



June 27, 2014

Department of State  
Bureau of Political-Military Affairs  
Directorate of Defense Trade Controls  
2401 E. St, NW  
12<sup>th</sup> Floor, SA-1  
Washington, DC 25022

ATTN: ATTN: Regulatory Change, USML Category XV

Re: USML Category XV(a)(7) and (e)(11) and ITAR § 124.15

The Aerospace Industries Association (AIA) and our member companies appreciate the opportunity to comment on the Department of State's proposed amendments to the International Traffic in Arms Regulations (ITAR) as they pertain to the U.S. Munitions List Category XV (Spacecraft Systems and Related Equipment). AIA and our member companies thank the Administration for their persistent efforts to bring about satellite export control reform and look forward to working together as these reforms are finalized and implemented.

## **BACKGROUND**

As the Federal Government considers additional modifications to Category XV, AIA and its member companies observe that it is both the policy and in the national security interest of the United States to maintain a competitive and robust space industrial base. Without a robust space industrial base, our nation risks losing the ability of U.S. manufacturers to supply the U.S. Government with state of the art space capabilities that are vital to protecting national security. To ensure the space industrial base can provide the remote sensing systems needed by the national security sector in an era of declining budgets, U.S. exports into the global satellite marketplace must be encouraged.

Due to the unlevel global playing field, growth in the remote sensing industry has largely been overseas as U.S. companies continued to be constrained by outdated export control limits. This is a national security concern for the United States Government for two key reasons. First, the ability to export these systems commercially is significantly reduced, and the investment by U.S. manufacturers in advanced remote sensing technology is curtailed. This in turn drives up the fixed cost of national security remote sensing systems. Second, foreign acquisition of remote sensing systems not exported by U.S. manufacturers eliminates the ability of the U.S. Government to conduct appropriate end use monitoring of technologically-advanced systems.

U.S. exports of remote sensing technologies that are readily available on the commercial market support the ability of the U.S. space industrial base to continue to develop cutting-edge

technologies to meet future national security needs of the United States. Exports also build partnerships and enhance interoperability with U.S. allies, thus aligning with the policy goals of National Security Presidential Directive (NSPD) 27, U.S. Commercial Remote Sensing Policy, which states:

*The fundamental goal of this policy is to advance and protect U.S. national security and foreign policy interests by maintaining the nation's leadership in remote sensing space activities, and by sustaining and enhancing the U.S. remote sensing industry. Doing so will also foster economic growth, contribute to environmental stewardship, and enable scientific and technological excellence.*

Unfortunately, since the signing of NSPD 27, the U.S. has ceded its leadership position in remote sensing to other foreign nations. In order for the U.S. to regain that leadership position on remote sensing, U.S. manufacturers must be allowed to compete on equal footing with foreign suppliers. Ultimately, without leveling the competitive environment, the ability of U.S. manufacturers to meet the future demands of the U.S. national security community will be diminished.

In addition to the stated policy goal of NSPD 27 noted above, the directive also states:

*It is in the U.S. national security, foreign policy and economic interests that U.S. industry compete successfully as providers of remote sensing space products and capabilities.....as a general guideline, remote sensing exports that are currently available or planned to be available in the global marketplace also will be considered favorably.*

Despite the policy's goals, U.S. manufacturers have been unable to export a high-resolution to medium resolution electro-optical imaging satellite since this policy was signed in 2003. As a result, our allies have turned to the French, Russians, British, Israelis, and South Koreans to purchase, put into service and *learn how to build* satellites for which U.S. manufacturers could have provided components or alternatives on a turn-key basis. The long lead that U.S. remote sensing technology enjoyed over foreign capabilities only ten years ago has largely vanished due to the billions of dollars being injected into competitive foreign suppliers while the domestic U.S. market continues contracting. An important contributing factor in the policy's failure has been the control of all remote sensing satellites, and similar satellites for a host of other applications regardless of purpose or capability, via the U.S. Munitions List (USML) while frequently classifying proposed remote sensing satellite exports as SME (Significant Military Equipment).

The nature of the global remote sensing market has changed radically in the last 10+ years. Foreign customers are now able to purchase commercially available remote sensing systems that are technologically equal to U.S. systems from numerous non-U.S. suppliers. The continued, active selection of non-U.S. suppliers over U.S. manufacturers for commercial remote sensing system is an immediate national security concern for the United States.

A combination of increased commercial remote sensing offerings by overseas suppliers coupled with a non-competitive export control system puts U.S. manufacturers at a disadvantage. While most of the world has embraced medium to low-resolution electro-optical satellites as

commodities useful for urban planning, agriculture and other civilian applications, the U.S. Government continues to classify even these medium to low-resolution passive imaging systems as Significant Military Equipment. Countries such as Thailand, Brazil, Taiwan and other developing-world actors are already operating medium to high-resolution imaging satellites using technologies or whole systems purchased from companies in France, China, the UK, Israel, South Korea and others.

## **ISSUE**

As the U.S. Government moves to implement the final rules that modify Category XV of the USML, a key remaining issue to be resolved is aperture threshold on electro-optical satellite systems above which systems become subject to the ITAR (currently proposed to be .35 meters).

To remain competitive in the global marketplace, U.S. manufacturers need a more level regulatory playing field. Items licensed for export under the USML carry significant requirements for pre-shipment review and post-export restrictions and record-keeping inconsistent with the “risk” of the export of this technology. This is especially true given that satellites delivered on-orbit to foreign governments’ pose no threat of later technology transfers allowing for a proliferation of technical know-how as could be the case with an aircraft or tank in the foreign government’s custody.

The proposed 0.35 meter aperture size limit was first proposed some three years ago when the best available U.S. commercial imaging systems could only sell commercially 0.5 meter ground sample distance resolution imagery. Today, that limit for commercial satellite imagery sales has shifted below 0.5 meter and will fall to 0.25 meters resolution by 2015. Meanwhile, satellites being purchased for civil and commercial uses around the world (notably, mostly from Europe) have an aperture size double the 0.35 meter aperture size proposed for CCL control, more on par with the 0.70 meter aperture capability the U.S. produced in the 1990’s that collected optimally at about 0.80 meters resolution.

An update of the proposed regulation definition of a military or dual-use aperture size simply recognizes the wide availability of larger aperture systems in the global marketplace. Even at 0.70 meters aperture, for example, a remote sensing satellite in an extremely low orbit of 350 kilometers would be incapable of producing imagery of a resolution comparable to what the U.S. commercial data provider, DigitalGlobe, can distribute to most anyone in the world today.

ITAR licensing burdens are onerous for both U.S. manufacturers and their foreign customers. The Department of Commerce conducts pre- and post-shipment checks that appropriately manage the risks of unauthorized retransfer. In addition, the global competitive environment supports moving electro-optical systems at or below the 1.1 meter threshold to the CCL.

Thus, the U.S. Government should move electro-optical systems at or below the 1.1 meter aperture threshold to the CCL. The increase in aperture threshold to at least 1.1 meters would support U.S. national security interests by ensuring a more robust electro-optical industry base bolstered by exports that are readily capable of meeting the needs of the U.S. national security community.

Finally, while the above comments are related solely to aperture and remote sensing issues, AIA also intends to file comments in advance of the November 10, 2014 deadline on human spaceflight-related matters. We appreciate the opportunity in advance to provide our observations on this important issue later this year.

Thank you for the opportunity to comment on the proposed regulatory change to Category XV. We look forward to our continued partnership with the U.S. Government on this and other export control reform issues.

Best regards,

A handwritten signature in black ink, appearing to read "Remy Nathan", with a long horizontal flourish extending to the right.

Remy Nathan  
Vice President, International Affairs  
Aerospace Industries Association