

percentage-of-estimated-construction-cost method. We believe, however, that the detailed analysis method is more appropriate and should be used by all agencies in lieu of the percentage-of-estimated-construction-cost method.

AUTOMATIC DATA PROCESSING

The Federal Government has been in the forefront of computer technology since its beginning and is the world's largest user of computers. Current expenditures for Government ADP activities are estimated to be running at a rate of about \$3 billion annually.

The billions of dollars already invested in this field by the Government for the development and use of this equipment have led to the widespread use of computers and computer-related equipment, including data communication systems throughout the Government and industry. Almost all disciplines, and certainly almost all large-scale data-handling activities of the Government, have been affected to some extent so far. The future portends even greater impact through new developments and the wedding of computers and communication systems in advanced systems. The uses of computers range across the spectrum of all disciplines from education to medical research and from routine data-handling to scientific decisionmaking.

Because of the high costs involved, the extent and significance of this development, and its impact on Federal Government activities, we have, from time to time, reported to the Congress on Government-wide developments in this field. Currently, we are conducting Government-wide studies of present and planned uses of ADP systems in the Federal Government with particular emphasis on compatibility and standardization of such systems and equipment, including related communication facilities. These studies include further inquiry into the trend and development, use, and cost of ADP systems in relation to flow of data and information within Government systems and between Government and industry systems.

One of our studies that is nearing completion involves consideration of the various concepts under which computer systems are being utilized. We are concentrating, in this study, on the use of third-generation computers in relation to what has come to be known as the "public utility concept" wherein multiple users time-share equipment through the use of communication facilities. We are also considering, in this study, various possibilities for increased sharing of computer resources. For example, we are looking into various possibilities for sharing through use of service centers or other arrangements which would provide for increased utilization of computer resources already acquired.

Our studies are also directed at such questions as how to achieve greater interchange of data automatically between ADP systems and how to reduce duplication of effort in the development and use of ADP systems.

In our statement before the Subcommittee last year, we pointed out that significant economies were being achieved because of the increased emphasis being placed on purchasing rather than leasing of ADP equipment in Government agencies.

The Bureau of the Budget has estimated that over 50 percent of currently installed equipment is now owned by the Government and in its February 23, 1967, report to the President on computer management in the Federal Government the Bureau reported the avoidance of approximately \$200 million in annual rental costs by the selective purchase of computers, many of which were purchased within the past 3 years and have already been amortized.

As we pointed out during the hearings last year, we believe also that substantial savings can be achieved through purchasing rather than leasing of ADP equipment by Government contractors. The Bureau of the Budget has informed us that it considers that the criteria set forth in its Circular No. A-54 of October 14, 1961, prescribing conditions under which determinations are to be made by Government agencies as to whether to buy or rent ADP equipment, also should be applied to cost-reimbursement-type contracts.

Subsequently, on March 24, 1967, the Department of Defense issued its Defense Procurement Circular No. 52 which contains a revision to the Armed Services Procurement Regulation which provides new policy and procedural guidance on the acquisition of ADP equipment by Department of Defense contractors.

Previously, in commenting to the Department of Defense on the proposed revision to the Armed Services Procurement Regulation, we expressed certain