From: "Brendan Godfrey" <brendan.godfrey@ieee.org>
To: PublicComments@bis.doc.gov
Date: Wed, Jan 19, 2011 5:30 PM
Subject: Notice of Inquiry-CCL

Thank you for the opportunity to comment on proposed Export Control reforms. As a faculty member, I have a strong interest in export control issues as they affect national competitiveness and, more directly, as they affect research-intensive universities. Here are my recommendations:

. Exports should be restricted only when there is a compelling national security requirement to do so. A tiered positive control list makes good sense in this regard. Items generally available overseas never should be controlled here.

. When national security considerations do require licensing before export, the licensing should be done expeditiously by a single office. Failure of the Government to act in a timely manner should constitute export approval

. An interagency steering group should be established to formulate policies to guide the office mentioned in the preceding bullet and to hear appeals.

. Deemed exports should be expressly included within a License Exception Strategic Trade Authorization, taking account of recommendations in the National Academy of Sciences report on this subject. The provisions of NSDD-189 should in no way be weakened.

. Clear definitions are important. For that reason, some colleagues and I developed the attached document. The ill-defined notion of "specifically designed for..." should be eliminated.

Harmonized Definitions for Review and Comment

(a) "*Technology*" means specific information "required" for the "development," "production," or "use" of a product. "Technology" includes "technical data" and "technical assistance." "Technology" does not include (i) general system descriptions, (ii) information on basic function or purpose of an item, (iii) information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges, or universities, or (iv) "publicly available" information.

(1) "*Information*" is a collection of related data or knowledge about a topic.

(2) "*Technical assistance*" may take forms such as instruction, skills training, working knowledge, and consulting services, and may involve the transfer of "technical data."

(3) "*Technical data*" may take forms such as blueprints, plans, diagrams, models, formulae, tables, software, engineering designs and specifications, manuals and instructions in written or electronic form.

(4) "*Development*" means all stages prior to serial production, such as design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, or layout.

(5) "*Production*" means all production stages, such as product engineering, manufacture, integration, assembly (mounting), inspection, testing, or quality assurance.

(6) "*Use*" means operation, installation (including on-site installation), maintenance (checking), repair, overhaul, *and* refurbishing.

(7) "*Required,*" as applied to "technology" or "software," refers to only that portion of "technology" or "software" that is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics or functions. Such "required" "technology" or "software" may be shared by different products.

(b) "Product" is defined as a tangible commercial object that meets specific commercial objectives or has a direct link to a given application with respect to processes, services or methods.

(c) "*Publicly available*" means information which is generally accessible or available to the public from such sources as:

(1) Through sales on the open market at public stores, newsstands, and bookstores;

(2) Through subscriptions or electronic publications, "e-publications", available

without restriction to any individual who desires to obtain or purchase the published information;

(3) Through second, third, or fourth class mailing privileges granted by the U.S. Government;

(4) At libraries or internet sites open or available to the public or from which the public can obtain documents;

(5) Through patents available at any patent office;

(6) Through unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to members of the public who desire to obtain or purchase the information;

(7) Through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form), including posting on the internet on sites or through cloud computing databases available to the public, provided such release is performed by the owners of the information or with their permission and no other publication limitations exist;

(8) Through instruction in catalog courses, archived online courses, and associated teaching laboratories of academic institutions;

(9) As a product of "fundamental research;" or

(10) As "informational materials."

(d) *"Fundamental research"* means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community. This is distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.

(1) *"Basic Research"* means systematic experimental, computational, or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not solely directed towards a specific practical aim or objective but have cross-cutting applications. It includes all scientific and engineering study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, computation

(2) *"Applied research"* means the effort that (i) normally follows basic research, but may not be severable from the related basic research; (ii) attempts to determine and exploit the potential of scientific discoveries or improvements in technology,

materials, processes, methods, devices, or techniques; (iii) and (iii) attempts to advance the state of the art by determining possible uses for the findings of basic research or to determine new ways of achieving some specific, predetermined objectives.

(e) *"Informational materials"* means information stored on electronic, magnetic, optical, etched, or printed media; phonograph records reproducing in whole or in part, the content of printed books, pamphlets, and miscellaneous publications, including newspapers and periodicals; printed books, pamphlets, and miscellaneous publications including bound newspapers and periodicals; children's picture and painting books; newspaper and periodicals, unbound, excluding waste; music books; sheet music; calendars and calendar blocks, paper; maps, hydrographical charts, atlases, gazetteers, globe covers, and globes (terrestrial and celestial); exposed and developed microfilm reproducing, in whole or in part, the content of any of the above; exposed and developed motion picture film or videotape and soundtrack; compact disks, CD ROMs, digital video disks, artworks, and news wire feeds; and advertising printed matter exclusively related thereto.

Notes:

Note 1: "Technical data" includes computing code or software scripts that approximate datasets through the use of scientific or engineering equations only when they represent publicly available scientific or engineering formulae in form and structure.

Note 2: "Public release" includes submission of papers to domestic or foreign editors or reviewers of journals, or to organizers of open conferences or other open gatherings, with the understanding that the papers will be made publicly available if favorably received.

Note 3: Posting on an intranet that is not generally available to the public does not make information publicly available.

Note 4: Publicly available patent information includes that contained in a patent application prepared wholly from foreign-origin technical data where the application is being sent to the foreign inventor to be executed and returned to the United States for subsequent filing in the U.S. Patent and Trademark Office; contained in a patent application, or an amendment, modification, supplement or division of an application, and authorized for filing in a foreign country in accordance with the regulations of the Patent and Trademark Office, 37 CFR part 5; or contained in a patent application when sent to a foreign country before or within six months after the filing of a United States patent application for the purpose of obtaining the signature of an inventor who was in the United States when the invention was made or who is a co-inventor with a person residing in the United States.

Note 5: "Publication" includes the production of information for the purposes of public dissemination that is stored on electronic, magnetic, optical, etched, or printed media such as paper, periodicals, technical journals, reports.