Union Calendar No. 259

88th Congress, 1st Session

House Report No. 627

INTERIM REPORT ON THE USE OF ELECTRONIC DATA PROCESSING EQUIPMENT IN THE FEDERAL AGENCIES

COMMITTEE ON POST OFFICE AND CIVIL SERVICE HOUSE OF REPRESENTATIVES



AUGUST 1, 1963

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11

LETTER OF TRANSMITTAL

House of Representatives, Committee on Post Office and Civil Service, Washington, D.C., August 1, 1963.

Hon. John W. McCormack, Speaker of the House of Representatives, Washington, D.C.

DEAR MR. SPEAKER: At the direction of the Committee on Post Office and Civil Service, House of Representatives, I am transmitting herewith a report of our Subcommittee on Census and Government Statistics.

This interim report provides information on the acquisition and use of electronic data processing (EDP) in the Federal agencies. It points out the need for certain improvements in the management of this new technology and recommends that the President authorize the Director of the Bureau of the Budget to evaluate the present EDP policies and practices in the Federal agencies and to develop guidelines for future policy on EDP.

Sincerely yours,

Tom Murray, Chairman.

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LETTER OF SUBMITTAL

House of Representatives,
Subcommittee on Census and
Government Statistics,
Committee on Post Office and Civil Service,
August 1, 1963.

Hon. Tom Murray, Chairman, Committee on Post Office and Civil Service, House of Representatives, Washington, D.C.

Dear Mr. Chairman: The Subcommittee on Census and Government Statistics, under authority of House Resolution 151 of the 88th Congress, is continuing with its investigative studies of the use of electronic data processing (EDP) equipment in the Federal agencies. This subcommittee first reported on Federal agency use of EDP in the 86th Congress in its "Report on the Use of Electronic Data Processing Equipment in the Federal Government," released in

August 1960.

The present report is an interim one and will be followed by a final report to be issued later this year. This interim report summarizes briefly the results of the subcommittee's findings based on hearings held with all of the Federal agencies using EDP. The report concludes with a recommendation to the President that he authorize the Director of the Bureau of the Budget to evaluate present EDP policies and practices in the Federal agencies and to develop guidelines for future policy. The subcommittee also recommends that the Director of the Budget submit a report to the President and to Congress on or before June 30, 1964, making recommendations "for such administrative and legislative changes as are determined to be in the public interest."

Sincerely yours,

ARNOLD OLSEN, Chairman.

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88TH CONGRESS 1st Session

HOUSE OF REPRESENTATIVES §

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INTERIM REPORT ON THE USE OF ELECTRONIC DATA PROCESSING EQUIPMENT IN THE FEDERAL AGENCIES

August 1, 1963.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. Murray, from the Committee on Post Office and Civil Service, submitted the following

INTERIM REPORT

VII

INTERIM REPORT ON THE USE OF ELECTRONIC DATA PROC-ESSING EQUIPMENT IN THE FEDERAL AGENCIES, AUGUST 1, 1963

Our subcommittee first began its investigation of the use of electronic data processing in the Federal agencies during the 86th Congress in connection with its investigative program relating to statistical and data compilation activities. The subcommittee's "Report on the Use of Electronic Data Processing Equipment in the Federal Government," issued in August 1960, was the first comprehensive study made by any congressional committee of this subject and served to focus the attention of Congress and the public at large on the rapidly growing use by the Federal Government of EDP and the impact of this development upon Federal data compilation activities and upon Government personnel. The August 1960 report made some 21 recommendations to the Federal agencies concerning the general management and planning of EDP systems and the personnel engaged in EDP occupations as well as the purchase, lease, utilization, and operation of these equipments. Most of the subcommittee's recommendations were incorporated into the Bureau of the Budget's Circular A-54 of October 14, 1961, which furnished the EDP guidelines under which the Federal Government is operating at the present time.

The August 1960 report showed that as of June 30, 1960, the Federal agencies had 524 electronic computers, exclusive of those used for tactical and classified purposes in the Department of Defense. As of June 30, 1963, there were 1,248 such systems in use in the Federal Government with a total annual cost of \$704 million. The range in rental cost per month of one of these systems is from \$1,000 to over \$100,000; the purchase price ranges from \$25,000 to \$7 million and over. It is readily apparent from these figures that EDP has become "big business" in the Federal Government, and informed opinion tells us that by 1970 we can reasonably expect that this activity will triple both in the number of installed systems and the annual cost to the Federal Government. Essentially, what we are dealing with here is a revolution, an electronic revolution, and there is widespread agreement that EDP will have profound effect upon our society and our

institutions.

SUBCOMMITTEE HEARINGS

In its hearings during recent months, the subcommittee took testimony from all of the Federal agencies using EDP and peripheral equipment, as well as from private industry spokesmen representing equipment manufacturers and equipment users. In holding the hearings, the subcommittee set as its major purpose that of informing the Congress about recent trends and developments in this rapidly mushrooming activity with a view to identifying the principle areas of difficulty encountered by the civil, military, scientific, and technical agencies. Members of the subcommittee recognized the fact that a

number of mistakes had been made by the Federal agencies in attempting to develop and manage this new technology. But, of considerably greater importance to members was the recognition of the need for developing sound guidelines for the years ahead in view of the expected growth of EDP applications in the Federal Government. Certainly, it is of greatest importance that the Federal Government take a new and high-level look at EDP now, so that past mistakes will not be repeated in the future. It is imperative also that the Federal Government's management of EDP be restructured so that this new science will be accorded a higher level management direction that it has in the past. The fact that the management of the executive branch will depend increasingly upon EDP for decisionmaking will be a key factor in upgrading management's organizational determinations concerning EDP.

SPECIFIC PROBLEMS

During the course of its hearings, the subcommittee's attention was directed toward the principal trouble spots in Federal EDP management and operations. Although the subcommittee gave considerable attention to the much discussed problem of whether these machines should be leased or purchased (lease versus purchase), it was quickly recognized that excessive leasing was only one aspect of one problem and was the result rather than the cause of poor management and operations. Members of the subcommittee were impressed, for instance, with the testimony of the vice president of a large insurance company who stated that his company finds it more efficient to lease EDP equipment. This testimony is somewhat at variance with that of the Comptroller General who in his March 1963 report stated that "very substantial amounts of money could be saved if the Federal Government purchased more of its data processing equipment needs."

In fact, in almost every problem area identified during the sub-committee hearings, contradictory testimony was given. Some agencies, for instance, wanted more centralized control, others wanted less. Some agencies testified that common machine languages (COBOL, FORTRAN, etc.) were timesavers; others indicated that they had not, as yet, found these languages particularly helpful. Labor representatives told the subcommittee that EDP was displacing large numbers of Federal workers, whereas the Civil Service Commission representatives stated that "remarkably little unemployment has been created in the Federal Government by automation." On the subject of standardization and compatibility, some witnesses testified that the Federal Government was making substantial progress in achieving greater compatibility, whereas other witnesses believed that considerably greater Federal initiative and effort were needed in this area.

In its hearings, the subcommittee identified a number of other EDP problems, some of which may be only mentioned in this interim report:

(1) There is a serious lack of communication between agencies on EDP matters generally, but particularly on the manpower and staffing problems which require special attention.

(2) There is need for standardized auditing and reporting of EDP utilization and performance in the agencies.

(3) Each department or agency's management approach to EDP should be carefully reviewed; in some cases, EDP systems management should be placed higher in the organizational structure.

(4) Greater use should be made of competitive bidding in EDP contracting, wherever feasible. A study is needed of sup-

pliers' pricing policies.

(5) Information available to the Government concerning defense contractors' policies and practices relating to the acquisition and use of EDP equipments is not satisfactory. Since the taxpayer pays for these costly machines, the Department of Defense should maintain strict control over contractors' acquisition and use of EDP.

From the above, it will be apparent that this interim report will not include recommendations for new legislation on EDP matters, principally because (1) it is felt that any legislation at this time would be premature in view of the wide disagreement both in and out of Government as to how best to resolve a number of critical problems, and (2) it is not clear that the executive branch does not now have ample authority to carry through most, if not all, of the needed reforms. It is for these reasons that the chairman and ranking minority member of this subcommittee opposed H.R. 5171, which passed the House on July 18, 1963.

Nonetheless, the subcommittee's findings have largely confirmed the disclosures of the Comptroller General that the management and utilization of EDP equipment in the Federal agencies is in need of improvement and is sufficiently important to be called to the attention of the President. It is pointless to attempt to place responsibility for the present state of affairs since the mushrooming growth of this new technology has engulfed even the best of Federal administrators. It is of highest importance, however, that positive steps be taken at once to bring to this problem advice and counsel of the highest authority and competence. It is imperative that firm guidelines be drawn now for the years ahead.

RECOMMENDATION

The subcommittee recommends, therefore, that the President authorize the Director of the Bureau of the Budget to evaluate the present EDP policies and practices in the Federal agencies and to develop guidelines for future Federal policy on EDP. In conducting the review, the Director should (1) consult widely with Members of Congress and with representatives of the principal Federal agencies, industry, business, labor, professional groups, and others concerned, (2) cooperate fully with pertinent congressional committees and keep Congress advised periodically concerning his progress, and (3) on or before June 30, 1964, submit a report and make recommendations to the President and to Congress for such administrative and legislative changes as are determined to be in the public interest.

The subcommittee proposes, therefore, that a letter recommending the above actions be sent by the chairman of the House Post Office and Civil Service Committee to the President. A draft of this proposed letter is attached to this report.

The subcommittee submits this interim report for approval for printing as a House report and also the proposed letter to the President.

USE OF ELECTRONIC DATA PROCESSING EQUIPMENT

DRAFT—August 1, 1963.

THE PRESIDENT, The White House, Washington, D.C.

Dear Mr. President: There is enclosed a copy of House Report No. —, an interim report of the House Post Office and Civil Service Committee, summarizing the results of a series of hearings conducted by the committee's Subcommittee on Census and Government Statistics on the procurement and use of electronic data processing equipment in the Federal Government. "Your particular attention is invited to the conclusions and recommendations set forth in the interim

report.

In 1951, there was one electronic data processing system in the Federal Government engaged in business-type application at the Bureau of the Census. At the close of fiscal year 1963, there were 1,248 such systems in use in the Federal Government (exclusive of tactical and classified installations) with a total annual cost of \$704 million. Informed opinion tells us that by 1970 the number of systems and the annual cost may be expected to triple. In other words, although there has been a phenomenal growth in this activity during the past 12 years, we are only at the threshold of startling advances and growth in this new technology. You may know that these developments are being referred to as "the electronic revolution" and some foresee greater impact upon our society and our institutions than that of the 19th century industrial revolution.

The enclosed report emphasizes the need for improving the Federal Government's management of electronic data processing and its peripheral equipment, and for a coordinated, Government-wide approach to the many problems faced by the Federal agencies. There is widespread disagreement in Congress and among the agencies as to how best to resolve such basic problems as central management, employee dislocations, standardization and compatibility of equipment and programs, the efficient utilization of installed computers, and other matters. Because of this, this committee feels that the enactment of legislation is undesirable at this time since it could conceivably retard the development of this new technology especially

in its scientific and technical applications.

We believe that before Congress legislates on electronic data processing, an opportunity should be given to the executive branch, in the exercise of its management responsibility, to evaluate the present system and to develop guidelines for future Federal policy. We are therefore recommending that you request the Director of the Bureau of the Budget to review these matters and to report to you and to Congress, on or before June 30, 1964, with such recommendations for management and administrative improvements, and for legislative action, as are determined to be in the public interest. We further recommend that, in conducting the review, the Director of the Budget consult with Members of Congress and with representatives of the principal Federal agencies, industry, business, labor, professional groups, and others concerned.

Respectfully yours,

Tom Murray, Chairman.