

EXPORT REFORM to PROTECT OUR NATION and AMERICAN JOBS

The National Photonics Initiative (NPI) supports an overhaul of U.S. export controls to save American jobs through the Export Control Reform (ECR) initiative. Current guidelines are vague, inconsistent and outdated. However, the current proposal for Category XII of the US Munitions List does not uphold the principals of ECR.

Overly restrictive regulation on dual-use technologies, and the inconsistent interpretation/ enforcement of regulations have created business, research, and workforce barriers that are limiting U.S. leadership in science and technology. Government export rules have driven high- tech jobs abroad and have made U.S. companies uncompetitive in the global marketplace. We are losing business to foreign companies that use "ITAR-free" as a marketing slogan. The current proposal for Category XII would not only continue these issues for the years to come, if not fundamentally rewritten, it stands to further erode the position of U.S. companies.

Why this matters: Unnecessary export controls destroy our ability to compete in the most critical sectors of the global economy.

- While the overall number of jobs supported by U.S. exports has grown by 1.2 million since 2009, our high-technology manufacturing employment is in decline.¹
- 9.7 million jobs depend upon overseas sales of American goods and services.
- In 2012, the United States exported \$305 billion of advanced technology products and imported \$396 billion. Outmoded and/or unnecessary export restrictions contribute to this deficit.²

When this is compared to the foreign availability of products that the U.S. chooses to control, the picture becomes even clearer. There is widespread foreign availability of many of the items being proposed for control under then soon to be released Category XII revision. For example, there are at least 9 companies located in 7 countries outside the US manufacturing uncooled infrared detectors. All of those countries control those items as commercial/dual-use. By controlling these items as such, the only result the USG achieves is ensuring foreign industry will continue to grow while the US industry is prohibited from competing and will eventually disappear.

A critical component of the Export Control Reform Initiative is moving militarily less significant parts and components from the U.S. Munitions List (USML) to the more flexible Commerce Control List (CCL) or dual-use controls. This will be a major step in implementing a common sense approach to export controls that will strengthen U.S. national security by allowing the export control system to focus on controlling the most sensitive technologies. However, the proposal for Category XII has fallen far short in several key areas:

- -A principal motivation behind the ECR was to provide clear regulations that would not require a company to hire a team of lawyers to understand. The proposal for Category XII is considerably more complex than the current regulation for the category.
- -ECR was meant to build taller walls around fewer items. The motivation for this was to better protect the U.S. militaries most sensitive items, while increasing U.S. global competitiveness. However, instead of being limited this proposal is actually expansive in its reach.
- -The proposal failed to define military significant items. Instead the performance parameters described in the proposal are either available commercially in today's global market or simply at the edge of the commercial market, limiting the growth of US industry in the years to come. The specially designed criteria should be applied to this category where appropriate parameters cannot be found.

¹ Source: National Science Board, Science and Engineering Indicators 2012

² Source: National Science Board, Science and Engineering Indicators 2014

Specially Designed criteria

One of the goals of the ECR Initiative was to create a simple regulatory definition of "specially designed" under both the USML and the CCL to streamline the inquiry as to whether an item is "specially designed" for the military and therefore subject to export controls. The Department of Defense and the Department of Commerce agreed upon a definition and on October 15, 2013, the "specially designed" definition was finalized. Subsequently, this criteria was applied to USML categories as they were individually revised in the ECR process. However, in Category XII specially designed is only used in very selective and limited ways.

Wassenaar Arrangement

The Wassenaar Arrangement was established in 1996 in order to contribute to regional and international security and stability, by participating countries agreeing to what conventional arms and dual-use goods and technologies should be controlled. There are 41 participating countries, including the U.S. and our European allies. Every year participating countries meet in Vienna and decide what technologies should be controlled, and additionally whether that item is considered to fall under the list of dual-use item or the Munitions List. Each country then promulgates their own regulations to control the agreed upon list. Unfortunately, the U.S. has chosen to regulate controls more strictly than the Wassenaar agreements, putting U.S. companies at a competitive disadvantage globally and even with our European allies.

About the NPI

The NPI is a collaborative alliance among industry, academia and government seeking to raise awareness of photonics and the impact of photonics on our everyday lives; increase cooperation and coordination to advance photonics-driven fields; and drive US funding and investment in areas of photonics critical to maintaining US economic competitiveness and national security. The initiative is led by a coalition of scientific societies, including the American Physical Society (APS), the IEEE Photonics Society (IPS), the Laser Institute of America (LIA), The Optical Society (OSA) and SPIE, the International Society for Optics and Photonics (SPIE).

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