



January 19, 2023

Matthew Borman, Deputy Assistant Secretary
Bureau of Industry and Security
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, D.C. 20230

Dear Deputy Assistant Secretary Borman:

The Association of University Export Control Officers (AUECO) respectfully submits this letter in response to RIN 0694–AI94– *Implementation of Additional Export Controls: Certain Advanced Computing and Semiconductor Manufacturing Items; Supercomputer and Semiconductor End Use; Entity List Modification*.

AUECO was formed in 2008 with 17 individuals representing 17 institutions of higher education, but it has since grown to include membership of 432 export control professionals with compliance responsibilities at 250 institutions of higher education within the United States. AUECO is committed to monitoring guidance and changes in the administration of export control laws and regulations that may affect the unique nature of higher education and academia.

AUECO appreciates the opportunity to **1) request clarification on certain provisions of the Interim Rule that could have unintended consequences for U.S. higher education, and 2) to address those potential troublesome consequences in detail**. AUECO membership is comprised of individuals from institutions whose core mission is teaching and research. Member institutions primarily conduct “fundamental research” as that term is defined at Part 734.8 of the Export Administration Regulations (EAR). The results of such fundamental research are not subject to the EAR. The new Interim Rule provisions at Part 744.6 circumscribes specific U.S. Person activity in the form of “support” for the development of certain advanced semiconductors and associated technology not subject to the EAR. Without further clarification, given the breadth of these new restrictions, U.S. universities – most of whom conduct basic and applied research intended to advance the state of the art including semiconductor design and prototype fabrication – may be stifled in their ability to engage in fundamental international research collaborations and to instruct students in U.S. classrooms and laboratories.

Clarification on Restrictions on Specific Activities of “U.S. Persons”

AUECO would like further clarification on the *Restrictions on Specific Activities of “U.S. Persons”* under §744.6. Specifically, what is the scope of “any item not subject to the EAR,” as referenced in §744.6(c)(2)(i) through (ix)? The EAR defines “item” in Part 772 to include commodities, software, and technology. Therefore, we are concerned that this section captures a broad range of activities that perhaps BIS does not intend to restrict. For example, §734.7 states that “unclassified “technology” or “software” is “published,” and is thus not “technology” or “software” subject to the EAR, when it has been made available to the public without restrictions upon its further dissemination...” Under the new rule, we foresee a situation where a

researcher wishes to share published designs with a fabrication facility in the PRC. If the published designs are used to develop or produce integrated circuits, and the recipient facility meets the requirements under paragraph (c)(2)(i)(A) through (C) of §744.6, the researcher would be prohibited from sharing designs, which are already in the public domain and therefore not subject to the EAR.

In addition, §734.8 states that ““technology” or “software” that arises during, or results from, fundamental research and is intended to be published is not subject to the EAR.” We are concerned that the scope of §744.6(c)(2) will inhibit fundamental research collaborations on semiconductors, including but not limited to fundamental research related to semiconductor materials and semiconductor design, with universities in the PRC. Under §744.6(c)(2)(i) and (iv), a license is required to ship, transmit, or transfer to or within the PRC “any item not subject to the EAR” or “any item not subject to the EAR and meeting the parameters of any ECCN in Product Groups B, C, D, or E in Category 3” that will be used in the “development” or “production” of integrated circuits at facilities in the PRC that fabricate or may fabricate integrated circuits that meet the specific parameters in §744.6(c)(2)(i)(A)-(C). U.S. universities may interpret §744.6(c)(2) as requiring a license to share fundamental research results relating to integrated circuits with universities in the PRC, even if the focus of the collaboration does not address the semiconductors enumerated in §744.6(c)(2)(i)(A)-(C) or elsewhere on the CCL. For example, if a university in the PRC fabricates its own integrated circuits or has relationships with fabrication facilities in China that meet or may meet the parameters in §744.6(c)(2)(i)(A)-(C), is a U.S. university who is collaborating with that PRC university now required to have a license prior to sharing its fundamental research results with its collaborator? If so, we are concerned that this will deter most if not all fundamental research collaborations with universities in the PRC on semiconductor materials and IC design specifically, and potentially the field of electrical engineering more broadly. We believe that this may be contrary to BIS’ intent – as the very definition of fundamental research is “...research in science, engineering, or mathematics, ***the results of which ordinarily are published and shared broadly within the research community***, and for which researchers have not accepted restrictions for proprietary or national security reasons.” (Emphasis added)

Clarification on scope of “support” and “facilitating”

AUECO is concerned that, without further clarification from BIS regarding the scope of “support” and “facilitating”, these terms could be interpreted to include core university activities such as training and teaching students and researchers from the PRC in the U.S. Based on guidance BIS provided in its FAQs issued on October 28, 2022, our understanding of the §744.6(c)(2) focus on “support” in the form of “shipping, transmitting, or transferring” is that it applies to written and oral transmissions that occur as “actual exports”. Regarding the interpretation of “facilitating” under §744.6(b), we understand from the FAQs that “this guidance does not limit the scope of §744.6(b) or apply to other uses of the term facilitate or facilitation found elsewhere in the EAR.” However, there are practical challenges for universities in understanding and mitigating this risk. For example, university electrical engineering departments might host graduate students or visiting researchers (such as post-doctoral researchers) from PRC. A post-doctoral researcher could have a two-year appointment with our university’s electrical engineering department in which they collaborate on advanced integrated circuits technology or are trained on a new process. FAQ IV.A2 clarifies that “the U.S. persons criteria in §744.6(c)(2)(i)-(iv) do not extend to U.S. persons conducting administrative or clerical activities...that are not directly related to the provision of specific items to or servicing of specific items for advanced PRC fabs.” AUECO requests that BIS expand FAQ IV.A2 to further clarify that these terms do not include training and teaching of students and researchers from the PRC in the U.S.

Conclusion

U.S. universities drive innovation in the advanced semiconductor sector and this innovation is a result of the U.S.'s continued commitment to openness in academic research. As written and without clarification as to the scope of the restrictions on U.S. Person activities that could "support" the development of certain advanced semiconductors and associated technologies in the PRC, §744.6(c)(2) will have a chilling effect on U.S. academic collaborations with universities in the PRC as well as on U.S. university recruitment of highly qualified students and researchers from the PRC in the semiconductor field. This may detrimentally impact U.S. leadership and competitiveness in the advanced semiconductor sector. For this reason, AUECO requests that BIS 1) clarify the scope of "any item not subject to the EAR" in §744.6(c)(2) to specifically exclude technology and software that is published and/or that arises during or results from fundamental research, and 2) clarify the scope of "support" and "facilitating" in §744.6(c)(2) to exclude core university activities such as training and teaching students and researchers from the PRC in the U.S.

Thank you for this opportunity to comment on the Interim Final Rule.

On behalf of AUECO,

A handwritten signature in black ink that reads "BETHANY NELSON". The signature is written in a cursive, slightly stylized font.

Bethany Nelson
Chair
Association of University Export Control Officers
Officers Website: <http://aueco.org>