

CRS Report for Congress

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Export Administration Act of 1979 Reauthorization

Updated March 11, 2002

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Summary

The Export Administration Act of 2001 was introduced on January 23, 2001. Hearings were held by the Senate Banking, Housing, and Urban Affairs Committee, and the bill, S. 149, was reported for consideration by the full Senate by a vote of 19-1 on March 22, 2001. The Senate debated the measure on September 4-6, and it passed 85-14 with three amendments. A companion version in the House, H.R. 2581, was introduced by Rep. Gilman on July 20, 2001. The House International Relations Committee reported the measure with 35 amendments on August 1. The House Armed Services Committee further amended H.R. 2581 on March 6, 2002. The Export Administration Act of 1979 expired on August 20, 2001, however the President extended export control authority and the Export Administration Regulations by invoking the International Emergency Economic Powers Act.

Through the EAA, Congress delegates to the executive branch its express constitutional authority to regulate foreign commerce. When the legislation last lapsed in 1994, the President kept the export administration regulations in force by executive order under emergency authority, as has been done in the past. The current EAA authorizes the President to establish export licensing mechanisms for items detailed on the Commerce Control List (CCL), and it provides some guidance and places certain limits on that authority. The CCL currently provides detailed specifications for about 2400 dual-use items including equipment, materials, software, and technology (including data and know-how) likely requiring some type of export license from the Commerce Department's Bureau of Export Administration. The CCL is periodically updated to decontrol broadly available items and to focus controls on critical technologies and on key items in which the targeted countries are deficient. Exports of defense articles are regulated separately by the State Department under the Arms Export Control Act.

In debates on export administration legislation, parties often fall into two camps: those who primarily want to liberalize controls in order to promote exports, and those who are apprehensive that liberalization may compromise national security goals. While it is widely agreed that exports of some goods and technologies can adversely affect U.S. national security and foreign policy, many believe that current export controls are detrimental to U.S. business, that the resultant loss of competitiveness, market share, and jobs can harm the U.S. economy, and that the harm to particular U.S. industries and to the economy itself can negatively impact U.S. security. Controversies arise with regard to the cost to the U.S. economy, the licensing system, foreign availability of controlled items, and unilateral controls as opposed to multilateral regimes. In the last few years, congressional attention has focused on high-performance computers, encryption, stealth technology, precision machine tools, satellites, and aerospace technology. Congress has several options in addressing export administration policy, ranging from approving no new legislation to rewriting the entire Export Administration Act. Among the options presented in this report are: allow the President to continue export controls under emergency authority, restore the EAA 1979 with increased penalties, or, rewrite the Export Administration Act to account for changing national security concerns and a globalized economy.

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Export Administration Act of 1979 Reauthorization

Introduction

The 107th Congress has shown an interest in revising the Export Administration Act of 1979 (EAA). This Act, which last expired in 1994, was reauthorized until August 20, 2001 at the end of the 106th Congress (H.R. 5239, P.L. 106-508). On August 17, 2001, President Bush continued export control authority and the Export Administration Regulations (EAR) under the International Emergency Economic Powers Act (IEEPA). The Export Administration Act of 2001 (S. 149) was introduced by Senator Mike Enzi on January 23, 2001. This bill and companion House legislation (H.R. 2581 introduced by Rep Benjamin Gilman on July 20, 2001) would delegate from Congress to the executive branch its express constitutional authority to regulate foreign commerce. This delegation of export controls has traditionally been temporary, and when it has lapsed, the President has declared a national emergency and maintained export control regulations under the authority of an executive order. The EAA, which was written and amended during the Cold War, focuses on the regulation of exports of those civilian goods and technology that have military applications (dual-use items). Export controls were based on strategic relationships, threats to U.S. national security, international business practices, and commercial technologies that have changed dramatically in the last 20 years. Many Members of Congress and most U.S. business representatives see a need to liberalize U.S. export regulations to allow American companies to engage in generally unrestrained international competition for sales of high-technology goods. But, there are also many Members and national security analysts who contend that liberalization of export controls over the last decade has contributed to foreign threats to U.S. national security, that some controls should be tightened, and that Congress should weigh further liberalization carefully.

While EAA authorizes the Department of Commerce to regulate U.S. exports of most dual-use commodities in consultation with the Department of Defense and other agencies, several other U.S. government agencies regulate exports of specified goods and technologies. For example, the Department of State must approve exports of defense articles and defense services that are identified on the U.S. Munitions List, which includes some dual-use items such as commercial communication satellites. See the box below for a list of other government organizations involved in export administration.

The Evolution of the Export Administration Act

1949-2002

Export controls in time of war have been an element of U.S. policy since the earliest days of the republic.¹ The end of WWII, however, ushered in a new era in which export control policy would become an extensive peacetime undertaking. The start of the cold war led to a major refocusing of export control policy on the Soviet-Bloc countries. Enactment of the Export Control Act of 1949 was a formal recognition of the new security threat and of the need for an extensive peacetime export control system.

The 1949 Act identified three possible reasons for imposing export controls. Short-supply controls were to be used to prevent the export of scarce goods that would have a deleterious impact on U.S. industry and national economic performance. Foreign policy controls were to be used by the President to promote the foreign policy of the United States. The broad issues of regional stability, human rights, anti-terrorism, missile technology, and chemical and biological warfare have come to be served by these controls.

National security controls were to be used to restrict the export of goods and

Other U.S. Government Departments and Agencies with Export Control Responsibilities

Department of Commerce, Patent and Trademark Office for Patent Filing Data

Department of State for Exports of Defense Articles and Defense Services

Department of Energy for Exports of Nuclear Technology and Technical Data for Nuclear Weapons and Special Nuclear Materials; and Natural Gas and Electric Power

Nuclear Regulatory Commission for Exports of Nuclear Materials and Equipment

Department of Treasury for Foreign Assets and Transactions; and Trafficking in Alcohol, Tobacco, Firearms, and Explosives

Department of Justice, DEA for Drugs, Chemicals, Precursors, Controlled Substances

Department of Interior for Fish and Wildlife/Endangered Species

Department of Health and Human Services, PHS, FDA for Drugs, Investigational Drugs, Biologics, and Medical Devices

Department of Transportation for American Carriers Destined to North Korea; and U.S. Vessels over 1,000 Gross Tons

Federal Maritime Commission for Ocean Freight Forwarders

Environmental Protection Agency for Pollutants, Hazardous Materials

¹In the first half of this century, war or the imminent threat of war led to the Trading With The Enemy Act of 1917 and the Neutrality Act of 1935. In 1940, Congress increased presidential power over the export of militarily significant goods and technology with the passage of Public Law 703, "An Act to Expedite and Strengthen the National Defense." In each of these instances the rationale for control was the necessity of not giving aid and comfort to the nation's enemies.

technology, including nuclear non-proliferation items, that would make a significant contribution to the military capability of any country that posed a threat to the national security of the United States.

Coincident with the establishment of the post-war U.S. export control regime was the establishment of a multilateral counterpart involving our NATO allies. The large amount of critical technology being transferred from the United States to the NATO allies, and the growing capability for technological development by the allies themselves required the establishment of a multilateral control regime. Toward this end, the Coordinating Committee for Multilateral Export Controls (CoCom) was established in 1949. CoCom controls were not a mirror image of U.S. controls but generally did reflect a uniformly high level of restrictions.

With little change in the perceived threat, the Export Control Act was renewed largely without amendment in 1951, 1953, 1956, 1958, 1960, 1962, and 1965. With the onset of the era of “detente” in the late 1960's there occurred the first serious reexamination and revision of the U.S. export control system. At this time, the growing importance of trade to the U.S. economy and those of our allies began to exert significant political pressure for some liberalization of export controls. Congress passed the Export Administration Act of 1969 to replace the near-embargo characteristic of the Export Control Act of 1949. The continued to shift of policy toward less restrictive export controls continued in the renewal of the Act in 1974, 1977, 1979, 1985, and some moderate further liberalization occurred in the following years.

The collapse of the Soviet Union in 1989, an event partially attributable to the success of U.S. cold war export control policy, marked a dramatic change in the nature of the external threat the United States now faces. Over the course of the Bush and Clinton Administrations, the export control system has been reduced in scope and streamlined, but the basic structure of the law remains intact. There are many who see a need to revamp the Act, whether to enhance exports, to shift the focus to current national security threats, or to increase penalties for violations.

The dissolution of CoCom in 1994 and its replacement by the Wassenaar Arrangement in 1997, also significantly changed the export control environment.² This new multilateral arrangement is more loosely structured than CoCom, allowing much wider variance between what is controlled by the United States and other members of the arrangement. Generally more liberal control practices abroad raise important questions about the ultimate effectiveness of U.S. export controls (under either the current or a revised EAA) in achieving national security objectives and the fairness of unilateral controls to American industry.

A lack of consensus on key issues has meant that Congress has not been able to agree on measures to reform the Export Administration Act that have been introduced since the 101st Congress. The export control process was continued from 1989-1994 by temporary statutory extensions of EAA79 and by invocation of the International

²For details on Wassenaar, see CRS Report 95-1196, *Military Technology and Conventional Weapons Export Controls: The Wassenaar Arrangement*, by Richard F. Grimmett.

Emergency Economic Powers Act (IEEPA). Thereafter, export controls were continued for six years under the authority of Executive Order No. 12924 of August 19, 1994, issued under IEEPA authority. Many of those who favor reforming the Act, whether to liberalize or tighten controls, contend that operating under IEEPA imposed constraints on the administration of the export control process and made it vulnerable to legal challenge, thus undermining its effectiveness. Legislation passed by the House and Senate and signed by the President on November 13, 2000 (P.L. 106-508) extended the EAA of 1979 until August 20, 2001, temporarily removing the need to operate the export control system under IEEPA powers.³

Legislation to rewrite the Export Administration Act was introduced in the 104th-106th Congress. In the 104th Congress, the House passed the Omnibus Export Administration Act of 1996 (H.R. 361) on July 16, 1996, after hearings and consideration by the Committee on International Relations, the Committee on Ways and Means, and by the Committee on National Security. On July 17, 1996, the bill was received by the Senate and referred to the Committee on Banking, Housing and Urban Affairs, which held a hearing but took no further action. In the 106th Congress, the Export Administration Act of 1999 (S. 1712) was introduced by Senator Michael P. Enzi. On September 23, 1999 the Senate Banking Committee voted unanimously (20-0) to report this legislation to the Senate floor. Action by the Senate on S. 1712 was not taken due to the concerns of several Senators about the bill's impact on national security.

The Export License Review Process Under the Export Administration Regulations (EAR)

The EAA and the implementing Export Administration Regulations (EAR) establish policies and procedures for the regulation of exports and set out which items need to be licensed for export to which destinations. Many of the current procedures were established by executive orders and regulations. The proposed Act (S. 149) would modify certain procedures and codify them. The Commerce Control List (CCL) currently provides detailed specifications for about 2400 dual-use items including equipment, materials, software, and technology (including data and know-how) likely requiring some type of export license. In many cases, items on the CCL will only require a license if going to a particular country. Yet some products, even if shipped to a friendly nation, will require a license due to the high risk of diversion to an unfriendly destination or because of the controversial nature of the product. The end-use and the end-user can also trigger a restriction. The CCL is periodically updated (with the benefit of significant input from other government agencies) to decontrol broadly available items and to focus controls on critical technologies and on key items in which the targeted countries are deficient. A major revision of the EAR was completed in 1996. It streamlined the licensing process and provided that exporters could follow a step-by-step process to determine whether a license was needed.

The task of the Bureau of Export Administration (BXA) of the Department of Commerce is to provide a complete analysis of each of the 10 to 12 thousand license

³See Appendix 1 for issues concerning IEEPA.

applications received each year, reviewing not just the item in question but also its stated end use, as well as the reliability of each party to the transaction.⁴ Within 9 days of receipt of the license application, BXA must notify the applicant as to whether the application is accepted, denied, in need of more information, or is being referred to other agencies for review. In practice, about 85% of all applications for a license are referred to other government agencies for evaluation, extending the length of the review process.

The current regulations give the Departments of Defense, Energy, and State a direct and equal role in the review of all license application submitted to the BXA. The interagency review process is facilitated by the use of several established interagency groups that provide broad expertise and help give a timely interagency consultation.

When review of a license application by another agency is requested by BXA, regulations give a set time table and procedure for that process. Within 10 days of such referral the receiving agency must advise BXA of any information deficiencies in the application. (Time taken to find such information does not count against the total allowed processing time). Within 30 days of the initial referral the reviewing agency will give BXA a recommendation to grant or deny the license application. If no recommendation is made within the 30-day period the reviewing agency will be deemed to have no objection to the license decision of BXA. If there is interagency disagreement the EAR contains a three tiered dispute resolution process set with explicit time limits for each stage of that process.⁵ Disagreements arise on about 6% of all license applications, and approximately 93% of all such disputes are resolved by consensus at the first tier.

BXA's goal is to make a decision on all license applications no latter than 90 days from the date of registration with the BXA. The recent goal of the BXA review process has been to use strict time limits mixed with extensive inter-agency review to assure an expedited, but thorough review process. BXA reports that 96% of all license applications are processed and resolved within the 90-day time limit.⁶ Interagency review typically takes less time than allowed in the regulations. But, if an agency needs more time for a thorough review it has the option of "stopping the clock."

⁴For current rules governing the export license review process see Executive Order 12981, "Administration of Export Controls," December 5, 1995.

⁵The first tier is the Operating Committee (OC) chaired by BXA, which makes an initial determination. Appeals from this committee's decision must be made in five days by a Presidential appointee. The next level of appeal is to the Advisory Committee on Export Policy (ACEP). That committee makes a decision within 11 days of the receipt of the appeal. Appeals from the ACEP decision must be made in 5 days by a presidential appointee to the Secretary of Commerce (Secretary) who also serves as the chair of the Export Administration Review Board (EARB). The EARB renders a decision within 11 days of receipt of the appeal. ACEP and EARB decisions are based on a majority vote. After this point the dissenting agency can, within 5 days, appeal the decision to the President.

⁶See testimony of R. Roger Majak, Assistant Secretary for Export Administration, DOC. Before the Subcommittee on International Affairs, U.S. Senate, April 14, 1999.

BXA's denial of an export license must be explicitly supported by the statutory and regulatory basis for the denial, giving specific considerations and what modifications would allow BXA to reconsider an application. An explicit appeal procedure is specified in the EAR. One possible basis for appeal is an "assessment of foreign availability." If the item in question can be shown to be readily available from a non-U.S. source in sufficient quantity and of comparable quality then a license denial may, in some cases, be reversed.

In deciding the manner in which to restrict exports of goods and technologies, and to which destinations, current policy calls for consideration of several factors: a) the potential contribution of the export to the ability of the recipient to threaten U.S. security interests,⁷ b) the importance of the goods or technology to U.S. military forces and the extent to which they "would permit a significant advance in a military system" of a threatening country,⁸ c) the likelihood that the recipient will divert the export to another party who poses a threat to U.S. security, and d) the ability of the United States, in conjunction with other countries or multilateral regimes, to prevent the proposed recipient from obtaining identical or similar goods.

Based on the evaluation of these and other criteria, the U.S. government regulates exports using a range of approaches:

- Embargo or regulation of exports of certain commodities to all countries,
- Embargo or regulation of exports of most commodities to certain countries,
- Prohibition of exports of few sensitive commodities to particular countries,
- Requirement for a license to export particular commodities to particular countries,
- Requirement to name and verify the end use and end user of certain exports,
- Unrestricted exports of most commodities to most countries,
- Facilitation of certain exports to certain destinations.

⁷Under the "catchall provision," the export of any item controlled by the Export Administration Regulations (EAR), whether it is on the CCL or not, that is destined for an end-use or end-user engaged in the development or production of weapons of mass destruction or missiles, must be licensed. See 15 C.F.R. 744 regarding the licensing of EAR 99 items, not included on the CCL.

⁸Section 5(d) EAA requires the Secretaries of Defense and Commerce to list and regulate exports of "Militarily Critical Technologies." The law requires emphasis be given to a) arrays of design and manufacturing know-how, b) keystone manufacturing, inspection, and test equipment, c) goods accompanied by sophisticated operation, application, or maintenance know-how, and d) keystone equipment which would reveal or give insight into the design and manufacturing of a U.S. military system, which are not available to threatening countries. The list can be seen at [<http://www.dtic.mil/mctl/>].

Issues Concerning IEEPA

When EAA79 expired in September 1990, President Bush extended existing export regulations by executive order, invoking emergency authority contained in the International Emergency Economic Powers Act (IEEPA).⁹ As required by IEEPA, the President first declared a national emergency “with respect to the unusual and extraordinary threat to the national security, foreign policy and economy of the United States” posed by the expiration of the Act. IEEPA-based controls were later terminated during two temporary EAA extensions enacted in 1993 and 1994 as Congress attempted to craft new export control legislation.¹⁰ After the second extension expired in August of 1994, President Clinton reimposed controls under IEEPA.¹¹ During this period, a major restructuring and reorganization of export control regulations was published as an interim rule in the March 23, 1996 *Federal Register*. These controls remained in effect until November 11, 2000 when the authority of EAA79 was again extended until August 20, 2001¹², when emergency controls were renewed by President Bush pursuant to Executive Order 13222. A measure to temporarily reauthorize and extend the Export Administration Act of 1979, H.R. 3189, passed the House of Representatives under suspension of the rules on November 27, 2001. The Senate did not act on the measure in the 2001 session. During the last period in which export controls were continued in this manner, several deficiencies were noted including:

- Penalty authorities under IEEPA are substantially lower than under the EAA and thus have less of a deterrent effect. IEEPA limits civil penalties to \$10,000, willful violations to \$50,000, and 10 years imprisonment if the violator is an individual or corporate officer who has knowingly participated in a violation. Equivalent penalties under the EAA limit civil penalties to \$10,000, or \$100,000 for violations involving national security controls, and willful violation to \$250,000 and 10 years imprisonment for individuals and \$1 million or 5 times the value of exports for firms. Even the higher EAA penalties have lost some of their deterrent effect due to erosion by inflation.
- The police power of enforcement agents lapsed with the EAA. Under IEEPA, these agents must obtain Special Deputy U.S. Marshal status in order to function as law enforcement officers, a complication that consumes limited resources better used on enforcement.
- IEEPA does not authorize the President to limit the jurisdiction of federal courts and thus does not permit him to extend the EAA’s general denial of judicial review. In addition, IEEPA does not have an explicit confidentiality

⁹50 U.S.C. §§ 1701 *et seq.* See Exec. Order No. 12730, 55 Fed. Reg. 40373 (1990).

¹⁰P.L. 103-10; P.L. 103-277.

¹¹“Continuation of Export Controls,” Exec. Order No. 12924, 59 Fed. Reg. 43437 (1994); Message from the President, Sept. 11. 1998, “Continuation of National Emergency Regarding the Lapse of the Export Administration Act of 1979,” Ex. Com. 10845, H. Doc. 105-303.

¹²P.L. 106-508.

provision to authorize protection from public disclosure of information pertaining to the export license applications and enforcement.

- The IEEPA does not explicitly authorize the executive to implement provisions to discourage compliance with foreign boycotts against friendly countries.
- The United States sends the wrong message to other countries by not enacting appropriate legislation. Although the United States has been urging countries such as Russia, Kazakhstan, Ukraine, and China to strengthen their export control laws and implementing regulations, this country's basic law expired and U.S. credibility is diminished by its lack of a statute.¹³

Legislation in the 107th Congress

On January 23, 2001, Senator Michael P. Enzi introduced the Export Administration Act of 2001 (S. 149). Hearings were held on this legislation by the Senate Banking Housing and Urban Affairs Committee in February 2001, and the measure was reported favorably to the Senate by a vote of 19-1 on March 22. The Senate debated the legislation on September 4-6, 2001, and it was approved 85-14.

The Senate bill was adopted with three amendments approved by voice vote. One amendment expands the authority of the Secretary of Commerce to deny licenses to end-users of a country that has not allowed post-shipment verifications. The amendment allows the Secretary to deny a license for any item determined to be "of equal or greater sensitivity" than the item for which a PSV was denied. Another amendment changed the standard for determining a foreign availability exemption. In order to qualify for a foreign availability exemption, "directly competitive" items must be available abroad. The amendment changed the definition of "directly competitive" from "not substantially inferior" to "of comparable quality." The manager's amendment (1) specified that EAA provisions would not conflict with the Trade Sanctions Reform and Export Enhancement Act of 2000 (Title IX, P.L.106-387), (2) required a report to Congress on the export of equipment that could be used for torture, (3) clarified license procedures and confidentiality provisions, and (4) established EAA jurisdiction over civilian aircraft equipment.

On May 23, June 12, and July 11 the House International Relations Committee (HIRC) held hearings on export control legislation. On August 1, 2001, the Committee reported H.R. 2581 with 35 amendments. The House Armed Services Committee held hearings on February 28, 2002 and marked-up and reported out the legislation on March 6, 2002 by a vote of 44-6.. Below are the common provisions of S. 149/S. 2581, followed by sections highlighting differences between S. 149 and current law, differences between S. 149 and H.R. 2581, and changes made to H.R. 2581 by the House Armed Services Committee.

¹³Testimony of William A. Reinsch the Under Secretary for Export Administration, Department of Commerce on the Reauthorization of the Export Administration Act of 1979 (EAA), before the Senate Committee of Banking, Housing and Urban Affairs, Subcommittee on Trade and International Finance, on January 20, 1999.

General Authority (Title I). The bill would authorize the Secretary of Commerce (Secretary) to establish a Commerce Control List of items subject to license or authorization for export, and to establish licensing, recordkeeping, or reporting procedures for exports controlled by the legislation. The Secretary may specify types of licenses and authorizations including licenses for specific exports, licenses for multiple exports, notification in lieu of license, or license exceptions. It exempts from license requirements the export of after-market services, replacement parts, or incidental technology under certain circumstances (Sec. 101). The President may delegate authority under this act to agencies and officials of the government as he sees fit, except that the President may not delegate authority to officials or agencies whose head is not appointed by the Senate, or may not delegate authority to overrule or modify actions made by the Secretary of State, Commerce, or Defense (Sec. 102). The Secretary is required to keep the public fully informed of changes in export control policy and procedures instituted under this Act and to consult regularly with representatives of business, labor, and interested citizens (Sec.103), including by the establishment of export control advisory committees, organized by the category of items being controlled by the Act. The Committees shall advise the Secretary, and any other appropriate department, agency, or Government official, on actions (including all aspects of controls imposed or proposed) designed to carry out this Act with respect to such items (Sec. 105). The legislation authorizes the President to establish a President's Technology Export Council to advise him on the implementation, operation, and effectiveness of this Act (Sec. 106). The Technology Export Council is a new entity that may supercede the President's Export Council, Subcommittee on Export Controls. Section 107 prohibits the charging of a fee for the processing of an application for an export license issued under this Act.

National Security Export Controls (Title II). The bill would authorize the President to prohibit, to curtail, or to require a license for the export of any item for national security purposes (Sec. 201) and directs the Secretary, with the concurrence of the Secretary of Defense, to establish a National Security Control List (NSCL) within the Commerce Control List (Sec. 202). The NSCL is a new feature of the current legislation. S. 149 would focus controls on the current threats to national security, such as proliferation of weapons of mass destruction and terrorism (although detailed provisions regarding terrorism are included under foreign policy controls), rather than communist countries. The President would be directed to establish a country tier system and assign each country to a tier for each item controlled for national security purposes (Sec. 203). Country tiers are employed in the Export Administration Regulations, but EAA79 only required the establishment of a list of controlled countries. The 2001 Act limits restrictions on exports of incorporated parts and components where the controlled content is essential to the functioning of the good or comprising 25% or less of the total value of the item. Restrictions limiting exports of U.S. parts and components were not in EAA79. S. 149 restricts the re-export of items that incorporate controlled U.S. content valued at 25% or less of the total value of the items, or valued at 10% for countries identified as supporting terrorism (Sec. 204). EAA79 contained the 25% re-exports threshold for goods incorporating United States content, but it did not differentiate among countries based on terrorism. If the President determines that decontrol of an item subject to foreign availability, mass market status, or re-export criteria constitutes a significant threat to national security, the item can be controlled under the enhanced control provision (Sec. 201). Like EAA79, Title II does not explicitly prohibit any export, nor does it

direct the administration to deny a license application for any reason, nor does it require a license for any commodity to any end-user in the interest of national security. The determination of the goods and destinations subject to control are left to the discretion of the executive branch.

Mass Market and Foreign Availability. The bill would charge the Secretary with determining on a continuing basis whether any item currently subject to export control for reasons of national security meets specified criteria for mass market or foreign availability status. Mass market status is applied to items produced or made available for sale in large volume or to multiple buyers. Also considered are the item's manner of distribution; its conduciveness to commercial shipping; or its usefulness for intended purposes without modification or service. EAA79 did not provide for decontrol of items based on mass market criterion. Foreign availability in the new proposal is defined as a good that is available to controlled countries from sources outside the U.S. in sufficient quantities and comparable prices (Sec. 211). If an item meets either of these criteria, it would be removed from the national security control list. Such a determination can be requested by any interested party (Sec. 205). Previously under EAA79, a foreign availability determination could only be brought by a license applicant or by the initiative of the Secretary. Under the new legislation, the President would be given the power to set aside a foreign availability determination for reasons of national security, when there is a high probability that foreign availability can be eliminated through multilateral negotiations, or to fulfill international obligations. If those negotiations fail or agreement cannot be reached within 18 months, the set-aside would end (Sec. 212). The President may also set-aside a mass-market determination for reasons of national security or to fulfill international obligations. The President must review this determination every six months (Sec. 213).

Foreign Policy Export Controls (Title III). The legislation would authorize the President to control exports for the purpose of promoting foreign policy objectives (such as peace, stability, and human rights) and deterring and punishing terrorism. The bill would place several requirements, limitations, and prohibitions on the use of such controls including a prohibition on controlling re-exports for foreign policy purposes; it would generally prohibit controlling items subject to a binding contract (Sec. 301); it would require 45 days notice and consultation before imposing a control (Sec. 302); it would require the President to clearly state objectives and criteria for controls which would be reported to Congress (Sec. 303-304); and it would require the President to review all such controls every two years (Sec. 307). Foreign policy controls under EAA79 expired after one year unless extended by the President. S. 149 would allow the President to impose controls prior to notifying Congress in particular situations (Sec. 306); it would allow the President to terminate any such control not required by law (Sec. 308); and it would allow the President to impose controls to comply with international obligations (Sec. 309). It requires a license for the export of certain items to countries that support international terrorism (Sec. 310). Under S. 149, missile technology, chemical, and biological weapons proliferation items would be covered by national security controls rather than foreign policy controls as under EAA79. Additionally, under EAA79 foreign policy controls were not authorized for sales of medicine or medical supplies, donations of food, medicines, seeds, and water resource equipment intended to meet basic human needs, or for sales of food if the controls would cause malnutrition or hardship.

License Review Process (Title IV). The bill would establish a license review mechanism similar to the current process, but with a notable difference. The current regulations (created by Executive Order 12981, December 5, 1995) specify that the Departments of Defense, State, and Energy have the authority to review any license application submitted to the Department of Commerce. S. 149, in contrast, specifies referral by the Secretary to the Department of Defense and other departments and agencies as the Secretary considers appropriate. The bill would make statutory current rules that subject application review to a strict time schedule by allowing 30 days for interagency review. This time schedule can be interrupted if agencies need additional information on an application, but such delays also have specified time limits (Sec. 401). Like the current process, if there is no agreement by the reviewing agencies, the license is referred to an interagency dispute resolution process. S. 149 specifies that the initial level of this process be a committee chaired by a designee of the Secretary who would have the authority to make a decision on the license application after consideration of the positions of the agencies. This decision can be appealed to a higher level of review, but only by a Presidential appointee. S. 149 does not specify the form of higher levels of the dispute resolution process, but it does stipulate that decisions at higher levels be made by majority vote and that the whole appeals process be completed or referred to the President within 90 days of the initial referral by the Department of Commerce (Sec. 402).

Multilateral Arrangements, Penalties and Enforcement (Title V). The multilateral arrangement provisions encourage U.S. participation in multilateral export control regimes. The section directs the President annually to report on the effectiveness of, and to seek certain objectives concerning, the multilateral export control system (Sec.501). The foreign boycott provisions direct the President to issue regulations prohibiting the participation in boycotts against countries friendly to the U.S. (Sec.502).

The legislation would authorize substantially higher criminal penalties than those contained in the EAA and IEEPA (Sec. 503). Willful violations by individuals would be punishable by a fine of up to 10 times the value of the exports involved or \$1,000,000 (whichever is greater), imprisonment of up to 10 years, or both, for each violation. Willful violations by firms would be punishable, for each violation, by up to 10 times the value of the exports involved or \$5 million, whichever is greater. Individuals and firms convicted of an offense would also be required to forfeit to the United States property interests and proceeds involving the violative exports, subject to procedures set out in the forfeiture chapter of Title 18 of the U.S. Code. The proposed S. 149 would significantly raise civil penalties as well, allowing the Secretary to impose a fine of up to \$500,000 for each violation, in addition to, or instead of, any other liability or penalty. As under current law and regulations, the Secretary could also deny the export privileges of a violator and exclude any person acting in a representative capacity from practicing before the Commerce Department in an export matter. Persons convicted under other named statutes (e.g., IEEPA, Arms Export Control Act) could also be denied export privileges by the Secretary for up to 10 years, as could persons associated with the violator (Sec 503).

The bill requires the imposition of sanctions against persons who violate regulations issued pursuant to a multilateral export control regime, and other sanctions against persons who engage in the proliferation of missiles, chemical

weapons, or biological weapons. (Sec 504,505). Post-shipment verifications (PSV) are authorized for exports involving the greatest risk to national security. The Secretary shall deny licenses to any end-user refusing a PSV, and may deny a license for that item to any country in which a PSV is refused (Sec 506).

Civil penalties could only be imposed after notice and a hearing and would be subject to judicial review in accordance with provisions of the Administrative Procedure Act. The bill would authorize the Secretary to impose temporary orders denying a person's export privileges in a broader range of circumstances than permitted under EAA79, allowing the Secretary to act where there was reasonable cause to believe that a person was engaged in or about to engage in activity violating the EAA, a criminal indictment had been returned alleging a violation of the new EAA, or one of the statutes whose violation may result in a denial of export privileges. While temporary denial orders could be imposed without a hearing, affected persons would have a limited right of administrative appeal and judicial review (Sec. 507).

Export Control Authority and Delegation (Title VI). This section authorizes the Secretary to delegate authority to an Undersecretary for Export Administration, to create the positions of Assistant Secretary for Export Administration and an Assistant Secretary for Export Enforcement, and to issue regulations to carry out the Act (Sec 601). The confidentiality of proprietary information disclosed for license application purposes is protected (Sec.602)

Miscellaneous Provisions (Title VII). The Title repeals Subtitle B, Title XII, Division A of National Defense Authorization Act of 1998. This repeals the Act's requirement for exporters to seek prior approval of exports or reexports of computers above a certain MTOP threshold to certain countries, and the requirement to conduct post-shipment verification of HPCs to certain countries including China (Sec.704).

Changes from Current Law

- **Expiration Date.** EAA79 was statutorily authorized for ten years. S. 149, as reported, expires on September 30, 2004 unless the President reports on the Act's implementation, the operation of U.S. export controls and provides to Congress legislative reform proposals, or certifies that the Act is satisfactory. H.R. 2581 terminates the authority of the Act on December 31, 2005.
- **National Security Control List.** S. 149 creates a separate list for items on or subject to the CCL controlled for national security purposes, to prevent proliferation of WMD, or to deter acts of international terrorism. Under the new legislation, the CCL would include both items on the NSCL and items controlled under foreign policy controls. EAA79 directed the Secretary of Defense to identify sensitive technologies and create a Military Critical Technologies List (MCTL) that was integrated into the CCL; **the current legislation does not mention a MCTL, nor does it require the maintenance of such a list by the Secretary of Defense.**

- **Mass Market Status.** S. 149 provides for the decontrol of items determined to have mass market characteristics. Mass market status is applied to items produced or made available for sale in large volume or to multiple buyers. Also considered are the item's manner of distribution; its conduciveness to commercial shipping; or its usefulness for intended purposes without modification or service. It directs the Secretary to determine on a continuing basis whether items on the national security control list have mass market status. EAA79 provides for a foreign availability determination, but not for a mass market determination.
- **Re-exports of goods incorporating United States content.** S. 149, as reported, would exempt from license requirements re-exports of foreign produced goods incorporating less than 10% U.S. parts or components to terrorist countries (Sec. 204), a provision not in EAA79.
- **Foreign Availability and Mass-Market Determinations.** S. 149 allows any interested party to petition the Secretary to make a foreign availability or mass-market determination. Under EAA79, only the Secretary or an license applicant can petition for a foreign availability determination. S. 149 also provides for the establishment within the Department of Commerce of an Office of Technology Evaluation to provide analysis and information to the Secretary to make such determinations.
- **Foreign Policy Controls.** Under S. 149, missile technology, chemical and biological weapons proliferation items would be covered by national security controls rather than foreign policy controls as under EAA79. This change would exempt these items from foreign policy control restrictions, yet on the NSCL they might be subject to decontrol under foreign availability or mass market criteria. S. 149 increases the duration of foreign policy export controls from one to two years.
- **Short Supply Controls.** EAA79 authorized restriction on the export of goods and technology to protect domestic industry from shortages of scarce materials and the inflationary impact of foreign demand. These controls are not in S. 149.
- **License Categories.** S. 149 creates a new license category, the notification in lieu of license (Sec. 101(b)(3)) that would permit specific or multiple exports with notification to the Department if advanced notification is filed in accordance with regulations to be prescribed by the Secretary.
- **Controls on High Performance Computers.** S. 149, as reported, repeals provisions of the National Defense Authorization Act of 1998 that set licensing standards and reporting requirements for high performance computers by the millions of theoretical operations per second (MTOPS) standards.¹⁴

¹⁴See page 19 for additional information on high performance computer export controls.

Differences between H.R. 2581 and S. 149

The House version of the Export Administration Act, H.R. 2581, was introduced on July 20, 2001. It was identical to S. 149, except for the additions of provisions related to oversight of nuclear transfers to North Korea. At the markup session on August 1, the House International Relation Committee passed the legislation with 35 amendments. Among the changes that now distinguish H.R. 2581 from S. 149 are:

- **Deemed Exports.** H.R. 2581 specifically defines the term ‘export’ to include ‘deemed exports’. (Sec. 2). It requires the Secretary to issue regulations governing release of technology to foreign nationals.(Sec. 601)
- **End Use and End User Controls.** H.R. 2581 requires the Secretary to establish and maintain a list of end users of concern and items subject to control (Sec. 201(c)). It mandates a presumption of denial for items that materially contribute to an end user’s ability to engage in proliferation of weapons of mass destruction, or for items that would contribute to a country’s ability to undermine a region or pose a threat to the U.S. or its allies. (Sec. 201(c))
- **Presumption of Denial for Certain Licenses.** The bill mandates a presumption of denial for items requiring licenses on the National Security Control List if there is a significant risk (1) an item would contribute to a nation’s capacity to produce or deliver weapons of mass destruction; (2) an item would be used to undermine regional stability or would prove detrimental to the national Security of the United States or its allies; (3) an item would be subject to diversion or unauthorized use. (Sec. 201(e))
- **Communications Satellites.** The House measure would transfer jurisdiction for licenses of commercial communications satellites from the State Department to the Commerce Department.
- **National Security Control List.** The President is granted authority to identify items to be included on the National Security Control List(Sec. 201(d)). Requires that the Secretary seek concurrence of the Secretary of State in identification of items and modification of the NSCL. (Sec. 202(a)(3))
- **Country Tiers.** The bill modifies and adds certain criteria in establishing a country’s tier position. It modifies one assessment factor by adding a country’s goals and intentions regarding weapons of mass destruction and compliance with multilateral export control regimes as a criterion. It adds adherence to multilateral export control regimes as an assessment factor. (Sec. 203(c))
- **Foreign Availability and Mass Market Petitions.** The House version provides that the Secretaries of Defense, State and other agencies must be notified of a petition for a foreign availability or mass market determination. If an objection is made to this petition from another agency, it must be resolved through the interagency dispute resolution process (Sec. 211(b)). The criteria for a Presidential set-aside of such a determination is changed from

“serious threat” to “threat” that decontrolling an item would have on the national security. (Sec. 213(a))

- **Export of Hazardous Substances.** H.R. 2581 includes the control of substances banned or regulated in the United States as a purpose of foreign policy controls. (Sec. 301(b)). It grants the Secretary with the concurrence of the Administrator of the Environmental Protection Agency (EPA) the authority to prohibit the export of certain pesticides or chemicals. Directs the Secretary in consultation with the Administrator of EPA to report to Congress the identity of all U.S. persons involved in the export of hazardous pesticides and chemicals and the quantity of those pesticides and chemicals in the 2-year period preceding enactment of the Act.
- **Export of Test Articles.** The legislation includes the control of test articles intended for clinical investigation involving human subjects in the scope of foreign policy controls (Sec. 301(b)). It would require an export license for such test articles.
- **Contract Sanctity.** The bill limits the contract sanctity provision to contracts reached before the first public or Congressional notice of the President’s intention to impose an export control. (Sec. 301(d))
- **Termination of Foreign Policy Controls.** In the measure, the President must consult with the House International Relations Committee and Senate Foreign Relations Committee 30 days prior to the termination of a foreign policy based export control. (Sec. 308)
- **Compliance with International Obligations.** The President is required to impose controls on items included on lists of the multilateral export controls regimes, or to fulfill treaty commitments. (Sec. 309)
- **Crime Control Instruments.** Export license and control list determinations for crime control items are to be made in concurrence with the Secretary of State. Crime control equipment shall not be licensed to countries practicing torture and implements of torture shall not be licensed. (Sec. 311)
- **License Application Review Time.** It allows reviewing agencies up to 60 days additional time to review applications in which the complexity of analysis, or the potential impact on national security precludes the timely consideration of the application. It also permits delays necessary to obtain information from intelligence agencies as an exception from required time periods. (Sec. 401)
- **Interagency Dispute Resolution Process.** The bill removes certain criteria for interagency reviews of license applications including decisions based on majority voting, default to decision requirements, and appeals of decisions only by Presidential appointees. (Sec. 402)
- **Penalties.** The legislation amends the intent threshold for violations to “knowing” from “willful.” Criminal penalties on corporations are raised to

\$10 million from \$5 million. Civil penalties are raised to \$1 million from \$500,000. (Sec. 503(a))

- **Post-Shipment Verifications (PSV).** It adds a provision requiring the denial of certain export licenses to countries which obstruct or deny PSVs after entering into a PSV agreement with the United States.
- **Nuclear Transfers to North Korea.** The North Korean Threat Reduction Act of 1999 (NKTRA) is amended by adding congressional oversight language. Under the provision, any cooperative agreement, license, or approval for the transfer of nuclear material, facilities, components or technology must be approved by a joint resolution passed by both Houses of Congress under joint resolution procedures amending NKTRA. (Sec. 702-3).

Action by the House Armed Services Committee

- **Deemed Exports.** Expands the definition of deemed exports to include the release of technology to foreign nationals outside the United States. (Sec. 2(9)(A)(iii))
- **Militarily Critical Technology List (MCTL).** The HASC version restores statutory authority for the MCTL, a list composed of items “critical to the United States military maintaining or advancing its qualitative advantage and superiority relative to other countries or potential adversaries.” This provision gives the Secretary of Defense sole authority to add or remove items from the MCTL, and the export of an item on the list must be approved by the Secretary of Defense. (Sec. 202(a)(4))
- **Foreign Availability and Mass Market Determinations.** It removes the ability of the Secretary of Commerce unilaterally to determine the foreign availability or mass market status of an item. It requires any foreign availability or mass market determination made by the Secretary of Commerce to have the concurrence of the Secretaries of Defense and State. (Sec. 211(c))
- **Foreign Availability Status.** The HASC version alters the definition of foreign availability status to require that an item must be available to controlled countries “without restriction” from “more than one” country that participate with the United States in multilateral export control regimes. It also replaces S. 149/H.R. 2581's threshold to assess the effectiveness of requiring a license from available in “sufficient quantity” to “significant quantity and comparable quantity.”(Sec. 211(d)(1))
- **Mass Market Status.** In determining the mass market status of an item, the HASC version requires that the item meet **all** the criteria enumerated for mass market decontrol. It also removes provisions concerning the consideration of substantially identical or directly competitive items in determining mass market status. (Sec. 211(d)(2))

- **High-Performance Computers (HPC).** The HASC version requires the Secretaries of Commerce, Defense, Energy, and State jointly to develop a process to monitor, assess, and verify HPC exports to countries of proliferation concern. Once this process is implemented and reported to Congress, Title XII(B) of Division A of the National Defense Authorization Act of 1998 is repealed. It also adds notification requirements for the export of any computer with a value of \$250,000, or included in the process to monitor exports of HPCs above. (Sec. 221)
- **International Obligations.** The HASC version requires the President to impose export controls for items on control lists of multilateral control regimes, or to fulfill United Nations resolutions, treaty commitments, or international arrangements. (Sec 309)
- **Interagency Dispute Resolution.** The HASC version removes the decisionmaking authority from the chairman of a first level of interagency dispute resolution and vests that authority in a committee composed of each referral agency. Any decision by this committee must be unanimous and continuing disagreement would result in a license denial. It bases further dispute resolution on concurrence of the parties, license denial absence such concurrence, and further right of appeal by Presidential appointee. (Sec. 402)
- **Communications Satellites.** The HASC version removes Title VII that would shift licensing of commercial communications satellites from the State Department to the Commerce Department. Hence, licensing authority would remain vested in the State Department.

The Debate Over Export Controls

Competing Perspectives In Export Control Legislation¹⁵

A principal theme in debates on export administration legislation is the tension between commercial and national security concerns. These concerns are not mutually exclusive, and thus it is often difficult to characterize opposing camps. For example, nearly everyone favors reform of the current system, yet no one considers themselves opposed to national security. Generally, however, many who favor reform of the current export control accept the business perspective that such reform would assist U.S. business to compete in the global marketplace. Others view the issue with a national security perspective. To this group, reform should be concerned less with the abilities of U.S. industry to export and more with effective controls placed on terrorists, violators of human rights, and proliferators of weapons of mass destruction. From these different perspectives, controversies arise regarding which items should be regulated for national security and foreign policy purposes, which items can

¹⁵See also CRS Report RL30689, *The Export Administration Act: Controversy and Prospects*, by Ian F. Fergusson, for background on positions of the stakeholders.

realistically be regulated, which destinations warrant close scrutiny, and which regulating mechanisms are most effective.

Foreign Availability and the Effectiveness of Multilateral Regimes.

Industry groups believe that when technologies are available from foreign suppliers, due to non-existent or weak multilateral controls, unilateral controls force U.S. firms to cede the market to overseas competitors, while doing little to promote national security. Thus, they argue, legislation should authorize only those export controls that will be effective, and should concentrate on controls that coincide with the multilateral regimes of which the United States is a member.

Others contend the United States should strictly control any export that is likely to damage U.S. security or foreign policy, and that foreign availability should not be a primary consideration in determining the need for unilateral controls. While acknowledging the weaknesses of current regimes, opponents of further liberalization believe that rather than acquiescing to the international availability of sensitive technologies, the U.S. should actively promote more effective regimes and should not validate proliferation of sensitive technologies by taking part in that sales market.

The Licensing Process and Organization of the Export Control System. Industry leaders identify several problems with the existing licensing system: First, overlapping jurisdiction between the Commerce and State Departments with regards to certain dual-use products makes it unclear where the exporters need to apply for licenses. Second, extended time periods required for license approval compromise the reliability of U.S. suppliers and make it hard for manufacturers and customers to plan ahead. Third, the licensing system does not reflect advances in technology, foreign availability of dual-use items, and the economic impact of export controls on the industrial base. Finally, there is no opportunity for judicial review of licensing decisions.

Others consider foreign availability and economic impact to be important considerations, yet secondary to national security. Export administration officials claim that they conduct thorough, fair, and expeditious license reviews. Time is required to check proposed export items against lists of controlled items, check end users and end uses against lists of suspect recipients, and coordinate with several government agencies. Officials say they must be able to “stop the clock” to obtain additional information and investigate certain issues on a case-by-case basis to insure that sensitive technologies do not find their way into the wrong hands. Some analysts who see national security as the primary purpose of the export control regime would question whether BXA belongs in the Department of Commerce. That Department’s mission is mostly one of promoting exports and generally serving commercial interests. This, in some eyes, may create an institutional bias towards the granting of export licenses and skew the process against national defense goals. Other analysts point to the full and equal participation of other agencies, particularly the Department of Defense, in the current structure in arguing that such bias is unlikely to prevail.

China. The focus of the debate over export controls in regard to China has focused on how to benefit from the potentially vast Chinese market and low Chinese production costs while minimizing the risk to U.S. security interests of exporting sensitive dual-use technologies to China. Some representatives of the business

community have argued that U.S. export controls are too stringent. They claim such controls have hampered technology transfers to China in the past few years while the controls of U.S. allies have not. They reported that Chinese companies will not ask U.S. companies to bid on sales because of the delays associated with the U.S. licensing process. As one industry spokesman has testified: "The result has been that the Chinese are denied nothing in terms of high technology, but U.S. firms have lost out in a crucial market. This serves neither our commercial nor our strategic interests".¹⁶

However, other analysts and several Members of Congress have expressed grave concerns about China's dual-use technology acquisitions. They cite findings of the Cox Commission that China evaded existing export controls to illegally obtain missile design and satellite technology and that China circumvented end-user controls on high-performance computers.¹⁷ According to this view, the Commission's findings show the need for both tightened controls and greater enforcement of export controls against China. In 2000, 1,400 applications were filed with the Department of Commerce for licenses to export controlled dual-use items to China. These applications represented potential sales of \$1.6 billion, or approximately 10% of the total value of U.S. exports to China in 2000 (\$15.3 billion).

Impact on the U.S. Economy and U.S. Business. The argument is often heard that export controls damage the U.S. economy because they cause U.S. high-tech companies, farmers, and others to lose overseas sales, thereby suffering a loss of global competitiveness, decreased ability to develop new products and services, and a loss of profits and jobs. Although export controls probably do have an overall negative impact on the economy, the size of that effect may be overstated by individual claims of adversely affected firms and sectors. International trade -- the exchange of exports for imports -- increases national income over what would be possible without trade. Therefore, export controls, by reducing exports, curtail this exchange and degrade U.S. economic welfare. Standard economic analysis indicates that the total economic loss associated with imposing export controls would be the *net* outcome of several partially offsetting effects, depending on whether one is a producer or consumer and whether one's economic circumstances are linked to exports or imports. Reduced exports in the long run translate into reduced imports and diminished economic welfare. But, the resources that produced those exports are not lost to the economy and, when applied to other uses, tend to raise economic welfare. Reduced imports in the long run assist domestic import competing activities which will find their economic position improved. The combined effect of reduced exports must be an unambiguous economic loss to the overall economy, but a loss that is a *fraction* of the initial reduction of export sales. A reasonable conjecture about the net welfare loss attributable to export controls would be between 5% to 35% of the value of lost export sales, with the more probable effect in the middle of

¹⁶Dr. Paul Freedenberg, Testimony before the Senate Banking, Housing, and Urban Affairs Committee, February 8, 2001, p. 7; available on the Committee's Web site at [<http://www.senate.gov/~banking/>]

¹⁷For more information on technology transfers to China, see: CRS Report 98-485 F, *China: Possible Missile Technology Transfers from U.S. Satellite Export Policy- Actions and Chronology*, by Shirley A. Kan.

that range rather than at the extremes. Based on a 1995 estimate of exports lost due to export controls, these fractions translate into an estimated welfare loss ranging from a low of \$500 million to a high of \$14 billion, but with the greatest probability attached to a central range of about \$2 billion to \$4 billion. Losses of this magnitude amounted to from 0.007% to 0.2% of GDP in 1995. Liberalization of export controls since the early 1990s suggests that this burden would have become even smaller today.¹⁸

Sectoral Costs. As suggested above, the direct cost of export controls to particular firms, industries, and sectors proportionately is larger than the net cost to the overall economy. The open and flexible nature of the U.S. economy helps to minimize such costs, although, significant burdens may still remain. Estimates of lost export sales are relevant to an evaluation of the U.S. export control regime. Lost sales provide some insight into possible adjustment costs and other social costs associated with export controls. They may also become useful in any discussion of equity of burden and possible policies to compensate those harmed by export controls. In theory, the federal government can provide compensation to ameliorate the domestic burden of export controls.

Economic Sanctions and Export Controls. In addition to the laws and regulations that restrict certain exports in order to protect U.S. national security or foreign policy, other laws and regulations restrict certain types of exports to punish or coerce individuals, companies, or countries that have violated international norms in such areas as proliferation, regional stability, terrorism, drug trafficking, and human rights. These sanctions are intended to punish the violators, persuade them to cease violating the norms, deter others from such violations, and prevent them from using the exports in ways that threaten U.S. security or foreign policy goals. There has been a great deal of debate in recent years on the need for sanctions to support national security and foreign policy goals, their effectiveness and appropriateness, and the cost of sanctions to U.S. exporters and the U.S. economy.¹⁹

Specific Areas of Concern

Controversial exports have included telecommunications and advanced electronic equipment, precision machine tools (especially computer assisted machines), guidance technology (including Global Positioning System technology), aerospace and jet engine technology, synthetic materials (especially high-strength, light-weight, heat- and corrosion-resistant materials), specialized manufacturing and testing equipment (including mixers, high temperature ovens, heat and vibration simulators). In the last few years, congressional attention has focused on the following goods and technologies.

¹⁸For a fuller discussion of the economic costs of export controls, see CRS Report RL30430, *Export Controls: Analysis of Economic Costs*, by Craig Elwell.

¹⁹For further discussion of U.S. sanctions, see CRS Report 97-949, *Economic Sanctions to Achieve U.S. Foreign Policy Goals: Discussion and Guide to Current Law*, by Dianne E. Rennack and Robert D. Shuey.

High Performance Computers (HPCs).²⁰ These are computers that can perform multiple, complex digital operations within seconds. Sometimes also called supercomputers, HPCs are actually a wide range of technologies that also include bundled workstations, mainframe computers, advanced microprocessors, and software. The benchmark used for gauging HPC computing performance is the standard known as millions of theoretical operations per second (MTOPS). The actual MTOPS performed by an HPC over a period of time can vary, based on which operations are performed (some can take longer than others or can be performed while other operations are taking place) and the real cycle speed of the computer. Since the advent of this technology, there have been restrictions on U.S. exports. However, some advocates have maintained that because the computing capabilities of HPCs have advanced so rapidly, and due to the foreign availability of models comparable to some of those produced in the United States, export restrictions of HPCs are neither practical or enforceable. During the Clinton Administration, HPC export thresholds—or the amount of MTOPS capability that an HPC would need to require a license—were raised several times. The last change was in January 2002, when the Bush Administration raised the MTOPS threshold of HPC exports to Tier 3²¹ countries to 190,000 MTOPS, up from 2,000 MTOPS in 1995.²² This change is subject to notification requirements of the National Defense Authorization Act of 1998, which allows implementation of the performance level 60 days after a report has been submitted to Congress justifying the new levels.²³

Both S. 149/ H.R. 2581 (IR) and legislation introduced in the House and Senate (S. 591, H.R. 1553) would repeal Title XII (B) of Division A of the National Defense Authorization Act of 1998 (NDAA). Repeal of this Title would remove (a) the prior notification requirement for exports of HPCs above the MTOPS threshold to Tier III countries. Under this provision of NDAA, exports of these HPCs are subject to the approval of the Secretaries of Commerce, Defense, Energy, and State; (b) the post-shipment verification requirements for these HPCs; and (c) the requirement to notify Congress of an adjustment in MTOPS threshold levels. Repeal of Title XII(B) would not remove MTOPS as a regulatory standard, but it would remove the statutory

²⁰This section contributed by Glenn McLoughlin, Resources, Science, and Industry Division.

²¹ For HPCs, the Commerce Department organized countries of destination into 4 tiers with increasing levels of export control. These range from a no-license policy for HPC exports to Tier 1 countries (Western Europe, Australia, Mexico, Japan, and New Zealand) to the virtual embargo for exports to Tier 4 countries (Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria). Tier 3 countries, including China, Russia and other countries of the Commonwealth of Independent States (CIS), India, and Pakistan, were subject to a dual control system distinguishing between civilian and military end-users and end-uses until 2000. In January 2001, President Clinton merged the Tier I and Tier 2 categories effectively decontrolling exports to those countries.

²²For a summary of changes to HPC controls, see CRS Report RL31175, *High Performance Computers and Export Control Policy: Issues for Congress*, by Glenn McLoughlin and Ian F. Fergusson. and Bureau of Export Administration, “High Performance Computer Export Controls,” [<http://www.bxa.doc.gov/>]

²³The National Defense Authorization Act of 2001 lowered the notification requirement from 180 to 60 days. H.Rept. 106-945, Sec. 1234, October 6, 2000.

requirement to use MTOPs. The President would still be able to modify MTOPs thresholds or implement a new standard for control. The HASC version of H.R. 2581 would also repeal the NDAA restrictions provided that the Secretaries of Commerce, Defense, Energy, and State jointly develop and alternative rubric to monitor, assess, and verify HPC exports.

Encryption.²⁴ Encryption is the encoding of electronic messages to transfer important information and data securely. “Keys” are needed to unlock or decode the message. Encryption is an important element of e-commerce security, with the issue of who holds the keys at the core of the debate. The Clinton Administration promoted the use of strong (greater than 56 bits) encryption domestically and abroad only if the encrypted product had “key recovery” features in which a “key recovery agent” holds a “spare key” to decrypt the information. Under this policy, the administration tried to use export control policy to influence companies to develop key recovery encryption products. There has been no control over domestic use of encrypted products, but the executive branch hoped that companies would not want to develop two sets of encrypted products, one for the United States and another for the rest of the world. However by 1998, businesses and consumer groups, concerned about cost and privacy, came to oppose this approach. In September 1999, the Clinton Administration announced plans to further relax its encryption export policy by allowing export of unlimited key length encryption products, with some exceptions. It also reduced reporting requirements for those firms that export encrypted products. The rules for implementing this policy were issued in September 2000 by the Bureau of Export Administration in the Department of Commerce. While this new policy appears to have addressed both industry, consumer and security concerns, many policymakers in the 107th Congress will likely maintain a key interest in this issue, both in the way it affects e-commerce and how the government may use its encryption policy as a form of government surveillance.

Stealth Technology and Materials.²⁵ Stealth design incorporates materials, shapes, and structures into a functional system to protect it against electronic detection. There are two major stealth technique categories: first, materials can deflect an incoming radar signal to neutral space thus preventing the radar receiver from “seeing” the object. second, materials may absorb incoming radar signals preventing them from reflecting back to the receiver. Stealth related commodities are sensitive from an export control perspective because some materials and processes involved have civil applications that make it difficult to control dissemination and retain U.S. leadership in this technology.²⁶

There have been some concerns over stealth related exports. In 1994, the Department of Commerce approved two applications to export a high-performance, radar absorbing coating. Both applications were approved in less than 10 days, and, in accordance with referral procedures, the Commerce Department did not refer the

²⁴This section contributed by Glenn McLoughlin, Resources, Science, and Industry Division.

²⁵For further discussion, see GAO report GAO/NSIAD 95-140, *Export Controls: Concerns over Stealth Related Exports* (May 1995).

²⁶GAO Report GAO/NSIAD 95-140.

applications to the State or Defense Departments. Reportedly, 200 gallons of the exported material would be used by a German company for a cruise missile project, and by another country for a commercial satellite. In addition, the radar frequencies this coating seeks to defend against reportedly include those employed by the Patriot anti-missile system. In response to this report and concerns raised by DOD, the State Department performed a commodity jurisdiction review and ruled that radar-absorbing coating was included on the U.S. Munitions List and therefore under State Department's export control jurisdiction. State did not approve the applications.²⁷

Satellites. Members have debated the issue of how strictly to control exports of satellites and whether monitoring of foreign launch operations has been effective in preventing disclosures of missile secrets. In April 1998, the press reported that U.S. firms may have engaged in transfers of sensitive missile technology to China. Exports of satellites were licensed by the Department of Commerce from late 1996 till March 1999. In October 1998, Congress returned the authority, effective March 15, 1999, to license exports of commercial communications satellites to the Department of State which had traditionally licensed missile technology exports.²⁸ The satellite industry claims that this transfer has led to licensing delays and lost sales resulting from regulatory uncertainty. They claim that the market share percentage of U.S. built satellites launched has declined from a ten year average of 75% to 45% in 2000, and they have lobbied to reverse export controls to Commerce.²⁹ Satellites launched for commercial communication purposes may contain embedded sensitive technology such as positioning thrusters, signal encryption, mating and separation mechanisms, and multiple satellite/reentry vehicle systems. As stand-alone items, these technologies are be controlled under the Munitions List. S. 149 and H.R. 2581 (HIRC) would transfer the licensing of commercial communications satellite sales from State to Commerce; H.R. 2581 (HASC) would leave such licensing at State.

Machine Tools. This category covers manufacturing technology such as lathes and other manufacturing equipment used to produce parts for missiles, aircraft engines and arms. This capital equipment is increasingly sophisticated, employing advanced computer software and circuitry. The industry has been vocal in claiming that its competitive position has been hampered by the lack of multilateral controls over sales of this equipment, especially the lack of consensus on controls regarding China.

Aerospace. "Hot section" technology is used in the development, production and overhaul of jet aircraft both military and commercial. Technology developed principally by the Department of Defense is controlled by the Munitions List. However, technology actually applied to commercial aircraft is regulated by the Department of Commerce. This has caused concern that sensitive technology may be improperly licensed, especially if it had mass market or foreign availability

²⁷*Ibid.*

²⁸

Required by the National Defense Authorization Act for FY1999, P.L. 105-261.

²⁹Satellite Industry Association, "Satellite Export Licensing: The Impact of Federal Export Control Laws on the California Space Industry," Presentation, February 2001.

characteristics. During the 106th Congress, a “carve-out” of hot section and other sensitive technologies was advocated to prevent such items from being decontrolled.³⁰

Deemed Exports. Exports of technology and non-encryption source code is “deemed” to have been exported when it is released to a foreign national within the United States. Such knowledge transfers are regulated by the Export Administration Regulations, which require that a license must be obtained by U.S. entities to transfer technology to foreign nationals in the United States if the same transfer to the foreign national’s home country would require a license. Deemed exports are not expressly addressed by S. 149 or in the current EAA. The Senate Banking Committee’s Report on S. 149 contends that the Bill’s definition of the term ‘export’ allows for regulation of deemed exports in the same manner as the current EAA.³¹ H.R. 2581 defines the term ‘export’ to include ‘deemed exports,’ and it requires the Secretary to issue regulations governing release of technology to foreign nationals.

Options for Congress

Congress has several options in addressing export administration policy, ranging from approving no new legislation to rewriting the entire Export Administration Act. Some of the major legislative approaches and their implications are outlined below.

Maintain the Status Quo. EAA79 is currently in force until August 20, 2001. Legislation introduced in the House on July 24, 2001 would extend EAA79 until November 20, 2001. Congress may continue to grant temporary extensions to EAA79. Alternatively, Congress may continue the authority of EAA79 with increased penalties or other technical changes, yet this approach would leave in place the current system devised during the Cold War. If EAA79 lapses without an extension or having been rewritten by Congress, the President would probably revert to continuation of export controls under the emergency authority of IEEPA. Thus, the limitations of IEEPA (discussed in Appendix 1) would again apply — including its lower penalties and other deficiencies regarding enforcement. The Executive branch would continue to administer export controls with a considerable amount of discretion, absent new legislative directives.

Conduct Rigorous Oversight. Congress can pass legislation to delegate export control authority to the executive with certain policy guidelines. The President would create the bureaucratic and enforcement mechanisms he deemed necessary. Through hearings and review of reports, Congress would conduct oversight of export administration. This approach can help insure compliance with existing law and policy and could help build the foundation for a new policy.

Legislate U.S. Export Administration Policy for Specific Commodities. Legislation on encryption, high-performance computers, nuclear weapons, chemical

³⁰“Sen. Warner Says Agreement Near On Bringing EAA Bill to Floor This Week,” 17 *International Trade Reporter* 340, March 2, 2000.

³¹Senate Banking Committee, S.Rept. 107-10, p. 9.

weapons, biological weapons, missiles and other commodities helps to fill gaps in export administration policy, yet these separate efforts would fail to provide an overall policy framework and implementing structures and procedures.

Legislate U.S. Policy for Exports to Particular Destinations. Legislation that restricts exports to Iran, Iraq, Libya, North Korea, Cuba, China, or Russia may help address particular current problems but may fail to provide a broad policy and implementing structures and procedures and may not provide for changed circumstances in these areas.

Legislate U.S. Policy to Persuade Exporters in Other Countries to Restrict Their Exports of Specific Commodities or Exports to Particular Destinations. This approach has usually been used to authorize the use of U.S. sanctions in reaction to foreign exports of weapons-related technology or exports to rogue regimes. However, this approach would also fail to establish new overall policy and procedures.

Rewrite the Export Administration Act to Establish a U.S. Export Administration Policy That Addresses Existing and Likely Future Threats to U.S. Security and Economic Well-Being. It should be noted that many question the effectiveness of export controls in contributing to national security and some contend that exports controls can harm national security through their deleterious effect on the national economy. Others question the effectiveness of export liberalization in contributing to the U.S. economy and point to the fractional percentage of the U.S. economy that is affected by the Export Administration Regulations.

In establishing a balance between security/foreign policy and economic goals, a new bill might emphasize one over the other. A bill more tightly focused on security goals might require the administration to prohibit exports of goods and technology that would contribute to the ability of any nation or subnational group to threaten U.S. national security interests with weapons of mass destruction, missiles, destabilizing types or quantities of conventional weapons, terrorists or special operations forces, illegal drugs, organized crime, or information warfare. It might also authorize and encourage the administration to restrict U.S. exports to induce other nations to refrain from activities that threaten U.S. security interests and to cooperate with the United States in the responsible regulation of exports. On the other hand, a bill more tightly focused on U.S. economic interests might make it more difficult for the executive branch unilaterally to restrict exports that are subject to international regimes. This bill could require effectiveness and non-foreign-availability tests for these exports. It might also consolidate and rationalize the use of sanctions for the enforcement of U.S. and multilateral export policies.

Outstanding Issues

Other issues that Congress may wish to resolve through the passage of a new EAA include the following:

- How much latitude should the executive be given to interpret the legislation or to change standards without congressional approval? Should the act establish

only broad policy guidelines or specific procedures and limitations on the exports of particular commodities and technologies to particular destinations?

- To what extent should foreign availability or mass market characteristics serve as a governing factor in export administration policy?
- To what extent can the United States obtain the cooperation of other countries in regulating the exports of sensitive goods and technologies through multilateral and bilateral arrangements? How effective are U.S. programs to assist in establishing foreign export control mechanisms, economic and political incentives, and economic and political sanctions in persuading other countries to adopt common export control guidelines?
- To what extent should end-use controls be depended upon to assure that U.S. exports are not used to increase the capabilities of hostile nations or groups to threaten U.S. security?
- Which U.S. government organizations should have responsibility for administering export controls?
- What measures should be taken to enhance the enforcement of U.S. export administration laws and regulations and multilateral guidelines? How much effort should be spent on enforcement, and which agencies or private organizations should be responsible?