

*Before the*  
**U.S. Department of Commerce**  
**Bureau of Industry and Security**  
Washington, D.C.

*In re*

Review of Controls for Certain Emerging  
Technologies

Docket No. 180712626-8840-01,  
BIS 2018-0024

**COMMENTS OF**  
**THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION (CCIA)**

Pursuant to the request for comments published by the U.S. Department of Commerce, Bureau of Industry and Security (BIS) in the Federal Register at 83 Fed. Reg. 58,201 (Nov. 19, 2018), and extended at 83 Fed. Reg. 64,299 (Dec. 14, 2018), the Computer & Communications Industry Association (CCIA) submits the following comments regarding the review of controls for certain emerging technologies. CCIA represents technology products and services providers of all sizes, including computer hardware and software, electronic commerce, telecommunications and Internet products and services. CCIA members employ more than 750,000 workers and generate annual revenues in excess of \$540 billion.<sup>1</sup>

**I. Introduction**

CCIA appreciates the opportunity to provide comments on the Advanced Notice of Proposed Rulemaking (ANPRM) for review of export controls for certain emerging technologies and agrees that export controls can be a relevant component of national security policy.

Consistent with the changes pursuant to the Export Control Reform Act of 2018 (ECRA),<sup>2</sup> the United States should work to achieve an export control regime that is narrowly targeted at exports that truly threaten our national security, without impeding the leadership of U.S.-based companies and research institutions in these technological fields.<sup>3</sup> Overbroad controls that would unreasonably limit or burden U.S. exports of technologies will place U.S. companies at a disadvantage vis-à-vis foreign competitors that do not face similar restrictions.

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<sup>1</sup> A list of CCIA members is available at <https://www.cciagnet.org/members>.

<sup>2</sup> Export Control Reform Act of 2018, <https://www.congress.gov/bill/115th-congress/house-bill/5515/text>.

<sup>3</sup> Further information on CCIA's view on export controls is available at <https://www.cciagnet.org/issues/trade/export-controls/>.

CCIA also notes that in order to develop the process envisioned under the ECRA, continued industry consultation is critical.<sup>4</sup> The questions on which BIS seeks comment require in-depth analysis that most companies cannot provide on a short timeline. For this reason, CCIA encourages BIS to hold further consultations on this process, and provide additional opportunities for industry input, with at least 90 days to comment, as BIS continues to consider any potential regulations. CCIA also urges BIS to develop a mechanism for industry participants to provide comments or other input on a confidential basis in order to protect proprietary and business confidential information from public disclosure.

With these perspectives in mind, CCIA offers the following comments:

## **II. Recommendations on the Export Control Process**

The decision to impose export controls on an identified emerging technology should be guided by a clear, transparent process, as mandated by the ECRA.<sup>5</sup> This process should entail inter-agency collaboration and continued reassessment regarding the impact on U.S. industry.<sup>6</sup>

CCIA urges BIS to consider several additional principles in this process. First, imposition of any controls should be narrowly tailored with a clear national security link and BIS should focus on truly emergent technologies. Second, unilateral export controls should be avoided, and only imposed if there is a clear path towards agreement by all Wassenaar member countries. Third, controls should not be imposed on technologies that are widely developed and available inside and outside of the United States as controls would be ineffective in these cases. Fourth, to the extent BIS imposes any controls these controls should not apply to intra-company transfer, re-exports, and transfers between and amongst U.S. companies and their non-U.S. subsidiaries.

In addition to these general principles, CCIA offers the following suggested definition, and observations about the potential economic consequences of overly broad regulation of U.S. exports.

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<sup>4</sup> A number of industry associations outlined these same concerns when requesting an extension of 90 days. See Industry Letter to U.S. Dept. of Commerce (Nov. 28, 2018), *available at* <https://www.itic.org/dotAsset/d567e37c-104c-4200-af76-ad734fc4113e.pdf>.

<sup>5</sup> ECRA § 1752(8) (“The export control system must ensure that it is transparent, predictable, and timely, has the flexibility to be adapted to address new threats in the future, and allows seamless access to and sharing of export control information among all relevant United States national security and foreign policy agencies.”).

<sup>6</sup> See ECRA § 1758(a)(2)(B).

### **III. Defining Relevant Terms**

#### **A. “Emerging Technologies”**

CCIA recommends the following definition using defined terms in the Export Administration Regulations (EAR) that are widely understood and applied by the exporting community:

*Emerging Technologies are specific technologies that:*

*(a) are “required” for the “development” of items that:*

*(i) provide the United States with a specific and identifiable qualitative military advantage;*

*(ii) are essential to the national security interests of the United States; and*

*(iii) are not identified on the Commerce Control List or the United States Munitions List; and*

*(b) are not available in or being produced in foreign countries; and*

*(c) do not include “production” technology or any aspect of “use” technology for items in production.*

#### **B. “Technology”**

CCIA requests that BIS confirm that all “emerging technology” must be a subset of “technology” as defined in 15 C.F.R. § 772.1. Additionally, CCIA notes that patented and (public) patent-pending technology “is not subject to the EAR.” *Id.* § 734.10. CCIA therefore requests that BIS reaffirm that patented emerging technologies and emerging technologies upon which public applications are pending are, by definition, excluded from the EAR regime.

As a general matter, to assist in the identification of such technology in the future, any export controls on “emerging technology” should be narrowly targeted to accomplish specific national security goals and consistent with standards laid out in ECRA, should not undermine U.S. competitiveness, and should not deter the export of technology that is plausibly available outside of the United States.

#### **C. Defining Regulated Classes of Technology**

To the extent BIS identifies emerging technologies for control, the regulated technology needs to be clearly defined in a manner more precise than the list of subject matter areas in the notice. BIS requests comments on “the status of development of these technologies in the United States and other countries.” However, the categories listed are very broad, and concern

technology at varying stages of development, with the majority of listed technologies being well-established. Greater specificity will be required if U.S. innovators are to have regulatory certainty in the planning of research, development, and investment. CCIA urges BIS to work closely with U.S. companies and research institutions as this process advances.

#### **IV. Exports Controls Can Have Negative Impacts on Emerging Technologies**

BIS requests comments on “the impact specific emerging technology controls would have on U.S. technological leadership.” If not sufficiently tailored to a specific technology that poses a direct and identified threat to national security, export controls can have a negative effect on U.S. innovation, risk leadership in next-generation technologies, and undermine security.<sup>7</sup>

U.S. technology firms at the forefront of emerging technology need to be able to export to foreign markets. Experience, feedback and iteration are important to the development of products and services and there are limits to what is gained by keeping technology “in-house.” In addition to exporting to new markets, U.S. companies need to be able to share technologies with their non-U.S. national workforce in the United States and abroad.

Subjecting broad categories of commonplace technology like those outlined in the ANPRM to export controls will harm U.S. international competitiveness, while doing little to accomplish any security goals. To the extent that technology is already available outside the U.S., imposition of export controls would put U.S. firms at a disadvantage to foreign competitors, while doing little to control distribution.<sup>8</sup> They will also affect American companies’ ability to compete for talent. When companies lose their competitive edge, members of the U.S. workforce may be drawn to universities, institutions, and companies outside the United States for study and job opportunities.

Export controls that are not sufficiently tailored also pose threats to open research initiatives. In many of the areas identified in the ANPRM, the levels of “fundamental research”

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<sup>7</sup> Testimony of the Honorable Kevin J. Wolf, Hearing on Modernizing Export Controls: Protecting Cutting-Edge Technology and U.S. National Security, House Committee on Foreign Affairs (Mar 14, 2018) at 41-42, available at <https://docs.house.gov/meetings/FA/FA00/20180314/107997/HHRG-115-FA00-Transcript-20180314.pdf> (“[Export controls] should be properly calibrated, tailored controls to avoid collateral economic costs, unnecessary regulatory burdens, and misallocation of federal resources. Excessive controls harm the U.S. defense industrial base, which results in harm to our national security. . . . Clamping down too hard on an emerging technology will drive research and development in the areas offshore, which hurts our national security.”).

<sup>8</sup> ECRA § 1752(6) (“Export controls applied unilaterally to items widely available from foreign sources generally are less effective in preventing end-users from acquiring those items. Application of unilateral export controls should be limited for purposes of protecting specific United States national security and foreign policy interests.”).

by both U.S. and non-U.S. academic institutions are significant.<sup>9</sup> Any controls should be clear not to extend to technology that comprises fundamental research, as uncertainty as to what is or is not excluded from export controls deters research initiatives.

CCIA therefore urges BIS to establish a technology-by-technology framework to ensure that any controls are narrowly tailored and clearly linked to U.S. national security.

## **V. Conclusion**

CCIA requests that BIS continue consultation with industry as it develops its export control process for “emerging technologies.” As explained above, a poorly executed export control regime can hinder innovation and U.S. leadership in next-generation technologies.

Matt Schruers  
Rachael Stelly  
Computer & Communications  
Industry Association (CCIA)  
25 Massachusetts Avenue, NW, Suite 300C  
Washington, D.C. 20001  
(202) 783-0070

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<sup>9</sup> As the notice indicates, “emerging” technologies are not “critical” technologies within the meaning provided in 50 U.S.C. § 4565(a)(6)(A)(i)-(v) (formerly 50 App. U.S.C. § 2170), and are not “fundamental research” within the scope of Export Administration Regulations (EAR), 15 C.F.R. § 734.8.