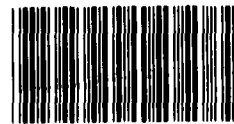COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

September 30, 1982

B-208331

The Honorable John D. Dingell
Chairman, Subcommittee on
  Oversight and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

> Subject: Information Resource Management Problems in the
>   Department of Commerce (GAO/CED-82-113)

At your request, we have reviewed the management of com-
puter and information resources at the Department of Commerce.
Your letter of October 8, 1981, requested information on selected
functions and projects within the Department. In response, we
briefed your office on December 7, 1981, and on May 6, 1982. We
provided information on the Department's process for selecting
computer contractors, on the level of technology used in the
Department's automated systems, and on the quality of internal
controls in financial systems. At your request we are providing
this written report on additional aspects of the Department's
management of computer and information resources.

The Department's Office of Information Resource Management
(OIRM), which reports to the Assistant Secretary for Administra-
tion, is responsible for overall information resource management
for the Department, its bureaus, and other subordinate organiza-
tions. We found that OIRM has been making significant progress
toward its goal of implementing the Paperwork Reduction Act of
1980. Nevertheless, we found that OIRM (1) needs to increase
emphasis on the execution of its policymaking and oversight
functions, (2) needs to protect against the tendency of opera-
tional responsibilities to overshadow its policy and oversight
role, and (3) needs to continue developing planning mechanisms
initiated during 1982.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objective was to assess the adequacy of OIRM's imple-
mentation of selected policy, oversight, and planning responsi-
bilities set forth in the Paperwork Reduction Act of 1980. We

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identified the responsibilities assigned to OIRM and examined major information projects it has undertaken. We concentrated our review on OIRM's responsibilities in the automatic data processing (ADP) and telecommunications areas. In carrying out this work, we interviewed officials of OIRM, bureau officials involved in key ADP projects, and contractors working for OIRM.

In evaluating OIRM efforts to consolidate various computer operations and information systems, we reviewed plans, cost-benefit studies, alternatives analyses, and where applicable, current and historical data on computer use. We have judged the efforts of OIRM against the standards set forth in the Paperwork Reduction Act of 1980, and not in comparison to the performance of other agencies. In applying these standards to the Department of Commerce, we have looked to see whether the actions taken to date by OIRM reflect what OIRM could reasonably have been expected to accomplish since 1980, taking into account the fact that the current management team came on board over the course of 1981. Our work was done in accordance with generally accepted Government audit standards.

OIRM WAS ESTABLISHED TO SET POLICY ON
INFORMATION SYSTEMS AND TO PROVIDE OVERSIGHT

The Paperwork Reduction Act of 1980 (Public Law 96-511) is designed to improve Federal agency management of information resources. The act requires that agencies covered by the act, including the Department of Commerce, designate a senior official reporting to the head of the agency and assign to the official the responsibilities set forth in the act for information management activities including reviewing, planning, budgeting, organizing, and related information resource functions.

The Department of Commerce has taken steps toward compliance with the act. Its Assistant Secretary for Administration was designated as the senior official. This Assistant Secretary in turn established the Office of Information Resource Management in 1981 to assist in carrying out the Department's responsibilities under the act. OIRM has a staff of 105. Its head reports directly to the Assistant Secretary for Administration.

Information resources include computers and data processing, word processing, telecommunications, and software systems. Under OMB Bulletin 81-21, which provides guidance to Federal agencies on implementing the Paperwork Reduction Act, the senior official is responsible for "developing agency information policies and procedures, and overseeing, auditing, and otherwise periodically reviewing" the management of these resources.

OIRM estimates that the bureaus spend $180 million annually for computer resources. Further, the Department's bureaus are

involved in major new computer procurements. For example, the Bureau of the Census plans to invest $98 million in a major computer acquisition, and two scientific bureaus plan to acquire computers costing over $40 million. OIRM reviews and approves these and all other bureau projects, in addition to being responsible for all departmental computer procurements.

OIRM has not addressed important policy and oversight issues

Although OIRM has made progress in putting together an organizational structure for managing information resources and in developing an approach to the planning contemplated under the act, OIRM has not taken several steps which could be expected at an early stage in efforts to implement the act's objectives. Notably, it has not issued basic agencywide information resource policies in several areas. For example, the lack of policy development and enforcement on software support has created duplication of effort at the Department's Environmental Research Laboratory (ERL). ERL provides extensive hardware support to scientists and other data analysts, but not software support. As a result, a number of different scientists have, on their own, updated a common software package. A policy requiring adequate centralized software support in ERL and other bureaus could avoid this type of duplication and ensure consistent development and documentation of this and other software packages.

Further, OIRM has not ensured that the various bureaus are using up-to-date word processing and computer equipment. Lack of an OIRM policy on developing levels of service, information requirements, and performance standards for automated systems and equipment decreases productivity and increases costs departmentwide. For example, the Bureau of the Census, the National Bureau of Standards, the Economic Development Administration, the Patent and Trademark Office, and the National Telecommunications and Information Administration have all reported to OIRM that they are having great difficulty in performing their basic missions because they have inefficient and obsolete computers, which have been operating at full capacity for years.

We also found that OIRM is providing only cursory and uncritical reviews of certain bureau projects. The result is that the Department has missed opportunities to achieve savings. For example, we recently reported 1/ that the Department could have saved $24.6 million by modifying two bureaus' planned computer acquisitions. OIRM approved both projects and the Department was in the process of procuring the equipment when we were asked to review the appropriateness of the acquisitions.

1/"Department of Commerce Could Save $24.6 Million by Modifying Computer Procurement Actions" (GAO/CED-82-81, Apr. 28, 1982).

We found that the Department had not adequately justified
these planned acquisitions, in that it had not adequately per-
formed requirements or workload analyses. Following our April 1982
report, OIRM's Executive Director agreed with our recommended
changes and he recently told us that since his office became in-
volved with the two projects, it has identified other potential
cost savings. OIRM could identify similar potential savings in
many Bureau projects if it was able to devote increased resources
and attentions to its mission of oversight and review. The office
could perform this function more effectively if it were not so busy
with operational projects.

The Executive Director of OIRM has agreed that the lack of De-
partment policies and project oversight has resulted in increased
costs due to purchases of unneeded equipment and the operation of
duplicate systems. He told us that OIRM is working on improving
its policy and oversight functions. We confirmed this to be the
case but found, as described below, that a heavy emphasis on
operational projects within OIRM has limited its progress in this
regard. An area in particular need of attention is formulating
and enforcing policies for acquiring, using, managing, and con-
trolling automatic data processing resources.

The Department and OIRM need to make continued progress in producing a comprehensive set of information resource management plans

We reported 1/ in 1978 that lack of planning was a key
cause of the Department's inefficient use of modern information
technology. We pointed out that the Department's lack of plan-
ning had resulted in the purchase and use of duplicate and ineffi-
cient systems and long delays and excessive costs in obtaining
them. Further, we found that the Department had inadequate
management control because it lacked a formal plan and a process
for coordinating such a plan with its mission and goals.

The Department has recently developed initial segments
of a planning process for some of its information-related activi-
ties. These initial efforts produced a framework for its "Multi-
Year Department Management Plan" for information resource manage-
ment, including automatic data processing, telecommunications,
and office automation. The Department has also taken steps
toward developing strategies in support of its plans for office
automation and telecommunications. Comprehensive plans and stra-
tegies for automatic data processing will be developed beginning
in October of this year, according to the Director of OIRM's
Division of Information Management. The office is currently

1/"Inadequacies in Data Processing Planning in the Department of
Commerce" (FGMSD-78-27, May 1, 1978).

using a system for ADP planning which it acknowledged to be
inadequate and which it plans to replace.

We support these efforts and believe they deserve even
greater emphasis than they are receiving at present. In addi-
tion, OIRM needs to develop plans for its own internal alloca-
tion of resources, including plans for policy development and
oversight, as well as plans for operational projects OIRM has
taken on, which are addressed below.

OIRM HAS ASSUMED SUBSTANTIAL OPERATIONAL RESPONSIBILITIES

OIRM has recently assumed operational responsibility for
selected software systems and computer centers and has initiated
projects to consolidate duplicate operations into single, depart-
mentwide systems. The payroll/personnel project will eliminate
duplication by consolidating the Department's current six payroll
and five personnel systems. The administrative payments project
will consolidate 23 administrative payments centers. In addition,
OIRM is consolidating four UNIVAC computer centers. By consoli-
dating at one location, OIRM plans to reduce operating costs, im-
prove service, and increase control over ADP standards.

We discussed OIRM's assumption of responsibility for opera-
tional projects with OIRM's Executive Director. He stated that
these projects consist largely of consolidation efforts which cut
across organizational lines and only OIRM has the authority to
initiate them. The Director believes that these projects would
not be properly carried out if they were assigned to the bureaus
or to another office of the Department.

We agree that these projects are important and can produce
savings as well as improved service. The Department's current
duplicate systems result in excessive costs and lack of uniformity
and prevent the maximum use of automation. As we reported in 1978,
the Department can achieve savings by consolidating. The extent
of the cost savings and the quality of the resulting systems will
depend on how well the consolidations are implemented.

We also agree that the initiative for departmentwide consoli-
dation projects is properly lodged in OIRM. OIRM has a clear
plan to address these critical efforts and considerable momentum
in executing them. However, we doubt the wisdom of OIRM's prac-
tice of continuing to manage these operational efforts after they
are initiated. We are concerned that progress on these operational
efforts has come at the expense of other OIRM functions, speci-
fically policy development and oversight, as well as planning for
these functions.

We noted further that in its efforts to implement operational projects, OIRM is not following basic project management procedures required by the Department's own directives. OIRM has not prepared detailed cost-benefit studies, alternatives analyses, or requirements studies and has arbitrarily set project deadlines without dedetermining the staff and time required to accomplish the work. OIRM's lack of detailed analysis of these projects was caused by time pressure to maintain OIRM's credibility by completing the projects by the date established by a former Deputy Secretary of Commerce. A completion date was established and announced before OIRM had performed any substantive analysis of the time or resources needed to complete the projects.

THE DEPARTMENT NEEDS TO SEPARATE OVERSIGHT AND OPERATIONAL RESPONSIBILITIES

As OIRM is currently structured, the office is in effect preparing and approving its own projects with no effective review or approval process. OIRM's disregard of its own directives and guidelines regarding cost-benefit studies, alternatives analyses, and requirements analysis in projects it operates strongly suggests the advisability of separating oversight and review from operations.

OIRM's Deputy Director told us that he recognized that OIRM's reviewing and approving its own projects could become a source of concern. He told us, however, that our reviews and those of the Department's Inspector General alleviate the Department's concern by providing objective reviews of these projects. We do not agree. Oversight of operational projects is an ongoing agency management responsibility. It is not appropriately left to audit organizations.

Recently the Assistant Secretary for Administration indicated that within a year she plans to restructure functions assigned to her to achieve better separation between policy/oversight and operations.

CONCLUSIONS

Although OIRM has made progress in implementing the objectives of the Paperwork Reduction Act, OIRM has not issued and is not enforcing departmentwide policies for computer operations, software development, and word processing. Policy development and oversight are critical for long-term cost reduction and service improvement. Commerce Department bureaus are operating without the benefit of systematic oversight and review. OIRM is addressing major operational needs in the information management area and is doing so aggressively. The result, however, is concentration on short-term gains at the expense of the long-term gains envisioned by the Paperwork Reduction Act and consistent with generally accepted management practices.

OIRM needs to restructure its organization to place greater emphasis on its statutory role of policy formulation and oversight of bureau information resource projects. This restructuring should also insulate project approval from project management and implementation. To achieve this separation, at least three options present themselves: (1) OIRM can ensure internally that its policy/oversight and operational functions are kept separate from each other, (2) the Assistant Secretary for Administration can shift the operational responsibilities to another office reporting to her, or (3) the Secretary of Commerce can shift responsibility for the direct management of operational projects elsewhere within the Department.

While we believe that the current problems in the functioning of OIRM, described above, can be addressed by any of these options, we view (2) or (3) as preferable to (1) because either (2) or (3) will leave OIRM with clear and undivided responsibility for its Paperwork Reduction Act mission whereas (1) will not. The separation of oversight and operational responsibilities would also help ensure independent, objective reviews of operational decisions and maintain OIRM's credibility in developing and enforcing new information policies throughout the Department's computer operations.

The information resource planning efforts initiated in 1982 for the departmentwide information-related functions are commendable. They constitute significant progress in implementing the goals of the Paperwork Reduction Act, taking into account the brief time period since passage of the act. However, OIRM needs to develop a plan or set of plans reflecting the full breadth of its responsibilities, including policy development, enforcement, and oversight.
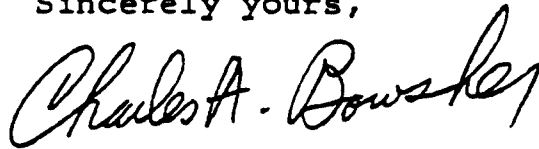
RECOMMENDATIONS

We recommend that the Secretary of Commerce direct the Assistant Secretary for Administration, who is the senior official for information resource management, to:

--Place greater emphasis on completing an effective departmentwide planning mechanism, including early completion of an ADP planning process.

--Require that OIRM develop a management plan and establish priorities which will place policy and oversight functions in proper balance with operational efforts carried on by OIRM.

--Separate OIRM's information resource management policy and oversight responsibilities from the direct management of computer center and related operations.

    As arranged with your office, we are sending copies of this
report to the Secretary of Commerce and will make copies available
to others on request.

                              Sincerely yours,

                              Charles A. Bowsher

                              Comptroller General
                              of the United States