

B. Dual Use Science and Technology Program

Dual use technology remains a key component of the Department's investment strategy in technology and progress continues to be made in the establishment of an effective program that will foster the joint development of dual use technologies with industry. The Technology Reinvestment Program (TRP) was instrumental in guiding our efforts to increase the use of dual use technologies. A key to the success of the program was the development of partnerships with industry, universities, and state and local governments. The TRP provided many valuable lessons we are using to develop our current dual use policies and programs. The lessons learned from TRP include:

1. Dual use products must be tested in their military context - In the absence of military specifications, it is vital to demonstrate the military utility of dual use "products" through selective laboratory and troop testing.

2. The commercial marketplace is a principal motivation for participating industries. Industry involvement and investment is driven principally by the commercial marketplace and the industrial partner must be allowed to pursue opportunities in the commercial marketplace.

3. Military needs must dictate program choices and optimization. It is important for dual use efforts, which are often struggling to meet commercial as well as military goals, to establish early and close relationships with the military user, integrator, or developer of the product. This will assure that military needs dictate the program's choices and that a clearly enunciated insertion strategy is developed early and updated as needed.

4. Innovative agreements are crucially important. Non-procurement agreements, such as Cooperative Agreements and "Other Transactions" are a necessary tool when seeking flexible negotiations, particularly concerning issues of intellectual property rights and foreign participation. These vehicles can offer a much less burdensome and more creative arrangement between the government and the performing consortium than can conventional contracts.

5. Consortia should be encouraged, but not mandated. While consortia and partnerships were found to work well, they should not be mandated, but their formation should be left to the discretion of the proposers -- the government should not dictate to business how to form and structure their teams.

6. Cost sharing should be demanded for technology development programs. Cost sharing is necessary for a technology development effort like the TRP. The benefits of cost share for a developmental program are a reduction of program cost to the government and an assertion by the participating company that the end product will be competitive in the commercial marketplace. A fifty percent cost share is an appropriate level for industry contribution.

The TRP made significant progress in establishing a new way of doing business in DoD and led to the establishment of the Dual Use Applications Program (DUAP) in Fiscal Year 1997. A primary component of the DUAP was the Dual Use Science & Technology Initiative which was led by the Office of Technology Transition. This initiative had two primary purposes. The first was the development, with industry, of dual use technologies, and the second was the transition to the Services of the techniques developed and the knowledge gained by DARPA during the execution of earlier dual use programs. In Fiscal Year 1997 this initiative resulted in the approval and initiation of 69 projects that are jointly funded with industry and will result in the development of dual use technologies that are needed to meet future defense needs and have sufficient commercial applications to support a viable production base. Funds provided by DUAP for these projects are matched by the Services, and industry then matches the combined DUAP and Service funds. Through this cost sharing formula a \$67 million investment by DUAP has resulted in \$275 million being invested by DoD and industry in the development of dual use technology with industry. Congress' continued support of the S&T Initiative in FY98 resulted in the authorization of an additional \$75M which is being used to launch a second wave of solicitations to industry through the Dual Use Science and Technology Program. Project selection for this second round is expected in June 1998 with project awards by the end of December. The program is again being executed by the Office of Technology Transition; however, in Fiscal Year 1999, it is planned to transition the execution of the program to the Services.

A list of the DUAP projects by Service, title, and costs begins on the next page. A more detailed report on this program is being submitted separately.