DEPARTMENT OF STATE
22 CFR 120, 121, 123, 124, and 125
RIN 1400-AD40

Amendment to the International Traffic in Arms Regulations:
Continued Implementation of Export Control Reform.

AGENCY: Department of State.

ACTION: Final rule.

SUMMARY: As part of the President’s Export Control Reform (ECR) effort, the Department of State is amending the International Traffic in Arms Regulations (ITAR) to revise four more U.S Munitions List (USML) categories and provide new definitions and other changes. The revisions contained in this rule are part of the Department of State’s retrospective plan under E.O. 13563.

DATES: This rule is effective [insert date 180 days after date of publication in the Federal Register].

FOR FURTHER INFORMATION CONTACT: Ms. Sarah J. Heidema, Acting Director, Office of Defense Trade Controls Policy, Department of State, telephone (202) 663-2809; e-mail DDTCResponseTeam@state.gov.


SUPPLEMENTARY INFORMATION: The Directorate of Defense Trade Controls (DDTC), U.S. Department of State, administers the International Traffic in Arms Regulations (ITAR) (22 CFR parts 120-130). The items subject to the jurisdiction of the ITAR, i.e., “defense articles” and
“defense services,” are identified on the ITAR’s U.S. Munitions List (USML) (22 CFR 121.1). With few exceptions, items not subject to the export control jurisdiction of the ITAR are subject to the jurisdiction of the Export Administration Regulations (“EAR,” 15 CFR parts 730-774, which includes the Commerce Control List (CCL) in Supplement No. 1 to part 774), administered by the Bureau of Industry and Security (BIS), U.S. Department of Commerce. Both the ITAR and the EAR impose license requirements on exports, reexports, and retransfers. Items not subject to the ITAR or to the exclusive licensing jurisdiction of any other set of regulations are subject to the EAR.

All references to the USML in this rule are to the list of defense articles controlled for the purpose of export or temporary import pursuant to the ITAR, and not to the defense articles on the USML that are controlled by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) for the purpose of permanent import under its regulations. See 27 CFR part 447. Pursuant to section 38(a)(1) of the Arms Export Control Act (AECA), all defense articles controlled for export or import are part of the USML under the AECA. For the sake of clarity, the list of defense articles controlled by ATF for the purpose of permanent import is the U.S. Munitions Import List (USMIL). The transfer of defense articles from the ITAR’s USML to the EAR’s CCL for the purpose of export control does not affect the list of defense articles controlled on the USMIL under the AECA for the purpose of permanent import.

Export Control Reform Update

Pursuant to the President’s Export Control Reform (ECR) initiative, the Department has published proposed revisions to twelve USML categories and has revised four USML categories to create a more positive
control list and eliminate where possible “catch all” controls. The Department, along with the Departments of Commerce and Defense, reviewed the public comments the Department received on the proposed rules and has, where appropriate, revised the rules. A discussion of the comments relevant to the USML categories that are part of this rule is included later on in this notice. The Department continues to review the remaining USML categories and will publish them as proposed rules in the coming months.

For discussion of public comments relevant to the two USML categories that have been published as final rules, please see, “Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform,” published April 16, 2013 (78 FR 22740). The aforementioned notice also contains policies and procedures regarding the licensing of items moving from the export jurisdiction of the Department of State to the Department of Commerce, a definition for specially designed, and responses to public comments and changes to other sections of the ITAR that affect the categories discussed in this rule.

Pursuant to ECR, the Department of Commerce has been publishing revisions to the EAR, including various revisions to the CCL. Revision of the USML and CCL are coordinated so there is uninterrupted regulatory coverage for items moving from the jurisdiction of the Department of State to that of the Department of Commerce. For the Department of Commerce’s companion to this rule, please see, “Revisions to the Export Administration Regulations: Military Vehicles; Vessels of War; Submersible Vessels, Oceanographic Equipment; Related Items; and Auxiliary and Miscellaneous Items that the President Determines No Longer Warrant Control under the
United States Munitions List,” elsewhere in this edition of the Federal Register.

**Changes in this Rule**

The following changes are made to the ITAR with this final rule: (i) revision of U.S. Munitions List (USML) Categories VI (Surface Vessels of War and Special Naval Equipment), VII (Ground Vehicles), XIII (Materials and Miscellaneous Articles), and XX (Submersible Vessels and Related Articles); (ii) addition of ITAR §121.4 to provide a definition for “ground vehicles,” ITAR §121.14 to provide a definition for “submersible vessels,” and ITAR §120.38 to provide definitions of “organizational-level maintenance,” “intermediate-level maintenance,” and “depot-level maintenance”; (iii) revision of the definition of “surface vessels of war” at ITAR §121.15; (iv) continued implementation of a new licensing procedure for the export of items subject to the EAR that are to be exported with defense articles; and (v) related changes to other ITAR sections.

**Revision of USML Category VI**

This final rule revises USML Category VI, covering surface vessels of war and special naval equipment, to establish a clearer line between the USML and the CCL regarding controls for these articles.

The revision narrows the types of surface vessels of war and special naval equipment controlled on the USML to only those that warrant control under the requirements of the AECA. It removes from USML control harbor entrance detection devices formerly controlled under USML Category VI(d) and no longer includes submarines, which are now controlled in USML Category XX. In addition, articles common to the Missile Technology Control Regime (MTCR) Annex and articles in this
category are identified with the parenthetical “(MT)” at the end of each section containing such articles.

The revised USML Category VI does not contain controls on all generic parts, components, accessories, and attachments specifically designed or modified for a defense article, regardless of their significance to maintaining a military advantage for the United States. Rather, it contains a positive list of specific types of parts, components, accessories, and attachments that continue to warrant control on the USML. All other parts, components, accessories, and attachments are subject to the new 600 series controls in Category 8 of the CCL, published separately by the Department of Commerce (see elsewhere in this issue of the Federal Register).

A new “(x) paragraph” has been added to USML Category VI, allowing ITAR licensing for commodities, software, and technical data subject to the EAR provided those commodities, software, and technical data are to be used in or with defense articles controlled in USML Category VI and are described in the purchase documentation submitted with the application.

This rule also revises ITAR §121.15 to more clearly define “surface vessels of war” for purposes of the revised USML Category VI.

This revision of USML Category VI was first published as a proposed rule (RIN 1400-AC99) on December 23, 2011, for public comment (see 76 FR 80302). The comment period ended February 6, 2012. Nine parties filed comments recommending changes, which were reviewed and considered by the Department and other agencies. The Department’s evaluation of the written comments and recommendations follows.

The Department received proposals for alternative phrasing of the regulatory text in USML Category VI and ITAR §121.15. When the
recommended changes added to the clarity of the regulation and were congruent with ECR objectives, the Department accepted them.

Two commenting parties recommended changing the criteria for USML control for articles developed as a result of funding from the Department of Defense. While the Department agrees that “mere” funding by the Department of Defense should not automatically designate a resulting article as a defense article, the Department also notes that, generally, the Department of Defense’s interest is in developing defense articles. However, the Department has revised paragraph (c) to clarify that the control does not apply to developmental vessels identified in the relevant Department of Defense contract as being developed for both civil and military applications. Additionally, in response to public comments, the Department has inserted a delayed effective date for this and other developmental article controls so that it would not affect contracts or other funding authorizations now in effect. The controls would thus apply prospectively and only after the affected community has a sufficient opportunity to review and, as necessary, modify standard contract or funding authorization terms and conditions. The Department did not accept the recommendation of another party to limit the coverage of parts, components, accessories, and attachments in paragraph (c) to those listed in paragraph (f), as this would narrow the coverage in a manner unintended by the Department. The Department notes that this response also applies to comments received on this matter in the context of other USML categories and provisions of the ITAR (e.g., USML Category XX and ITAR §121.14, elsewhere in this rule).

Three commenting parties recommended the Department address and correct for any unintended consequences in revised ITAR §121.15(a)(6)
providing for the control of surface vessels of war that incorporate USML-
controlled mission systems, a provision that may control vessels the
Department intends for the transfer of export jurisdiction to the Department
of Commerce. While the issue of the control of USML items in 600 series
end-items will be addressed in a future policy statement, the Department has
revised the definition of “mission systems” to include only those “systems”
that are defense articles. The Department notes that this response also
applies to comments received on this matter in the context of other USML
categories and provisions of the ITAR (e.g., USML Category XX and ITAR
§121.14, elsewhere in this rule).

One commenting party recommended clarifying the regulation to not
control decommissioned and demilitarized surface vessels of war
manufactured prior to a certain date to avoid controlling “historic” vessels,
such as the U.S.S. Constitution. The Department has accepted this
recommendation in part, and has noted in ITAR §121.15 that demilitarized
surface vessels of war manufactured prior to 1950 are not subject to the
USML. Decommissioned vessels may retain their military capabilities, and
therefore are not excluded from USML control on that basis.

In response to one commenting party’s recommendation, the
Department has clarified that “hulls” and “superstructures” include “support
structures.” The Department notes that unformed steel plating would be
controlled based on the control of the material itself (see USML Category
XIII, Materials and Miscellaneous Articles, elsewhere in this rule).

One commenting party recommended clarification of the 12.5% or
greater damage threshold for hulls or superstructures. The damage threshold
is a measurement based on length between perpendiculars (LBP). The LBP
is a standard naval architecture term of reference that refers to the length of a
vessel along the waterline from the forward surface of the stem, or main bow perpendicular member, to the after surface of the sternpost, or main stern perpendicular member. The regulation covers vessels that are specially designed to survive damage defined by a shell opening centered at any point along the hull where the longitudinal extent of the shell opening is equivalent to 12.5% of LBP or greater.

**Revision of USML Category VII**

This final rule revises USML Category VII, covering ground vehicles, to more accurately describe the articles within the category and to establish a clearer line between the USML and the CCL regarding controls over these articles. The revision narrows the types of ground vehicles controlled on the USML to only those that warrant control under the requirements of the AECA. Changes include the removal of most unarmored and unarmed military vehicles, trucks, trailers, and trains (unless specially designed as firing platforms for weapons above .50 caliber), and armored vehicles (either unarmored or with inoperable weapons) manufactured before 1956. Engines formerly controlled in paragraph (f) are now covered in revised USML Category XIX, published April 16, 2013 (see 78 FR 22740) or subject to the EAR in ECCN 0A606 (see 78 FR 22660). In addition, articles common to the MTCR Annex and articles in this category are identified with the parenthetical “(MT)” at the end of each section containing such articles.

A significant aspect of the revised USML Category VII is that it does not contain controls on all generic parts, components, accessories, and attachments that are specifically designed or modified for a defense article, regardless of their significance to maintaining a military advantage for the United States. Rather, it contains a positive list of specific types of parts, components, accessories, and attachments that continue to warrant control
on the USML. All other parts, components, accessories, and attachments are subject to the new 600 series controls in Category 0 of the CCL (see the Department of Commerce rule elsewhere in this issue of the *Federal Register*).

A new “(x) paragraph” has been added to USML Category VII, allowing ITAR licensing for commodities, software, and technical data subject to the EAR provided those commodities, software, and technical data are to be used in or with defense articles controlled in USML Category VII and are described in the purchase documentation submitted with the application.

This rule also establishes a definition for ground vehicles in ITAR §121.4.

This revision of USML Category VII was published as a proposed rule (RIN 1400-AC77) on December 6, 2011, for public comment (see 76 FR 7611). The comment period ended January 20, 2012. Five parties filed comments recommending changes, which were thoroughly reviewed and considered by the Department and other agencies. The Department’s evaluation of the written comments and recommendations follows.

The Department received proposals for alternative phrasing of the regulatory text in USML Category VII and ITAR §121.4. When the recommended changes added to the clarity of the regulation and were congruent with ECR objectives, the Department accepted them.

One commenting party recommended providing an explanation of or reference for the phrase “rated class 60 or above” in paragraph (g)(9), to assist the exporter with interpretation. The Department notes there are numerous instances in the regulation where technical terminology is used. Such terminology is indispensable in the effort to provide a more descriptive
and “positive” U.S. Munitions List. While the Department strives for simplicity and clarity in the regulation, and acknowledges that some of the terminology may be inscrutable to those without the proper knowledge base, the provision of layman’s explanation of all technical parameters would make for a voluminous and unwieldy regulation.

One commenting party recommended revising paragraph (g)(11) to more specifically identify which kits should be controlled on the USML. The Department believes it has sufficiently described the articles meant to be controlled in that paragraph. For those in the public who disagree on the wording of a particular regulation because they believe it does not sufficiently describe the article to be controlled, the Department urges the submission of alternative text or criteria using the contact information in the “For Further Information” section. Any such comments will be evaluated for possible addition in a future rulemaking.

**Revision of USML Category XIII**

This final rule revises USML Category XIII, covering materials and miscellaneous articles, to more accurately describe the articles within the category and to establish a clearer line between the USML and the CCL regarding controls over these articles.

Paragraph (c) is removed and placed in reserve; the articles formerly controlled there (i.e., self-contained diving and underwater breathing apparatus) are controlled in ECCN 8A620.f. Paragraphs (d), (e), (g), and (h) are reorganized and expanded to better describe the articles controlled therein. Paragraph (f) is re-designated to cover articles that are classified. The articles in the former paragraph (f) (i.e., structural materials) are controlled in ECCN 0C617, revised USML Categories VI, VII, and VIII, and in paragraphs (d), (e), and new paragraph (f) of USML Category XIII.
Paragraph (i) is re-designated to control signature reduction software, with embrittling agents (formerly controlled in paragraph (i)) moving to the CCL under ECCN 0A617.f. Paragraph (m) is amended to reflect the revisions made throughout this category. In addition, articles common to the MTCR Annex and articles in this category are identified with the parenthetical “(MT)” at the end of each section containing such articles.

A new “(x) paragraph” has been added to USML Category XIII, allowing ITAR licensing for commodities, software, and technical data subject to the EAR provided those commodities, software, and technical data are to be used in or with defense articles controlled in USML Category XIII and are described in the purchase documentation submitted with the application.

Although the articles controlled in paragraph (a) (i.e., cameras and specialized processing equipment) are to controlled elsewhere on the USML and on the CCL, they will remain controlled in paragraph (a) until the Department publishes a final rule for USML Category XII and the Department of Commerce publishes its companion rule.

This revision of USML Category XIII was published as a proposed rule (RIN 1400-AD13) on May 18, 2012, for public comment (see 77 FR 29575). The comment period ended July 2, 2012. Ten parties filed comments recommending changes, which were reviewed and considered by the Department and other agencies. The Department’s evaluation of the written comments and recommendations follows.

The Department received proposals for alternative phrasing of the regulatory text in USML Category XIII. When the recommended changes added to the clarity of the regulation and were congruent with ECR objectives, the Department accepted them.
One commenting party recommended removal of the phrase, “specially designed for military applications,” from the introduction to paragraph (b) because an item should not be controlled on the USML merely because the military may be the first entity to purchase or use the item. The Department agrees that an item should not be considered a defense article based on first use by the military, and believes that appropriate application of the specially designed definition will work toward the preclusion of this occurrence. But the Department also notes that whether an item is specially designed for a military application and which sector (military or commercial) has established first purchases are two separate matters. Separately, the Department has accepted the recommendation to remove the phrase “specially designed for a military application” because it is superfluous.

One commenting party suggested that the parenthetical, “e.g., command, control, and communications (C³), and government intelligence applications,” in the introduction to paragraph (b) is unnecessary, as the regulation lists, or should list, all articles to be controlled. The Department has removed the example, but has added “intelligence” as a description of the articles controlled in the paragraph.

Three commenting parties recommended the provision of specific criteria for discerning the threshold between military and non-military articles in paragraph (b). The Department acknowledges that the control of these items requires review, and that this aspect of the regulation requires further development, but at this point publishes the regulation largely as provided in the proposed rule.
The Department has revised paragraph (b)(4) by providing criteria to clarify the scope of the regulation, as recommended by two commenting parties.

In response to the recommendation of one commenting party for clarity of purpose in paragraph (d), the Department has removed the word “ablative” from the introduction.

Three commenting parties recommended that developmental armor funded by a Department of Defense contract should not be automatically controlled under the ITAR. The Department has qualified the regulation by stipulating that the USML does not control developmental armor determined to be subject to the EAR via a commodity jurisdiction determination or identified in the relevant Department of Defense contract as being developed for both civil and military applications.

The Department accepted the recommendation of three commenting parties for identification of a lower-limit criterion for the provided parameter in paragraph (g)(1), and has revised the regulation accordingly.

Four commenting parties recommended control on the CCL as more appropriate for energy conversion devices controlled in paragraph (h). The Department has not accepted this recommendation, but has narrowed the control on thermionic generators covered in that paragraph.

The Department accepted the recommendation of five commenting parties to specifically indicate that the signature reduction software controlled in paragraph (i) be directly related to reducing the ability to detect a defense article, and has revised the regulation accordingly.

In response to the recommendation of one commenting party, laser eye-safe media will be controlled in revised USML Category X rather than
in paragraph (j), and comments regarding the appropriate control criteria for those articles will be discussed in that rule.

Two commenting parties recommended deletion of paragraph (k), which controls certain tooling and equipment, saying it is unnecessary (because technical data controls elsewhere in the ITAR would cover the items) or too broad in scope (commercial items would be captured). The Department believes the regulation is appropriately phrased to control only the articles intended to be captured. In addition, the reason for the control goes beyond related technical data; the Department wants to control these items for their intended function. For these reasons, the Department did not accept the recommendation of another commenting party to transfer jurisdiction over these articles to the Department of Commerce.

One commenting party recommended the removal from paragraph (m) description of the term “electromagnetic armor,” as it is not included in this category. The Department accepted this recommendation in part, and has included a note to USML Category VII(g)(6) to point to the definitions in USML Category XIII(m).

**Revision of USML Category XX**

This final rule revises USML Category XX, covering submersible vessels and related articles. The revision accounts for the movement of submarines from USML Category VI and consolidates the controls that apply to all submersible vessels in a single category. In addition, naval nuclear propulsion power plants for submersible vessels controlled under USML Category XX, formerly controlled under USML Category VI(e), are now controlled under USML Category XX(b). In addition, articles common to the MTCR Annex and articles in this category are identified with the parenthetical “(MT)” at the end of each section containing such articles.
Revised USML Category XX controls only those parts, components, accessories, and attachments that are specially designed for a defense article controlled therein. All other parts, components, accessories, and attachments become subject to the new 600 series controls in Category 8 of the CCL published separately by the Department of Commerce (see elsewhere in this issue of the Federal Register).

A new “(x) paragraph” has been added to USML Category XX, allowing ITAR licensing for commodities, software, and technical data subject to the EAR provided those commodities, software, and technical data are to be used in or with defense articles controlled in USML Category XX and are described in the purchase documentation submitted with the application.

This rule also creates ITAR §121.14 to more clearly define “submersible vessels and related articles,” and makes conforming edits to ITAR §§123.20, 124.2, and 125.1 (nuclear related controls).

This revision of USML Category XX was first published as a proposed rule (RIN 1400-AD01) on December 23, 2011, for public comment (see 76 FR 80305). The comment period ended February 6, 2012. Six parties filed comments recommending changes, which were reviewed and considered by the Department and other agencies. The Department’s evaluation of the written comments and recommendations follows.

The Department received proposals for alternative phrasing of the regulatory text in USML Category XX and ITAR §121.14. When the recommended changes added to the clarity of the regulation and were congruent with ECR objectives, the Department accepted them.

One commenting party recommended revising paragraph (c) to list the parts, components, accessories, attachments, and associated equipment
controlled therein, rather than provide for the control of these articles that are specially designed for the articles in paragraphs (a) and (b) of USML Category XX. Because of the specialized and sensitive application of the articles controlled in USML Category XX, the Department did not enumerate the parts, components, accessories, attachments, and associated equipment for these articles.

**Definition for Maintenance Levels**

This final rule provides definitions for “organizational-level maintenance,” “intermediate-level maintenance,” and “depot-level maintenance.”

These definitions were published for public comment on April 13, 2011, along with a proposed revision of the definition for “defense service” (RIN 1400-AC80, see 76 FR 20590. Revision of the defense service definition was the subject of another proposed rule. Please see 78 FR 31444). The comment period ended June 13, 2011. Thirty-nine parties filed comments recommending changes to the rule, which were reviewed and considered by the Department and other agencies. The Department’s evaluation of the written comments and recommendations follows (the Department notes that comments bearing more on the definitions of defense service and public domain will be addressed in those respective rules).

Three commenting parties recommended that the definitions of maintenance levels proposed in ITAR §120.38 should be replaced with the definitions already established by the Department of Defense in DoD Directive 4151.18, “Maintenance of Military Materiel,” to avoid confusion and maintain consistency. While the Department did not accept this recommendation, it notes that the definitions are very similar. Certain differences among the two sets of definitions include a description of the
types of maintenance services in the Department’s definition for depot-level maintenance, and not providing for the manufacturing of unavailable parts in its definition for intermediate-level maintenance.

Nine commenting parties recommended revising the definitions to focus on the nature or complexity of the service performed or the specialized skills and knowledge required in the performance of the maintenance rather than specifying where and by whom the service is performed. The Department accepted this recommendation in part. While the Department believes the nature and complexity of the services are distinguished by the three levels, it was not the intent to limit who may provide the services or where they may be provided. The Department revised the definitions accordingly.

One commenting party recommended inclusion of the phrase, “enhancements that do not improve military capability other than to enhance part life-cycle, reliability, or increase time between maintenance cycle checks,” in all three defined maintenance levels, to reflect the fact that component improvement programs are common for hardware with long lifecycles. The Department accepted this comment and revised the definitions accordingly.

One commenting party recommended defining the terms “extensive equipment” and “higher technical skill,” included in the definition for depot-level maintenance, as they are subjective. The Department accepted this recommendation in part. To minimize subjectivity, the Department replaced “extensive” with “necessary” and “higher technical” with “requisite.”

One commenting party recommended removal of the phrase “assigned to the inventory of the end-user unit” in the definition of organizational-level maintenance because this would require the applicant to verify that
equipment is in a foreign military inventory before performing the maintenance. The Department accepted this comment and has revised the definition accordingly.

**Adoption of Proposed Rules and Other Changes**

Having reviewed and evaluated the comments and recommended changes for the USML Category VI, USML Category VII, USML Category XIII, and USML Category XX proposed rules, and for the definition for maintenance levels, the Department has determined that it will, and hereby does, adopt them, with changes noted and other edits, and promulgates them in final form under this rule.

**REGULATORY ANALYSIS AND NOTICES**

*Administrative Procedure Act*

The Department of State is of the opinion that controlling the import and export of defense articles and services is a foreign affairs function of the United States Government and that rules implementing this function are exempt from sections 553 (rulemaking) and 554 (adjudications) of the Administrative Procedure Act (APA). Although the Department is of the opinion that this rule is exempt from the rulemaking provisions of the APA, the Department has published this rule as separate proposed rules identified as 1400-AC77, 1400-AC80, 1400-AC99, 1400-AD01, and 1400-AD13, each with a 45- or 60-day provision for public comment and without prejudice to its determination that controlling the import and export of defense services is a foreign affairs function.

*Regulatory Flexibility Act*

Since the Department is of the opinion that this rule is exempt from the provisions of 5 U.S.C. 553, there is no requirement for an analysis under the Regulatory Flexibility Act.
Unfunded Mandates Reform Act of 1995

This rulemaking does not involve a mandate that will result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any year and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996 (the “Act”), a “major” rule is a rule that the Administrator of the OMB Office of Information and Regulatory Affairs finds has resulted or is likely to result in 1) an annual effect on the economy of $100,000,000 or more; 2) a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions; or 3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and foreign markets.

The Department does not believe this rulemaking will have an annual effect on the economy of $100,000,000 or more. Articles that are being removed from coverage in the U.S. Munitions List categories contained in this rule will still require licensing for export, but from the Department of Commerce. While the licensing regime of the Department of Commerce is more flexible than that of the Department of State, it is not expected that the change in jurisdiction of these articles will result in an export difference of $100,000,000 or more.
The Department also does not believe that this rulemaking will result in a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions, or have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and foreign markets.

Executive Orders 12372 and 13132

This rulemaking will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 13132, it is determined that this rulemaking does not have sufficient federalism implications to require consultations or warrant the preparation of a federalism summary impact statement. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this rulemaking.

Executive Orders 12866 and 13563

Executive Orders 12866 and 13563 direct agencies to assess costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributed impacts, and equity). These executive orders stress the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This rulemaking has been designated a “significant regulatory action,” although not economically significant, under section 3(f) of Executive Order 12866. Accordingly, this rule has been reviewed by the Office of Management and Budget (OMB).
Executive Order 12988

The Department of State has reviewed this rulemaking in light of sections 3(a) and 3(b)(2) of Executive Order 12988 to eliminate ambiguity, minimize litigation, establish clear legal standards, and reduce burden.

Executive Order 13175

The Department of State has determined that this rulemaking will not have tribal implications, will not impose substantial direct compliance costs on Indian tribal governments, and will not pre-empt tribal law. Accordingly, the requirement of Executive Order 13175 does not apply to this rulemaking.

Paperwork Reduction Act

Following is a listing of approved collections that will be affected by revision, pursuant to the President’s Export Control Reform (ECR) initiative, of the U.S. Munitions List (USML) and the Commerce Control List. This final rule continues the implementation of ECR. Other final rules will follow. The list of collections and the description of the manner in which they will be affected pertains to revision of the USML in its entirety, not only to the categories published in this rule:

1) Statement of Registration, DS-2032, OMB No. 1405-0002. The Department estimates that between 3,000 and 5,000 of the currently-registered persons will not need to maintain registration following full revision of the USML. This would result in a burden reduction of between 6,000 and 10,000 hours annually, based on a revised time burden of two hours to complete a Statement of Registration.

2) Application/License for Permanent Export of Unclassified Defense Articles and Related Unclassified Technical Data, DSP-5, OMB No. 1405-0003. The Department estimates that there will be 35,000 fewer DSP-5 submissions annually following full revision of the USML. This would
result in a burden reduction of 35,000 hours annually. In addition, the DSP-5 will allow respondents to select USML Category XIX, a newly-established category, as a description of articles to be exported.

3) Application/License for Temporary Import of Unclassified Defense Articles, DSP-61, OMB No. 1405-0013. The Department estimates that there will be 200 fewer DSP-61 submissions annually following full revision of the USML. This would result in a burden reduction of 100 hours annually. In addition, the DSP-61 will allow respondents to select USML Category XIX, a newly-established category, as a description of articles to be temporarily imported.

4) Application/License for Temporary Export of Unclassified Defense Articles, DSP-73, OMB No. 1405-0023. The Department estimates that there will be 800 fewer DSP-73 submissions annually following full revision of the USML. This would result in a burden reduction of 800 hours annually. In addition, the DSP-73 will allow respondents to select USML Category XIX, a newly-established category, as a description of articles to be temporarily exported.

5) Application for Amendment to License for Export or Import of Classified or Unclassified Defense Articles and Related Technical Data, DSP-6, -62, -74, -119, OMB No. 1405-0092. The Department estimates that there will be 2,000 fewer amendment submissions annually following full revision of the USML. This would result in a burden reduction of 1,000 hours annually. In addition, the amendment forms will allow respondents to select USML Category XIX, a newly-established category, as a description of the articles that are the subject of the amendment request.

6) Request for Approval of Manufacturing License Agreements, Technical Assistance Agreements, and Other Agreements, DSP-5, OMB No. 1405-
0093. The Department estimates that there will be 1,000 fewer agreement submissions annually following full revision of the USML. This would result in a burden reduction of 2,000 hours annually. In addition, the DSP-5, the form used for the purposes of electronically submitting agreements, will allow respondents to select USML Category XIX, a newly-established category, as a description of articles to be exported.

7) Maintenance of Records by Registrants, OMB No. 1405-0111. The requirement to actively maintain records pursuant to provisions of the International Traffic in Arms Regulations (ITAR) will decline commensurate with the drop in the number of persons who will be required to register with the Department pursuant to the ITAR. As stated above, the Department estimates that between 3,000 and 5,000 of the currently-registered persons will not need to maintain registration following full revision of the USML. This would result in a burden reduction of between 60,000 and 100,000 hours annually. However, the ITAR does provide for the maintenance of records for a period of five years. Therefore, persons newly relieved of the requirement to register with the Department may still be required to maintain records.

8) Export Declaration of Defense Technical Data or Services, DS-4071, OMB No. 1405-0157. The Department estimates that there will be 2,000 fewer declaration submissions annually following full revision of the USML. This would result in a burden reduction of 1,000 hours annually.

List of Subjects

22 CFR 120, 121, and 125

Arms and munitions, Classified information, Exports.

22 CFR 123
Arms and munitions, Exports, Reporting and recordkeeping requirements.

**22 CFR 124**

Arms and munitions, Exports, Technical assistance.

Accordingly, for the reasons set forth above, Title 22, Chapter I, Subchapter M, parts 120, 121, 123, 124, and 125 are amended as follows:

**PART 120 – PURPOSE AND DEFINITIONS**

1. The authority citation for part 120 continues to read as follows:


2. Section 120.38 is added to read as follows:

   §120.38 Maintenance levels.

   (a) *Organizational-level maintenance* (or basic-level maintenance) is the first level of maintenance that can be performed “on-equipment” (directly on the defense article or support equipment) without specialized training. It consists of repairing, inspecting, servicing, calibrating, lubricating, or adjusting equipment, as well as replacing minor parts, components, assemblies, and line-replaceable spares or units. This includes modifications, enhancements, or upgrades that would result in improving only the reliability or maintainability of the commodity (*e.g.*, an increased mean time between failure (MTBF)) and does not enhance the basic performance or capability of the defense article.

   (b) *Intermediate-level maintenance* is second-level maintenance performed “off-equipment” (on removed parts, components, or equipment) at or by designated maintenance shops or centers, tenders, or field teams. It may
consist of calibrating, repairing, testing, or replacing damaged or unserviceable parts, components, or assemblies. This includes modifications, enhancements, or upgrades that would result in improving only the reliability or maintainability of the commodity (e.g., an increased mean time between failure (MTBF)) and does not enhance the basic performance or capability of the defense article.

(c) *Depot-level maintenance* is third-level maintenance performed on- or off-equipment at or by a major repair facility, shipyard, or field team, each with necessary equipment and personnel of requisite technical skill. It consists of providing evaluation or repair beyond unit or organization capability. This maintenance consists of inspecting, testing, calibrating, repairing, overhauling, refurbishing, reconditioning, and one-to-one replacing of any defective parts, components or assemblies. This includes modifications, enhancements, or upgrades that would result in improving only the reliability or maintainability of the commodity (e.g., an increased mean time between failure (MTBF)) and does not enhance the basic performance or capability of the defense article.

**PART 121 – THE UNITED STATES MUNITIONS LIST**

3. The authority citation for part 121 continues to read as follows:


4. Section 121.1 is amended by revising U.S. Munitions List Categories VI, VII, XIII, and XX to read as follows:

**§121.1 General. The United States Munitions List.**

* * * * *

**Category VI—Surface Vessels of War and Special Naval Equipment**
*(a) Warships and other combatant vessels (see §121.15 of this subchapter).
(b) Other vessels not controlled in paragraph (a) of this category (see §121.15 of this subchapter).
(c) Developmental vessels and specially designed parts, components, accessories, and attachments therefor funded by the Department of Defense via contract or other funding authorization.

*Note 1 to paragraph (c):* This paragraph does not control developmental vessels and specially designed parts, components, accessories, and attachments therefor (a) in production, (b) determined to be subject to the EAR via a commodity jurisdiction determination (see §120.4 of this subchapter), or (c) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications.

*Note 2 to paragraph (c):* Note 1 does not apply to defense articles enumerated on the U.S. Munitions List, whether in production or development.

*Note 3 to paragraph (c):* This provision is applicable to those contracts and funding authorizations that are dated one year or later following the publication of the rule, “Amendment to the International Traffic in Arms Regulations: Continued Implementation of Export Control Reform,” RIN 140-AD40.

(d) [Reserved]

*(e) Naval nuclear propulsion plants and prototypes, and special facilities for construction, support, and maintenance therefor (see §123.20 of this subchapter).
(f) Vessel and naval equipment, parts, components, accessories, attachments, associated equipment, and systems, as follows:
(1) Hulls or superstructures, including support structures therefor, that:
   (i) Are specially designed for any vessels controlled in paragraph (a) of this category;
   (ii) Have armor, active protection systems, or developmental armor systems; or
   (iii) Are specially designed to survive 12.5% or greater damage across the length as measured between perpendiculars;
(2) Systems that manage, store, create, distribute, conserve, and transfer energy, and specially designed parts and components therefor, that have:
   (i) Storage exceeding 30MJ;
   (ii) A discharge rate less than 3 seconds; and
   (iii) A cycle time under 45 seconds;
(3) Shipborne auxiliary systems for chemical, biological, radiological, and nuclear (CBRN) compartmentalization, over-pressurization and filtration systems, and specially designed parts and components therefor;
*(4) Control and monitoring systems for autonomous unmanned vessels capable of on-board, autonomous perception and decision-making necessary for the vessel to navigate while avoiding fixed and moving hazards, and obeying rules-of-the road without human intervention;
*(5) Any machinery, device, component, or equipment, including production, testing and inspection equipment, and tooling, specially designed for plants or facilities controlled in paragraph (e) of this section (see §123.20 of this subchapter);
(6) Parts, components, accessories, attachments, and equipment specially designed for integration of articles controlled by USML Categories II, IV, or XVIII or catapults for launching aircraft or arresting gear for recovering aircraft (MT for launcher mechanisms specially designed for rockets, space
launch vehicles, or missiles capable of achieving a range greater than or equal to 300 km);

*Note to paragraph (f)(6):* “Range” is the maximum distance that the specified rocket system is capable of traveling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for rocket systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints. For rocket systems, the range will be determined using the trajectory that maximizes range, assuming International Civil Aviation Organization (ICAO) standard atmosphere with zero wind.

(7) Shipborne active protection systems (*i.e.*, defensive systems that actively detect and track incoming threats and launch a ballistic, explosive, energy, or electromagnetic countermeasure(s) to neutralize the threat prior to contact with a vessel) and specially designed parts and components therefor;

(8) Minesweeping and mine hunting equipment (including mine countermeasures equipment deployed by aircraft) and specially designed parts and components therefor; or

*(9) Any part, component, accessory, attachment, equipment, or system that:

(i) Is classified;

(ii) Contains classified software directly related to defense articles in this subchapter or 600 series items subject to the EAR; or

(iii) Is being developed using classified information.

“Classified” means classified pursuant to Executive Order 13526, or predecessor order, and a security classification guide developed pursuant
thereto or equivalent, or to the corresponding classification rules of another
government or international organization.

Note 1 to paragraph (f): Parts, components, accessories, attachments, 
associated equipment, and systems specially designed for vessels 
enumerated in this category but not listed in paragraph (f) are subject to the 
EAR under ECCN 8A609.

Note 2 to paragraph (f): For controls related to ship signature management, 
see also USML Category XIII.

(g) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles enumerated in paragraphs (a) through (f) of this category and classified technical data 
directly related to items controlled in ECCNs 8A609, 8B609, 8C609, and 
8D609 and defense services using the classified technical data. (MT for technical data and defense services related to articles designated as such.) 
(See §125.4 of this subchapter for exemptions.)

(h)-(w) [Reserved]

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.

Note to paragraph (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see §123.1(b) of this subchapter).

Category VII—Ground Vehicles

*(a) Armored combat ground vehicles (see §121.4 of this subchapter) as follows:

(1) Tanks; or
(2) Infantry fighting vehicles.

*(b) Ground vehicles (not enumerated in paragraph (a) of this category) and trailers that are armed or are specially designed to serve as a firing or launch platform (see §121.4 of this subchapter) (MT if specially designed for rockets, space launch vehicles, missiles, drones, or unmanned aerial vehicles capable of delivering a payload of at least 500 kg to a range of at least 300 km).

(c) Ground vehicles and trailers equipped with any mission systems controlled under this subchapter (MT if specially designed for rockets, space launch vehicles, missiles, drones, or unmanned aerial vehicles capable of delivering a payload of at least 500 kg to a range of at least 300 km) (see §121.4 of this subchapter).

*Note to paragraphs (b) and (c): “Payload” is the total mass that can be carried or delivered by the specified rocket, space launch vehicle, missile, drone, or unmanned aerial vehicle that is not used to maintain flight. For definition of “range” as it pertains to aircraft systems, see note to paragraph (a) USML Category VIII. For definition of “range” as it pertains to rocket systems, see note to paragraph (f)(6) of USML Category VI.

(d) [Reserved]

*(e) Armored support ground vehicles (see §121.4 of this subchapter).

(f) [Reserved]

(g) Ground vehicle parts, components, accessories, attachments, associated equipment, and systems as follows:

(1) Armored hulls, armored turrets, and turret rings;

(2) Active protection systems (i.e., defensive systems that actively detect and track incoming threats and launch a ballistic, explosive, energy, or
electromagnetic countermeasure(s) to neutralize the threat prior to contact with a vehicle) and specially designed parts and components therefor;

(3) Composite armor parts and components specially designed for the vehicles in this category;

(4) Spaced armor components and parts, including slat armor parts and components specially designed for the vehicles in this category;

(5) Reactive armor parts and components;

(6) Electromagnetic armor parts and components, including pulsed power specially designed parts and components therefor;

*Note to paragraphs (g)(3)-(6): See USML Category XIII(m)(1)-(4) for interpretations which explain and amplify terms used in these paragraphs.*

(7) Built in test equipment (BITE) to evaluate the condition of weapons or other mission systems for vehicles identified in this category, excluding equipment that provides diagnostics solely for a subsystem or component involved in the basic operation of the vehicle;

(8) Gun mount, stabilization, turret drive, and automatic elevating systems, and specially designed parts and components therefor;

(9) Self-launching bridge components rated class 60 or above for deployment by vehicles in this category;

(10) Suspension components as follows:

(i) Rotary shock absorbers specially designed for the vehicles weighing more than 30 tons in this category; or

(ii) Torsion bars specially designed for the vehicles weighing more than 50 tons in this category;

(11) Kits specially designed to convert a vehicle in this category into either an unmanned or a driver-optional vehicle. For a kit to be controlled by this paragraph, it must, at a minimum, include equipment for:
(i) Remote or autonomous steering;
(ii) Acceleration and braking; and
(iii) A control system;

(12) Fire control computers, mission computers, vehicle management computers, integrated core processors, stores management systems, armaments control processors, vehicle-weapon interface units and computers;

(13) Test or calibration equipment for the mission systems of the vehicles in this category, except those enumerated elsewhere; or

*(14) Any part, component, accessory, attachment, equipment, or system that (MT for those articles designated as such):

(i) Is classified;
(ii) Contains classified software directly related to defense articles in this subchapter or 600 series items subject to the EAR; or
(iii) Is being developed using classified information.

“Classified” means classified pursuant to Executive Order 13526, or predecessor order, and a security classification guide developed pursuant thereto or equivalent, or to the corresponding classification rules of another government or international organization.

Note to paragraph (g): Parts, components, accessories, attachments, associated equipment, and systems specially designed for vehicles in this category but not listed in paragraph (g) are subject to the EAR under ECCN 0A606.

(h) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles enumerated in paragraphs (a) through (g) of this category and classified technical data directly related to items controlled in ECCNs 0A606, 0B606, 0C606, and
0D606 and defense services using the classified technical data. (See §125.4 of this subchapter for exemptions.) (MT for technical data and defense services related to articles designated as such.)

(i)-(w) [Reserved]

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.

Note to paragraph (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see §123.1(b) of this subchapter).

* * * * *

Category XIII—Materials and Miscellaneous Articles

(a) Cameras and specialized processing equipment therefor, photointerpretation, stereoscopic plotting, and photogrammetry equipment which are specifically designed, developed, modified, adapted, or configured for military purposes, and components specifically designed or modified therefor.

(b) Information security or information assurance systems and equipment, cryptographic devices, software, and components, as follows:

(1) Military or intelligence cryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of maintaining secrecy or confidentiality of information or information systems, including equipment or software for tracking, telemetry, and control (TT&C) encryption and decryption;
(2) Military or intelligence cryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of generating spreading or hopping codes for spread spectrum systems or equipment;
(3) Military or intelligence cryptanalytic systems, equipment, assemblies, modules, integrated circuits, components and software;
(4) Military or intelligence systems, equipment, assemblies, modules, integrated circuits, components, or software (including all previous or derived versions) authorized to control access to or transfer data between different security domains as listed on the Unified Cross Domain Management Office (UCDMO) Control List (UCL); or

(5) Ancillary equipment specially designed for the articles in paragraphs (b)(1)-(b)(4) of this category.
(c) [Reserved]
(d) Materials, as follows:
*(1) Ablative materials fabricated or semi-fabricated from advanced composites (e.g., silica, graphite, carbon, carbon/carbon, and boron filaments) specially designed for the articles in USML Category IV (MT if usable for nozzles, re-entry vehicles, nose tips, or nozzle flaps usable in rockets, space launch vehicles (SLVs), or missiles capable of achieving a range greater than or equal to 300 km); or
(2) Carbon/carbon billets and preforms that are reinforced with continuous unidirectional fibers, tows, tapes, or woven cloths in three or more dimensional planes (MT if designed for rocket, SLV, or missile systems and usable in rockets, SLVs, or missiles capable of achieving a range greater than or equal to 300 km).
Note to paragraph (d): “Range” is the maximum distance that the specified rocket system is capable of traveling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for rocket systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints. For rocket systems, the range will be determined using the trajectory that maximizes range, assuming International Civil Aviation Organization (ICAO) standard atmosphere with zero wind.

Note to paragraph (d)(2): This paragraph does not control carbon/carbon billets and preforms where reinforcement in the third dimension is limited to interlocking of adjacent layers only.

(e) Armor (e.g., organic, ceramic, metallic) and armor materials, as follows:
(1) Spaced armor with $E_m$ greater than 1.4 and meeting NIJ Level III or better;
(2) Transparent armor having $E_m$ greater than or equal to 1.3 or having $E_m$ less than 1.3 and meeting and exceeding NIJ Level III standards with areal density less than or equal to 40 pounds per square foot;
(3) Transparent ceramic plate greater than ¼ inch-thick and larger than 8 inches x 8 inches, excluding glass, for transparent armor;
(4) Non-transparent ceramic plate or blanks, greater than ¼ inches thick and larger than 8 inches x 8 inches for transparent armor. This includes spinel and aluminum oxynitride (ALON);
(5) Composite armor with $E_m$ greater than 1.4 and meeting or exceeding NIJ Level III;
(6) Metal laminate armor with $E_m$ greater than 1.4 and meeting or exceeding
NIJ Level III; or

(7) Developmental armor funded by the Department of Defense via contract
or other funding authorization.

**Note 1 to paragraph (e)(7):** This paragraph does not control developmental
armor (a) in production, (b) determined to be subject to the EAR via a
commodity jurisdiction determination (see §120.4 of this subchapter), or (c)
identified in the relevant Department of Defense contract or other funding
authorization as being developed for both civil and military applications.

**Note 2 to paragraph (e)(7):** Note 1 does not apply to defense articles
enumerated on the USML, whether in production or development.

**Note 3 to paragraph (e)(7):** This provision is applicable to those contracts
and funding authorizations that are dated one year or later following the
publication of the rule, “Amendment to the International Traffic in Arms
Regulations: Continued Implementation of Export Control Reform,” RIN
140-AD40.

*(f)* Any article enumerated in this category that (MT for those articles
designated as such):

(i) Is classified;

(ii) Contains classified software directly related to defense articles in this
subchapter or 600 series items subject to the EAR; or

(iii) Is being developed using classified information.

“Classified” means classified pursuant to Executive Order 13526, or
predecessor order, and a security classification guide developed pursuant
thereo or equivalent, or to the corresponding classification rules of another
government or international organization.
*(g) Concealment and deception equipment, as follows (MT for applications usable for rockets, SLVs, missiles, drones, or unmanned aerial vehicles (UAVs) capable of achieving a range greater than or equal to 300 km and their subsystems. See note to paragraph (d) of this category):

(1) Polymers loaded with carbonyl iron powder, ferrites, iron whiskers, fibers, flakes, or other magnetic additives having a surface resistivity of less than 5000 ohms/square and greater than 10 ohms/square with electrical isotropy of less than 5%;

(2) Multi-layer camouflage systems specially designed to reduce detection of platforms or equipment in the infrared or ultraviolet frequency spectrums;

(3) High temperature (greater than 300° F operation) ceramic or magnetic radar absorbing material (RAM) specially designed for use on defense articles or military items subject to the EAR; or

(4) Broadband (greater than 30% bandwidth) lightweight (less than 2 lbs/sq ft) magnetic radar absorbing material (RAM) specially designed for use on defense articles or military items subject to the EAR.

(h) Energy conversion devices not otherwise enumerated in this subchapter, as follows:

(1) Fuel cells specially designed for platforms or soldier systems specified in this subchapter;

(2) Thermal engines specially designed for platforms or soldier systems specified in this subchapter;

(3) Thermal batteries (MT if designed or modified for rockets, SLVs, missiles, drones, or UAVs capable of achieving a range equal to or greater than 300 km. See note to paragraph (d) of this category); or

*Note to paragraph (h)(3):* Thermal batteries are single use batteries that contain a solid non-conducting inorganic salt as the electrolyte. These
batteries incorporate a pyrolitic material that, when ignited, melts the electrolyte and activates the battery.

(4) Thermionic generators specially designed for platforms or soldier systems enumerated in this subchapter.

*(i) Signature reduction software, and technical data as follows (MT for software specially designed for reduced observables, for applications usable for rockets, SLVs, missiles, drones, or UAVs capable of achieving a range (see note to paragraph (d) of this category) greater than or equal to 300 km, and their subsystems, including software specially designed for analysis of signature reduction; MT for technical data for the development, production, or use of equipment, materials, or software designated as such, including databases specially designed for analysis of signature reduction):

(1) Software associated with the measurement or modification of system signatures for defense articles to reduce detectability or observability;

(2) Software for design of low-observable platforms;

(3) Software for design, analysis, prediction, or optimization of signature management solutions for defense articles;

(4) Infrared signature measurement or prediction software for defense articles or radar cross section measurement or prediction software;

(5) Signature management technical data, including codes and algorithms for defense articles to reduce detectability or observability;

(6) Signature control design methodology (see §125.4(c)(4) of this subchapter) for defense articles to reduce detectability or observability;

(7) Technical data for use of micro-encapsulation or micro-spheres to reduce infrared, radar, or visual detection of platforms or equipment;

(8) Multi-layer camouflage system technical data for reducing detection of platforms or equipment;
(9) Multi-spectral surface treatment technical data for modifying infrared, visual or radio frequency signatures of platforms or equipment;
(10) Technical data for modifying visual, electro-optical, radiofrequency, electric, magnetic, electromagnetic, or wake signatures (e.g., low probability of intercept (LPI) techniques, methods or applications) of defense platforms or equipment through shaping, active, or passive techniques; or
(11) Technical data for modifying acoustic signatures of defense platforms or equipment through shaping, active, or passive techniques.

(j) Equipment, materials, coatings, and treatments not elsewhere specified, as follows:
(1) Specially treated or formulated dyes, coatings, and fabrics used in the design, manufacture, or production of personnel protective clothing, equipment, or face paints designed to protect against or reduce detection by radar, infrared, or other sensors at wavelengths greater than 900 nanometers (see USML Category X(a)(2)); or
*(2) Equipment, materials, coatings, and treatments that are specially designed to modify the electro-optical, radiofrequency, infrared, electric, laser, magnetic, electromagnetic, acoustic, electro-static, or wake signatures of defense articles or 600 series items subject to the EAR through control of absorption, reflection, or emission to reduce detectability or observability (MT for applications usable for rockets, SLVs, missiles, drones, or UAVs capable of achieving a range greater than or equal to 300 km, and their subsystems. See note to paragraph (d) of this category).
*(k) Tooling and equipment, as follows:
(1) Tooling and equipment specially designed for production of low observable (LO) components; or
(2) Portable platform signature field repair validation equipment (e.g., portable optical interrogator that validates integrity of a repair to a signature reduction structure).

(l) Technical data (see §120.10 of this subchapter) directly related to the defense articles enumerated in paragraphs (a) through (h), (j), and (k) of this category and defense services (see §120.9 of this subchapter) directly related to the defense articles enumerated in this category. (See also §123.20 of this subchapter.) (MT for technical data and defense services related to articles designated as such.)

(m) The following interpretations explain and amplify terms used in this category and elsewhere in this subchapter:

(1) Composite armor is defined as having more than one layer of different materials or a matrix.

(2) Spaced armors are metallic or non-metallic armors that incorporate an air space or obliquity or discontinuous material path effects as part of the defeat mechanism.

(3) Reactive armor employs explosives, propellants, or other materials between plates for the purpose of enhancing plate motion during a ballistic event or otherwise defeating the penetrator.

(4) Electromagnetic armor (EMA) employs electricity to defeat threats such as shaped charges.

(5) Materials used in composite armor could include layers of metals, plastics, elastomers, fibers, glass, ceramics, ceramic-glass reinforced plastic laminates, encapsulated ceramics in a metallic or non-metallic matrix, functionally gradient ceramic-metal materials, or ceramic balls in a cast metal matrix.
(6) For this category, a material is considered transparent if it allows 75% or greater transmission of light, corrected for index of refraction, in the visible spectrum through a 1 mm thick nominal sample.

(7) The material controlled in paragraph (e)(4) of this category has not been treated to reach the 75% transmission level referenced in (m)(6) of this category.

(8) Metal laminate armors are two or more layers of metallic materials which are mechanically or adhesively bonded together to form an armor system.

(9) $E_m$ is the line-of-sight target mass effectiveness ratio and provides a measure of the tested armor’s performance to that of rolled homogenous armor, where $E_m$ is defined as follows:

$$E_m = \frac{\rho_{RHA}(P_o - P_r)}{A_{TARGET}}$$

Where:

- $\rho_{RHA}$ is the density of RHA, (7.85 g/cm$^3$)
- $P_o$ is Baseline Penetration of RHA, (mm)
- $P_r$ is Residual Line of Sight Penetration, either positive or negative (mm RHA equivalent)
- $A_{TARGET}$ is Line-of-Sight Areal Density of Target (kg/m$^2$)

(10) NIJ is the National Institute of Justice and Level III refers to the requirements specified in NIJ standard 0108.01 Ballistic Resistant Protective Materials.

(n)-(w) [Reserved]

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.
Note to paragraph (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see §123.1(b) of this subchapter).

* * * * *

Category XX—Submersible Vessels and Related Articles

(a) Submersible and semi-submersible vessels (see §121.14 of this subchapter) that are:

*(1) Submarines;
(2) Mine countermeasure vehicles;
(3) Anti-submarine warfare vehicles;
(4) Armed;
(5) Swimmer delivery vehicles specially designed for the deployment, recovery, or support of swimmers or divers from submarines;
(6) Vessels equipped with any mission systems controlled under this subchapter; or
(7) Developmental vessels funded by the Department of Defense via contract or other funding authorization.

Note 1 to paragraph (a)(7): This paragraph does not control developmental vessels, and specially designed parts, components, accessories, attachments, and associated equipment therefor, (a) in production, (b) determined to be subject to the EAR via a commodity jurisdiction determination (see §120.4 of this subchapter) or (c) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications.
Note 2 to paragraph (a)(7): Note 1 does not apply to defense articles enumerated on the U.S. Munitions List, whether in production or development.

Note 3 to paragraph (a)(7): This provision is applicable to those contracts and funding authorizations that are dated one year or later following the publication of the rule, “Amendment to the International Traffic in Arms Regulations: Continued Implementation of Export Control Reform,” RIN 140-AD40.

*(b) Engines, electric motors, and propulsion plants as follows:

(1) Naval nuclear propulsion plants and prototypes, and special facilities for construction, support, and maintenance therefor (see §123.20 of this subchapter);
(2) Electric motors specially designed for submarines that have the following:
   (i) Power output of more than 0.75 MW (1,000 hp);
   (ii) Quick reversing;
   (iii) Liquid cooled; and
   (iv) Totally enclosed.

(c) Parts, components, accessories, attachments, and associated equipment, including production, testing, and inspection equipment and tooling, specially designed for any of the articles in paragraphs (a) and (b) of this category (MT for launcher mechanisms specially designed for rockets, space launch vehicles, or missiles capable of achieving a range greater than or equal to 300 km).

Note to paragraph (c): “Range” is the maximum distance that the specified rocket system is capable of traveling in the mode of stable flight as measured
by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for rocket systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints. For rocket systems, the range will be determined using the trajectory that maximizes range, assuming International Civil Aviation Organization (ICAO) standard atmosphere with zero wind.

(d) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles enumerated in paragraphs (a) through (c) of this category. (MT for technical data and defense services related to articles designated as such.) (See §125.4 of this subchapter for exemptions.)

(e)-(w) [Reserved]

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.

* * * * *

5. Section 121.4 is added to read as follows:

§121.4 Ground vehicles.

(a) In USML Category VII, “ground vehicles” are those, whether manned or unmanned, that:
(1) Are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing lasers, launching rockets, firing missiles, firing mortars, firing artillery rounds, or firing other ammunition greater than .50 caliber);
(2) Are armored support vehicles capable of off-road or amphibious use specially designed to transport or deploy personnel or materiel, or to move with other vehicles over land in close support of combat vehicles or troops (e.g., personnel carriers, resupply vehicles, combat engineer vehicles, recovery vehicles, reconnaissance vehicles, bridge launching vehicles, ambulances, and command and control vehicles); or
(3) Incorporate any “mission systems” controlled under this subchapter. “Mission systems” are defined as “systems” (see §121.8(g) of this subchapter) that are defense articles that perform specific military functions, such as by providing military communication, target designation, surveillance, target detection, or sensor capabilities.

Note 1 to paragraph (a): Armored ground vehicles are (i) ground vehicles that have integrated, fully armored hulls or cabs, or (ii) ground vehicles on which add-on armor has been installed to provide ballistic protection to level III (National Institute of Justice Standard 0108.01, September 1985) or better. Armored vehicles do not include those that are merely capable of being equipped with add-on armor.

Note 2 to paragraph (a): Ground vehicles include any vehicle meeting the definitions or control parameters regardless of the surface (e.g., highway, off-road, rail) upon which the vehicle is designed to operate.

(b) Ground vehicles specially designed for military applications that are not identified in paragraph (a) of this section are subject to the EAR under ECCN 0A606, including any unarmed ground vehicles, regardless of origin
or designation, manufactured prior to 1956 and unmodified since 1955. Modifications made to incorporate safety features required by law, are cosmetic (e.g., different paint, repositioning of bolt holes), or that add parts or components otherwise available prior to 1956 are considered “unmodified” for the purposes of this paragraph. ECCN 0A606 also includes unarmed vehicles derived from otherwise EAR99 civilian vehicles that have been modified or otherwise fitted with materials to provide ballistic protection, including protection to level III (National Institute of Justice Standard 0108.01, September 1985) or better and that do not have reactive or electromagnetic armor.

6. Section 121.14 is added to read as follows:

§121.14 Submersible vessels.

(a) In USML Category XX, submersible and semi-submersible vessels are those, manned or unmanned, tethered or untethered, that:

(1) Are submarines specially designed for military use;

(2) Are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing torpedoes, launching rockets, firing missiles, deploying mines, deploying countermeasures) or deploy military payloads;

(3) Are specially designed for the deployment, recovery, or support of swimmers or divers from submarines;

(4) Are integrated with nuclear propulsion systems;

(5) Incorporate any “mission systems” controlled under this subchapter. “Mission systems” are defined as “systems” (see §121.8(g) of this subchapter) that are defense articles that perform specific military functions such as by providing military communication, electronic warfare, target designation, surveillance, target detection, or sensor capabilities; or
(6) Are developmental vessels funded or contracted by the Department of Defense.

(b) Submersible and semi-submersible vessels that are not identified in paragraph (a) of this section are subject to the EAR under Category 8.

7. Section 121.15 is revised to read as follows:

§121.15 Surface vessels of war.

(a) In USML Category VI, “surface vessels of war” are those, manned or unmanned, that:

(1) Are warships or other combatant vessels (battleships, aircraft carriers, destroyers, frigates, cruisers, corvettes, littoral combat ships, mine sweepers, mine hunters, mine countermeasure ships, dock landing ships, amphibious assault ships), or Coast Guard Cutters (with or equivalent to those with U.S. designations WHEC, WMEC, WMSL, or WPB for the purpose of this subchapter);

(2) Are foreign-origin vessels specially designed to provide functions equivalent to those of the vessels listed in paragraph (a)(1) of this section;

(3) Are high-speed air cushion vessels for transporting cargo and personnel, ship-to-shore and across a beach, with a payload over 25 tons;

(4) Are surface vessels integrated with nuclear propulsion plants or specially designed to support naval nuclear propulsion plants;

(5) Are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing lasers, launching torpedoes, rockets, or missiles, or firing munitions greater than .50 caliber); or

(6) Incorporate any mission systems controlled under this subchapter.

“Mission systems” are defined as “systems” (see §121.8(g) of this subchapter) that are defense articles that perform specific military functions
such as by providing military communication, electronic warfare, target designation, surveillance, target detection, or sensor capabilities.

(b) Vessels specially designed for military use that are not identified in paragraph (a) of this section are subject to the EAR under ECCN 8A609, including any demilitarized vessels, regardless of origin or designation, manufactured prior to 1950 and unmodified since 1949. Modifications made to incorporate safety features required by law, are cosmetic (e.g., different paint), or that add parts or components otherwise available prior to 1950 are considered “unmodified” for the purposes of this paragraph.

PART 123 – LICENSES FOR THE EXPORT AND TEMPORARY IMPORT OF DEFENSE ARTICLES

8. The authority citation for part 123 continues to read as follows:


9. Section 123.20 is amended by revising paragraphs (a) and (c) introductory text to read as follows:

§123.20 Nuclear related controls.

(a) The provisions of this subchapter do not apply to equipment, technical data, or services in Category VI, Category XVI, and Category XX of §121.1 of this subchapter to the extent such equipment, technical data, or services are under the export control of the Department of Energy or the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, and the Nuclear Non-Proliferation Act of 1978, as amended, or is a government transfer authorized pursuant to these Acts.
(c) A license for the export of any machinery, device, component, equipment, or technical data relating to equipment referred to in Category VI(e) or Category XX(b) of §121.1 of this subchapter will not be granted unless the proposed equipment comes within the scope of an existing Agreement for Cooperation for Mutual Defense Purposes concluded pursuant to the Atomic Energy Act of 1954, as amended, with the government of the country to which the Article is to be exported. Licenses may be granted in the absence of such an agreement only:

PART 124 – AGREEMENTS, OFF-SHORE PROCUREMENT, AND OTHER DEFENSE SERVICES

10. The authority citation for part 124 is revised to read as follows:


11. The heading for part 124 is revised to read as set forth above.

12. Section 124.2 is amended by revising paragraphs (c)(5)(iv) and (xii) to read as follows:

§124.2 Exemptions for training and military service.

(c) * * *

(5) * * *

(iv) Naval nuclear propulsion equipment listed in USML Category VI and USML Category XX;

* * * *
(xii) Submersible and semi-submersible vessels and related articles covered in USML Category XX; or

* * * * *

PART 125—LICENSES FOR THE EXPORT OF TECHNICAL DATA AND CLASSIFIED DEFENSE ARTICLES

13. The authority citation for part 125 is revised to read as follows:


14. Section 125.1 is amended by revising paragraph (e) to read as follows:

§125.1 Exports subject to this part.

* * * * *

(e) The provisions of this subchapter do not apply to technical data related to articles in Category VI(e), Category XVI, and Category XX(b) of §121.1 of this subchapter. The export of such data is controlled by the Department of Energy or the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, and the Nuclear Non-Proliferation Act of 1978, as amended.

(Date)

Rose E. Gottemoeller,
Acting Under Secretary,
Arms Control and International Security,
Department of State.