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UNIVERSITY OF MICHIGAN

August 3, 2015

Ms. Hillary Hess
Regulatory Policy Division
Bureau of Industry and Security (BIS)
14th Street and Pennsylvania Ave. NW.
Room 2099B
Washington, DC 20230

RE: Revisions to Definitions in the Export Administration Regulations (RIN 0694-AG32)

Dear Ms. Hess,

I am writing on behalf of the University of Michigan ("U-M"), a public, nonprofit, educational institution. The U-M conducts a high volume of diverse research activity and has faculty, students, and staff from all over the world. We appreciate the opportunity to comment on the proposed *Revisions to Definitions in the Export Administration Regulations* (80 Fed. Reg. 31505, June 3, 2015). The proposed revisions to the Export Administration Regulations (EAR) and corresponding changes to the International Traffic in Arms Regulations (ITAR) could, if adopted as proposed, have significant impact on research and education at the U-M. We believe there are significant opportunities for the U.S. Department of Commerce to revise these definitions further to achieve greater harmonization and to avoid revisions that could have a negative impact on U-M's research enterprise.

Definition of "Fundamental Research"

The proposed definition of "fundamental research" using the language of NSDD-189 in the EAR and the ITAR is consistent with our understanding of the concept. BIS has also proposed a simpler, alternate definition that would read:

> "Fundamental research" means non-proprietary research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community.

We assume that this simpler definition would not alter other wording in the proposed rule permitting prepublication review under specific circumstances within the fundamental research domain. While we find the simplified definition acceptable, it would be helpful if a note were added to illustrate what is and what is not "non-proprietary research," or alternately for the term to be defined to allow for prepublication review by a research sponsor.

While the proposed definition of "fundamental research" clarifies the broad applicability of the concept, the removal of the specific criteria for university-based research found in the current §734.8(b) is confusing. The U-M has used §734.8(b) to make determinations as to the applicability of fundamental research by evaluating proposed research activities against paragraphs two through six. We assume that its research qualifies as "fundamental research" if all conditions are met. We strongly recommend that the specific language of §734.8(b) be retained. If this is not possible, we suggest that BIS develop a decision tree tool for the determination of fundamental research for universities that incorporates the current criteria for university based fundamental research.

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Changes to Educational Information

The current §734.9 defines "Educational information" as information "released by instruction in catalog courses and associated teaching laboratories of academic institutions," and the current §734.3(b)(3)(iii) excludes such information from the scope of the EAR. In the proposed rule, the definition of "Educational information" is removed. The proposed §734.3(b)(3)(iii) adds uncertainty and potentially narrows the scope of applicability of the exclusion for the U-M. If the U-M is contemplating new curricular additions, would we need to concern ourselves that the course may not be "commonly taught" at other universities? Many catalog courses include hands on design laboratories, particularly as capstone experiences. Would the content of these courses, which would have previously been treated as "educational information," now become subject to the EAR by virtue of including more than general principles?

The U-M does not discriminate on the basis of citizenship or national origin in academic programs. Education at universities is by nature open, with the opportunity to participate limited only by fulfillment of required prerequisites. A narrow interpretation of the revised §734.3(b)(3)(iii) would inhibit the ability of the U-M to develop new courses in emerging areas of science and engineering critical to employability of their graduates and the future competitiveness of the industrial sector. We recommend that the qualifier "concern general scientific, mathematical, or engineering principles commonly taught in schools" be removed and that the simpler "is released by instruction in catalog courses and associated teaching laboratories of academic institutions" be retained for §734.3(b)(3)(iii). As an alternative, we believe changing the proposed description to "information and 'software' that concerns general scientific, mathematical, or engineering principles commonly taught in schools and/or released by instruction in a catalog course or associated teaching laboratory of an academic institution" would describe educational information more fully without narrowing the scope of the exclusion.

"Technology" and "Software"

Under the proposed §734.8(a), "'Technology'" that arises during, or results from, fundamental research and that is "intended to be published" would not be subject to the EAR. This is a change from the current §734.3(b)(3), under which "publicly available technology and software…[that] arise during, or result from, fundamental research" are not subject to the EAR. This change would significantly complicate and restrict U-M's research because while natural-language documents written by a researcher would be "technology" that could be freely shared as arising during fundamental research, a computer-language document (source code) written by the same researcher would be subject to deemed export restrictions. We strongly recommend that the proposed §734.8(a) be revised as follows:

> **Proposed revised language for §734.8**
> **Revise title to: ''Technology'' and "software" that arises during, or results from, fundamental research.**
> (a) ''Technology'' or "software" that arises during, or results from, fundamental research and that is 'intended to be published' is not ''subject to the EAR.''
> (b) Prepublication review. ''Technology'' or "software" that arises during, or results from, fundamental research and that is ''intended to be published'' to the extent that the researchers are free to publish the technology and software source code without restriction or delay. ''Technology'' that arises during, or results from, fundamental research subject to prepublication review is still ''intended to be published'' when…

Omission of software from the definition of "Technology" would significantly complicate and restrict University research. We strongly recommend that this definition be revised to include "software."

Questions and Answers- Technology and Software Subject to the EAR
We urge BIS to retain the questions and answers found in Supplement No. 1 to part 734 in the regulations. Removal from the EAR creates uncertainty created by changes due to interpretive difference. We are concerned that removal of the questions and answers, which we rely upon to guide export control decisions, would create increased uncertainty in our application of key concepts including fundamental research, publication, and educational instruction.

Effective Date of the Final Rule
We requests, at minimum, a six (6) month delay in effective date and further requests that the revised regulations be applicable only to new sponsored research begun after the effective date of the Final Rule.

We appreciate the opportunity to provide comments on these proposed changes.

Sincerely,

James Ashton-Miller
Associate Vice President for Research, Research Policy and Compliance