Request for Proposals and Universities

The issues surrounding contract solicitation are discussed and recommendations for improvement are made.

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Several federal agencies that have traditionally worked with institutions of higher education through the unsolicited proposal and grant mechanism are increasingly utilizing contracts solicited through the request for proposal (RFP) mechanism. This development raises certain procedural and substantive issues of considerable concern to the higher education community. Important procedural issues include the adequacy of the process for disseminating information, the provision of adequate response time, and the efficient determination of capability. The substantive issues involve the perennial questions of peer review, directed and undirected research, and the balance between basic and applied research. In this article we will discuss some of these issues and propose certain recommendations for improvement of the system.

Procedural Issues

The RFP is used by the federal government to solicit contract research on a specific topic. This solicitation is announced in a variety of ways, depending upon the agency's procurement rules. If the study is for a defense agency and is expected to cost $10,000 or more or if the work is for a civilian agency and is expected to cost $5,000 or more, the availability of the RFP must, with certain exceptions, be advertised (*1*) in the *Commerce Business Daily* (CBD), a publication produced in Chicago by the Department of Commerce. Because its staff is small, the CBD must rely upon the agencies themselves to adhere to its publication requirements. Editing is limited to ensuring that certain essential bits of information are included, and copy is published almost exactly as it is submitted by the agencies. Therefore, CBD notices are uneven: some are abbreviated to such an extent that very little intelligible information remains, while others are overly wordy—very few are models of clarity.

One category of solicitations that does not have to be published in CBD is work customarily done by educational institutions (*1*). Some program officers in the agencies publicize such solicitations, but many do not, and this causes universities that have not been informed to feel that they have been unfairly treated. In view of the increased use of solicited contracts by agencies such as the U.S. Office of Education, the National Institutes of Health (NIH), Social and Rehabilitation Services, and Health Services and Mental Health Administration, which support a great deal of the research at educational institutions, we recommend that they be required to advertise for bids in this category and that CBD be urged to add a special section for these announcements. If this is not feasible, a special bulletin should be issued to announce RFP's for work that is to be provided only by educational institutions. The CBD should also be encouraged to publish periodically a list of programs in the agencies that maintain and solicit bidder's lists, and the information requested for bidder's lists should be standardized.

Increasingly, university research administrators charged with the responsibility of identifying sources of support for their institutions and their faculties screen CBD and other publications such as *Science*, the NIH *Guide for Grants and Contracts*, and *College and University Reports* of the Commerce Clearing House. They also encourage faculty members to submit their names to appropriate agencies, with a request that they be put on bidder's lists so they may receive RFP's directly. Even with these efforts, it has become apparent to many administrators that the means of disseminating information about RFP's, particularly as it relates to academic institutions, has serious deficiencies.

Even though agencies do not wish to tie their hands early in the acquisition cycle by too much specificity, program officers need to make a special effort to write RFP's that are long enough and clear enough for institutions and investigators to determine whether they have the capability to undertake the project. At a minimum, the solicitation must include a description of the work to be performed. Also needed is the format for submission, special facilities required, and the factors to be considered in evaluating the project. Knowing the evaluation factors is necessary for success—if not mentioned in the RFP, they will probably not be dealt with in the proposal (*2*). The Department of Health, Education, and Welfare (HEW) is to be commended for its 16 September announcement in the *Federal Register* stressing these points (*3*).

Agencies should also reveal in their announcements where RFP's have already been sent. This would assist investigators in assessing the likely competition and, therefore, in deciding whether they should expend the considerable effort required to prepare a proposal. If an agency expects to give a contract to a particular institution because it thinks that institution is the only one qualified (a sole-source RFP) or because the project is based on original ideas from that institution, then the agency should publicly announce this before awarding the contract, in order that other institutions, if they wish, can challenge this choice. This procedure would help forestall allegations that there was no open competition.

Sole-source RFP's are appropriate if they result from unsolicited proposals. Investigators who are not sure whether their idea will be considered unique and who wish to protect their plans should clearly mark their proposals as proprietary information to assure that their

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plans will not be incorporated into an RFP. If the agency does not agree that the investigator's idea is unique and thus warrants "sole source," it is marked confidential and returned.

The most troublesome problem, however, is the limited time usually allowed an institution to respond to an RFP. Often only 10 days are provided, and sometimes RFP's are issued either too late for a response or after briefings to clarify solicitation ambiguities have already been held. The staff of CBD does not condone the scheduling of briefings before all interested parties have had sufficient notification through public announcements. Short response times are detrimental to the interests of both the agency and the universities. To reduce the problem, we recommend that the government's interest in a given field of research be advertised at least 30 days before an RFP is issued, especially if that RFP is to require a return proposal within 30 days. Whenever feasible, RFP's for educational institutions should be issued at least 60 days before a proposal is expected.

Under the present system, agencies receive hastily prepared and poorly planned proposals, and the normal teaching and research activities of the universities are disrupted unnecessarily. William J. Argersinger, Jr., vice-chancellor for research and graduate studies, University of Kansas, commented to us recently: "The universities, by their very nature, have a year-round schedule of obligations that cannot be easily or completely set aside, because students cannot be set aside. If the federal XYA Department decides in its own wisdom suddenly to start attacking a 10-year-old problem within 30 days, it may very well sacrifice the opportunity of bringing the best brains in the country to bear on that problem because they cannot be released from other responsibilities before the beginning of the next semester."

Substantive Issues

The trend toward increased utilization of solicited contracts for university research supported by federal agencies can be traced to a variety of factors. Perhaps the most important is the general dissatisfaction of the public, and through them the Congress and the Executive Branch, with the lack of evidence that the vast sums of money spent on university research have helped alleviate society's many pressing problems. They are impatient for tangible results, particularly from the mission-oriented agencies; thus much of the funding for research by such agencies as the Environmental Protection Agency, the National Cancer Institute, and the Office of Education will go for solicited research on problems of immediate interest to the agency, where the scope of the work is well defined by the agency in the RFP. This attitude finds support in such influential studies as Project Hindsight, in which the investigators found that the contribution of recent, undirected science to the development of the defense systems studied is apparently quite small. They concluded (*4*, p. 1577):

> . . . It is unusual for random, disconnected fragments of scientific knowledge to find application rapidly. . . . If scientists would see their efforts in undirected science used on a more substantial scale in a time period shorter than 20 years, they must put a bigger fraction of their collective, creative efforts into organizing scientific knowledge expressly for use by society.

In another area, a similar conclusion was reached by Amitai Etzioni (*5*), who says:

> As new funds are appropriated for national research and development programs, particularly in the social sciences, applied research should be favored over basic research. I am convinced, moreover, that reform is needed in the way the money is given out—that less should go as grants, which give greater latitude to the researcher, and more as contracts, which afford the government greater control over the studies. (I speak as one who has received more than $1 million in the freer-wheeling grants.) At stake in these questions, I believe, are many of the urgent domestic needs of our society.

Another kind of demand for accountability is reflected in the reports of the Fountain Committee (*6*), which criticized university administrative practices. Although the committee did not recommend the use of contracts, contracts certainly give an agency the opportunity to withhold payment until final reports are in; in addition, an agency has greater opportunity for monitoring because contracts frequently require monthly or quarterly progress reports (*7*). However, there is no intrinsic reason that sponsors could not exercise accountability under the traditional methods as well as under contract methods, and accountability should be expected of the sponsors as well as the doers.

Another factor encouraging the issuance of RFP's by certain agencies is their need to speed up the process of proposal review. Often an agency must implement a new legislative program during a fiscal year in which appropriations are not passed until late in the fall and the Office of Management and Budget does not authorize the release of funds until some time later. By the time the staff of the agency develops applications and administrative guidelines, obtains approval for them within the agency, and then transmits them to an overburdened government printing service, there is little time to follow the usual review procedures, which involve lead times for applications of 3 to 6 months and require the convening of panels for peer review. Although some agencies attempt to obtain outside review, or are required by law to do so (as is the Health Services and Mental Health Administration), many base their selections solely on staff review.

This circumvention of the usual peer review process, while understandable under some circumstances, could have far-reaching effects on the quality and direction of research in this country. If agencies rely entirely on staff judgment and no longer solicit advice from a variety of recognized experts with differing approaches and backgrounds, there is the distinct danger that too much of the funding will be determined by a well-intentioned staff with limited viewpoints. The influential report of the Wooldridge Committee (*8*) warns of this when it states:

> In science we know of no valid method of estimating the probable pay-off of a proposed project except that of exposing it to such an appraisal by disinterested and expert scientists. In the NIH program, we believe there is correlation between the generally high quality of the scientific work supported and the utilization of scientific peer judgments prior to initial award or grant renewal.

This view was reiterated recently by retired NIH director Robert Q. Marston in a speech to the American Association of Neurological Surgeons. It is ironic that even some programs in NIH are, to some extent, turning away from this system.

If agencies cannot adhere to the requirements of the usual review process because of circumstances outside their control, then we recommend that they make an earnest attempt to solicit external review on at least an ad hoc basis and, wherever feasible, arrange visits to campuses in order to facilitate interchange between institutional investigators and agency staff. The use of outside reviewers was never men-

tioned in the recent HEW release (*3*) that spelled out technical review procedures in considerable detail.

Universities themselves are also contributing to the increased use of RFP's. At a time when other sources of funding are increasingly limited, they are demonstrating their willingness to respond to the impossible deadlines and to compete with industry and nonprofit research institutes for research contracts in areas appropriate for universities. Not everyone believes this is desirable. E. P. Bledsoe, chief of procurement at the Office of Naval Research, told us he was surprised that universities were responding to the RFP's listed in CBD and pointed out that the Office of Naval Research still reserves 60 percent of its research money for unsolicited proposals and that 99 percent of this money is allocated to universities. He is concerned that the trend toward solicited research will dry up the new ideas the nation needs. "Who will invent the wheel?" he asked.

Another problem facing universities involves their organizational and functional structure. Unlike industry and research institutes, they cannot quickly assemble a team of experts from a variety of fields to focus on a specific problem. The federal agencies themselves face a similar dilemma. An official of one agency told us he could not afford to appoint researchers to the agency staff to study a specific problem because the team would tend to perpetuate itself within the agency after its task had been completed. Thus the agency prefers to use the solicited contract. Universities should take the concern of this agency as a warning. Can they afford to assume the long-range costs required to assemble the personnel, space, and support services needed for such interdisciplinary efforts? On the other hand, can universities remain dynamic institutions if their research is not focused to at least some degree on the pressing problems of our society?

The trend toward contract research solicited through the RFP is increasing, and there are powerful forces providing the impetus. This trend has some advantages for institutions of higher education. It has opened up new funding opportunities in a time of constraint, the time cycle between proposal and award is greatly reduced, cost-sharing is usually not required, and successful contracts can lead to a close interaction between the agencies and the project directors, which in turn can lead to requests for further research on these and related problems. The trend does, however, have important implications for many issues that have traditionally been of great concern to the academic community—directed and undirected research, peer review, and the balance between applied and basic research. The problems involved are not amenable to easy solutions, and we recommend to national organizations representing university research administrators and faculty that they immediately initiate talks with agency officials to work on ameliorating some of the more undesirable aspects.

References and Notes

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4. C. W. Sherwin and R. Isenson, *Science* **156**, 1571 (1967).
5. A. Etzioni, Washington *Post* (11 June 1972), p. B-3.
6. Intergovernmental Relations Subcommittee of the House Committee on Government Operations, *The Research Grant Programs of the Public Health Service* (Government Printing Office, Washington, D.C., 1968), pp. 1–98.
7. W. Willner and P. Hendricks, Jr., *Grants Administration* (National Graduate University, Washington, D.C., 1972), pp. 3–18.
8. National Institutes of Health Study Committee, *Biomedical Science and Its Administration* (Government Printing Office, Washington, D.C., 1965), p. 4.
9. This article is the outgrowth of two committee studies within the National Council of University Research Administrators and the National Association of State Universities and Land-Grant Colleges.

NEWS AND COMMENT

Alaskan Oil: Court Ruling Revives Canada Pipeline Issue

Since the environmentalists began going to court, it hasn't been as easy as it used to be for the government to let big industry have its way in a matter such as the proposed Trans-Alaska pipeline (TAP). For some 3 years now environmental groups have successfully opposed the construction of the pipeline. Their most recent victory came on 9 February when a federal appeals court ruled that under existing law the Department of the Interior could not issue the necessary right-of-way permit to Alyeska, the pipeline company owned by Atlantic Richfield, Humble, Standard Oil of Ohio, and several other companies holding leases on Alaska's North Slope. This victory, though perhaps only temporary, means that it is still an open question whether the oil companies may not ultimately have to seek construction of a Trans-Canadian pipeline.

The present Canadian government has favored such a project, provided of course the pipeline is controlled by Canada and probably owned mostly by Canadians. But no pipeline, whether intended for Alaskan or Canadian oil, can be built through the North American Arctic without environmental hazards, as some Canadian environmentalists are now arguing. Furthermore, the proposal for a Trans-Canadian pipeline tends to raise the controversial question of a "continental energy policy," which to many Canadians is simply a code phrase signifying an American desire to share Canadian resources.

In 1969, the year following the big oil strike at Prudhoe Bay by the Atlantic Richfield Company, application was made to the Department of the Interior by the oil companies for a permit to build a 48-inch hot oil pipeline—the largest ever—from Prudhoe to the port of Valdez, 800 miles to the south and mostly across federal domain lands. Despite high risk to the integrity of the pipeline from potential earthquakes and from problems associated with permafrost, Interior indicated that the permit would be forthcoming once it was fully satisfied with the pipeline design. For their part, officials of the oil companies were so little concerned that the permit might be denied that, as early as the summer of 1969, they began accepting delivery in Alaska of $100 million worth of steel pipe from Japan.