

OSTP Seeks Ideas for Federal Regulatory Reform to Enhance Research Innovation

The White House Office of Science and Technology Policy (OSTP) is investigating ways that the federal government's research and development (R&D) policies and regulations might be reformed in order to accelerate the pace of technological innovation. OSTP calls it "the first attempt to develop a specific national reform program for federal support of innovation and establish priorities for federal action."

The effort has emerged from discussions over the past year by top science and technology policy officials in the Clinton Administration, according to Lori Perine, senior policy advisor at OSTP and lead staffer in the investigation. "It has been a subject of interest to many people," particularly among members of the interagency National Science & Technology Committee, she said. Members have been raising concerns that some federal regulations and policies may be outdated, and therefore the government may be hindering the private sector from pursuing innovations effectively.

"As a general viewpoint, it is believed that there is a new environment surrounding innovation, both economically and politically," Perine said. "The question is, how do we in the government address that environment? We need to hear from the research community about how the federal role can be improved to encourage innovation—either by getting more involved or getting out of the way."

Toward that end, OSTP has asked the RAND Corporation's Science and Technology Policy Institute (STPI) to solicit ideas from the research community that may be used in government R&D policy discussions. OSTP is especially interested in potential actions that could be undertaken by the end of the year 2000, but the agency also is looking for ideas for the longer term. The effort focuses on four areas:

- How the Federal Government restricts the ability of capital markets to drive innovation through market incentives for further research.
- How it hinders basic and applied research directly.
- How it neglects to "cross technology streams" to stimulate innovative products and services.
- How it prevents better coordination among federal, state, and local agencies.

OSTP's request is likely to generate responses from the research community that encompass several highly controversial issues, according to other officials

familiar with the initiative. For example, a parallel regulatory-reform effort at the National Institutes of Health generated suggestions that the government consider revising its financial conflict-of-interest rules, its patent, trademark, and copyright protections, and, in the case of biomaterials research, such sticky items as animal and human research subject protection rules and hazardous waste disposal requirements.

OSTP director Neal Lane, in an open letter to the research community announcing the initiative, cited "the economic benefits of technological advances [that] have contributed to the competitiveness not only of the traditional 'technology sector,' including manufacturing and processing industries, but [that] also has driven the creation of a vibrant and globally competitive service industry."

Lane added that while, "[o]ver the past decade, the pace of technical innovation has increased dramatically, due in no small part to past Federal efforts to sustain and nurture the science and technology enterprise...some elements of the national innovation system have not been able to adapt as rapidly as others to accommodate these changes."

Lane cited such examples as changing business models in high-tech industries that increasingly focus on research geared toward shorter term objectives, such as applied product development. He added, however, that regulations "may inhibit the formation of consortia and partnerships that could share knowledge and risks for supporting longer term research."

Of particular concern, according to Lane, is a general "lack of harmonization in local, state, and Federal laws and policies." The situation tends to force companies attempting to commercialize new ideas to address "a plethora of criteria including procurement practices, environmental regulations, product liability, intellectual property, and data and patent rights." In addition, "[t]here are no mechanisms for coordinated or harmonized testing and/or certification to ensure that new technologies and concepts meet the technical and nontechnical standards demanded by each level of government."

One problem area that is unrelated to regulation involves the documentation of innovations developed in Federal research facilities. Although these innovations may be documented in the information databases of individual agencies, only a small percentage are researched by or transferred to the private sector for development and commercialization. The administration is attempting to address this situation through its Scientific Simulation

Initiative, under the management of the Department of Energy (see *MRS Bulletin*, April 1999, page 10).

Other potential issues for discussion include:

- the current structure of the peer-review process for federally funded research;
- mechanisms for addressing complex (multidiscipline and/or cross-sectoral) innovations;
- federal funding mechanisms for graduate research;
- performance and evaluation criteria for federally funded research;
- availability and accessibility of research infrastructure;
- current federal public-private partnership programs; and
- general tax and regulatory incentives and disincentives.

"We're not looking for revolutionary changes," Perine said. "We're just trying to find the areas where the government can take the most effective actions."

OSTP will hold a two-day workshop in Washington, DC on this topic on November 30. The full text of Lane's statement can be found at http://www.whitehouse.gov/WH/EOP/OSTP/html/998_5.html. For further information, contact Bruce W. Don, Director, Science & Technology Policy Institute at RAND, 1333 H Street, N.W., Suite 800, Washington, DC 20005; 202-296-5000, ext. 5685; or e-mail: stpi@rand.org.

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RAND Releases Reports on International S&T Information

The Science & Technology Policy Institute (STPI) at RAND Corporation has been conducting a series of projects that examine different aspects of government-sponsored cooperation in international science and technology (S&T). Part of this work has been completed and has resulted in three publications. In the most recent of these reports, "Global Science and Technology Information: A New Spin on Access," Caroline S. Wagner and Alison Yezril, MR-1079-NSF, 1999, STPI summarized that the government-collected international S&T information should be easily accessible. Users view this collection and analysis as a government role, and STPI anticipates a growing need for it. The report suggests that possible improvements to this service could include providing a global reach to collection efforts, adding economic and trade information, encouraging networking of information and resources, and increasing the number of quick responses and person-to-person interactions. All three reports are available at website www.rand.org/centers/stpi. □