

Section A: Publication

Question A(1): I plan to publish in a foreign journal a scientific paper describing the results of my research, which is in an area listed in the EAR as requiring a license to all countries except Canada. Do I need a license to send a copy to my publisher abroad?

Answer: No. This export transaction is not subject to the EAR. The EAR do not cover technology that is already publicly available, as well as technology that is made public by the transaction in question (§§734.3 and 734.7 of this part). Your research results would be made public by the planned publication. You would not need a license.

Question A(2): Would the answer differ depending on where I work or where I performed the research?

Answer: No. Of course, the result would be different if your employer or another sponsor of your research imposed restrictions on its publication (§734.8 of this part).

Question (A)3: Would I need a license to send the paper to the editors of a foreign journal for review to determine whether it will be accepted for publication?

Answer: No. This export transaction is not subject to the EAR because you are submitting the paper to the editors with the intention that the paper will be published if favorably received (§734.7(a)(4)(iii) of this part).

Question A(4): The research on which I will be reporting in my paper is supported by a grant from the Department of Energy (DOE). The grant requires prepublication clearance by DOE. Does that make any difference under the Export Administration Regulations?

Answer: No, the transaction is not subject to the EAR. But if you published in violation of any Department of Energy controls you have accepted in the grant, you may be subject to appropriate administrative, civil, or criminal sanctions under other laws.

Question A(5): We provide consulting services on the design, layout, and construction of integrated circuit plants and production lines. A major part of our business is

the publication for sale to clients of detailed handbooks and reference manuals on key aspects on the design and manufacturing processes. A typical cost of publishing such a handbook and manual might be \$500; the typical sales price is about \$15,000. Is the publication and sale of such handbooks or manuals subject to the EAR?

Answer: Yes. The price is above the cost of reproduction and distribution (§734.7(a)(1) of this part). Thus, you would need to obtain a license or qualify for a License Exception before you could export or reexport any of these handbooks or manuals.

Question A(6): My Ph.D. thesis is on technology, listed in the EAR as requiring a license to all destinations except Canada, which has never been published for general distribution. However, the thesis is available at the institution from which I took the degree. Do I need a license to send another copy to a colleague overseas?

Answer: That may depend on where in the institution it is available. If it is not readily available in the university library (e.g., by filing in open stacks with a reference in the catalog), it is not "publicly available" and the export or reexport would be subject to the EAR on that ground. The export or reexport would not be subject to the EAR if your Ph.D. research qualified as "fundamental research" under §734.8 of this part. If not, however, you will need to obtain a license or qualify for a License Exception before you can send a copy out of the country.

Section B: Conferences

Question B(1): I have been invited to give a paper at a prestigious international scientific conference on a subject listed as requiring a license under the EAR to all countries, except Canada. Scientists in the field are given an opportunity to submit applications to attend. Invitations are given to those judged to be the leading researchers in the field, and attendance is by invitation only. Attendees will be free to take notes, but not make electronic or verbatim recordings of the presentations or discussions. Some of the attendees will be foreigners. Do I need a license to give my paper?

Answer: No. Release of information at an open conference and information that has been released at an open conference is not subject to the EAR. The conference you describe fits the definition of an open conference (§734.7(a) of this part).

Question B(2): Would it make any difference if there were a prohibition on making any notes or other personal record of what transpires at the conference?

Answer: Yes. To qualify as an "open" conference, attendees must be permitted to take notes or otherwise make a personal record (although not necessarily a recording). If note taking or the making of personal records is altogether prohibited, the conference would not be considered "open".

Question B(3): Would it make any difference if there were also a registration fee?

Answer: That would depend on whether the fee is reasonably related to costs and reflects an intention that all interested and technically qualified persons should be able to attend (§734.7(a)(4)(ii) of this part).

Question B(4): Would it make any difference if the conference were to take place in another country?

Answer: No.

Question B(5): Must I have a license to send the paper I propose to present at such a foreign conference to the conference organizer for review?

Answer: No. A license is not required under the EAR to submit papers to foreign organizers of open conferences or other open gatherings with the intention that the papers will be delivered at the conference, and so made publicly available, if favorably received. The submission of the papers is not subject to the EAR (§734.7(a)(4)(iii) of this part).

Question B(6): Would the answers to any of the foregoing questions be different if my work were supported by the Federal Government?

Answer: No. You may export and reexport the papers, even if the release of the paper violates any agreements you have made with your government sponsor. However, nothing in the EAR relieves you of responsibility for conforming to any controls you have agreed to in your Federal grant or contract.

Section C: Educational Instruction

Question C(1): I teach a university graduate course on design and manufacture of very high-speed integrated circuitry. Many of the students are foreigners. Do I need a license to teach this course?

Answer: No. Release of information by instruction in catalog courses and associated teaching laboratories of academic institutions is not subject to the EAR (§734.9 of this part).

Question C(2): Would it make any difference if some of the students were from countries to which export licenses are required?

Answer: No.

Question C(3): Would it make any difference if I talk about recent and as yet unpublished results from my laboratory research?

Answer: No.

Question C(4): Even if that research is funded by the Government?

Answer: Even then, but you would not be released from any separate obligations you have accepted in your grant or contract.

Question C(5): Would it make any difference if I were teaching at a foreign university?

Answer: No.

Question C(6): We teach proprietary courses on design and manufacture of high-performance machine tools. Is the instruction in our classes subject to

the EAR?

Answer: Yes. That instruction would not qualify as "release of educational information" under §734.9 of this part because your proprietary business does not qualify as an "academic institution" within the meaning of §734.9 of this part. Conceivably, however, the instruction might qualify as "release at an open seminar, or other open gathering" under §734.7(a) of this part. The conditions for qualification of such a seminar or gathering as "open", including a fee "reasonably related to costs (of the conference, not of producing the data) and reflecting an intention that all interested and technically qualified persons be able to attend," would have to be satisfied.

Section D: Research, Correspondence, and Informal Scientific Exchanges

Question D(1): Do I need a license in order for a foreign graduate student to work in my laboratory?

Answer: Not if the research on which the foreign student is working qualifies as "fundamental research" under §734.8 of this part. In that case, the research is not subject to the EAR.

Question D(2): Our company has entered into a cooperative research arrangement with a research group at a university. One of the researchers in that group is a PRC national. We would like to share some of our proprietary information

with the university research group. We have no way of guaranteeing that this information will not get into the hands of the PRC scientist. Do we need to obtain a license to protect against that possibility?

Answer: No. The EAR do not cover the disclosure of information to any scientists, engineers, or students at a U.S. university in the course of industry-university research collaboration under specific arrangements between the firm and the university, provided these arrangements do not permit the sponsor to withhold from publication any of the information that he provides to the researchers. However, if your company and the researchers have agreed to a prohibition on publication, then you must obtain a license or qualify for a License Exception before transferring the information to the university. It is important that you as the corporate sponsor and the university get together to discuss whether foreign nationals will have access to the information, so that you may obtain any necessary authorization prior to transferring the information to the research team.

Question D(3): My university will host a prominent scientist from the PRC who is an expert on research in engineered ceramics and composite materials. Do I require a license before telling our visitor about my latest, as yet unpublished, research results in those fields?

Answer: Probably not. If you performed your research at the university, and you were subject to no contract controls on release of the research, your research would qualify as "fundamental research" (§734.8(a) of this part). Information arising during or resulting from such research is not subject to the EAR (§734.3(b)(3) of this part).

You should probably assume, however, that your visitor will be debriefed later about anything of potential military value he learns from you. If you are concerned that giving such information to him, even though permitted, could jeopardize U.S. security interests, the Commerce Department can put you in touch with appropriate Government scientists who can advise you. Write to:

Department of Commerce Bureau of Industry and Security P.O. Box 273 Washington, DC 20044

Question D(4): Would it make any difference if I were proposing to talk with a PRC expert in China?

Answer: No, if the information in question arose during or resulted from the same "fundamental research."

Question D(5): Could I properly do some work with him in his research laboratory inside China?

Answer: Application abroad of personal knowledge or technical experience acquired in the United States constitutes an export of that knowledge and experience, and such an export may be subject to the EAR. If any of the knowledge or experience you export in this way requires a license under the EAR, you must obtain such a license or qualify for a License Exception.

Question D(6): I would like to correspond and share research results with an Iranian expert in my field, which deals with technology that requires a license to all destinations except Canada. Do I need a license to do so?

> **Answer:** Not as long as we are still talking about information that arose during or resulted from research that qualifies as "fundamental" under the rules spelled out in §734.8(a) of this part.

Question D(7): Suppose the research in question were funded by a corporate sponsor and I had agreed to prepublication review of any paper arising from the research?

> **Answer:** Whether your research would still qualify as "fundamental" would depend on the nature and purpose of the prepublication review. If the review is intended solely to ensure that your publications will neither compromise patent rights nor inadvertently divulge proprietary information that the sponsor has furnished to you, the research could still qualify as "fundamental." But if the sponsor will consider as part of its prepublication review whether it wants to hold your new research results as trade secrets or otherwise proprietary information (even if your voluntary cooperation would be needed for it to do so), your research would no longer qualify as "fundamental." As used in these regulations it is the actual and intended openness of research results that primarily determines whether the research counts as "fundamental" and so is not subject to the EAR.

Question D(8): In determining whether research is thus open and therefore counts as "fundamental," does it matter where or in what sort of institution the research is performed?

> **Answer:** In principle, no. "Fundamental research" is performed in industry, Federal laboratories, or other types of institutions, as well as in universities. The regulations introduce some operational presumptions and procedures that can be used both by those subject to the regulations and by those who administer them to determine with some precision whether a particular research activity is covered. Recognizing that common and predictable norms operate in different types of institutions, the regulations use the institutional locus of the research as a starting point for these presumptions and procedures. Nonetheless, it remains the type of research, and particularly the intent and freedom to publish, that identifies "fundamental research," not the institutional locus (§734.8(a) of this part).

Section E: Federal Contract Controls

Question E(1): In a contract for performance of research entered into with the Department of Defense (DOD), we have agreed to certain national security controls. DOD is to have ninety days to review any papers we proposed before they are published and must approve assignment of any foreign nationals to the project. The work in question would otherwise qualify as "fundamental research" section under §734.8 of this part. Is the information arising during or resulting from this sponsored research subject to the EAR?

Answer: Under §734.11 of this part, any export or reexport of information resulting from government-sponsored research that is inconsistent with contract controls you have agreed to will not qualify as "fundamental research" and any such export or reexport would be subject to the EAR. Any such export or reexport that is consistent with the controls will continue to be eligible for export and reexport under the "fundamental research" rule set forth in §734.8(a) of this part. Thus, if you abide by the specific controls you have agreed to, you need not be concerned about violating the EAR. If you violate those controls and export or reexport information as "fundamental research" under §734.8(a) of this part, you may subject yourself to the sanctions provided for under the EAR, including criminal sanctions, in addition to administrative and civil penalties for breach of contract under other law.

Question E(2): Do the Export Administration Regulations restrict my ability to publish the results of my research?

Answer: The Export Administration Regulations are not the means for enforcing the national security controls you have agreed to. If such a publication violates the contract, you would be subject to administrative, civil, and possible criminal penalties under other law.

Section F: Commercial Consulting

Question F(1): I am a professor at a U.S. university, with expertise in design and creation of submicron devices. I have been asked to be a consultant for a "third-world" company that wishes to manufacture such devices. Do I need a license to do so?

Answer: Quite possibly you do. Application abroad of personal knowledge or technical experience acquired in the United States constitutes an export of that knowledge and experience that is subject to the Export Administration Regulations. If any part of the knowledge or experience your

export or reexport deals with technology that requires a license under the EAR, you will need to obtain a license or qualify for a License Exception.

Section G: Software

Question G(1): Is the export or reexport of software in machine readable code subject to the EAR when the source code for such software is publicly available?

Answer: If the source code of a software program is publicly available, then the machine readable code compiled from the source code is software that is publicly available and therefore not subject to the EAR.

Question G(2): Is the export or reexport of software sold at a price that does not exceed the cost of reproduction and distribution subject to the EAR?

Answer: Software in machine readable code is publicly available if it is available to a community at a price that does not exceed the cost of reproduction and distribution. Such reproduction and distribution costs may include variable and fixed allocations of overhead and normal profit for the reproduction and distribution functions either in your company or in a third party distribution system. In your company, such costs may not include recovery for development, design, or acquisition. In this case, the provider of the software does not receive a fee for the inherent value of the software.

Section H: Available in a Public Library

Question H(1): Is the export or reexport of information subject to the EAR if it is available in a library and sold through an electronic or print service?

Answer: Electronic and print services for the distribution of information may be relatively expensive in the marketplace because of the value vendors add in retrieving and organizing information in a useful way. If such information is also available in a library -- itself accessible to the public -- or has been published in any way, that information is "publicly available" for those reasons, and the information itself continues not to be subject to the EAR even though you access the information through an electronic or print service for which you or your employer pay a substantial fee.

Question H(2): Is the export or reexport of information subject to the EAR if the information is available in an electronic form in a library at no charge to the library patron?

Answer: Information available in an electronic form at no charge to the library patron in a library accessible to the public is information publicly

available even though the library pays a substantial subscription fee for the electronic retrieval service.

Question H(3): Is the export or reexport of information subject to the EAR if the information is available in a library and sold for more than the cost of reproduction and distribution?

Answer: Information from books, magazines, dissertations, papers, electronic data bases, and other information available in a library that is accessible to the public is not subject to the EAR. This is true even if you purchase such a book at more than the cost of reproduction and distribution. In other words, such information is "publicly available" even though the author makes a profit on your particular purchase for the inherent value of the information.

Section I: Miscellaneous

Question I(1): The manufacturing plant that I work at is planning to begin admitting groups of the general public to tour the plant facilities. We are concerned that a license might be required if the tour groups include foreign nationals. Would

such a tour constitute an export? If so, is the export subject to the EAR?

**Answer: The EAR define exports and reexports of technology to include release through visual inequation by foreign patients of LLS, origin

release through visual inspection by foreign nationals of U.S.-origin equipment and facilities. Such an export or reexport qualifies under the "publicly available" provision and would not be subject to the EAR so long as the tour is truly open to all members of the public, including your competitors, and you do not charge a fee that is not reasonably related to the cost of conducting the tours. Otherwise, you will have to obtain a license, or qualify for a License Exception, prior to permitting foreign nationals to tour your facilities (§734.7 of this part).

Question I(2): Is the export or reexport of information subject to the EAR if the information is not in a library or published, but sold at a price that does not exceed the cost of reproduction and distribution?

Answer: Information that is not in a library accessible to the public and that has not been published in any way, may nonetheless become "publicly available" if you make it both available to a community of persons and if you sell it at no more than the cost of reproduction and distribution. Such reproduction and distribution costs may include variable and fixed cost allocations of overhead and normal profit for the reproduction and distribution functions either in your company or in a third party distribution system. In your company, such costs may not include recovery for development, design, or acquisition costs of the technology or software.

The reason for this conclusion is that the provider of the information receives nothing for the inherent value of the information.

Question I(3): Is the export or reexport of information contributed to an electronic bulletin board subject to the EAR?

Answer: Assume each of the following:

- 1. Information is uploaded to an electronic bulletin board by a person that is the owner or originator of the information:
- 2. That person does not charge a fee to the bulletin board administrator or the subscribers of the bulletin board; and
- 3. The bulletin board is available for subscription to any subscriber in a given community regardless of the cost of subscription.

Such information is "publicly available" and therefore not subject to the EAR even if it is not elsewhere published and is not in a library. The reason for this conclusion is that the bulletin board subscription charges or line charges are for distribution exclusively, and the provider of the information receives nothing for the inherent value of the information.

Question I(4): Is the export or reexport of patented information fully disclosed on the public record subject to the EAR?

Answer: Information to the extent it is disclosed on the patent record open to the public is not subject to the EAR even though you may use such information only after paying a fee in excess of the costs of reproduction and distribution. In this case the seller does receive a fee for the inherent value of the technical data; however, the export or reexport of the information is nonetheless not subject to the EAR because any person can obtain the technology from the public record and further disclose or publish the information. For that reason, it is impossible to impose export controls that deny access to the information.