DIVISION OF RESEARCH

Office of the Vice President for Research

TEXAS A&M UNIVERSITY

August 3, 2015

Ms. Hillary Hess
Regulatory Policy Division
Bureau of Industry and Security
U.S. Department of Commerce
Room 2099B
14th Street and Pennsylvania Avenue NW
Washington, DC 20230

RE: RIN 0694-AG32

Dear Ms. Hess,

I am pleased to provide comments to the proposed changes to the definitions in the Export Control Administration Regulations (EAR).

Texas A&M University is located in College Station, Texas with branch campuses in Galveston, Texas and Doha, Qatar. It is the flagship institution of The Texas A&M University System and home to more than 50,000 students. It is among the nation's five largest universities, and is one of a select few academic institutions in the nation to hold triple federal designations as a land-grant, sea-grant and space-grant university. Texas A&M University is also member of the prestigious Association of American Universities and ranks in the top tier of universities nationwide in research expenditures with more than $820 million – attracting prominent, respected scholars and researchers from around the world.

We are pleased to have the opportunity to comment on the proposed Revisions to the Definitions in the Export Administration Regulations (EAR) and the corresponding changes to the International Traffic in Arms Regulations (ITAR). While we appreciate the efforts that have been made to harmonize export control related definitions, we believe that the proposed changes, if adopted, will have a significant impact on Texas A&M University. Highlighted below are our specific concerns.

Fundamental Research and Applied Research

The proposed definition of "fundamental research" using the language of NSDD-189 in the EAR and the ITAR is consistent with U.S. academic institutions' understanding of the concept. The proposed rule adopts a definition of "applied research" taken from the DFARS (48 CFR part 31.205-18) with an alternate definition adopting OMB Circular A-11 language.

The OMB Circular A-11 language reads: "applied research is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met". This language is well understood by universities in the context of

1112 TAMU
College Station, TX 77843-1112

Tel. 979.845.8585 Fax. 979.845.1855
http://vpr.tamu.edu

reporting on federal expenditures to NSF, and we favor the adoption of this commonly used definition.

If the DFARS definition is adopted, we suggest that the definition of "applied research" be further clarified by including the rest of 48 CFR part 31.205-18 – "Applied research does not include efforts whose principal aim is design, development, or test of specific items or services to be considered for sale; these efforts are within the definition of the term development, defined in this subsection." — the "for sale" criterion will help to clearly distinguish between "applied research" and "development" activities.

With regard to BIS' proposed alternate definition: "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 generally favor the simplified definition, it would be helpful if a note were added to illustrate what is and is not non-proprietary, or alternately for the term to be defined. This will clarify any ambiguity about what is and what is not "non-proprietary".

We strongly recommend that the specific criteria for university based research currently found in §734.8(b) be retained in the EAR. The criteria is used by universities to make determinations as to the applicability of fundamental research by evaluating proposed research activities using paragraphs 2 -6. The removal of the specific criteria will create interpretive uncertainty. That said, Texas A&M University appreciates that the proposed definition of "fundamental research" clarifies the broad applicability of the concept regardless of organization type or location.

Technology, Software and Fundamental Research

Under the proposed §734.8(a), "'technology'" that arises during, or results from, fundamental research and 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.

The proposed rule refers to a proposed note "to clarify that software and commodities are not "technology resulting from fundamental research" (although we were unable to locate the note). This change would significantly complicate and restrict university research; 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 (a program in source code) written by the same researcher would be subject to deemed export restrictions. "Software" resulting from university research is "published" as well as "technology", as recognized in the current §734.7(b). The export definitions in §734.2(b) recognize the similarities between software and technology. We strongly recommend that the proposed §734.8(a) be revised as follows:

§ 734.8 ''Technology'' and "software" that arises during, or results from, fundamental research.

(a) ''Technology'' or "software" that arises during, or results from, fundamental research and 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 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:

Proposed Changes to Educational Information

We believe that the proposed change to the current definition of educational information will significantly impact universities by potentially narrowing the scope of the applicability of the exclusion.

The current §734.9 defines "educational information" as information released by instruction in catalog courses and associated teaching laboratories of academic institutions, and §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, and §734.3(b)(3)(iii) excludes information and "software" that concern general scientific, mathematical, or engineering principles commonly taught in schools and released by instruction in a catalog course or associated teaching laboratory of an academic institution.

We believe that the proposed change adds uncertainty and restricts university research. Like other universities, Texas A&M University offers many catalog courses that include hands on design laboratories, particularly as capstone experiences. It is unclear whether or not the content of these courses, which would have previously been treated as "educational information" would become subject to the EAR by virtue of including more than general principles.

Universities do 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 required prerequisites. A narrow interpretation of the revised §734.3(b)(3)(iii) would inhibit the ability of U.S. universities 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. Therefore, we suggest 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 concern 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.

Questions and Answers in Supplement No. 1 to part 734

We urge BIS to retain the questions and answers found in Supplement No. 1 to part 734 in the regulations. While we agree that the questions and answers are illustrative, inclusion of them in the EAR removes the uncertainty created by changes due to interpretive differences without benefit of the rulemaking process. We are concerned that removal of the questions and answers, which we use to guide export control decisions, would create increased uncertainty in our application of key concepts including fundamental research, publication, and educational instruction. It should be noted that other parts of EAR contain important regulatory information (e.g., Supplement No. 1 to part 740).

End-to-end encryption in the proposed revision of the definition of "Activities that are Not Exports, Reexports, or Transfers,"

We believe the addition of §734.18 listing activities that are not exports, reexports or transfers is a useful addition to the EAR. In particular, the exclusion of sending, taking or storing software that is secured using end to end encryption from export activities is welcome to the academic research community as it will reduce the faculty burden associated with international travel and the need to monitor and conduct research using main campus resources while abroad.

Proposed Effective Date

While the revised definitions do not make changes to the USML or the CCL, as written they have a significant impact on regulatory burden for U.S. universities. Most industry sponsors of university research, as well as many foundations, require limited time prepublication review to prevent the inadvertent disclosure of sponsor proprietary information and to permit seeking of patent protection as applicable. U.S. universities have until now interpreted such reviews as within the scope of fundamental research. If the proposed changes to ITAR §120.49(b) Prepublication Review go to final rule without changes, Texas A&M University, like many other universities, will need to significantly change their business practices associated with review and negotiation of sponsored research agreements as well as the management of access to sponsored research. These changes will require implementation of new procedures to determine applicability of the ITAR to fundamental research with prepublication review, implementation of technology control plans and submission of license applications for the participation of foreign nationals in the research, monitoring of those plans, and eventual removal of the plans once the prepublication review has occurred, as well as revised export compliance training for affected departments on campus. Importantly, such review would be required retrospectively for current projects. These procedures will also require additional staffing for export compliance. Texas

A&M University favors as much lead time as possible for implementation and suggests, at a minimum, a 6 month delay in the effective date, and further that the revised regulations be applicable only to new sponsored research begun after the effective date of the Final Rule.

Thank you for the opportunity to provide comments on the proposed changes.

Sincerely,

Dr. Glen A. Laine
Vice President for Research