

PERSPECTIVE ON TECHNOLOGY

When the Bullets Meet the Bytes



Dual-use research has profited military and civilian needs; Congress should resist the urge to scrap it for petty savings.

By JOHN M. DEUTCH

There is a real risk that Congress will kill the Technology Reinvestment Program, which would be a seriously shortsighted action, saving little money today while undercutting our troops tomorrow.

This program generates dual-use technology that has both military and commercial application. This is a laudable aim in itself, but it becomes a compelling defense policy when seen as part of Secretary of Defense William Perry's overall strategy to make defense affordable. That strategy requires integration of the nation's defense and commercial, industrial and technology bases. That integration gives defense the economies of scale inherent in larger commercial production runs, and it allows defense to benefit from faster commercial progress in so many critical technology areas.

The program fosters this commercial-defense integration through merit-based, competitive awards to industries with the kind of double-barreled technology we're looking for. Examples include such things as the development of low-cost electrical power trains for both military and commercial vehicles, a portable robotic welding system for both naval and commercial ship construction, and an advanced radar system to detect hazardous weather conditions for aviation, both commercial and military.

It's not only a good idea, it even has a bipartisan pedigree. It was begun under

the Bush Administration and has been championed by President Clinton. And it's run by the Advanced Research Projects Agency, which, among other breakthroughs, gave birth to what is now the Internet.

We also should understand that we've always produced dual-use technology. Just look at the areas where defense research spawned new commercial industries: computers, communications and electronics. But to do it, we created defense-unique research and production bases, and we put the emphasis on performance, not on reducing cost.

We can no longer afford the enormous expense, time consumption or lag in technological innovation that reliance on a defense-unique base means today in so many areas. And, in fact, there isn't much disagreement about this problem inherent in continuing to rely on a defense-unique technology base.

But, this being Washington, there is always suspicion that political motivation is involved.

That shouldn't be the case for the Technology Reinvestment Program, which is entirely merit-based, with awards going only to companies with militarily-relevant technology and that put up at least 50% of the cost. It is perverse and always true that some critics would be more kindly disposed toward any program if the White House failed to see its merits.

Other objections are that it's not defense-relevant, that it's unaffordable or interferes with the free market.

The program's projects are clearly defense-relevant, but critics point to the 8% of the projects in the areas of manufacturing, education and training when they question relevance. Congress

mandated that these areas be included in the program.

Some argue that the program is unaffordable at a time when the defense budget is strained and short-term readiness is our top priority. But readiness is more than short-term. We must not forget that future military capability depends upon the technology-based investments we make today.

Others raise the specter of an industrial policy, with the Pentagon picking winners and losers. But all federal research and development programs pick winners and losers.

Finally, some critics are bothered that it's not the largest defense contractors but a wide range of partners—including small, dynamic, creative companies—that have never done business with the Department of Defense that are enthusiastic about the program. These companies are developing new markets and creating new jobs in partnership with defense. If this is an accusation, we plead guilty.

Dual-use technology programs amounted to \$1.8 billion in the 1995 defense budget—about 5% of the total research and development spending.

The Technology Reinvestment Program costs \$500 million, a small but critical portion of the overall research effort. And it is a win-win proposition for the country. Projects are supported only if they have a potential military payoff and a commercial payoff as well.

We can pay for the defense we need in the future only if we have an economy that is internationally competitive, and we can afford the specific defense systems we need only if we realize the benefits that a competitive commercial economy offers

John M. Deutch is deputy secretary of defense and has been designated the new CIA director.