Professor Alice P. Gast  
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Dear Professor Gast:

I am writing with regard to your letter of July 30, 2004 on the recent findings and recommendations of the Department of Commerce’s Office of Inspector General report, *Deemed Export Controls May Not Stop the Transfer of Sensitive Technology to Foreign Nationals in the U.S.*, (hereafter “IG Report”) IPE-16176, March 2004. We welcome the opportunity to explain our deemed export controls and respond to certain concerns raised in your letter. Specifically, your letter focused on (i) the meaning of “use” technology in relation to the “fundamental research” exception, and (ii) the IG Report’s recommendation that the Bureau of Industry and Security (BIS) revise its policy regarding the country of nationality of a foreign national.

Before discussing the substantive issues you have raised and in light of your reference to “the Office of Inspections and Program Evaluations of DOC’s Bureau of Industry and Security,” we would like to clarify that the Office of Inspections and Program Evaluations is not part of BIS. The IG Report was drafted by the Department of Commerce’s Office of Inspector General to evaluate BIS’s implementation of deemed export controls. This IG Report is the fifth in a series of eight IG Reports on export controls that is required by the National Defense Authorization Act of 2000. BIS is now working with the Inspector General’s Office in order to ensure that U.S. deemed export controls strike the proper balance between protecting national security and promoting the academic freedom that is essential to conducting fundamental research at universities in the United States.

Deemed export controls are an important part of the overall mission of BIS to control exports and reexports of sensitive U.S. technology to destinations of concern. An export of technology is “deemed” to have taken place when it is released to a foreign national in the United States. A license may be required to release controlled technology to a foreign national depending on the sensitivity of the technology and the foreign national’s country of origin. However, a license may not be required if a license exception is available. See 15 C.F.R. Part 740. In addition, a license may not be required if the technology consists of books, pamphlets, or other miscellaneous publications, or is “publicly available” as defined in the Export Administration Regulations (the “EAR”).
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"Use" Technology and the "Fundamental Research" Exception Issue

With regard to your concern about the meaning of "use" technology and the "fundamental research" exception, it may be helpful to summarize certain provisions of the EAR that outline the scope of the existing controls and exceptions. The term "technology," as used in the EAR, refers to "specific information necessary for the 'development,' 'production,' or 'use' of a product." See 15 C.F.R. Section 772.1, definition of "technology." Accordingly, "specific information necessary for the . . . 'use' of a product" is currently included in our definition of "technology." Whether such "use" technology is controlled in a particular situation depends upon the specific technology involved, as detailed in the relevant Export Control Classification Number ("ECCN") on the Commerce Control List ("CCL"), 15 C.F.R. Section 774, Supp. No. 1. For instance, ECCN 3E201 controls "technology" for the "use" of equipment controlled by certain ECCNs in Category 3 of the CCL. Thus, the existing regulations cover "use" technology relating to particular equipment.

The meaning of "use" technology itself is defined as technology for "operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing." See 15 C.F.R. Section 772.1, definition of "use." Under its current authority, and in accordance with this definition, BIS controls technology that describes how to operate equipment and, in fact, exercises such authority depending on the specific equipment and technology involved. The IG Report recommended that BIS revise the definition of "use" technology to replace the word "and" with the word "or," to clarify that controlled "use" technology does not have to be related to all of the listed activities. In response to this recommendation, BIS stated that it would examine the issue of whether the term "use" needs to be clarified and, if it does need to be clarified, BIS would publish a regulatory revision and incorporate this revision into deemed export outreach activities. See IG Report, App. 3 at 1. Any change to the regulation would be subject to a formal rule-making process in which all interested parties would have an opportunity to comment.

As part of the exception for "publicly available technology," there is an exception for technology that "arise[s] during or result[s] from fundamental research." See 15 C.F.R. Section 734.3(b)(3)(ii). Fundamental research refers to "basic and applied research in science and engineering where resulting information is ordinarily published and broadly shared within the scientific community." See 15 C.F.R. Section 734.8(a). However, if research is funded by the U.S. Government, and specific national security controls (such as requirements for

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1 With regard to your statement that "individuals who buy [export-controlled] equipment in the United States should be free to use it without restriction," it is important to note that the actual use of equipment by a foreign national is not controlled by the EAR. Rather, the transfer of technology relating to the use of the equipment may be controlled.
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pre-publication review by the Government) have been agreed to, technology and software arising during or resulting from fundamental research is subject to export controls. See 15 C.F.R. Section 734.11.

This current exception, by its terms, applies only to technology that “arises during” or “results from” fundamental research. Depending on the situation, it is possible that the transfer of “use” technology would not be covered by this exception. For example, if a foreign national needs to learn how to use specific equipment in order to undertake the research project, but the equipment was not developed for the research project, the technology to operate that equipment may not be within the scope of the exception. Accordingly, as the IG Report states, current controls may prohibit the transfer of technology for the use of controlled equipment even if the equipment is used for fundamental research by foreign nationals.

In sum, there will be many situations in which a university would not need to seek a license to transfer “use” technology to a foreign national. For example, the technology may not be controlled to the foreign national’s country of origin. The technology may also be “publicly available,” e.g., because the technology has been published or is posted on the Internet. In other cases, technology may arise during or result from fundamental research. In addition, technology may be eligible for a license exception. However, as indicated above, there are also some situations in which the transfer of “use” technology to a foreign national will require a license, even where the foreign national is engaged in fundamental research.

This overall – and longstanding – framework is necessary to protect U.S. national security interests related to sensitive technologies. Accordingly, it is important that universities, like other U.S. persons who must comply with our laws and regulations, carefully analyze the specific circumstances involved in order to determine whether an export license may be required.

Country of Origin Issue

Separately, the IG Report recommended that current BIS policy be amended to require U.S. entities to apply for a deemed export license when a foreign employee or visitor was born in a country to which the technology transfer in question is EAR-controlled. Current BIS policy is to consider the foreign national’s most recent country of permanent residence for purposes of determining deemed export license requirements. As reflected in its comments on the IG Report, BIS is prepared to consider this recommendation, taking into account traditional understandings of citizenship as denoting a substantial personal connection to a given country. BIS stated that it would conduct an internal review to determine whether there are any legal impediments and to further determine whether there are any inappropriate policy outcomes that should be considered if the Bureau were to modify current policy. See IG Report, App. 3 at 1-2. Again, interested parties will have an opportunity to comment on any proposed revision to the regulations.
As noted in your letter, the Administration has reaffirmed its support for NSDD-189, which states that U.S. leadership in science and technology is an essential element of our economic and physical security. BIS appreciates the vital role that U.S. institutions of higher education have played and will continue to play in advancing science and technology for future generations.

In order to protect sensitive technology and facilitate university research, BIS is working to increase understanding in the academic community regarding U.S. deemed export controls. BIS has conducted approximately 20 deemed export outreach events in 2004 with the university research community. During the past year, my staff has established a dialogue and conducted outreach to the Council on Governmental Relations and the National Council of University Research Administrators (NCURA) in order to explain the requirements of the deemed export rule. In addition, we have provided universities with advisory opinions and classifications on whether a foreign national required a deemed export license. In an effort to further increase understanding of our regulations and to determine how to best address concerns expressed by the academic community, BIS will shortly establish a position to serve as liaison with the U.S. academic and research communities on these issues.

We hope to continue this dialogue on the regulatory requirements for deemed exports. In particular, my colleagues and I would be pleased to meet with you and other university representatives. Our point of contact for this issue is Bernie Kritzer, Director, Office of National Security and Technology Transfer Controls, who can be reached at (202) 482-4196.

Sincerely,

Kenneth I. Juster