

with the help of industry and Federal Contract Research Centers like RAND. Depending on the problem, these analyses require the application of many disciplines, including economics, sociology, physics, chemistry, and the engineering fields. But once these analyses are "complete"—alternatives considered, needs defined, and government departments committed to pursue these needs—industry would have a clear goal, an end point towards which its privately financed research and development efforts might be directed.

There are at least two general approaches to defining problems "with a large social factor involved". First, the government systems study teams should include social and behavioral scientists, consider alternative incentives for industrial participation, recognize policy constraints within the government by frequent interaction with senior officials, and, most important, should follow-up initial studies with research/evaluation so that the social-technological issues are continuously re-evaluated. Just as we have not yet exploited our industrial-technological capabilities for solving national domestic problems, we do not yet understand fully the limitations on "technological fixes" in many social situations. So social scientists should be involved in a continuing R&D effort.

Second, larger industrial firms having plants throughout the country could be encouraged to work directly with local and state governments to "define a problem" in a way that makes it meaningful locally and solvable by the industrial groups available and affected. After such a decentralized analysis, the Federal Government could provide incentives in the form of tax exemptions on "seed money" for pilot work by industry, and then could consider the degree to which the "local solutions" could be applied nationally. Thus, the "large social factor" would be introduced and evaluated locally, with industry directly, and without some of the policy constraints found at the Federal level.

*Question No. 2. The Department of Defense has a well established system to rate the performance of its contractors that supply research and development. Would you please explain what this system is and how it works? To what extent does, or should, the Department use this system in appraising the work of its own laboratories? What other approach do you take?*

Answer. The Contractor Performance Evaluation (CPE) program (Dod Directive 5126.38) is a system designed to provide an orderly and uniform technique of determining and recording the effectiveness of contractors in meeting their contractual commitments principally for hardware development and production contracts. The program provides a long-term incentive to contractors by creating within the Government a "memory" of their performance and means for considering this record in future actions relating to source selections and negotiations.

CPE reports are prepared by system/project managers for certain defense contracts. (See Tab A to this question for sample format.) The first report covers the period from the date of contract award to no later than one year after the award date. Subsequent reports are prepared at intervals of six months and upon completion or termination of the effort. These reports are submitted to the Services' Contractor Performance Evaluation Groups. The reports are reviewed to assure that meaningful time, cost and technical performance data have been clearly and objectively reported. The contractor also reviews the report and makes comments as he desires. The report is then returned to the CPE Group who makes a final review and resolves any mistakes of fact. The CPE Group may also make any independent field investigations that are considered necessary. The report is then sent to the Defense Documentation Center for storage and issue of performance evaluation reports for Source Selection Boards, etc.

For those contracts where the end product is new technology or new scientific findings, CPE can be utilized, if the Military Departments consider it desirable. However, a less formal evaluation of such contracts is generally utilized. This is usually in the form of a subjective appraisal by the project monitor.

The CPE System appears to be most suitable for evaluating specific programs for which there are meaningful performance standards and mileposts. I might add that similar criteria are utilized to evaluate the hardware development laboratories, although in a different form. In other words, the CPE System is designed to evaluate performance on a specific well-defined project or program. Its purpose is not to evaluate over-all organizational effectiveness.

Much of the work of Defense laboratories is in the areas of long-range research and technology. Thus, a system such as CPE would not be generally applicable. One advantage we see in the establishment of military problem oriented weapon centers is that the utility of their output can be measured fairly