partment with a meeting (sponsored by the Optical Society of America and the Institute of Electrical and Electronics Engineers) on lasers and inertial-confinement fusion (PHYSICS TODAY, April 1980, page 81). According to John Vossen, a past president of the AVS, much of the wording in the proposed revisions to ITAR is "dangerous to the future of technical meetings in this country." The proposed regulations make more frequent reference to technical data, technical conferences, symposia and trade shows, than the current regulations, he said.

But the State Department denies that the revisions will make the regulations more restrictive in the area of technical data. According to Edward Cummings, a State Department legal adviser who helped draft the proposed revisions, the academics unfortunately have interpreted the signals incorrectly. He said that State did not intend to introduce any policy change into the new regulations with regard to the export of technical data as they apply to universities. Cummings said that State merely wanted to make the regulations simpler and clearer. The specific language that caused concern had been added primarily, he told us, in response to requests from academic researchers that ITAR contain some explicit guidance on what kinds of technical data are exempt from State Department licensing.

Theoretically, two factors determine whether the Federal government will intervene in a scientific symposium attended by Communist nationals: the nature of the information being discussed and the availability of that information. Commerce Department guidelines, for example, prohibit disclosing without a license controlled manufacturing technology at an international meeting that is not open. (According to the Department, a meeting is open if anyone can attend and if the material being presented either has been or will be published in the open literature.) However, both State- and Commerce-Department spokesmen told us that other factors could also be considered in deciding whether or not a conference can take place as planned. Last fall FBI agents questioned the local arrangements chairman and the program chairman of the AVS National Symposium. The agents were trying to determine if the meeting would be an open one, in the official sense of the word. Luckily, according to Vossen, this was one of the few AVS meetings for which proceedings are published; so the meeting was allowed to go on as planned.

The American Vacuum Society, which was put in the embarrassing position of having to "disinvite" several Soviet-bloc nationals from the bubble memory meeting last year, has been trying to change these rules. The AVS is attempting to convince the government to exempt from the export requirements information presented orally at technical meetings that are open to the public, regardless of whether or not proceedings of the conference are to be published. The AVS argues that the sort of detailed manufacturing design and technology that the government is mainly concerned about is, for proprietary reasons, rarely released by industrial representatives at a conference. On the other hand, the Society says, any truly useful technical information presented at a meeting either has been or will soon be published, and therefore will become part of the public domain anyway. Finally, the AVS is concerned that the present regulations make both the conference organizers and the participants responsible for compliance with the export regulations (and therefore subject to prosecution if they are violated). According to Vossen, "If the government continues to take the position that the societies are responsible for what is reported at a conference—that the societies must act as cops and censors—then the meetings will just dry up."

In April, AIP Governing Board Chairman Norman Ramsey wrote to President Reagan on behalf of the Board, urging that US policy on Soviets at US meetings (as enunciated in a White House statement on 4 November) be modified to make more specific the definition of an open meeting and to place responsibility for compliance on individual speakers rather than on the organizers of the meeting.

Foreign students. An additional concern of government export administrators is what technologies foreign visitors and students at US universities pick up during their visits. Last fall, for example, the Commerce Department cautioned Cornell University, which was expecting an Eastern-European visitor to its department of electrical engineering. Commerce said that the university would have to guarantee that no information would be given to the visitor that was not already in the public domain. A license would be required to discuss any government- or industry-sponsored research with the visitor. The university decided that it would be difficult and unfair to the visitor to try to enforce such a restriction; so the visitor's invitation was withdrawn.

This incident illustrates one of the objections of the critics of export policy: that even if the regulations themselves do not prohibit all scientific exchange, they may become sufficiently intimidating to inhibit some legitimate avenues of exchange.

Another example of the government's concern with foreigners in US laboratories occurred in April. The State Department's Office of Chinese Affairs sent a letter to the MIT physics department, which is hosting a visiting Chinese scholar as part of an official US–China exchange program. The letter reminded the faculty that the US government is concerned that none of its exchange programs involve the

Agencies develop export control lists

Four Federal agencies are involved in the control of the export of technological information to the Communist world: the Departments of Commerce, State, Defense and Energy. Commerce has the lead role in the administration of the export control system. Through its Office of Export Administration, it has jurisdiction over most unclassified technical data, as listed on the Commodity Control List. The Export Administration Act of 1979 directed the Secretary of Defense to develop a list of militarily critical technologies, to be incorporated into the Commodity Control List.

The militarily critical technologies list that the Pentagon drew up last year contains mainly dual-use technologies, that is, those having both a civilian and a military application. For example, in the area of gas lasers, the list identifies the following technologies: mirror coating, hard sealing of components and assemblies, chemical cleaning of components and assemblies, and design techniques for electrode structures and specialized power supplies and short-pulse conditioners. The DOD list also represents technologies judged critical by the Department of Energy. The DOE was responsible for identifying technologies to be controlled—mainly nuclear, but also fusion, magnetohydrodynamics, seismic detection, satellite technology, semiconductor manufacturing technology and superconducting magnet technology.

Before the DOD list is incorporated into the Commodity Control List, it will have to go through certain international channels to coordinate the US list with those of our allies. The US is a member of CoCom, the Coordinating Committee for Multilateral Export Controls, an informal organization made up of the US and its principal allies. It coordinates the national export controls of its members into a unified policy that limits strategic trade with the Communist bloc. Most of the items on the Commodity Control List are also on the CoCom list, but several items are unilaterally controlled by the US.

The State Department is responsible for items on the Munitions Control List, governed by the International Traffic in Arms Regulations. The Munitions Control List contains items that are, in general, more directly related to military hardware than items on the Commodity Control List. —mej