The Difference Between DOD Programs That Develop Dual-Use Technologies and DOD's Dual-Use Technology Development Programs — A Fact Sheet

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This fact sheet makes a distinction between DOD programs that develop dual-use technologies and DOD's "dual-use" technology development programs. The distinction is more than semantic and is worth noting as Congress considers non-defense expenditures in DOD's budget. Many of the technologies and much of the knowledge generated by DOD's traditional Science and Technology (S&T) programs could be considered dual-use (e.g., programs in the sciences, materials, electronics, computers, design methods, manufacturing methods, software engineering). DOD has been supporting many of these programs for decades. "Dual-use" programs, on the other hand, are those S&T programs that explicitly attempt to leverage the commercial sector's investment in those same technologies. These programs are relatively new, initiated at the behest of Congress. A program that develops dual-use technologies is not necessarily a dual-use program, even if they develop the same technology. Dual-use technology programs typically involve consortia that include commercially oriented firms. The research agenda is negotiated with industry and aims to address the common needs of both the commercial and military sector. Industry cost-shares the project. The "agreements" are negotiated outside the federal regulations for grants or contracts. This is particularly important because it frees firms from having to provide specified cost-and-accounting data and allows more flexibility in negotiating technical data rights (both of which have discouraged some commercially-oriented firms from doing business with DOD in the past). The projects also tend to address technologies and technical issues with relatively near term application (there is less commercial interest in long term exploratory research). In traditional DOD-supported S&T programs, DOD defines the research to be done based solely on DOD's needs. Data rights, etc. are specifically spelled out in regulations. If DOD pays for all of the research, it gains unlimited rights to the data. Participants tend to be organizations dedicated to military production or small start-up firms, whose first customer is likely to be DOD, or defense laboratories.

The push for dual-use technology development programs came from Congress. Citing the relative decline in DOD's share of the Nation's research effort from over 50% following World War II to 25% today, the apparent lead that commercial markets have
The partnership model was fashioned after the Semiconductor Manufacturing Technology (SEMATECH) Consortium, begun in 1987. Although SEMATECH could be viewed more as an effort by DOD to "save" a segment of the commercial electronics industry rather than a way to leverage commercial investment, the program became a model for the generation of "dual-use" programs that followed.