

NSDD-189 — Export Controls and the Safe Harbor Exemption for Fundamental Research

The United States Government first passed export control regulations in the late 1960's to protect national security. These arose during the cold war era when the relationship between the Soviet Union and the U.S. was fragile and concern existed that releasing information might erode US scientific/technological advantage. Universities, because of the open nature of research activities, were thought to be possible areas where national security might be breached. These regulations denied access to certain data/information, which might aid our adversaries by advancing their military potential or by aiding in the proliferation of weapons of mass destruction.

The Department of Commerce Export Administration Regulations (EAR) (1969) involve "dual use" commodities – those with both civilian and military uses. These are delineated in the Commerce Control List under ten categories that include many areas of university research such as advanced materials, telecommunications, microelectronics, encryption, computing, biotechnology, etc.

The State Department International Traffic in Arms Regulations (ITAR) (1976) include defense items and services developed for military applications. These are organized in the U.S. Munitions List into twenty-one categories, which include certain toxic agents, military electronics, aircraft equipment, missile and spacecraft systems, satellite equipment and related software.

Both EAR and ITAR prohibit the unauthorized "export" of items on the list without a government issued license. The regulations cover tangible exportation of a particular item but also "deemed exports" – transfers of information through oral or written disclosure of information. A deemed export may include a disclosure to a foreign person who is not a US citizen or a permanent resident of the U.S. There are certain embargoed countries – those subject to trade embargoes (Cuba, Iran, Syria, etc.) or countries under sanction for terrorist activities (Libya, Liberia, Palestinian Authority, etc.) where licenses will not be issued.

Upon passage of these regulations, the higher education community became concerned about its ability to comply with these regulations and sought clarification. The presidents of several major research universities argued that where a legitimate need exists to protect information, it could best be accomplished through a security classification process. In response, in 1985 the government issued a national policy in National Security Decision Directive 189 (NSDD-189) during the Reagan administration.

This Directive established the policy for controlling the flow of science, technology and engineering information produced in federally funded fundamental research at colleges, universities, and laboratories. Essentially, NSDD - 189 recognized the open nature of university fundamental research. Fundamental research was defined as "basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as 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."

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NSDD-189 affirmed that, to the maximum extent possible, the products of fundamental research would remain unrestricted. Where there was a matter of national security, information generated during federally funded fundamental research in science, technology and engineering at universities could be controlled through classification of that research.

This Directive provided an important exception to ITAR and EAR regulations, which has become commonly known as the “fundamental research exemption.” University research which is publicly available or in the public domain (i.e. published, released at conferences), is exempt from the export license requirement. This provides a “safe harbor” for universities to openly disseminate results of research without applying for export licenses provided the university does not accept publication restrictions or agree to exclude certain individuals from participating in research (i.e. foreign faculty or students). The fundamental research exemption is destroyed if the university agrees a research sponsor may approve a publication, regardless of whether the sponsor is federal, industry or non-profit. Universities may agree to pre-publication review to prevent inadvertent disclosure of sponsor proprietary information or may agree to delay publication for a brief period to ensure that patent rights will not be lost without jeopardizing the exemption. For this reason, it is critical that university personnel be cognizant of these matters and avoid accepting clauses in agreements that could destroy the basic exemption. Administrators are advised to include language in clauses pertaining to export control laws that the institution agrees to comply with all laws, “subject to the exemptions and exclusions.”

In 2001, then National Security Advisor Condoleezza Rice reaffirmed the principles of NSDD 189. Since then, heightened concerns about national security are producing new attempts to impose additional restrictions on university research. A report issued by the Department of Commerce Inspector General in March of 2004, entitled Export-Controlled Technology at Contractor, University, and Federally Funded Research and Development Facilities (d-2004-06) contained recommendations on deemed exports that many universities found troubling. One such recommendation involves DOD awards and suggests inclusion of an export control compliance clause that would not recognize the fundamental research exemption that currently protects university research from the licensing requirements. This has resulted in a task force of university and industry representatives (formed in 2006) to re-examine this issue.