3. THE LABORATORIES' CONTRIBUTIONS TO THE DEFENSE RDT&E PROGRAM

In general, the DoD laboratories engage in a very broad spectrum of activities. The Task Force considered it important to gain some understanding of the laboratories' direct involvement with the development and acquisition of operational hardware for our modern military forces. With this understanding, even if only qualitative, it should be possible to identify critical problem areas that require management attention.

The present system by which important military systems are developed and produced consists of at least the following three basic steps:

(1) A firm requirement is established, usually after much discussion between the Departments and OSD; systems studies are made, concepts are evaluated, and funds are allocated.

(2) A program-management organization is then established within an appropriate Service systems command.

(3) After competitive bidding, a substantial contract is awarded to an industrial concern for large-scale system development and production.

The program-management system is a highly efficient arrangement for evaluating the performance of contractors on well-defined major programs. In general, the laboratories' personnel are involved in providing important services to the system/project office (SPO). Prior to an award, specifications are prepared for bid solicitations, special studies are conducted, and consulting support to the SPO is provided. Laboratories' specialists usually participate in the source-selection process. After the award is made, the DoD laboratories' involvement is substantially decreased, particularly if a tight incentive contract has been negotiated. Occasionally, if a contract is in difficulty because of technical-feasibility problems, in-house laboratories are asked to examine the problem areas, make recommendations, and subsequently contribute.

The DoD laboratories provide supporting services to the SPOs; they provide supporting services to the organizations responsible for establishing requirements; they provide supporting services to operational commands. The level and quality of their support are usually difficult to evaluate, since there is little available data that can be interpreted meaningfully.