

June 15, 2012

To: DDTCResponseTeam@state.gov  
Publiccomments@bis.doc.gov

Subject: ITAR Amendment - Category IX RIN 1400-AD15 and  
EAR Revision - Training Equipment RIN 0694-AF54

What follows includes responses to the State requests that the public identify:

- (1) any potential lack of coverage in the June 13 State and Commerce rules compared with Wassenaar Munitions List (WML) Item 14 (or 18, 21, or 22); and
- (2) specific examples of materials and miscellaneous articles whose jurisdiction would be in doubt based on this revision (this includes examples of double coverage).

What follows also identifies:

- (3) proposed coverage not now included in the WML.

Proposed U.S. omission of WML13 coverage should not continue or, if new, now be put into effect without Wassenaar concurrence. Proposed continued or new U.S. unilateral coverage would be more effective if included on the WML. It is recommended that the United States seek Wassenaar agreement along the lines of the proposed rules before putting them into effect in U.S. regulations.

- (1) The two proposed rules would omit the following WML 14, 18, 21, or 22 coverage:

14 Specialized equipment for military training or for simulating military scenarios to the extent “specialized” is broader than “specially designed” and the U.S. definition of “equipment” may be narrower than the undefined word equipment in the WML

14 Note 1 Image generating and interactive environment systems for simulators specially designed or modified for military use  
if not otherwise described in Category IX and not controlled by 0A614.a or .x because modified but not specially designed for military use

But, rather than conform with WML 14, the U.S. should seek changes in WML 14 along the lines of the June 13 proposed rules, in order to further the “bright line” objective.

18 Equipment and components modified to produce 0A614 or Category IX

21 Software for software

21 Software modified for 0A614 or 0B614

22 Technology for portions of WML 14, 18, and 21 described above

(2) Examples of doubtful jurisdiction

IX.a.2 mock-ups, IXb.1 simulators, and 0A614 military training not in Category IX all overlap 0A617.d test models for development USML or 600 series

IX.a.9 and IX.b.5 Jurisdiction for classified items is unknown to exporters who have not been informed that the items are classified. If they have been informed, then regulations for classified items, rather than less restrictive export control regulations, should apply.

IX.e Differing definitions of “technical data” and no definition of “directly related” give rise to significant doubts concerning jurisdiction.

0A614.a equipment for military training not in Category IX includes VIII.a.3, 9A610.a, and 9A991.a.2 military trainer aircraft.

0A614.a Note This entry does not apply to “equipment” “specially designed” for training in the use of hunting or sporting weapons

Except for putting equipment in quotation marks, this is identical to WML 14 Note 2. Using the unique interpretation of specially designed, training equipment for both military and hunting or sporting would be neither controlled nor not controlled. A definition of specially designed which is superior to something would have unintended consequences when used in a decontrol Note.

0A614.y heading is limited to parts, components, accessories, and attachments; but 0A614.y.99 is not so limited

0B614 is included in 2B018

0D614 for 0B614 is included in 2D018

0E614.a for 0B614 and for 0D614 for 0B614 is included in 2E018

(3) Proposed coverage not now included in the WML

IX.a.1 Airborne targets that mimic an item other than a defense article or person

IX.a.9 and b.5 Classified items

IX.b.1 System specific simulators other than for training in the use of ML1 or ML2 firearms

IX.b.4 Software and data bases to simulate portions of a.1, a.9, b.1, b.5 described above

IXe Technical data for portions of IX.a.1, a.9, b.1, b.4, b.5 described above

0A614.x & y Parts and attachments

0A614.x Components and accessories for portions of IX.a.1, a.9, b.1, b.4, b.5 described above and for portions of 0B614 described below

0B614.a for production of portions of IX.a.1, a.9, b.1, b.4, b.5 described above

0B614.y.99

0D614.a software for portions of 0A614 and 0B614 described above

0E614.a technology for portions of 0A614, 0B614, and 0D614 described above



The Boeing Company  
1200 Wilson Blvd  
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July 18, 2012

Ms. Candace M. Goforth  
Director, Office of Defense Trade Controls Policy  
Directorate of Defense Trade Controls  
Department of State  
2201 C Street, NW  
Washington, DC 20520-0001

Subject: "ITAR Amendment – Category IX"

Reference: Federal Register/Vol. 77, No. 114/Wednesday, June 13, 2012  
Proposed Rule - Amendment to the International Traffic in Arms Regulations: Revisions  
of U.S. Munitions List Category IX – Military Training Equipment

Dear Ms. Goforth:

The Boeing Company ("Boeing") appreciates the opportunity to respond to the above-referenced Proposed Rule. We reiterate our continued support for the Export Control Reform Initiative and its efforts to rationalize the U.S. export control system in a manner that allows both government and industry to focus its licensing and compliance resources on those products and technologies that truly impact U.S. national security.

We welcome a simplified, narrowly-scoped, positive-list Category IX, and particularly appreciate the removal of "Military Training" from the scope of this Category. We appreciate the overall clarity of the proposed Category's qualifying language, and support the significant transitioning of items currently controlled under this Category to the export control jurisdiction of the Export Administration Regulations. Boeing believes that the proposed rule's focused controls represent an appropriate balance between national security protection and international business opportunity.

Please do not hesitate to contact me if you have any questions or need additional information. I can be reached at 703-465-3505 or via e-mail at [stephanie.a.reuer@boeing.com](mailto:stephanie.a.reuer@boeing.com).

Sincerely,

Stephanie A. Reuer  
Director, International, Policy, and Licensing Administration  
Global Trade Controls



DRS Technologies, Inc.  
Trade & Security Compliance Office  
2345 Crystal City Drive  
Arlington, VA 22202

July 30, 2012

Mr. Robert S. Kovac  
Managing Director  
PM/DDTC, SA-1, Room 1200  
Directorate of Defense Trade Controls  
Bureau of Political Military Affairs  
U.S. Department of State  
Washington, DC 20522-0112

**Subject: Response to the Proposed Amendment to the International Traffic in Arms Regulations: Revision of U.S. Munitions List Category IX - 77 FR 35317, RIN 1400-AD15**

Dear Mr. Kovac:

DRS Technologies, Inc. is fully supportive of the U.S. Government efforts to reform the regulations and systems for controlling exports. As a 10,000+ employee company with products and customers in both the international commercial and defense markets, we are very familiar with the current export control systems. The reforms are much needed to help the U.S. export control apparatus stay in step with the ever evolving and changing global markets and national security climates.

As with the proposed revisions to USML Category X, the majority of the proposed changes to Category IX contain clear and rational positive criteria that help to establish a clear line between what is or is not subject to the jurisdiction of the ITAR. We commend the department for these significant improvements. There are however four exceptions, noted below, that we urge the department to further evaluate.

#### **Specific Comments on USML Category IX-Military Training Equipment**

1. IX(a)(1)(i), Ground, surface, submersible, space, or towed airborne targets that have an infrared, radar, acoustic, magnetic, or thermal signature that mimic a specific defense article, other item, or person. The criteria are clear through the term "defense article." The words "other item, or person" are overly broad, capturing anything used as a target with a signature that mimics an item or a person and lack the precision associated with the creation of a positive USML. As drafted, "other item, or person" would include many target simulators used in commercial firing ranges that do not merit control by the USML. Accordingly, the words "other item, or person" should be deleted from this entry.
2. IX(a)(1)(ii), Ground, surface, submersible, space, or towed airborne targets that are instrumented to provide hit/miss performance information. The positive criteria of providing

hit/miss performance information is severely inadequate to define such simulators that are of such a unique military nature as to warrant control under this subchapter. As written the entry encompasses commercial firing ranges with targets that provide real time shot scoring. Accordingly, this entry should be deleted or the positive criteria must be more specifically defined so as to capture only those articles with national security or foreign policy implications.

3. IX(a)(2), Devices that are mockups of articles enumerated in this subchapter used for maintenance training or disposal training for ordnance enumerated in this subchapter. This entry is inconsistent with the ITAR definition of a defense article, as mockups are excluded if they do not contain any parts/components/accessories/attachments/etc. regulated by this subchapter and do not reveal any technical data related to the items regulated by this subchapter (*See* 22 C.F.R. 120.6). Use of a nondefense article in training does not necessitate control of the article under the ITAR regulation. The training itself will be controlled as a defense service, and parts/components/accessories/attachments/etc. or technical data regulated by this subchapter will already be captured. As such, we recommend this entry be deleted.
4. IX(b)(4), Software and associated databases not elsewhere enumerated in this subchapter that can be used to simulate the following. We have two comments regarding this entry.
  - a. First, as with the proposed changes to USML Category XIII, software is called out separately in this entry, as if it were hardware, rather than being limited to the definition of technical data as is the case in all of the current USML categories. We believe this unique approach will cause unnecessary confusion as to what software, independent from the 22 C.F.R. §120.10 definition of technical data, will be regulated by these entries, or if the intent is to indicate that not all software is technical data. If this is the case then in all other USML categories that do not specifically enumerate software it might be misinterpreted that such software is not controlled. We strongly recommend these stand-alone references to software be removed from the category to avoid such confusion. Software is defined as technical data and is controlled as such in all other USML categories. The approach used in Category IX should be consistent.
  - b. Second, regarding the four sub-entries identified, the software and associated databases that can simulate the four entries should be regulated as technical data in the specific USML category of the articles. This would be especially beneficial given the vague description for the second and third entries. The second entry, battle management is completely void of any unique military-only positive criteria. As written, it would control many commercial video games, including Spec Ops by Wikia, which lists battle management as one of its objectives. The third entry, military test scenarios/models is completely lacking in any detail of what constitutes a military test scenario or a military test model. As such, this entry could control any commercial software simply used by the military. Again, we strongly recommend these entries be deleted.

As we stated earlier, with the above four exceptions, the proposed rule conforms extremely well to the tenants of the export control reform effort. It establishes a clear jurisdictional line and limits control under the ITAR to those items truly requiring such control. We do strongly urge the department to consider our above comments in amending the proposed rule before final publication.

Should you have any questions in this matter or require additional information, please contact Mr. Greg Hill at (703) 412-0288, [ghill@drs.com](mailto:ghill@drs.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Heather C. Sears". The signature is fluid and cursive, with a long horizontal stroke at the end.

Heather C. Sears  
Vice President, Trade & Security Compliance  
& Associate Corporate Counsel  
DRS Technologies, Inc.



July 30, 2012

Directorate of Defense Trade Controls  
Office of Defense Trade Controls Policy  
Department of State  
VIA EMAIL: [DDTCResponseTeam@state.gov](mailto:DDTCResponseTeam@state.gov)

**Re: Amendment to the International Traffic in Arms Regulations: Revision of U.S. Munitions List Category IX (Federal Register Docket ID. 2012-14443, RIN 1400-AD15)**

IPC — Association Connecting Electronics Industries welcomes the opportunity to comment on the proposed revision of United States Munitions List (“USML”) Category IX as detailed by the Department of State’s Federal Register notice. As an organization with a long history of cooperation with and support of the agencies that develop and implement national security policy, IPC shares the Department of State’s concern that the proposed rule ensures appropriate USML coverage and fully protects U.S. national security.

In December 2011, IPC submitted extensive comments to the Department of State in response to proposed revisions of USML Category VIII. In this submission, IPC recommended that the Directorate of Defense Trade Controls (DDTC) clarify in a final Category VIII rule the treatment of printed boards, ensuring that a printed board’s designs and digital instructions be subject to the USML when the end item for which the printed board is designed is identified on the USML. In making its case, IPC provided a diverse selection of examples to illustrate the highly sensitive and important role of printed boards in military electronics.

The concerns and recommendations that IPC detailed in its December 2011 comments parallel those IPC has with regard to the Department of State’s Category IX revisions. IPC believes it is important that the Category IX rule – and similar USML/ Commerce Control List (CCL) rules developed in the future – ensure clear treatment of printed boards and their designs as the DDTC transitions certain parts, components, accessories, and attachments from the USML to the CCL. Specifically, the rules should make clear that the design instructions (known as “digital data” in the industry) for printed boards will remain under International Traffic in Arms Regulation (ITAR) control when the end item for which the printed board was designed is included on the USML. This clarification would ensure appropriate USML coverage and protect national security by controlling important technical data about ITAR controlled items.

These comments provide a concise response to the Department of State’s Category IX revisions. IPC has attached its comments to Category VIII as well, and it urges DDTC to reference this lengthier explanation of IPC’s position concerning export control reform. IPC also intends to comment on any proposed rule that DDTC publishes regarding Category XI.



## **I. About IPC**

IPC is a U.S.-headquartered global trade association, representing all facets of the electronic interconnect industry, including design, printed board manufacturing and printed board assembly. IPC has more than 3,300 member companies of which 1,900 members are located in the United States. IPC is the definitive authority on standards used by the global electronics industry and is the leading source for training, market research and public policy advocacy and other programs to meet the needs of an estimated \$1.7 trillion global electronics industry.

## **II. National Security Importance of Printed Circuit Boards and Designs**

Specialized printed board and printed board assemblies are custom-made and uniquely designed for the specific function of the electronic items in which they are incorporated. Drawing upon very precise specifications for the design and placement of parts, a printed board contains a roadmap for the operation of that item. Manufacture of the printed board, then, requires access to and use of all of the printed board's design information. This access exposes a significant portion of the intellectual property for both the printed board and the item for which it is uniquely designed. Companies with access to the designs of printed boards for defense articles thereby also have access to sensitive information about controlled technologies.

Printed boards and their designs, in fact, hold valuable and specific information about the workings of the underlying defense articles that make up USML Category IX. For example, the design, numbers, and arrangement of printed boards in training equipment (particularly complex simulation suites) can convey information about the applications, staffing, and anticipated range of suitable actions of the persons being trained. The number and nature of input channels, the number of "work stations" required to operate either the "real" or the "simulated" defensive network provide valuable clues for a potential adversary to analyze methods of operation, and possible means of circumvention. With this information, adversaries can better understand the tactics of use of the real systems (e.g. air defense, antisubmarine warfare, and theater surface warfare training simulation). In short, this information will provide guidance to hostile forces seeking to develop tactics to avoid the strengths and exploit the weaknesses of the "real" military systems.

## **III. Current Rule**

Under the current ITAR, printed boards designed for military training equipment covered by ITAR are generally within the scope of the USML's controls on "components" that are specifically designed or modified for defense articles. Their printed board designs are also controlled by Category IX(e) and/or Category XI (Military Electronics), because they reveal technical data regarding both the printed boards and the ultimate defense articles into which the printed boards are installed. IPC understands the treatment of printed boards under ITAR to be unequivocal, but IPC has longstanding concerns that current law is frequently misunderstood, leading to preventable ITAR violations. IPC maintains that greater clarity about the controls on printed boards is necessary to protect national security.

#### **IV. Proposed Rule**

Under the proposed rule, it is unclear whether all printed boards would be transferred to the jurisdiction of the CCL. The proposed rule generally transfers to the CCL all components specifically designed for military training equipment, but as IPC noted in its Category VIII comments, printed boards may be considered as “technical data” related to the defense articles into which they are incorporated, such as military training equipment. IPC recommends that DDTC clarify the proper treatment of printed boards designed for items on the USML, to ensure that the industry understands the U.S. government’s position regarding the proper export control jurisdiction of these important products.

If printed boards themselves are retained on the USML as “technical data” in physical form, then printed board designs necessarily must be retained on the USML as well. They convey the same information, just in a different format. Even if DDTC determines that printed boards for defense articles are not subject to USML jurisdiction, however, DDTC should determine that printed board designs are subject to the USML as “technical data” as they convey technical data regarding the defense items into which printed boards are incorporated. Control of printed board digital data and related designs, in short, should follow the categorization of the end item itself, whether or not the physical printed board remains an ITAR controlled item.

#### **V. Recommendation**

Given confusion over the treatment of printed boards under ITAR, IPC contends that DDTC clarify the status of printed board designs in its final rule regarding Category IX. For instance, DDTC could state the following in the Final Rule when it responds to public comments:

One commenter requested that DDTC confirm that the design and digital instructions for printed boards specifically designed for materials and miscellaneous articles are “technical data” within the meaning of Category IX(e). DDTC confirms that these designs and digital data fall within the standard definition of “technical data,” to the extent that they contain technical data directly relating to Category IX items. Accordingly, such printed board designs and digital instructions are subject to the USML when the end item for which the printed board is designed is identified in Category IX.

IPC seeks similar clarification for printed boards in other USML categories, although IPC recognizes that there could be a number of additional ways to address this issue. DDTC may wish to amend the definition of “technical data” in 22 C.F.R. §120.10, to clarify this point. Another approach would be to address the issue clearly in Category XI (Military Electronics), to explicitly cover all printed board designs related to defense articles.

#### **VI. Conclusion**

IPC supports the Department of State’s goal of reforming the USML to clearly describe what items it covers. However, in order to prevent the unintentional release of detailed design

information about these items, the Department of State's should clarify that printed circuit board designs remain under the jurisdiction of ITAR when the end item for which the board is designed is a USML item.

The issue of printed board designs is not unique to the Category IX. Every category of USML items includes the technical data directly related to those items.<sup>1</sup> These printed board designs and digital data constitute technical data relating to the various end-items and USML components identified in each category because they contain information required for the design, development, manufacture, etc. of those defense articles.

Accordingly, IPC recommends that DDTC clarify the status of printed board designs in its final rule regarding Category IX and has suggested one approach in Section V of these comments. Further, IPC recommends that DDTC consider the issue of printed circuit board designs in the context of its ongoing revision of the USML, through steps such as (1) clarifying the scope of technical data in each USML Category, noting that printed board design coverage follows the coverage of the end item itself, (2) amending the definition of "technical data" in 22 C.F.R. §120.10, to clarify this point across all categories, and (3) clarifying Category XI to refer expressly to printed board designs for defense articles.

Thank you again for the opportunity to comment on the proposed amendments to USML Category IX. If IPC can offer additional information or assistance, please contact me at [fabrams@ipc.org](mailto:fabrams@ipc.org) or 703-522-2287.

Sincerely,



Fern Abrams  
Director, Government Relations and Environmental Policy

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<sup>1</sup> See 22 C.F.R. § 121.1 Category I(i), II(k), III(e), IV(i), V(h), VI(g), VII(h), IX(e), X(e), XI(d), XII(f), IX(l), XIV(m), XV(f), XVI(e), XVII(a), XVIII(f), XX(d), XXI(b).

# PUBLIC SUBMISSION

**Docket:** DOS-2012-0041

Amendment to the International Traffic in Arms Regulations: Revision of U.S. Munitions List Category IX

**Comment On:** DOS-2012-0041-0001

International Traffic in Arms Regulations: Revision of U.S. Munitions List Category IX

**Document:** DOS-2012-0041-DRAFT-0001

Comment on DOS-2012-0041-0001

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## Submitter Information

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### General Comment

To clarify the proposed note to Category IX and make it more consistent with the corresponding related controls note (3) to proposed ECCN 0A614, we would recommend changing the proposed note to:

"Note: Parts, components, accessories, or attachments that are common to a simulator controlled by ECCN 0A614.a and to a simulated system or an end-item that is enumerated in Category IX, elsewhere on the USML, or elsewhere on the CCL are controlled under the same USML Category or CCL ECCN as the parts, components, accessories, and attachments of such enumerated simulated system or end-item."

Thank you for your consideration.