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OFFICE OF ECONOMIC

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Reply to

Attn. of: Iris Rotberg and Joy Frechtling

Subject: Contractual Arrangements in Complex Social Research Projects

To: Edward Gramlich

The purpose of this discussion is to indicate factors we have found to operate against achieving a satisfactory contractual performance in technically demanding research areas, and to suggest alternative strategies for conducting research in the future. The discussion of problems in research implementation is limited to the following situation: (a) the research idea is initiated by government staff; (b) the problem requires sophisticated research methodology and procedures; (c) the study is directed toward policy goals; and (d) standard RFP procedures are applied. Although the problems described reflect particular experiences of the authors, it is our judgment that these difficulties occur in most complex research efforts undertaken by the government through the contracting process.

Definition of the Research Problem

A review of social research efforts conducted to date indicates that there are serious difficulties in successfully implementing this type of research. These problems occur whether or not the research is sponsored by a government agency. In particular, it is extremely difficult to design studies which are methodologically feasible and also make significant contributions to policy and research questions. In social research, as in other research areas, the more important studies are also the more difficult to design and implement. Theoretical and methodological considerations frequently conflict, with the result that mesearch findings often are only vaguely related to the research questions as originally defined.

These difficulties are increased when the research is sponsored by the government. Government research offices are faced not only with the inherent complexities of social research, but also with additional pressures which further complicate the research process. In topical areas particularly, there are often pressures to design research which appears to provide fast solutions to



complicated problems. In addition, the range of questions included in research efforts is often unrealistic. Studies sometimes become "overloaded" because of the need to satisfy many, often divergent interests. A project which satisfies these interests may well be one that is impossible to satisfactorily implement.

Typically, little attention is given to realistically evaluating study demands. The possibility that the project requirements cannot be implemented by the contracting resources available is rarely considered. Once a study plan is agreed upon and the RFP written, responsibility for project success or failure is transferred almost completely to the contractor who is selected to implement the study. Depending on the office, a project manager may be assigned who has little time, interest or even ability for monitoring the research. It is assumed that the contractor will be able to solve the problems of study design and implementation. Whether or not this is a valid assumption is considered below.

Proposal Selection

The RFP reaching prospective contractors represents a difficult set of expectations. In many cases, the RFP is poorly conceptualized and these expectations are only vaguely conveyed to prospective bidders. The rather vague questions presented in the RFP often cannot be translated into meaningful research. The result is that large studies are sometimes funded without a clear delineation of the research questions or methodology. In a small proportion of research efforts, a more specific delineation of the problem is included in the RFP, with at least a tentative research design specified. However, even where the research design and issues are more specific, the RFP still typically requests a range of tasks and skills which are extremely demanding.

Understandably, the contractor's primary goal at this point in time is to write the winning proposal. To accomplish this, he must produce something responsive to the RFP demands regardless of their shortcomings. There are several rather standard approaches.

Contractors generally agree to RFP specifications. The proposal typically accepts the research problem and policy issues as stated, and promises to carry out each of the tasks within the required time period. The contractor generally does not believe that proposal requirements are serious. It is assumed that after the contract award, extensive changes will be made and all requirements reassessed. The contractor knows that in a cost plus fixed

fee contract, he will be defaulted only in extreme instances of nonperformance.

Since responding to an RFP is expensive and time-consuming, those contractors who feel strongly that the problem is badly defined or the tasks impossible, generally do not take the time to bid. Their reasoning in this decision and critiques of the tasks required are not, of course, communicated to the government staff. The rare firm that responds while protesting the impossibility of the demands knows that the chances of selection are considerably reduced. Consequently, contractors writing the proposal judged to be the most responsive and acceptable frequently elaborate on the RFP, while adding little new information. Where points of disagreement are expressed, they are typically over minor issues.

There are other methods by which contractors increase their chances of selection. Typically, the cost proposal submitted is a significant underestimate of final cost. The contractor knows that while cost plays a major role in contract selection, collection of overruns is easy in a CPFF contract. The cost analyses made by the government generally do not provide much help in assessing the reality of the contractor's estimate. Analyses break costs into components but fail to provide some quality standard against which bids can be evaluated.

Contractors also enhance their proposals by selecting the most capable and articulate writers to respond to the RFP, even if these staff members will have minimal or no involvement in the study. In addition, contractors frequently include as proposed staff members or consultants known experts who typically assume little involvement once the study begins. Attempts to safeguard against these procedures by asking the authors of proposals to be named or by writing critical staff into the contract can easily be circumvented by the contractor.

For these reasons, government research personnel and panels have inadequate information on which to base contractor selections. At best, the written proposal provides some indication as to whether at least one member of the contractor's staff approaches problems and their solution intelligently. However, it is difficult for the panel to assess the degree of involvement that this (sometimes unknown) staff member will have in the study. Oral presentations are more helpful, but include all the interpretive problems associated with interview techniques. The panel can partially assess the staff members' intelligence and charisma, but has little evidence of their potential performance with respect to responsibility, management, motivation, etc. Reference checks, credentials, and examples of previous work are of some value in assessing general analytic capability, but rarely provide

the specific information on skills required by the study.

These difficulties can be particularly serious when the staff member being evaluated is the proposed project director. Frequently he has not had experience relevant to the particular needs of the study, and attempts to infer potential from available background information and even from the oral interview are usually unproductive. Since the project director is the staff member primarily responsible for the conceptualization, management and technical excellence of the study, poor information in this area can be especially detrimental to the potential success of the research. Qualified supportive staff can rarely compensate for a weak project director, or significantly alter the direction of the study. Typically, supplementary staff members are unwilling or unable to change the course of action selected by the person responsible for the project.

There is typically no single contractor that appears satisfactory in all areas (e.g., the proposed project director is inexperienced; staff analytic capabilities are inadequate, etc.). In many cases, no proposal satisfactorily meets the standards necessary for implementing a sophisticated and complex project. If the time and emotional investment in developing the research idea, defending its implementation within the office, writing and rewriting the RFP, and reading and evaluating proposals were not so great, it is likely that many RFP's which are funded might otherwise have been withdrawn.

This section has not covered alternative strategies for evaluating proposals and the relative roles of the research panel, project manager, and supervisory personnel. Although a good selection mechanism can be an important safeguard against possible bias and uninformed choice, it does little to alleviate the more basic problems described in this paper. Similarly, systematic evaluation criteria included in the RFP, while making judgements more uniform, do not compensate for the incomplete information available to panel members.

Contract Implementation

Problems in previously discussed areas can easily be dwarfed by problems in contract implementation. The contract generally begins with a set of government goals which even under the most favorable circumstances would be difficult to achieve. To execute, as well as understand, these goals demands a high level of interest and intelligence. However, these prerequisite skills are rarely in evidence.

A variety of problems arise. The contractor's staff often has little interest in the study and either rejects its goals or is uncommitted to them. Although proposals typically agree to RFP requirements, staff members assigned to implement them frequently do not accept their underlying rationale or philosophy. This nonacceptance of the study goals can result in problems ranging from poor conceptualization and understanding of the design needs to disinterest in meeting field schedules. Lack of interest can occur at all staff levels, and is particularly evident for field personnel who understandably do not always accept requirements imposed by the research design of a study they did not initiate and do not fully understand.

In addition, contractor's staff is frequently not of first rate ability. The most intelligent and creative researchers are rarely interested in carrying out someone else's research design. 1/ Even if the problem has some intrinsic appeal, the most effective people are typically overcommitted. In addition, organizations sometimes permit their more capable staff, to spend a substantial amount of time on their own interests, thereby further eliminating those with the most ability from the pool of respondents. problem is particularly serious when applied to the project director, who is primarily responsible for the success or failure of the study. Project directors available to bid on RFP's rarely possess the technical ability to handle complex research issues, or the managerial ability to implement a demanding study. Although other staff members or consultants sometimes contribute in technical areas, they are only tangentially involved in the study and are typically not able to significantly affect its course.

These management shortcomings might be manifested very early in the contract. Usually, the problems resulting from inadequate management expertise are compounded by research demands requiring rushed decisions and insufficient time for developing information systems. For these reasons, project directors frequently communicate poorly with their staff, and available conceptual input from peripheral staff members or consultants is often not included in the study. Similarly, the flow of information between supervisory personnel and field staff is usually less than satisfactory. In some cases, because of poor supervision or an inadequate information system, field staff operate autonomously,

^{1/}The solution to this problem is not, of course, simply to allow contractors a freer hand in project design and development. The issue is a complex one of attracting capable and motivated staff, while at the same time answering research questions relevant to government policy. Alternative approaches to this problem are discussed in the final section.

without the guidance or research expertise needed to implement a complex study. Often, critical study decisions are made by people in the field who have at most a very limited understanding of their implications. If this occurs, information feedback between the field personnel and central office is also poor, so that key staff members do not have the field data needed to make informed design decisions. The quality of data resulting from this type of field effort is, or course, questionable. However, these problems are rarely discussed in the research reports submitted to government staff.

Communication is even more difficult between the contractor and the government project manager. Where the project manager has the time and background2/ to be a participant in the research process, his input is even less likely to be included than that of the contractor's peripheral staff and consultants. It is difficult for government staff to be apprised of research details. If the project manager is cognizant of problems, there is usually little he can do to alleviate the situation short of terminating the contract. Typically, awareness of problems comes too late to make needed changes, even if these changes were acceptable to the contractor.

The relationship between the project director and project manager is at best a difficult one, with the role each is to play unclearly delineated. The project manager often believes that the study is not being implemented effectively. The contractor feels that the problems and harrassments he is encountering are not considered or acknowledged by government staff who are more isolated from the operational aspects of the study. The project manager rarely can affect the course of the study; his role frequently becomes one of reviewing and critiquing research reports, sometimes with only incomplete data available. If the study has been ineffectively implemented, report reorganization and editorial work can do little to improve the final result.

Poor communication between all areas of responsibility is partially the result of a tendency to "smooth over" unpleasant information. Contractors typically reassure government staff that the study is progressing well. Government personnel, therefore, frequently lack access to basic information needed to effectively monitor the contract. This problem occurs at all levels. Field staff minimize problems in their reports to the central office. Government staff justify their efforts to

^{2/}Typically, the project manager does not have either the needed technical abilities or the time to be more than superficially involved in the study. In this case, the potential government input is minimal, and most of the study problems are unrecognized.

supervisors and contracting personnel, and problems of which they are aware are frequently glossed over.

Alternative Research Strategies

Because of the range of problems that exist in most complex research projects, the obvious question is whether the government should conduct this type of research at all. Although many of the problems discussed have no ready solution, we do not believe that a completely pessimistic evaluation is warranted. Certain of the difficulties described are not unique to government contract research, but are general management and research issues which occur in large projects regardless of particular contracting arrangements employed. Other problems, however, appear to be more closely related to specific strategies usually adopted by the government and might, therefore, be amenable to change. In our judgment, more effective research projects will require modifications in government staffing patterns, contracting arrangements, and the nature of studies funded. In the discussion below, potential guidelines in these areas are presented.

Selection of Government Research Staff. An important prerequisite for successful studies is the selection of government research staff who are technically capable of planning and implementing the studies they monitor. A typical problem with contract implementation is that project managers frequently do not have sufficient expertise in their areas of responsibility. They do not, therefore, formulate research questions clearly, and are not able to effectively monitor the study or evaluate the research design and contractor's performance. Research outcomes are, in this case, completely dependent on the interest and competence of the contractor, and failures are not perceived until too late, if at all. This is particularly serious if the contractor's staff also has limited ability or interest. If project managers were more highly qualified, they could design feasible studies and could reasonably be expected to assume at least partial responsibility for contract implementation and evaluation at successive intermediate stages of project development. way, the chances would be increased of producing research which fulfills basic study objectives, meets high methodological standards, and is responsive to government needs.

Contractual Arrangements. Even in those cases where government personnel have the appropriate expertise, there are not, of course, sufficient resources within the government to implement complex studies without outside staff. Typically, in the RFP procedure, additional manpower is obtained by awarding a contract for the full scale study to an outside organization. The result of this procedure is effectively to transfer authority for study

execution from the government to outside researchers. As our earlier discussion indicates, this arrangement often does not yield a satisfactory product. There are, however, other arrangements 3/ which are more likely to be effective. The two suggestions below are based on the rather obvious premise that researchers developing study plans should be primarily responsible for implementing them. These arrangements might alleviate difficulties associated with contractor evaluation procedures, unrealistic project requirements, and uninterested or unqualified staff.

Under the first arrangement, contractors would be used for specified subtasks such as testing or interviewing, but would not be awarded a general contract for conducting the study. This procedure would be most appropriate in those cases where government staff had developed a detailed study design prior to issuing the RFP. The responsibility for managing the project would remain with the government. Where possible, certain subtasks such as data processing and analysis would also be performed in-house.

Under the second arrangement, one or more design contracts would be awarded before implementing a full scale study. This procedure would be appropriate in those cases where government staff has initiated an idea or rationale for research, but has not yet designed the study. This approach involves outside staff during the beginning stages of the study and is more likely to attract well-qualified researchers because of the opportunities for significant design input. The design phase also permits evaluation of potential contractors before a major contract is signed, and provides a better indication of the feasibility of implementing the study. If the project director who designed the study is selected to carry it out, he is more likely to be committed to its successful implementation.

Types of Studies Funded. There remain a number of design and practical difficulties in carrying out social research regardless of the quality of staff or contractual arrangement. These difficulties could be alleviated by conducting a design and pilot phase prior to implementing the full scale study. This

^{3/}These recommendations are relevant to the particular research characteristics described in the Introduction. In particular, it should be emphasized that these suggestions are appropriate only for situations in which the research idea is initiated within the government, and excludes all research conceived and planned by nongovernmental sources, in which questions of academic freedom become relevant.

would permit an informed judgment as to the practical implications of carrying out the study and the appropriateness of the design. Preliminary data analyses would provide tentative information on the interrelationships between variables, and indicate measurement, design and analysis difficulties. Therefore, with a relatively small commitment of resources, the feasibility of a particular large-scale social research project could be assessed. It is likely that in many cases, studies would be discontinued after the pilot phase, or if implemented would be quite different from the study as originally planned.

If more stringent requirements were applied to staff and research efforts, it is possible that the quantity of research would be reduced. It is hoped, however, that those projects which are implemented would have a greater probability of achieving the major study goals with efficient use of resources.

Iris C. Rotherg

Joy A. Frechtling

Policy Research Division