

GAO

Report to the Subcommittee on  
Readiness and Management Support,  
Committee on Armed Services, U.S.  
Senate

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October 2001

# EXPORT CONTROLS

## Clarification of Jurisdiction for Missile Technology Items Needed



G A O

Accountability \* Integrity \* Reliability

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United States General Accounting Office  
Washington, DC 20548

October 9, 2001

The Honorable Daniel K. Akaka  
Chairman  
The Honorable James M. Inhofe  
Ranking Minority Member  
Subcommittee on Readiness and  
Management Support  
Committee on Armed Services  
United States Senate

The U.S. government has long been concerned about the growing threat to U.S. interests from the proliferation of missiles, their components, and related technologies. These missiles can deliver chemical, biological, and nuclear weapons of mass destruction. In an effort to address these concerns, the United States has committed to work with other countries through the Missile Technology Control Regime to control the export of missile-related items. With the passage of the National Defense Authorization Act for Fiscal Year 1991, the Congress amended existing export control statutes to strengthen missile-related export controls, consistent with the U.S. government's commitments to the Regime.<sup>1</sup> Under the amended statutes, the Departments of Commerce and State share primary responsibility for controlling exports of Regime items. The Commerce Department is required to control Regime items that are dual-use (those having both military and civilian uses) on its export control list—the Commerce Control List. All other Regime items are to be controlled by the State Department on its export control list—the U.S. Munitions List.

Given the current interest in missile technology proliferation and export controls, you asked us to determine whether the Departments of Commerce and State have clearly established which Department has jurisdiction over Missile Technology Control Regime items. Specifically, we identified the two Departments' division of jurisdiction over Regime items, the factors that contribute to unclear jurisdiction for these items, and the potential effects of unclear jurisdiction over these items.

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<sup>1</sup> P.L. 101-510, Nov. 5, 1990.

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## Results in Brief

The Departments of Commerce and State have not clearly established which Department has jurisdiction for almost 25 percent of the items the United States agreed to control as part of its Missile Technology Control Regime commitments.<sup>2</sup> In some cases, the descriptions of the Regime items on the Commerce Control List and the U.S. Munitions List are the same. In other cases, one Department claims jurisdiction over items that do not explicitly appear on its export control list but do appear on the other Department's list.

Two factors contribute to unclear jurisdiction for Regime items. First, the Departments of Commerce and State disagree on how to determine which Regime items are Commerce Department-controlled and which are State Department-controlled. Commerce Department officials said a Regime item appearing on both export control lists should be State Department-controlled only if it meets the criteria of being specifically designed or modified for a military application. The State Department disagreed with this position by stating that an item is State Department-controlled if it appears on the U.S. Munitions List and that exporters should not use any other criteria to determine jurisdiction. Second, consultations between the Departments of Commerce and State regarding their respective control lists have not been effective in ensuring that Regime items are subject to the jurisdiction of only one Department. The State Department office responsible for maintaining the U.S. Munitions List has not participated in these consultations. Furthermore, the State Department has not updated the Regime section of its export control list for several years, which has limited opportunities for consultations.

Unclear jurisdiction may result in the same Regime item being subject to different export control restrictions and processes at the Departments of Commerce and State, which could affect U.S. national interests and companies' ability to export. For example, by law, the State Department generally cannot allow missile technology and other items it controls to be exported to China, while this same restriction does not apply to the Commerce Department. Therefore, a company generally cannot export a Regime item to China under the State Department's export control system but may be able to do so through the Commerce Department's system after meeting certain requirements. Because of differences between the

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<sup>2</sup> We previously reported on unclear lines of jurisdiction for stealth-related commodities and technologies, which are Regime items. See *Export Controls: Concerns Over Stealth-Related Exports* (GAO/NSIAD-95-140, May 10, 1995).

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two Departments' export control systems, it is critical that exporters properly determine which Department has jurisdiction over Regime items. However, some of the exporters we spoke with did not fully understand the export control system or certain terms in the regulations thereby making it sometimes difficult to determine where to apply for a license to export Regime items.

To ensure that proposed exports of Regime items are subject to the appropriate review process as determined by the U.S. government, we are recommending that the Departments of Commerce and State resolve their jurisdictional lines of control for Regime items and revise their regulations accordingly. In commenting on a draft of this report, the Commerce Department stated that, although it believes jurisdiction for Regime items is generally clear, it supports reviewing the export control lists to provide additional clarity for exporters. In its comments, the State Department agreed to update its regulations and work with the Commerce Department to eliminate areas of overlap in jurisdiction for Regime items.

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## Background

The United States along with six allies established the Missile Technology Control Regime (MTCR) in 1987.<sup>3</sup> The Regime is a voluntary agreement among member countries to limit the proliferation of missiles capable of delivering nuclear, biological, and chemical weapons and their associated equipment and technology. The Regime consists of common export policy guidelines and a list of controlled items that include complete missile systems (rocket and unmanned air vehicle systems) and missile-related components and technologies that may have civilian applications. The list, known as the Equipment, Software, and Technology Annex (hereafter, referred to as the Regime Annex), is periodically updated to reflect technological advances. Member countries agree to control exports of Regime items in accordance with their respective national laws.<sup>4</sup>

The United States fulfills its MTCR commitments primarily through the export control systems of the Departments of Commerce and State. These two systems were founded on different premises. The Commerce

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<sup>3</sup> The other founding members of the Regime are Canada, France, Germany, Italy, Japan, and the United Kingdom. Since 1987, 26 additional countries have become members of the Regime, bringing the total number of member countries to 33.

<sup>4</sup> Throughout this report, the phrase "Regime item" refers to the equipment, facilities, components, materials, software, and technologies listed in the Regime Annex.

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Department, through its Bureau of Export Administration, controls exports of most dual-use items and technologies under the authority of the Export Administration Act of 1979.<sup>5</sup> As such, the Commerce Department is charged with weighing U.S. economic and trade interests along with national security and foreign policy interests. Dual-use items subject to the Commerce Department's export controls are identified in the Commerce Control List of the Export Administration Regulations.<sup>6</sup> In contrast, the State Department, through its Office of Defense Trade Controls, controls exports of defense articles and services under the authority of the Arms Export Control Act.<sup>7</sup> The State Department's export control system is designed primarily to further national security and foreign policy interests. The items controlled by the State Department can be found in the International Traffic in Arms Regulations, specifically within the U.S. Munitions List, which the State Department develops with the concurrence of the Department of Defense.<sup>8</sup> The Departments of State and Defense are reviewing and revising different portions of the U.S. Munitions List on an annual basis, as part of the Defense Trade Security Initiative, to ensure that coverage of items on the list is appropriate.<sup>9</sup> Exporters are responsible for determining whether an item they seek to export is on the Commerce Control List and, therefore, subject to the Commerce Department's jurisdiction, or on the U.S. Munitions List and subject to the State Department's jurisdiction.

With the passage of the National Defense Authorization Act for Fiscal Year 1991, the Congress amended both the Export Administration Act and the Arms Export Control Act to include restrictions on the export of Regime items. Under the amended Export Administration Act, the Secretary of Commerce, in consultation with the Secretaries of State and Defense and other officials, is required to establish and maintain as part of the Commerce Control List, a list of all dual-use goods and technologies that appear on the Regime Annex. Under the amended Arms Export Control Act, the Secretary of State, in consultation with the Secretary of Defense and others, is to establish and maintain as part of the U.S.

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<sup>5</sup> 50 U.S.C. App. secs. 2401 et seq.

<sup>6</sup> 15 C.F.R. secs. 730-774.

<sup>7</sup> 22 U.S.C. secs. 2751 et seq.

<sup>8</sup> 22 C.F.R. secs. 120-130.

<sup>9</sup> See *Defense Trade: Analysis of Support for Recent Initiatives* (GAO/NSIAD-00-191, Aug. 31, 2000).

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Munitions List, a list of Regime items that are not controlled under the Export Administration Act. Thus, under these statutes, individual Regime items are to be listed on either the Commerce Control List or the U.S. Munitions List—but not both lists. The Commerce Control List identifies a variety of controlled dual-use items, some of which are designated as being controlled for missile technology reasons, and includes Regime items. In contrast, the U.S. Munitions List contains a separate section that identifies Regime items subject to the State Department’s jurisdiction.<sup>10</sup>

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## Export Control Jurisdiction Unclear for Certain Missile Technology Control Regime Items

Forty-seven of 196 Regime items appear subject to the export control jurisdictions of both the Commerce Department and the State Department.<sup>11</sup> For these 47 items, either (1) the description of the item is the same on both the Commerce Control List and the U.S. Munitions List or (2) one Department claims jurisdiction over an item even though the item does not explicitly appear on its export control list but does appear on the other Department’s list. Appendix I contains descriptions of the 47 Regime items and identifies where they are covered on the Commerce and State control lists.

Table 1 provides examples of Regime items that appear on both export control lists with either identical descriptions or overlapping performance parameters.

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<sup>10</sup> 22 C.F.R. sec. 121.16.

<sup>11</sup> The MTCR Annex consists of 20 groupings of items, which are divided into subitems. For the purpose of this report, we counted 196 subitems as separate Regime items.

**Table 1: Examples of Regime Items on Both the Commerce Control List and the State Department’s U.S. Munitions List**

<b>Commerce Control List</b>	<b>U.S. Munitions List</b>
Bulk machinable silicon-carbide reinforced unfired ceramic, usable for nose tips.	Bulk machinable silicon-carbide reinforced unfired ceramic usable for nose tips.
Gyro-astro compasses and other devices, other than those controlled by 7A004, <sup>a</sup> which derive position or orientation by means of automatically tracking celestial bodies or satellites and specially designed components therefor.	Instrumentation, navigation, and direction finding equipment and systems, and associated production and test equipment as follows; and specially designed components and software therefor: Gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites.
Software that processes post-flight, recorded data, obtained from the systems controlled by 6A108.b, <sup>b</sup> enabling determination of vehicle position throughout its flight path.	Precision tracking systems: Software which processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path.

<sup>a</sup> Export Control Classification Number 7A004 covers “gyro-astro compasses, and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, with an azimuth accuracy of equal to or less (better) than 5 seconds of arc.”

<sup>b</sup> Export Control Classification Number 6A108.b controls precision tracking systems, usable for missiles.

Neither the Commerce Control List nor the U.S. Munitions List provides criteria to differentiate when these items are subject to the Commerce Department’s jurisdiction and when they are subject to the State Department’s jurisdiction. The Commerce Control List sometimes provides a cross-reference to the U.S. Munitions List when the State Department controls certain items meeting particular parameters.<sup>12</sup> However, Commerce Department officials said that the Commerce Control List does not always include such references because the regulations would become too voluminous. The State Department’s control list generally does not indicate that an item may be subject to the Commerce Department’s control since the U.S. Munitions List is supposed to identify only those items subject to the State Department’s jurisdiction.

<sup>12</sup> According to Part 738.2(d) of the Commerce Department’s export control regulations, the Commerce Control List includes cross-references if another U.S. government department has export licensing authority over items related to those controlled by the Commerce Department.

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## Disagreement Over Definitions and Lack of Effective Consultation Have Contributed to Unclear Jurisdiction for Regime Items

In other cases, the State Department claims jurisdiction over software and technologies related to missile production equipment and facilities, although these items do not explicitly appear on the U.S. Munitions List. These items, however, appear on the Commerce Control List.

Two factors have contributed to unclear jurisdiction for Regime items. First, officials at the Departments of Commerce and State have expressed different understandings of how to define which Regime items are Commerce Department-controlled and which are State Department-controlled. Second, consultations between the Departments of Commerce and State on Regime-related changes to their regulations have not ensured that items are clearly subject to the jurisdiction of one Department or the other. The State Department office responsible for maintaining the U.S. Munitions List has not formally participated in reviews of proposed changes to the Commerce Control List. Furthermore, the State Department has not updated the MTCR section of the U.S. Munitions List since the mid-1990s, precluding the opportunity to consult with the Commerce Department.

Commerce Department officials said that jurisdiction for Regime items is clear as long as an exporter follows the State Department's regulation on designating and determining defense articles and services. Referring to the State Department's regulations, Commerce Department officials said that if a Regime item appears on both Departments' control lists, it should be subject to the State Department's jurisdiction if it

"Is specifically designed, developed, configured, adapted, or modified for a military application, and

(i) Does not have predominant civil applications, and

(ii) Does not have performance equivalent (defined by form, fit and function) to those of an article or service used for civil applications; ...."<sup>13</sup>

Conversely, according to Commerce Department officials, if the item does not meet these criteria—even if it appears in the MTCR section of the U.S. Munitions List—it should be subject to the Commerce Department's export controls. However, a senior State Department official disagreed with the Commerce Department officials' interpretation of the State Department's regulations. The official explained that the criteria cited by

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<sup>13</sup> 22 C.F.R. sec. 120.3.

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Commerce Department officials is used by the State Department, in consultation with the Defense Department, to determine which items will appear on the U.S. Munitions List and should not be used by exporters and others to determine whether an item is subject to the State Department's export controls. Instead, exporters are to consult the U.S. Munitions List to determine which Regime items are under the State Department's jurisdiction.

Consultations between the Departments of Commerce and State have been limited. According to the Commerce Department, it coordinates its regulations and proposed changes for the control of Regime items with the Departments of State, Defense, and Energy and, therefore, these Departments should be aware of which Regime items appear on the Commerce Control List. However, officials from the State Department's Office of Defense Trade Controls, which maintains the U.S. Munitions List, said they are not formally consulted to ensure that Regime items do not appear on both export control lists. Within the State Department, the Bureau of Nonproliferation formally reviews and comments on the Commerce Department's regulations for the control of Regime items. A senior Bureau official said that the review is to ensure that Regime items are controlled, without concern for which Department has jurisdiction.

Further, the State Department has not consulted with the Commerce Department in recent years regarding the Regime items covered by its export control list. According to a senior official with the Office of Defense Trade Controls, the Commerce Department was provided an opportunity to review the section of the U.S. Munitions List that identifies the Regime items subject to the State Department's controls before the section was added to the International Traffic in Arms Regulations in 1994. However, this section of the State Department's regulations has not been updated or revised since then to incorporate the periodic changes made to the Regime Annex. State Department officials maintain that the U.S. Munitions List does not have to be regularly revised to ensure that new items added to the Regime Annex are controlled, as those items are already controlled under the U.S. Munitions List's broad categories. However, as a result of this lack of revision, the Commerce Department has not been provided another opportunity to review and comment on the Regime items covered by the U.S. Munitions List to ensure that items do not appear on both export control lists.

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## Unclear Jurisdiction for Regime Items May Have Consequences for U.S. National Interests and Exporters

The appearance of an item on both the Commerce Control List and the U.S. Munitions List and disagreements between the Departments over which one has jurisdiction may result in the same Regime item being subject to different restrictions and reviews, which may affect U.S. national interests and companies' ability to export Regime items. While the Commerce Department's export control system seeks to balance U.S. national security and foreign policy interests with economic interests, the State Department's export control system was designed to primarily further national security and foreign policy interests. The differences in the underlying premises of the two Department's export control systems are reflected in their restrictions on where Regime items can be exported and processes to review export licensing applications.

A key difference between the Departments' export control systems is that some sanctions and embargoes only apply to items on the U.S. Munitions List and not to those on the Commerce Control List. For example, under U.S. law, licenses cannot be issued for the export of most missile technology and other items on the U.S. Munitions List to China.<sup>14</sup> As a result, the State Department generally denies license applications involving the export of items on the U.S. Munitions List to China. This same restriction does not apply to items on the Commerce Control List. Missile technology items on the Commerce Control List may be licensed for export to China provided that certain legal requirements are met.<sup>15</sup> Additionally, the State Department generally denies license applications involving exports of U.S. Munitions List items to Indonesia and Yugoslavia. The Commerce Department does not have a comparable policy for exports of Regime items to these countries. Because of these policy differences, the State Department could deny a license to an exporter seeking to export a Regime item to one of these countries, whereas the Commerce

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<sup>14</sup> P.L. 101-246, Feb. 16, 1990. The statute permits licensing of some systems and components specifically designed for inclusion in civil products unless the President determines that the intended recipient is the military or security forces of China. Also, under the statute, licensing of U.S. Munitions List items for export to China is prohibited unless the President reports to Congress that (1) China has achieved certain political and human rights reforms or (2) it is in the U.S. national interest.

<sup>15</sup> Section 1512 of P.L. 105-261, Oct. 17, 1998, as amended, generally permits the export of missile equipment or technology to China only after the President certifies that the export is not detrimental to the U.S. space launch industry and the missile equipment or technology will not measurably improve China's missile or space launch capabilities. This restriction applies to the export of all missile equipment or technology on the Regime Annex, except inertial reference units and components in manned civilian aircraft.

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Department could approve a license to export the same item to these countries.

Other sanctions apply to both export control lists, but the Departments have enforced these sanctions differently. For example, under the MTCR sanction provisions of the Export Administration Act and the Arms Export Control Act, the President generally is to impose sanctions on U.S. and foreign parties who improperly transferred Regime items.<sup>16</sup> For the improper transfer of Regime-controlled components, equipment, material, and technology, the Departments of Commerce and State are to deny export licenses to the involved parties for all Regime items subject to their respective controls for a 2-year period.<sup>17</sup> In applying MTCR sanctions, the Commerce Department has allowed Regime items to be exported to sanctioned parties if these items were incorporated into larger items not subject to these sanctions. The State Department, however, has prohibited the export to sanctioned parties of non-Regime items on the U.S. Munitions List if they contain Regime items. As a result, exporters have been subject to different levels of scrutiny and restrictions at the Departments of Commerce and State.

Finally, the Commerce Department's regulations do not require licenses for the export of Regime items on the Commerce Control List to Canada, while the Department of State's regulations require licenses for the export of Regime items on the U.S. Munitions List to all countries.<sup>18</sup> The exporter consulting the Commerce Control List could export an item to Canada without a license, while the exporter consulting the U.S. Munitions List would have to go through the Department of State's license application process. The U.S. government may or may not have an opportunity to review and approve a Regime item exported to Canada, depending on whether the exporter consults the Commerce Control List or the U.S. Munitions List.

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<sup>16</sup> The law allows the President to waive these sanctions under certain conditions. The United States has imposed these sanctions in the past on several countries including China, Egypt, India, Pakistan, and Russia.

<sup>17</sup> For the improper transfer of Regime-controlled complete rocket systems and unmanned air vehicle systems and their complete subsystems, the sanction provisions call for the Departments of Commerce and State to deny export licenses to the involved parties for all items on the Commerce Control List and U.S. Munitions List for at least two years.

<sup>18</sup> See *Export Controls: Regulatory Change Needed to Comply with Missile Technology Licensing Requirements* (GAO-01-530, May 31, 2001).

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Because of differences in the export control systems of the Departments of Commerce and State, it is critical that exporters properly determine whether their items are controlled on the Commerce Control List or the U.S. Munitions List. However, some of the companies we spoke with did not understand U.S. export controls as applied to missile technology items. For example, an official from one company stated the company's product is not exported for use in missiles and, therefore, did not understand why this product is controlled for missile technology reasons, even though it is on the Regime Annex. At another company, an official said that the State Department controls all Regime items and did not realize that the Commerce Department controls dual-use Regime items. Export licensing officials with another company said that companies acquired by their company had incorrectly determined that certain Regime items were Commerce Department-controlled when the items were State Department-controlled.<sup>19</sup> An export licensing official from another company stated that when there is uncertainty as to which Department has jurisdiction over a particular Regime item, the company submits the license application to the Commerce Department with the expectation that the Commerce Department would send the license application to the State Department if the item were State Department-controlled. Officials from other companies said they relied on past experience, familiarity with a particular Department, and their own interpretations of the regulations when deciding where to submit an export license application.

Some of the companies expressed uncertainty of the meaning of certain terms in the regulations, which sometimes made it difficult to determine whether to submit their license applications to the Commerce Department or the State Department. For example, officials from several companies indicated that they did not understand what the regulations mean when referring to items as specifically designed or modified for a military application. These officials noted that the Departments of Commerce and State do not provide either a regulatory definition or sufficient guidance for what constitutes being specifically designed or modified. As a result, an official with one company said there is room for interpretation on the part of exporters. Officials from these companies stated that if they make any modifications to an item for use by the military, they submit the

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<sup>19</sup> According to the company officials, the acquired companies voluntarily disclosed to the State Department that they had incorrectly exported certain Regime items through the Commerce Department rather than the State Department.

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license application to the State Department to ensure that they do not violate the State Department's regulations and governing statute.

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## Conclusions

The U.S. government has committed internationally to controlling Regime items because of its concerns about the threat missile proliferation poses to U.S. interests. The lack of clarity over which Department has jurisdiction over some Regime items may lead an exporter to seek a Commerce Department license for a militarily sensitive item controlled on the U.S. Munitions List or a State Department license for a dual-use item controlled on the Commerce Control List. The Commerce Department and State Department would review these license applications according to different criteria and restrictions and possibly reach different determinations on whether the item may be exported. Because there is unclear jurisdiction for critical Regime items, exporters are left to decide which Department should review their exports and, by default, the policy interests that are to be considered and acted upon.

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## Recommendations for Executive Action

To ensure that proposed exports of Missile Technology Control Regime items are subject to the appropriate review process, we recommend that

- the Secretaries of Commerce and State direct the offices responsible for the Commerce Control List and the U.S. Munitions List, in consultation with others as appropriate, to jointly review the Regime Annex, determine the appropriate jurisdiction for items on the Annex, and revise their respective export control lists accordingly;
- the Secretary of Commerce ensure that, when a Regime item generally controlled by the Commerce Department becomes subject to the State Department's control if it meets certain parameters, the Commerce Control List specify those parameters and provide a cross-reference to the U.S. Munitions List; and
- the Secretary of State update the section of the U.S. Munitions List that identifies the Regime items subject to the State Department's jurisdiction to ensure that it is consistent with the current version of the Regime Annex and provide a cross-reference to the Commerce Control List for those Regime items that would be subject to the Commerce Department's control when certain parameters are met.

The annual review of the U.S. Munitions List, which is being conducted as part of the Defense Trade Security Initiative, may provide a vehicle to implement these recommendations.

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## Agency Comments and Our Evaluation

In written comments on a draft of this report, the Commerce Department concurred with our recommendation to review the Commerce Control List and the U.S. Munitions List to provide additional clarity to exporters. However, the Commerce Department commented that jurisdiction for Regime items is generally clear and the current export control system is not a risk to U.S. nonproliferation interests. The Commerce Department stated that it refers its export license applications for Regime items to the State Department and other agencies for their review.<sup>20</sup> According to the Commerce Department, the State Department has an opportunity to indicate that an item cannot be licensed under the Commerce Department because it is State Department-controlled. However, making a jurisdiction determination during the license review process delays the exporter from obtaining an approved license from the appropriate Department. By clarifying the regulations, the Departments would minimize such occurrences that can impact the workloads of both the exporters and the U.S. government. The Commerce Department's comments are reprinted in appendix II, along with our evaluation of them.

In written comments on a draft of this report, the State Department concurred with our recommendation to update the section of the U.S. Munitions List that identifies the Regime items subject to the State Department's jurisdiction. The State Department said that, as part of this update, it will work with the Commerce Department in an effort to eliminate unclear jurisdiction for Regime items. According to the State Department, the process of updating this section has already begun and should be completed before the end of 2001. The State Department also provided technical comments to clarify which Regime items are subject to its jurisdiction and we revised the report to reflect those comments. The State Department's comments are reprinted in appendix III, along with our evaluation of them.

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## Scope and Methodology

To determine the division of jurisdiction over Regime items between the Departments of Commerce and State, we compared the Regime Equipment, Software, and Technology Annex of October 2000 with the January 2001 Commerce Control List and the April 2000 U.S. Munitions List (and subsequent updates made to each list). We then confirmed with officials from the Department of State's Office of Defense Trade Controls

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<sup>20</sup> Executive Order 12981 grants authority for the Departments of State, Defense, and Energy to review any license applications submitted to the Commerce Department.

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and the Department of Commerce's Bureau of Export Administration the Regime items that they claim as subject to their respective export controls.

To identify the factors that contribute to unclear jurisdiction for Regime items, we interviewed officials with the Department of Defense's Defense Threat Reduction Agency, the Department of State's Bureau of Nonproliferation and Office of Defense Trade Controls, and the Department of Commerce's Bureau of Export Administration. We also reviewed Commerce Department and State Department policies and practices for revising the export control lists.

To identify the potential effects of unclear jurisdiction, we conducted structured interviews with 24 companies that export Regime items to discuss how they determine which Department controls their exports of Regime items and how they are affected by differences in the export control systems. These companies were selected on the basis of the number of license applications for the export of Regime items they had submitted to either the Commerce Department or the State Department from fiscal year 1997 through fiscal year 2000. We also interviewed officials with the Department of Defense's Defense Threat Reduction Agency, the Department of State's Bureau of Nonproliferation and Office of Defense Trade Controls, and the Department of Commerce's Bureau of Export Administration. Additionally, we reviewed our prior reports and reports from the Inspectors General of the Departments of Defense and Commerce.

We conducted our review from January through July 2001 in accordance with generally accepted government auditing standards.

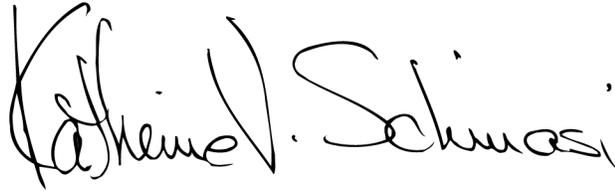
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As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 30 days after its issuance. At that time, we will send copies to the Chairmen and Ranking Minority Members of the Senate Committee on Banking, Housing, and Urban Affairs; Senate Committee on Foreign Relations; House Committee on International Relations; House Committee on Armed Services; the Secretaries of Commerce, Defense, and State; the Director, Office of Management and Budget; and the Assistant to the President for National Security Affairs. We will also make the report available to others upon request.

If you or your staff have questions concerning this report, please contact me at (202) 512-4841. Others making key contributions to this report were

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Thomas J. Denomme, Anne-Marie Lasowski, Johana R. Ayers, Richard K. Geiger, and John Van Schaik.

A handwritten signature in black ink that reads "Katherine V. Schinasi". The signature is written in a cursive style with a large, stylized initial 'K'.

Katherine V. Schinasi  
Director  
Acquisition and Sourcing Management

# Appendix I: Missile Technology Control Regime Items Subject to Unclear Jurisdiction

Forty-seven of the 196 items listed in the Missile Technology Control Regime (MTCR) Equipment, Software, and Technology Annex appear subject to the export control jurisdictions of both the Departments of Commerce and State. These 47 Regime items are described in table 2, along with an identification of where they are controlled on the Commerce Control List and the State Department’s U.S. Munitions List.

In some cases, Regime items are described on both export control lists with either identical or overlapping performance parameters. For these items, we have identified the category and Export Control Classification Number where they appear on the Commerce Control List and the category where they appear on the U.S. Munitions List. The remaining items, which are software and technologies related to Regime production facilities and equipment, have been claimed by Department of State officials as subject to the State Department’s jurisdiction, although the items do not explicitly appear on the U.S. Munitions List but do appear on the Commerce Control List. For these items, we have indicated on the table where State Department officials claim these items are controlled on the U.S. Munitions List and where they appear on the Commerce Control List.

**Table 2: Control of Regime Items by Both the Departments of Commerce and State**

Description of MTCR Item <sup>a</sup>	Commerce Control List Category (Export Control Classification Number)	U.S. Munitions List Category (Number)
1. Software specially designed or modified for the use of missile <sup>b</sup> production facilities	Propulsion Systems, Space Vehicles, and Related Equipment (9D101)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Aircraft and Associated Equipment (Category VIII)
2. Technology for the development, production, or use of missile production facilities and specially designed or modified software for the use of those facilities	Propulsion Systems, Space Vehicles, and Related Equipment (9E001, 9E002, and 9E102)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Aircraft and Associated Equipment (Category VIII)
3. Software specially designed or modified for the use of missile subsystem <sup>c</sup> production facilities	Propulsion Systems, Space Vehicles, and Related Equipment (9D101)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
4. Software specially designed or modified for the use of thrust vector control systems <sup>d</sup>	Propulsion Systems, Space Vehicles, and Related Equipment (9D102)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

<b>Description of MTCR Item<sup>a</sup></b>	<b>Commerce Control List Category (Export Control Classification Number)</b>	<b>U.S. Munitions List Category (Number)</b>
5. Technology for the development, production, or use of missile subsystem production equipment and facilities, software for the use of those facilities, and software for thrust vector control subsystems	Propulsion Systems, Space Vehicles, and Related Equipment (9E001, 9E002, and 9E102)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
6. Liquid and slurry propellant (including oxidizers) control systems, and specially designed components, usable in missiles, designed or modified to operate in vibration environments of more than 10 g RMS between 20 Hz and 2 kHz	Propulsion Systems, Space Vehicles, and Related Equipment (9A106)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
7. Software specially designed or modified for the use of production facilities for propulsion equipment, assemblies, components, and materials usable in missiles	Propulsion Systems, Space Vehicles, and Related Equipment (9D002 and 9D101)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Aircraft and Associated Equipment (Category VIII)
8. Software specially designed or modified for the use of lightweight turbojet and turbofan engines and of liquid and slurry propellant control systems and specially designed components	Propulsion Systems, Space Vehicles, and Related Equipment (9D102)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Aircraft and Associated Equipment (Category VIII)
9. Technology for the development, production, or use of liquid and slurry propellant control systems, production equipment and facilities for the manufacture of propulsion components, and software for the use of those facilities, lightweight turbojet and turbofan engines, liquid and slurry propellant control systems	Propulsion Systems, Space Vehicles, and Related Equipment (9E001, 9E002, 9E101, and 9E102)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Aircraft and Associated Equipment (Category VIII)
10. Nitrogen dioxide/dinitrogen tetroxide <sup>e</sup>	Materials, Chemicals, Microorganisms, and Toxins (1C111)	Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)
11. Triethylene glycol dinitrate <sup>f</sup>	Materials, Chemicals, Microorganisms, and Toxins (1C111)	Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)
12. 2-Nitrodiphenylamine <sup>g</sup>	Materials, Chemicals, Microorganisms, and Toxins (1C111)	Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)
13. Technology for the development, production, or use of nitrogen dioxide/ dinitrogen tetroxide, triethylene glycol dinitrate, and 2-Nitrodiphenylamine	Materials, Chemicals, Microorganisms, and Toxins (1E001 and 1E101)	Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)
14. Software specially designed or modified for the use of propellant test and production equipment for the production and handling of propellants and chemicals	Materials, Chemicals, Microorganisms, and Toxins (1D102)	State officials claim this item is categorized as Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

<b>Description of MTCR Item<sup>a</sup></b>	<b>Commerce Control List Category (Export Control Classification Number)</b>	<b>U.S. Munitions List Category (Number)</b>
15. Technology for the development, production, or use of propellant test and production equipment	Materials, Chemicals, Microorganisms, and Toxins (1E001 and 1E101)	State officials claim this item is categorized as Explosives, Propellants, Incendiary Agents, and Their Constituents (Category V)
16. Resin impregnated fiber prepregs and metal coated fiber preforms for composite structures, laminates, and manufactures thereof, specially designed for use in missiles and their complete subsystems, made either with organic matrix or metal matrix utilizing fibrous or filamentary reinforcements having a specific tensile strength greater than $7.62 \times 10^4$ m and a specific modulus greater than $3.18 \times 10^6$ m	Propulsion Systems, Space Vehicles, and Related Equipment (9A110)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Auxiliary Military Equipment (Category XIII)
17. Fine grain recrystallized bulk graphites (with a bulk density of at least $1.72 \text{ g/cm}^3$ measured at $15^\circ \text{ C}$ ) having a particle size of $100 \times 10^{-6}$ m or less, usable for rocket nozzles and reentry vehicle nose tips usable in missiles	Materials, Chemicals, Microorganisms, and Toxins (1C107)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Auxiliary Military Equipment (Category XIII)
18. Pyrolytic or fibrous reinforced graphites usable for rocket nozzles and reentry vehicle nose tips usable in missiles	Materials, Chemicals, Microorganisms, and Toxins (1C107)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Auxiliary Military Equipment (Category XIII)
19. Ceramic composite materials (dielectric constant less than 6 at frequencies from 100 Hz to 10 GHz) for use in radomes usable in missiles	Materials, Chemicals, Microorganisms, and Toxins (1C107)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
20. Bulk machinable silicon-carbide reinforced unfired ceramic usable for nose tips usable in missiles	Materials, Chemicals, Microorganisms, and Toxins (1C107)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
21. Technology for the development, production, or use of resin impregnated fiber prepregs, metal coated fiber preforms, fine grain recrystallized bulk graphites, pyrolytic or fibrous reinforced graphites, ceramic composite materials, and bulk machinable silicon-carbide reinforced unfired ceramic	Materials, Chemicals, Microorganisms, and Toxins (1E001 and 1E101) and Propulsion Systems, Space Vehicles, and Related Equipment (9E101 and 9E102)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Auxiliary Military Equipment (Category XIII)
22. Gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, and specially designed components	Navigation and Avionics (7A104)	Spacecraft Systems and Associated Equipment (Category XV)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

<b>Description of MTCR Item<sup>a</sup></b>	<b>Commerce Control List Category (Export Control Classification Number)</b>	<b>U.S. Munitions List Category (Number)</b>
23. Accelerometers with a threshold of 0.05 g or less, or a linearity error within 0.25% of full scale output, or both, which are designed for use in inertial navigation systems or in guidance systems of all types and specially designed components <sup>h</sup>	Navigation and Avionics (7A101)	Aircraft and Associated Equipment (Category VIII) and Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
24. All types of gyros usable in missiles, with a rated drift rate stability of less than 0.5 degrees per hour in a 1 g environment and specially designed components <sup>i</sup>	Navigation and Avionics (7A102)	Aircraft and Associated Equipment (Category VIII) and Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
25. Continuous output accelerometers or gyros of any type, specified to function at acceleration levels greater than 100 g, and specially designed components	Navigation and Avionics (7A001 and 7A002)	Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
26. Software specially designed or modified for the use of gyro-astro compasses, accelerometers, gyros, and production, test, calibration, and alignment equipment deigned or modified to be used with equipment for instrumentation, navigation, and direction finding	Navigation and Avionics (7D101)	Aircraft and Associated Equipment (Category VIII); Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII); and Spacecraft Systems and Associated Equipment (Category XV)
27. Integration software specially designed for inertial or other equipment using accelerometers or gyros and systems incorporating such equipment	Navigation and Avionics (7D102)	Aircraft and Associated Equipment (Category VIII) and Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
28. Technology for the development, production, or use of gyro-astro compasses, accelerometers, gyros, related production and test equipment, and related software	Navigation and Avionics (7E001, 7E002, and 7E101)	Aircraft and Associated Equipment (Category VIII); Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII); and Spacecraft Systems and Associated Equipment (Category XV)
29. Test, calibration, and alignment equipment specially designed for hydraulic, mechanical, electro-optical, or electromechanical flight control systems and attitude control equipment designed or modified for missiles	Navigation and Avionics (7B001)	State officials claim this item is categorized as Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
30. Software specially designed or modified for the use of test, calibration, and alignment equipment for flight and attitude control systems and equipment	Navigation and Avionics (7D101)	State officials claim this item is categorized as Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)
31. Technology for the development, production, or use of test, calibration, and alignment equipment for flight and attitude control systems and equipment and related software	Navigation and Avionics (7E001, 7E002, and 7E101)	State officials claim this item is categorized as Fire Control, Range Finder, Optical and Guidance and Control Equipment (Category XII)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

<b>Description of MTCR Item<sup>a</sup></b>	<b>Commerce Control List Category (Export Control Classification Number)</b>	<b>U.S. Munitions List Category (Number)</b>
32. Design technology for protection of avionics and electrical subsystems against electromagnetic pulse and electromagnetic interference hazards from external sources as follows: <ul style="list-style-type: none"> <li>• Design technology for shielding systems</li> <li>• Design technology for the configuration of hardened electrical circuits and subsystems</li> <li>• Design technology for determination of hardening criteria for the above</li> </ul>	Navigation and Avionics (7E102)	Military Electronics (Category XI)
33. Precision tracking systems, usable for missiles as follows: <ul style="list-style-type: none"> <li>• Tracking systems that use a code translator installed on the rocket or unmanned air vehicle in conjunction with either surface or airborne reference or navigation satellite systems to provide real-time measurements of in-flight position and velocity</li> <li>• Range instrumentation radars including associated optical/infrared trackers with all of the following capabilities:               <ul style="list-style-type: none"> <li>• Angular resolution better than 3 mrad,</li> <li>• Range of 30 km or greater with a range resolution better than 10 m RMS, and</li> <li>• Velocity resolution better than 3 m/s</li> </ul> </li> </ul>	Sensors and Lasers (6A108)	Military Electronics (Category XI)
34. Software that processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path, specially designed or modified for missiles	Sensors and Lasers (6D103)	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)
35. Software specially designed or modified for the use of precision tracking systems	Sensors and Lasers (6D102)	Military Electronics (Category XI)
36. Technology for the development, production, or use of precision tracking systems, software which processes post-flight recorded data, and software for precision tracking systems	Sensors and Lasers (6E001, 6E002, and 6E101)	Launch Vehicles, Guided Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV) and Military Electronics (Category XI)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

<b>Description of MTCR Item<sup>a</sup></b>	<b>Commerce Control List Category (Export Control Classification Number)</b>	<b>U.S. Munitions List Category (Number)</b>
37. Analog computers, digital computers, or digital differential analyzers designed or modified for use in missiles having any of the following characteristics: <ul style="list-style-type: none"> <li>Rated for continuous operation at temperatures from below -45° C to above +55° C or</li> <li>Designed as ruggedized or radiation hardened</li> </ul>	Computers (4A101)	Military Electronics (Category XI)
38. Technology for the development, production, or use of analog and digital computers and digital differential analyzers	Computers (4E001)	Military Electronics (Category XI)
39. Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e., stealth technology), for applications usable in missiles and their complete subsystems	Materials, Chemicals, Microorganisms, and Toxins (1C101)	Auxiliary Military Equipment (Category XIII)
40. Systems specially designed for radar cross section measurement usable for missiles and their complete subsystems <sup>j</sup>	Sensors and Lasers (6B108)	Military Electronics (Category XI)
41. Materials for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e., stealth technology), for applications usable for missiles and their complete subsystems	Materials, Chemicals, Microorganisms, and Toxins (1C101)	Auxiliary Military Equipment (Category XIII)
42. Software specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e., stealth technology), for applications usable for missiles and their complete subsystems	Materials, Chemicals, Microorganisms, and Toxins (1D103)	Auxiliary Military Equipment (Category XIII)
43. Technology for the development, production, or use of devices, materials, and software for reduced observables, and systems for radar cross section measurement	Materials, Chemicals, Microorganisms, and Toxins (1E001, 1E002, 1E101, and 1E102) and Sensors and Lasers (6E001, 6E002, and 6E101)	Military Electronics (Category XI) and Auxiliary Military Equipment (Category XIII)
44. Detectors specially designed or modified to protect rocket systems and unmanned air vehicles against nuclear effects, and usable for missiles	Sensors and Lasers (6A102)	Military Electronics (Category XI)
45. Technology for the development, production, or use of detectors	Sensors and Lasers (6E001, 6E002, and 6E101)	Military Electronics (Category XI)
46. Software specially designed or modified for production facilities for complete subsystems usable in complete rocket systems and unmanned air vehicles that are capable of a maximum range equal to or greater than 300 km with payloads of less than 500 kg	Propulsion Systems, Space Vehicles, and Related Equipment (9D001, 9D002, and 9D101)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)

**Appendix I: Missile Technology Control  
Regime Items Subject to Unclear Jurisdiction**

Description of MTCR Item <sup>a</sup>	Commerce Control List Category (Export Control Classification Number)	U.S. Munitions List Category (Number)
47. Technology for the development, production or use of production facilities and equipment for complete rocket systems and unmanned air vehicles that are capable of a maximum range equal to or greater than 300 km with payloads of less than 500 kg and software for those facilities	Propulsion Systems, Space Vehicles, and Related Equipment (9E001, 9E002, and 9E102)	State officials claim this item is categorized as Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines (Category IV)

<sup>a</sup>The descriptions of the MTCR items are based on the Missile Technology Control Regime Equipment, Software, and Technology Annex.

<sup>b</sup> For the purpose of this appendix, missiles are defined as complete rocket and unmanned air vehicle systems capable of delivering at least a 500 kilogram (kg) payload to a range of at least 300 kilometers (km).

<sup>c</sup> Complete subsystems include individual rocket stages, reentry vehicles, rocket engines, and warhead arming and fusing mechanisms.

<sup>d</sup> Thrust vector control systems change the rocket's thrust direction to steer a missile. They are also used on advanced fighters and spacecraft.

<sup>e</sup> Nitrogen dioxide/dinitrogen tetroxide is a liquid oxidizer that burns fuel in rocket motors and engines and is also used as an agent in agricultural chemicals and plastics.

<sup>f</sup> Triethylene glycol dinitrate is a nitrated plasticizer added to solid rocket propellants to increase their burn rate and is also used in military and commercial explosives.

<sup>g</sup> 2-Nitrodiphenylamine is an additive that reduces the decomposition of rocket fuels and is also widely used throughout the ammunition industry.

<sup>h</sup> Accelerometers are used to measure the rate of change of speed in a given direction and are used in missile guidance systems but are also used on civilian and military aircraft and in electronic equipment and manufacturing.

<sup>i</sup> Gyroscopes, or gyros, sense changes in orientation and are used in missile guidance systems but are also used on commercial and military ships and aircraft.

<sup>j</sup> Radar cross section measurement systems are needed to determine and reduce the radar signature of a missile. They can also be adapted to measure antenna performance patterns for commercial applications, including cell phones and satellite dishes.

# Appendix II: Comments From the Department of Commerce

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



**THE SECRETARY OF COMMERCE**  
Washington, D.C. 20230

SEP 13 2001

Ms. Katherine V. Schinasi  
Director  
Acquisition and Sourcing Management  
General Accounting Office  
Washington, D.C. 20548

Dear Ms. Schinasi:

This is in response to your request for comments on the General Accounting Office's (GAO) draft report entitled, "Export Controls: Clarification of Jurisdiction for Missile Technology Items Needed." We appreciate the GAO's work in this area.

The Department of Commerce's comments on the GAO's draft report are enclosed. Thank you for the opportunity to comment on the report.

Warm regards,

A handwritten signature in black ink, appearing to read "Donald L. Evans".

Donald L. Evans

Enclosure

**U.S. Department of Commerce**  
**Comments on the General Accounting Office Draft Report**  
***Export Controls: Clarification of Jurisdiction for Missile Technology Items Needed***  
**(GAO-01-531)**

The Department of Commerce has the following comments on the draft report.

**General Comment**

The draft report should explicitly note the role of the Departments of State and Defense in the export control system administered by the Department of Commerce. Under the Export Administration Act of 1979, as amended, and Office of Management and Budget procedures, State and Defense review and comment on all revisions to the Export Administration Regulations, including revisions to the Commerce Control List (CCL) related to controls based on the Missile Technology Control Regime (MTCR). In addition, under Executive Order 12981, as amended, State and Defense can review and make recommendations on all applications to export items controlled pursuant to the MTCR. In this review process, State can (and sometimes does) assert that the item cannot be licensed in the Commerce system because it is on the United States Munitions List (USML). In both the development of the CCL and review of license applications, State has ample opportunity to ensure that MTCR items it believes are on the USML are not licensed through the Commerce process. Commerce relies, as it must, on State and the other reviewing departments to ensure they have full internal review of CCL entries or license applications when providing Commerce with a department position. The draft report's language (i.e. consultations between State and Commerce have not been effective; the relevant State Department office has not participated in consultations) could be read to imply that Commerce has failed to work with State on this issue when this is really an internal State issue. The draft report also could be understood to imply that Commerce might be licensing MTCR items on the USML that State would not license because the report fails to note that all applications to Commerce to export MTCR items are reviewed by State.

**Specific Comments**

**Page 1**

First paragraph/fourth sentence:

It is unclear why this sentence states that the MTCR provisions in the National Defense Authorization Act for Fiscal Year 1991 fulfilled U.S. MTCR commitments. The U.S. had authority to implement its MTCR commitments in 1987 and did so. The 1991 MTCR amendments of the Export Administration Act were not necessary to implement U.S. commitments and in several ways go beyond those commitments.

See comment 1.

**Page 2**

Second Paragraph/Third sentence:

The comment attributed to the Commerce official should read as follows: "Commerce Department officials said a Regime item appearing on both lists should only be State Department controlled if it meets the criteria of being a defense article set forth in the International Traffic in Arms Regulations (120.3 of ITAR) such as by being specially designed or modified for a military application."

Second Paragraph/Last three sentences:

Participation of State's Office of Defense Trade Controls in review of the CCL and license applications is an internal State matter over which Commerce has no control. Commerce refers all proposed changes to the CCL directly to State. State internally determines the appropriate distribution for formal review within their department. Commerce cannot mandate which bureaus at State should review control list changes. In addition, Commerce has no formal role in review of State regulations or license applications.

Third paragraph:

This paragraph should be revised in two respects. First, the Commerce licensing system fully ensures that U.S. national interests are taken into account. Under Executive Order 12981, as amended, the Departments of State, Defense, and Energy have the right to review all export license applications submitted to Commerce. State and Defense review all applications for items controlled pursuant to the MTCR. Under Executive Order 12981, each agency can make a recommendation on whether a particular export should be approved and can escalate disagreements on proposed exports all the way to the President.

Second, there are some legal limits on Commerce's authority to license MTCR items. For example, section 1512 of the National Defense Authorization Act (NDAA) for FY 1999 (Pub. L. 105-261) requires presidential certification for the export of missile technology (MT)-controlled items to any end user in China.<sup>1</sup> Under this requirement, the president is required to notify Congress, 15 days prior to the export of any missile technology controlled item to China, of the proposed shipment and certify that: (1) the export is not detrimental to the United States space launch industry; and (2) the equipment,

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<sup>1</sup> Section 1512 of the NDAA for FY 1999 exempts certain items described in the law as "the export of inertial reference units and components in manned civilian aircraft or supplied as spare or replacement parts for such aircraft" from the certification process.

See comment 2.

See comment 3.

See comment 4.

including any indirect technical benefit that could be derived from the export, will not measurably improve the missile or space launch capabilities of China. Commerce may not issue an export license until the 15 day congressional review period has expired. The missile proliferation sanctions provision of the Export Administration Act (section 11B) is another example of a legal limit on exports of MTCR items.

**Page 3**

Last paragraph continued onto page 4:

This paragraph overlooks State's role in developing and revising the CCL and State's role in reviewing applications to export MT-controlled items. All the relevant departments (State, Defense, and Energy) have a full opportunity to ensure their views on proposed dual-use exports are taken into account in the licensing process. Commerce's system also affords State an opportunity to raise commodity jurisdiction issues (i.e. whether an item subject to a Commerce license application is actually on the USML) in the license review process.

**Page 6**

First sentence:

Commerce believes the International Traffic in Arms Regulations (ITAR), in section 120.3, do provide criteria to differentiate when items are on the CCL and when they are on the USML. The basic construct of the U.S. export control system is items that are purely civil or have both a civil and military application (dual-use) are under Commerce jurisdiction and those items that are specially designed or modified for a military application or otherwise meet the definition of defense article (120.3 of the ITAR) are under State jurisdiction. Thus, a commercial or dual-use gyro-astro compass would be under Commerce jurisdiction and a gyro-astro compass specially designed for a military application would be under State jurisdiction. This basic concept holds true for the vast majority of items that the report notes as having unclear licensing jurisdiction.

**Page 7**

Second paragraph:

As noted above, the description of State-Commerce consultations leaves the impression that Commerce did not consult with the proper State office. Commerce receives State clearance on its MT related regulations and must rely on State to obtain the necessary internal review.

See comment 5.

See comment 6.

**Page 8**

First full paragraph/first sentence:

This should be revised to state that Commerce officials said when the item listed has both a military and commercial version, only those items that meet the definition of a defense article should be on the ITAR.

Second full paragraph:

As noted above, State should be responsible for obtaining complete internal review.

**Page 9**

First paragraph:

It should be noted that Commerce does not believe there was any interagency view that the 1994 ITAR provisions affected the CCL MT entries - which had been in place since 1987.

The report references the MTCR Annex published in the ITAR Part 121.16. When reviewing this section of the ITAR, it is important to read the preamble "Some of the items on the Missile Technology Control Regime Annex are controlled by both the Department of Commerce on the Commodity Control List and by the Department of State on the United States Munitions List. To the *extent* (emphasis added) an article is on the United States Munitions List, a reference appears in parentheses listing the United States Munitions List Category in which it appears. The following items *constitute all items on the Missile Technology Control Regime Annex which are covered by the U.S. Munitions List:*" (emphasis added).

Thus, reviewing Part 121.16, it is apparent that there is no MTCR production equipment on the USML. Furthermore, a reference to a USML category beside an MTCR Annex entry does not mean that the entire entry is subject solely to ITAR jurisdiction, but only that there may be items described in this entry that are licensed by State (i.e., there could also be items of the same MTCR descriptions that are licensed by Commerce because they do not meet the criteria in section 120.3 of the ITAR).

**Page 10**

First full paragraph:

This paragraph overlooks the fundamental difference between dual-use items (items that are civilian or have civilian and military applications) and defense articles (items that few, if any, civilian applications). It also overlooks the role of State and other departments in Commerce's export control system and legal limits on exports of items controlled by Commerce for MT reasons.

Since the enactment of the 1999 NDAA, the Department of Commerce has approved only two export licenses for MT-controlled items to China that did not satisfy the safety-of-flight exemption. Both licenses required presidential certification and no objections were raised during the congressional review period.

First full paragraph/fourth sentence:

This sentence needs clarification. It is true Commerce would not consider a Boeing 747 with an MTCR controlled inertial navigation system installed in it subject to MTCR Sanctions. This is because a Boeing 747 is not an MTCR item. The MTCR does not control aircraft with inertial navigation equipment installed in them, nor does the MTCR control telecommunications equipment with radiation hardened microcircuits installed in them. The State Department's practice of using a "see through rule" that makes any item that contains an MTCR component, regardless of significance to the cost or performance of the end item, subject to sanctions is not based on the MTCR guidelines but instead is based State's policy for USML items.

Last line of Page 10 going on to Page 11:

Commerce has addressed the issue of MTCR licensing to Canada in its recent response to GAO Draft Report, *Export Controls: Regulatory Change Needed to Comply with Missile Technology Licensing Requirements* (GAO Code 120053) by committing to revising its regulations to require a license for MT-controlled items going to Canada. As with any other MT-related regulatory revisions, State will have the opportunity to review that regulation.

**Page 11**

Main paragraph:

It is BXA's experience that most companies can generally determine what agency has licensing

See comment 7.

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**Appendix II: Comments From the  
Department of Commerce**

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See comment 8.

authority over their product. As GAO correctly points out, Commerce licensing officers do return a number of export license applications that tell the exporter to either apply for a license with the State Department or to request a commodity jurisdiction determination. Additionally, all Commerce licenses for MT-controlled items are officially reviewed by both Defense and State. Thus, both of these agencies have a chance to review the items being exported for proper jurisdiction. Commerce has no official review of State licenses.

Comments on footnote 19:

See comment 9.

The purpose of this statement - companies self-reporting to State on Commerce-license exports of MTCR items - is unclear. It is appropriate for MTCR items to be licensed by Commerce. Furthermore, Commerce cannot issue an export license for an MTCR-controlled commodity without the consent of State and Defense. Therefore "self-reporting" to State is redundant and implies that an extra State check is needed even though State formally reviews such license applications. If a company submits a license application to Commerce and the commodity is determined to be under State's jurisdiction, Commerce immediately returns the application to the exporter stating that the applicant should seek an export license from State.

**Page 12**

Recommendations:

Although Commerce believes jurisdiction on MTCR items is generally clear and the current system is not a risk to U.S. nonproliferation interests, Commerce does support reviewing the CCL and USML entries to provide additional clarity for exporters. Commerce supports conforming, to the extent possible, our MTCR controls with respect to jurisdiction (dual-use versus munitions) to those of our MTCR/European Union Partners. This should also lead to greater clarity to the exporting public and aid in harmonization of export control procedures for multinational corporations.

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The following are GAO's comments on the Commerce Department's letter dated September 13, 2001:

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## GAO Comments

1. Text revised for clarification.
2. We believe the text reflects what Commerce Department officials told us during our review and is not substantively different than the Commerce Department's proposed change. We, therefore, do not believe a revision is needed.
3. We did not revise the report to include a discussion of the license review process. We believe that jurisdictional determinations should be made before a company submits an export license application for review. Clarification of the regulations would help ensure that a company submits its license application for a Regime item to the appropriate Department.
4. Text revised.
5. As discussed in the report, the State Department did not agree that exporters should use the criteria contained in section 120.3 of the State Department's regulations to determine whether an item is subject to the State Department's export controls. In addition, the Commerce Department refers to section 120.3 as containing the definition of a defense article. However, the definition of a defense article appears in section 120.6 of the State Department's regulations. According to the definition in section 120.6, a defense article is any item or technical data designated on the U.S. Munitions List.
6. We believe the text reflects what Commerce Department officials told us during our review and is not substantively different than the Commerce Department's proposed change. We, therefore, do not believe a revision is needed.
7. The Commerce Department's example highlights the difference between how the Departments of Commerce and State enforce sanctions. We do not believe additional clarification is needed.
8. As discussed in the report, some of the exporters we spoke with did not understand the export control system or certain terms in the regulations, thereby making it sometimes difficult to determine where to apply for a license to export Regime items. We point out in one

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example that a company submits license applications to the Commerce Department when uncertain as to which Department has jurisdiction, but do not discuss how Commerce licensing officers respond in such a situation.

9. Text revised for clarification.

# Appendix III: Comments From the Department of State

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



**United States Department of State**

*Chief Financial Officer*

Washington, D.C. 20520-7427

SEP 10 2001

Dear Ms. Westin:

We appreciate the opportunity to review your draft report, "EXPORT CONTROLS: Clarification of Jurisdiction for Missile Technology Items Needed," GAO-01-531, GAO Job Code 707550.

The enclosed Department of State comments are provided for incorporation with this letter as an appendix to the final report.

If you have any questions concerning this response, please contact Steve Tomchik, Office of Defense Trade Controls, Bureau of Political-Military Affairs, at (202) 663-2799.

Sincerely,

  
Larry J. Eisenhart  
Acting

Enclosure:

As stated.

cc: GAO/ASM - Ms. Lasowski  
State/OIG - Mr. Atkins  
State/PM/DTC - Mr. Lowell

Ms. Susan S. Westin,  
Managing Director,  
International Affairs and Trade,  
U.S. General Accounting Office.

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**Appendix III: Comments From the  
Department of State**

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Department of State Comments on GAO Draft Report

EXPORT CONTROLS: Clarification of Jurisdiction for Missile  
Technology Items Needed (GAO-01-531)  
Job Code 707550

Relevant offices of the Department of State have reviewed the draft report cited above. The Department is concerned that, in certain cases, the draft report mistakenly attributes the views of other agencies to the Department of State. In this respect, we attach the GAO-prepared document of April 25, 2001 as an accurate guide to the Department's views, and request that the draft be thoroughly reviewed to assure that viewpoints attributed to the Department are accurately presented.

With regard to the recommendations contained in the draft report, the Department agrees that the control list appearing in the International Traffic in Arms Regulations (ITAR) for items on the Missile Technology Control Regime (MTCR) Equipment and Technology Annex should be updated. This process has begun and the Department expects to promulgate before the end of 2001 a revision of the ITAR to this effect. In the context of this exercise, the Department will work with the Department of Commerce in an effort to eliminate areas of overlap in jurisdiction for items on the MTCR Annex.

See comment 1.

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The following is GAO's comment on the State Department's letter dated September 10, 2001:

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**GAO Comment**

1. We believe our draft report reflected information provided to us by State Department officials during the course of our review. However, we have revised the report to reflect the State Department's position as indicated in its comments.

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