basis for the controls. The United States is working particularly closely with Japan and others in the Wassenaar Arrangement, to explain that our controls are consistent with the basic foundations and principles already agreed in these negotiations. As noted above, the U.S. was the only nation

to oppose raising the decontrol threshold from 2000 to 4000 MTOPS in Wassenaar.

E. Alternative Means

The United States will continue to use diplomatic efforts to discourage other countries from engaging in activities which the controls address, and to consult with other supplier countries about adhering to multilateral export controls. However, these efforts can only supplement, not replace, the effectiveness of actual export controls.

F. Foreign Availability

A number of computer manufacturers exist outside the U.S. In addition to subsidiaries of U.S. computer manufacturers, other manufacturers are located in Canada, Japan, Europe, and Asia. In Europe, Germany, France, the U.K. and Switzerland indigenously manufacture computers which compete with those of the U.S. In Asia, India is a significant producer and capabilities also exist in Taiwan and Singapore, where export controls resembling those of the U.S. do not exist. Most of the systems indigenously produced in Europe and Asia have computing powers that are less than 5,000 MTOPS to target a portion of the HPC market that is large and affordable. The Japanese have concentrated on manufacturing higher end HPCs that compete directly with those of the U.S. Yet, for more powerful HPCs over 5,000 MTOPS, the U.S. dominates the world market. However, the threat of competition is strong for lower end systems below 5,000 MTOPS, which provides some insight to the types of systems for which the U.S. is most vulnerable to lose market share if unable to compete in the world market. The evidence supports the conclusion that the U.S. is not a monopolist in this industry. Others have the capability to produce, and will likely improve on this capability if afforded the opportunity to do so. This supports the findings of the 1995 and 1998 Stanford University studies.

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ENDNOTES

- 1. The scope of the embargo as pertains to reexports to Sudan has not been determined as of the submission of this report.*