



POSITION STATEMENT

OPTIMIZED USE OF FEDERAL LABORATORIES

*Adopted by the IEEE-USA
Board of Directors, 18 Feb. 2011*

IEEE-USA commends the work of Congress, the federal agencies and laboratories, and interagency initiatives in the area of government-university-industry cooperation. We are pleased with the considerable progress that has been made in recent decades. In view of the growing international competition faced by the Nation, we encourage even more effective use of the laboratories.

To that end, IEEE-USA recommends:

1. Parent agencies should review and, if necessary, update the charters of their laboratories to assure that the laboratories contribute effectively, not only to agency mission needs, but also to the economic competitiveness and national security of the United States.
2. Parent agencies should support internal investments, such as laboratory directed research and development programs, that nurture scientific exploration, engineering development, and educational outreach that complement the core missions of their laboratories.
3. Parent agencies should provide adequate, stable funding to their laboratories to maintain critical mass and achieve their missions.
4. Parent agencies should assure that their laboratories are not burdened by bureaucratic requirements that reduce agility and waste funds.
5. Laboratories should maintain an appropriate balance between work performed organically and on contract in order to draw effectively on the nation's best talent to meet mission needs, as well as to maintain responsive capabilities that can address unanticipated technical challenges.
6. Parent agencies should utilize their laboratories, not only for research and development, but also for trusted technical advice on technical policy development and systems acquisition.

7. Technology transfer should be an integral part of all agency and laboratory R&D strategies to leverage federal R&D investments, as mandated by the *Stevenson-Wydler Technology Innovation Act of 1980*. The laboratory work forces should be incentivized to transfer technologies to industry (when not limited by national security requirements) through license proceeds sharing or awards. Laboratory management at all levels should be evaluated, in part, by the effectiveness of their organizations in technology transfer.
8. The federal government should strive to optimize use of federal funds by encouraging increased collaboration and technology transfer among the laboratories of different agencies.
9. Laboratory partnerships should be improved, where practical, to stimulate regional economic development and technology clusters; leverage commercialization; and promote the exchange of expertise with state and local governments, universities and industry, particularly small firms.
10. Well-qualified military officers should be encouraged to conduct research in the Department of Defense, and perhaps other laboratories, to provide an operational perspective to the laboratories and to provide technical insights to military planners. For this initiative to be successful, participating officers must have S&T research billets, clear career paths, and equitable promotion opportunities.

Federal laboratories and their personnel are a significant national asset as centers of excellence for many disciplines of science and technology, and in many cases, offer confluence points for interdisciplinary research on large scales. These laboratories operate unique facilities not found in universities and industry. To maintain and ensure U.S. leadership in technology and ultimately in the global technology sectors, these federal laboratories must be maintained and supported using long-term strategies and consistent funding. One strategy for supporting laboratory missions, as well as the overall economy, is government-university-industry cooperation.

Both Congress and the executive branch have recognized the merits of shared laboratory utilization and partnerships. Since 1980, a number of laws have been enacted for this purpose. These laws grant federal agencies unprecedented authorities to enter into partnerships and agreements with outside organizations. Examples include patent licenses, cooperative R&D agreements, user facility agreements, technical assistance agreements, test service agreements, consortia, personnel exchanges, *Space Act* agreements, educational partnership agreements, partnership intermediary agreements, and a variety of other transactions. These authorities should be utilized with new vigor in light of technological competition from abroad.

This statement was developed by IEEE-USA's Research and Development Policy Committee, and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA advances the public good and promotes the careers and public policy interests of the more than 210,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. The positions taken by IEEE-USA do not necessarily reflect the views of the IEEE or its other organizational units.