# Deemed export controls expected to be eased

The US Department of Commerce has initiated what likely will be a major revamping of its system for keeping "dual-use" information out of the hands of potential adversaries abroad. The department announced last month that it is taking steps to implement the recommendations of a blue-ribbon advisory committee that urged a fundamental change in the government's approach for controlling "deemed exports" technological knowledge that is imparted to foreign nationals working in US institutions and companies. Tightened enforcement of deemed exports in the years since September 11, 2001, has become an administrative burden for American universities and has complicated US industry's hiring of foreignborn scientists and engineers (see PHYSICS TODAY, July 2006, page 21).

In a statement issued 6 February, Commerce's Bureau of Industry and Security (BIS) said it had completed its internal review of the panel's recommendations and was beginning consultations with the other government agencies that share responsibility for export controls.

The advisory committee, chaired by retired Lockheed Martin chairman Norm Augustine, in December urged the BIS to replace the current system with a simplified regime that would erect "higher fences" around a few justifiably classified technologies. It further called for the development of more consistent criteria to more narrowly focus on the relatively few foreign nationals whose loyalties might be suspect. And it recommended establishment of a "trusted entity" system in which universities and companies that agreed to play by the rules could self-approve their deemed export license applications.

With the exception of very few highly sensitive military areas, the nation's security would be better served "by seeking to accelerate its own technical prowess than by seeking to deny potential enemies access to broad ranges of knowledge," the report says. "Stated otherwise, protecting what we know is in most instances not the primary concern; participating in the creation of that body of scientific and technical knowledge that is not known is the concern."

Under the existing regime, a license is supposed to be a prerequisite for individuals from specified nations either to work on research in certain unclassified areas that are considered sensitive or to work with instruments that embody certain technologies. A separate license is required for each controlled technology used by the individual.

The export control regime is a vestige of the cold war era, when the US dominated the technological spectrum and its adversaries were few and well-known, the report states. Today, however, many of the listed items can be readily obtained from other nations, and US industry suffers a competitive disadvantage, the committee said.

The committee recommended narrowing the list to encompass critical aspects of the few exports that could pose real threats—nuclear weapons, biological pathogens, chemical warfare agents, and cryptography, plus a few "pivotal technological breakthroughs" such as advanced composites, stealth and night-vision technologies, and electronic countermeasures.

Under an executive order dating to the Reagan administration, all research considered fundamental in nature is to be freely disseminated. The same edict declares classification to be the only valid method for restricting fundamental research results. But since 9/11, pressure has built to restrict some research that isn't classified but might still be considered sensitive. The detailed design of a nuclear facility and instructions for genetically engineering a super-bug pathogen are examples that officials often give for such sensitive but unclassified information.

In an interview, Augustine said the panel thought it prudent to provide the government an "opening" other than classification for keeping some research secret. But he stressed that the burden would be on the government to explicitly justify the need for secrecy. "I will grant you that people can abuse this," he acknowledged.

The committee drew up a seven-step review procedure for determining whether to grant a deemed export license, starting with an "overall evaluation of the probable loyalty of the individual of interest." If the review indicates a tie to a country on the terrorist-supporting list, the license application would be denied.

An Association of American Universities official questioned how universities could determine a foreign student's loyalties and why the committee felt the loyalty review should precede the determination of whether the technology is controlled. Augustine acknowledged there was no good reason why the order couldn't be reversed.

Although deemed exports "could have had a serious impact had the government chosen to make it so," Augustine said his committee was surprised at how few academic institutions and companies actually have applied for licenses. Only 900 or so applications are received in a given year, with just three companies submitting 56% of them. About 85% of the requests are approved, and fewer

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## http://www.agu.org/sci\_soc/policy/positions/climate\_change2008.shtml

"The Earth's climate is now clearly out of balance and is warming." Thus begins



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