

Highlights of GAO-06-793, a report to the Committee on Armed Services, House of Representatives

## Why GAO Did This Study

Major acquisitions in the Department of Defense's (DOD) force transformation rely on maintaining technological superiority to ensure U.S. military dominance. Failure to identify and protect critical technologies makes U.S. military assets vulnerable to cloning, neutralization, or other action that degrades current and anticipated capabilities.

To help minimize these risks, DOD's Militarily Critical Technologies Program developed and periodically updates two lists of technologies—the Militarily Critical Technologies List (MCTL) and the Developing Science and Technologies List (DSTL). While the lists are primarily intended to inform U.S. export control decisions, they can also inform counterintelligence activities, research plans, and technology protection programs, making MCTL and DSTL fundamental resources for security decisions.

To ensure these lists are informative, GAO assessed the Militarily Critical Technologies Program's process for updating the MCTL and DSTL and determined how the lists are used to inform export control and DOD policy decisions.

## What GAO Recommends

GAO is recommending that DOD take several actions to better ensure that efforts to identify critical technologies meet user requirements. DOD concurred with our recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-06-793](http://www.gao.gov/cgi-bin/getrpt?GAO-06-793).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Ann Calvaresi-Barr at (202) 512-4841 or [calvaresibarra@gao.gov](mailto:calvaresibarra@gao.gov).

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# DEFENSE TECHNOLOGIES

## DOD's Critical Technologies Lists Rarely Inform Export Control and Other Policy Decisions

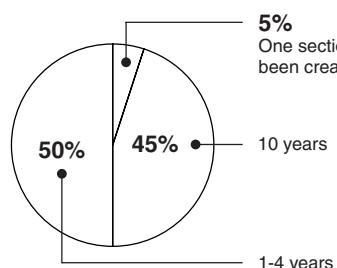
### What GAO Found

The Militarily Critical Technologies Program's process for updating the MCTL and DSTL has generated lists that are of questionable value. To update the lists, working groups of experts from government, industry, and academia identify militarily critical technologies. However, participation in the working groups is voluntary, and some experts choose not to participate or do not participate fully. Validation of the updates—a critical check to ensure the lists are complete and accurate—also provides little assurance that the lists are of value. More than one-third of the reviewers acknowledged they do not have the technical expertise necessary to validate the updates, and one-quarter did not review the lists. The lists are also out of date. Although a stated program goal calls for all 20 sections of the lists to be completely updated at least every 4 years, about half of the sections on the MCTL—including technologies related to weapons, communications, and biological warfare—have not been updated for 10 years. The DSTL is also out of date; almost half of the sections have not been updated in the past 5 years.

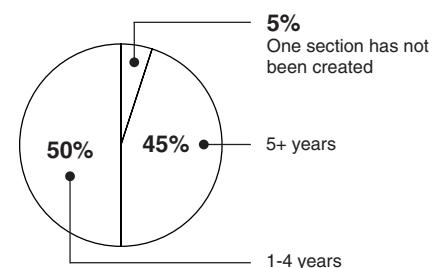
With the limited value of the MCTL and DSTL, agencies tend to rely on other information sources to inform export control and DOD policy decisions. According to DOD and Department of Commerce export control officials, the MCTL is too broad, difficult to use, and out of date to inform export control proposals or export licensing decisions. Concerned about the MCTL's accuracy and reliability, the Air Force instructed its personnel not to use the MCTL. The DSTL is also seldom used—in part because some DOD components were not aware of the list. For those components that were aware of the DSTL, some found it only marginally useful because it too is out of date. Several DOD components have developed their own efforts to track global technologies. For example, the Army established international technology centers dedicated to identifying international cooperative opportunities as well as to maintain knowledge of foreign research efforts to avoid technological surprises for the warfighter.

### Most Recent Updates by Fiscal Year for MCTL and DSTL Sections as of April 30, 2006

#### MCTL



#### DSTL



Source: GAO.