TEXAS TECH UNIVERSITY™

Office of the President

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 Ave. NW.
Washington, DC 20230

RE: RIN 0694-AG32

Dear Ms. Hess,

I am writing on behalf of Texas Tech University, an institution of higher education of the State of Texas. Texas Tech University (TTU) is providing the following comments in response to the Bureau of Industry and Security RIN 0694-AG32 *Revisions to Definitions in the Export Administration Regulations (EAR).* TTU supports revisions to the EAR that clarify and harmonize definitions with the International Traffic in Arms Regulations.

We appreciate the opportunity to comment on the harmonized definitions and believe they are an important step forward. They advance meaningful export control reform and contain many helpful changes and clarifications (e.g. redefinition of "release," clarification that submission of manuscripts to journal editors constitutes "published" information). The changes will have significant impact on our university. Below are our comments in response to the eight issues on which BIS has requested specific comments:

1. Whether the proposed revisions create gaps, overlaps, or contradictions between the EAR and the ITAR, or among various provisions within the EAR.

Response: Most inconsistencies between the EAR and ITAR are either relatively minor or reflect longstanding practices. There is a major conflict, however, between the proposed EAR and ITAR definitions in their treatment of prepublication review (to assure that publication does not divulge a sponsor's proprietary information). EAR 734.8(b) continues to provide that such review does not change the status of technology. Technology that arises during or results from fundamental research is still "intended to be published" when prepublication review is conducted to ensure patent rights are not compromised and when there is only a temporary delay in publication of the research results. In contrast, ITAR 120.49 states that technical data that arises during, or results from, fundamental research is intended to be published to the extent that the researchers are free to publish the technical

Box 42005 | Lubbock, Texas 79409-2005 | T 806.742.2121 | F 806.742.2138

An EEO/Affirmative Action Institution

data without *any restriction or delay*, including temporary delays for research sponsor proprietary information review. (Emphasis added.)

TTU strongly opposes the proposed ITAR interpretation that would exclude any research subject to prepublication review from being considered fundamental research, even when the results will be published. It is reasonable, and our current practice, to allow industrial sponsors time to review proposed publications and file provisional patents prior to publication, which usually occurs with a maximum 90-day delay. The proposed ITAR provision will remove any research projects involving defense articles subject to such review from fundamental research. No explanation is provided as to the reason for the different policies. We urge that the ITAR be aligned with the EAR interpretation and definition of fundamental research.

Also inconsistent with the ITAR are the provisions related to government-sponsored research covered by contract controls in EAR 734.11. The proposed EAR rule essentially restates the current 734.11(a), which universities have found confusing. We join our colleagues at other universities in requesting instead the ITAR language at 120.49(b) Note 3, modified to apply to technology arising during or resulting from fundamental research. The examples in 734.11(b) are helpful and TTU requests they be retained.

One change that is important to educational institutions is the proposed restatement of the "education exemption" in the current EAR 734.9, which is removed. The new statement in the proposed EAR 734.3(b)(3)(iii) merges current ITAR (120.10(b)) and EAR text to state "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." If narrowly interpreted, the revised 743.3(b)(3)(iii) would inhibit the ability of TTU to develop new courses in emerging areas of science and engineering critical to the employability of its graduates and their future competitiveness in the industrial sector. We suggest that the "and" be changed to "or" to avoid unintentionally limiting this section, i.e.to clearly cover a new university course in an technology area so long as it is included in a course catalog.

2. Whether the alternative definition of fundamental research suggested in the preamble should be adopted.

Response: The proposed alternative definition 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." While this definition is shorter, there may be some vagueness in the term "non-proprietary." The proposed ITAR rule discussed above demonstrates confusion about what constitutes non-proprietary research. We urge significant caution in changing a definition of fundamental research that has been endorsed by White House Administrations of both parties over the years and that has served the scientific community well.

Research findings in the form of technology and software arising during or resulting from fundamental research, intended to be published, and should not be subject to EAR. Currently the EAR §734.3(b)(3) states that "publicly available technology and software "[that] arise during, or result from, fundamental research" are not subject to the EAR. The proposed 734.3(b) (3) and 734.7(a) also treat technology and software similarly. 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, but software is not mentioned. "Software" should be included as well as "technology."

Research findings resulting from fundamental research may be written in natural-language or computer language. In either case it is "technology" that should be able to be freely shared as arising during or resulting from fundamental research. No explanation is provided as to the reason for changing the recognition of the similarities between software and technology in the current EAR (734.2(b); 734.7(b)). 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. TTU strongly recommends that software arising during, or resulting from, fundamental research should not be subject to the EAR.

The current presumption in EAR 734.8(b) that university-based research will be considered fundamental research appears to have been eliminated. There is no clear policy reason stated for this change. The applicability should continue to be determined by the other criteria in 734.8(b).We urge BIS to restate the presumption in the final rule.

3. Whether the alternative definition of applied research suggested in the preamble should be adopted, or whether basic and applied research definitions are needed given that they are subsumed by fundamental research.

Response: The EAR changes include definitions of "basic research" (734.8, currently found at EAR 772.1) and "applied research" (currently found in the DFARS). The preamble suggests that the DFARS definition be used, which is reflected in the ITAR (120.49). It also suggests an alternate definition of applied research taken from OMB Circular A-11: "Systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met." This definition is well-understood by universities in the context of reporting federal expenditures to NSF, and we suggest that it be adopted.

If the DFARS definition is adopted instead, the definition of "applied research" would be 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 distinguish between "applied research" and "development" activities.

4. Whether the questions and answers in existing Supplement no. 1 to part 734 proposed to be removed (to the BIS website) have criteria that should be retained in part 734.

Response: The Q&As are very helpful. If they are removed from the EAR and placed on the website, they will no longer have the same regulatory weight. We also note that supplements to other parts of the EAR contain important regulatory information (e.g. Supplement No. 1 to Part 740). We request that the Q&As be retained in part 734.

5. With respect to end-to-end encryption as described in the proposed rule (sec. 734.18), whether the illustrative standard in the proposed EAR rule also should be adopted in the ITAR; whether the safe harbor standard in the proposed ITAR rule also should be adopted in the EAR, or whether the two bodies of regulations should have different standards.

Response: We appreciate that the proposed rules address cloud computing situations, which have been an area of considerable uncertainty under the current rules. We prefer the proposed EAR definition in 734.13(a)(6), which requires knowledge that releasing information relating to encryption will cause or permit the transfer of technology to a foreign national. In general, we believe that knowledge or intent to transfer controlled information should be required for an "export" or "deemed export" to occur. The addition of 734.18 listing activities that are not exports, re-exports 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 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. We also prefer the EAR provision in 734.18(4)(iii) providing for "other similarly effective cryptographic means" for securing technology or software.

The restriction in 734.18(a)(4)(iv) to countries not listed in Country Group D:5 unfortunately may substantially limit the usefulness of the proposed rule. Most cloud providers insist on storing data anywhere that they want. We suggest BIS consider adding a note that a contract that imposes these obligations on a vendor is sufficient for compliance purposes, to provide a greater safe harbor. Ensuring actual compliance is beyond a university's control.

6. Whether encryption standards adequately address data storage and transmission issues.

Response: TTU favors the proposed hardware or software compliant with Federal Information Processing Standards Publication 140-2 supplemented in accordance with NIST guidance or other similarly effective means.

7. Whether the proposed definition of "peculiarly responsible" effectively explains how items may be "required" or "specially designed" for particular functions.

Response: The definitions provide appropriate explanations.

8. The effective date of the final rule.

Response: TTU supports a six-month delayed effective date. If the proposed changes to ITAR 120.49(b) Prepublication Review go to the final rule without changes. TTU will need to significantly change our sponsored research practices associated with review and negotiation of industry sponsored research agreements. A review will be required of current and ongoing projects. We will time to develop new procedures determining when ITAR applies to fundamental research with prepublication review. Staff will need to implement additional technology control plans, monitor those plans, and establish procedures to remove the plans once prepublication review has occurred. In addition, TTU will need to submit license applications for foreign national students who are participating in affected research. Export compliance training will be required for additional departments on campus.

These procedures will likely require additional staffing for export compliance. TTU will not be able to meet the compliance obligations imposed by the addition of prepublication review language within 30 days of publication of the rules. Our view is that significant changes in definitions should have as long a lead time as possible for implementation. Therefore we support a six-month delayed effective date.

Conclusion

In closing, we again want to express our appreciation to BIS for your willingness to engage universities in dialogue on these issues. We believe the EAR changes are mostly positive and deserving of support. We hope BIS will consider our comments in finalizing the proposed definitions, and are available to provide more information or discuss these matters further.

Sincerely,

M. Duane Nellis, Ph.D.
President