

committees. Thus, the Bureau is directly involved in discussions of the full array of R&D issues considered by the Council and its subunits, a number of which deal with interagency programs. The FCST recommendations are considered by the Bureau as well as by OST and the agencies, and the data collected by FCST study groups are a valuable addition to the information the Bureau requires in formulating its judgments.

*Question 2. In your prepared statement you say that "new laboratories should not be created without the most careful consideration of alternatives." What do you consider are the alternatives, and what criteria are there to guide an agency in making a proper choice? How does, or should BOB oversee this determination?*

Answer. In our judgment there are two principal alternatives for accomplishing the Government's R&D work. Either existing or new in-house facilities must be used or arrangements must be made to perform the needed R&D by contract or grant with industrial, educational, State or local governmental and not-for-profit organizations. In considering the first alternative an agency should determine the feasibility of using the facilities of another agency before seriously considering creating a new one of its own.

Precise criteria for choosing among alternatives are at best difficult to develop, but there are a number of guidelines which an agency can consider in making its choices. For example, BOB Circular A-49 requires each agency to establish criteria for the use of management and operating contracts and suggests guidelines for such criteria. The Bell Report of 1962 discussed the natural advantages of direct Federal operations and the various patterns of contracting now in use and included the following general guideline for choosing among alternatives which we believe is still valid:

"... Not all arrangements, however, are equally suitable for all purposes and under all circumstances, and discriminating choices must be made among them by the Government agencies having research and development responsibilities. These choices should be based primarily on two considerations:

"(1) Getting the job done effectively and efficiently, with due regard to the long-term strength of the Nation's scientific and technical resources; and

"(2) Avoiding assignments of work which would create inherent conflicts of interest."

A number of specific factors must be examined by an agency in considering alternatives for satisfying its R&D needs. They include:

a. The requirement for and nature of the R&D effort to be undertaken in support of the agency's mission and programs.

b. The importance of maintaining or acquiring technical competence within the agency to do both an effective job of managing R&D programs and being a sophisticated buyer of the products and services the agency requires.

c. The availability of outside resources to perform the work, e.g., established university laboratories, Federal contract research centers, industrial laboratories, and other Government laboratories.

d. Comparative costs.

With respect to the factor of cost, BOB Circular A-76 provides guidance for agencies to decide among alternatives on the basis of cost comparisons. However, as was pointed out in Bureau testimony, program requirements and management considerations are the most compelling determinants for choosing alternatives in the research and development area.

In general, BOB reviews proposals for major new laboratories in the context of agencies' overall budget proposals—the programs proposed by the agencies, the means they propose to accomplish the programs and the resource implications (dollars, manpower, facilities). The Bureau obtains from the agency the information needed to identify alternative courses of action and relative priority for program funding. There is no specific procedure which singles out laboratories for special treatment from other programs and facilities. Depending upon the situation, however, the Bureau may ask an agency to complete a special study to identify alternatives to a laboratory proposal and provide other pertinent information.

*Question 3. In your prepared statement you state: "We fully agree that some discretionary funds are needed if a laboratory is to respond promptly to new opportunities within the area of its research competence."*

*a. Generally speaking, what amount do you recommend as a percentage of the laboratory's budget?*