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USDA INFORMATION MANAGEMENT

Proposal to Strengthen Authority of the Chief Information Officer

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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to assist the Subcommittee by discussing the bill, H.R. 3280, cosponsored by yourself and Congressman Latham to strengthen the authority of the Department of Agriculture's (USDA) Chief information Officer. To provide some background for my testimony this morning, I will briefly discuss the problems and challenges USDA has faced in managing the more than $1 billion it spends annually on information technology (IT) investments, as well as recent IT reform legislation that established the Chief Information Officer (CIO) position in federal agencies. I will then summarize the bill's provisions, designed to clarify and enhance the CIO's authority at USDA, and briefly convey our views on these provisions.

USDA: Size, Complexity Make Department Enormous User of Information Technology

The influence of USDA on millions of Americans makes it essential that the department plan and manage its information technology wisely. USDA's size and complexity, however, make this far from simple. It has a diverse portfolio of over 200 federal programs throughout the nation and the world. The department delivers about $80 billion in programs, at a cost in federal outlays of an estimated $54 billion. The fourth largest federal agency, USDA employs over 100,000 individuals in 31 agencies and departmental offices having multiple and sometimes disparate missions. Its responsibilities range from forests and timber to food assistance for the needy and the safety of meat and poultry products for human consumption.

In fiscal year 1998 alone, USDA plans to spend about $1.2 billion on information technology and related information resources management (IRM) activities. It has reported spending more than $8 billion on IT over the past decade. During this time, USDA has seen its annual IT expenditures nearly double.

Strong Leadership Essential to Overcoming Long-Standing Problems Managing Information Technology Investments

As we testified before this Subcommittee last spring, USDA has a long history of problems in managing its substantial investments in IT.[1] We chronicled many cases dating back to 1981 in which the department had not effectively planned major computer modernization activities or managed IT resources. Such ineffective IT planning and management have resulted in USDA's wasting millions of dollars.

While many factors have contributed to these problems, a major cause was the lack of strong IRM leadership, accountability, and oversight of the acquisition and use of departmental IT investments. Over the years USDA's component agencies were allowed to independently acquire and manage IT investments solely on the basis of their own parochial needs or interests. Because of this, USDA agencies have continued to independently plan, acquire, and develop separate systems, without considering opportunities to integrate systems and share data.

Consequently, over time, the department has invested hundreds of millions of dollars in hundreds of systems that are not interoperable with others in the agency and that actually inhibit the use and sharing of information. In fact, data are often inaccessible and underutilized outside of and even within USDA's individual agencies for identifying problems, analyzing trends, or assessing crosscutting programmatic and policy issues.

Legislative Reforms Provide Framework for Improved Information Technology Acquisition, Management

Unfortunately, USDA's experiences with information technology management are not atypical among government agencies. After more than a decade of poor IT planning and program management by federal agencies, as just described for USDA, the Congress enacted the Clinger-Cohen Act of 1996, which, in part, seeks to strengthen executive leadership in information management and institute sound capital investment decision-making to maximize the return on information systems investments. It is important to note that just as technology is most effective when it supports defined business needs and objectives, the Clinger-Cohen Act is at its most powerful when integrated with the objectives of other, broader, governmentwide management reform legislation that USDA is also required to implement.

One such reform is the Paperwork Reduction Act of 1995, which emphasizes the need for an overall IRM strategic planning framework, with IT decisions linked directly to mission needs and practices. Another is the

[1]USDA Information Management: Extensive Improvements Needed in Managing Information Technology Investments (GAO/T-AIMD-97-90, May 14, 1997).

Chief Financial Officers Act of 1990, which requires that sound financial management practices and systems essential for tracking program costs and expenditures be in place. Still another is the 1993 Government Performance and Results Act, which focuses on defining mission goals and objectives, measuring and evaluating performance, and reporting results. Together, Clinger-Cohen and these other laws provide a powerful framework under which federal agencies such as USDA have the best opportunity to improve their management and acquisition of IT.

The Chief Information Officer

A central element of Clinger-Cohen was the requirement that the head of each executive agency designate a CIO. Much more than a senior technology manager, this top-level executive—reporting directly to the agency head—is to be responsible for mission results through technology by working with senior managers to achieve the agency's strategic performance goals. Moreover, the CIO is to promote improvements in work processes and develop and implement an integrated, agencywide technology architecture. The CIO is also required to monitor and evaluate the performance of IT programs, and advise the head of the agency whether to continue, modify, or terminate a program or project. Further, the CIO is responsible for strengthening the agency's knowledge, skills, and capabilities to effectively manage information resources.

A Bill to Strengthen CIO Authorities at USDA

H.R. 3280 presents requirements to clarify and enhance the authorities of the department's CIO; these requirements are discussed in five major sections. The first addresses the CIO's relationship to the Secretary and the department's Executive Information Technology Investment Review Board. The next three present requirements as they relate to developing an information technology architecture, providing funding for the CIO's office, and establishing control over IT staff across the department. The last provision discusses an annual Comptroller General report on compliance. More specifically, the sections and some information about them include the following.

Position of Chief Information Officer, Department of Agriculture

This section requires that the CIO report directly to the Secretary, and that the CIO shall not be under the direction or control of the Deputy Secretary or other official or employee of the department. This section also requires the CIO to serve as vice chair of the department's Executive Information Technology Investment Review Board—or any other entity established for

this purpose—and to review and approve IT acquisitions by USDA offices and agencies.

The Secretary of Agriculture established the CIO position on August 8, 1996. That same day, he announced the designation of the department's then-Deputy Assistant Secretary for Administration to serve as acting CIO, and has since appointed this individual as USDA's first departmental CIO. However, we were advised that the Secretary has not yet issued a formal delegation of authority describing the CIO's authority and responsibilities.

USDA established the Executive Information Technology Investment Review Board on July 1, 1996, to coordinate and prioritize the department's IT investments, and to provide a critical link between IT and agency missions. Comprising senior-level managers, the board is also supposed to ensure that USDA technology investments are managed as strategic business resources supporting efficient and effective program delivery. Moreover, USDA's Fiscal Year 1998 Appropriations Act provides that all IT acquisitions for new systems or significant upgrades must be approved by the CIO, with the concurrence of USDA's Executive Information Technology Investment Review Board. The CIO told us that she had reviewed and approved the department's fiscal year 1998 and fiscal year 1999 IT investment package and submitted it to the board in September 1997, which then concurred with the investment package as submitted.

Responsibilities of Chief Information Officer With Regard to Information Technology Architecture

This section requires the CIO to be responsible for designing and implementing an information technology architecture for the department. It also requires the CIO to ensure that development, acquisition, procurement, and implementation of IT by any USDA office or agency complies with the resulting architecture and results in the best use of resources.

In February 1997 USDA published an initial draft version of a high-level information technology architecture. However, the CIO said that little has been done since then and that much work remains to refine that version.

Availability of Agency Information System Funds

This section requires each USDA office and agency to annually transfer to the control of the CIO an amount equal to 4 percent of the estimated expenditures to be made by that office or agency for equipment and software. The funds transferred are to remain available until expended by

the CIO for carrying out responsibilities of the CIO, as outlined in this bill, Clinger-Cohen, and the Paperwork Reduction Act. Additionally, funds may be used when developing, acquiring, procuring, or implementing departmentwide information systems or to make all mission-critical systems Year 2000 compliant.[2]

Mr. Chairman, it is a policy call whether to transfer no-year funds to the CIO annually and what amount is required in addition to other sources of funding available to the CIO. In this regard, the CIO already obtains appropriated funds to carry out responsibilities under Clinger-Cohen and other legislative mandates. In addition, the CIO's office uses working capital funds to support departmentwide IT-related activities, such as operating its Kansas City data center and carrying out telecommunications activities.

Authority of Chief Information Officer Over Information Technology Personnel

This section creates the position of Deputy Information Officer within the CIO's office, while abolishing the separate CIO positions within the department's agencies and offices. It also requires that managers of major IT programs and projects within USDA shall be subject to the CIO's approval and that the CIO shall provide his or her perspective as a factor in the performance reviews of such persons. Also covered under this section are the temporary detail and assignment of personnel to the CIO's office and the transfer to the CIO of the direction and control of officials responsible for procurement of IT across the department.

As we testified last October on the importance of having strong CIO leadership at federal agencies, we support the establishment of a CIO structure at major agency component and bureau levels because it may be difficult for the CIO at a large department to adequately oversee and manage the specific information needs of a department's major components.[3] Such a management structure is particularly important in situations, such as at USDA, where the departmental components have large information technology budgets or are engaged in major modernization efforts that require substantial CIO attention and oversight. In the Conference Report on the Clinger-Cohen Act, the conferees recognized

[2]For the past several decades, information systems have typically used two digits to represent the year, such as "98" for 1998, in order to conserve electronic data storage and reduce operating costs. In this format, however, 2000 is indistinguishable from 1900 because both are represented as "00." As a result, if not modified, computer systems or applications that use dates or perform date- or time-sensitive calculations may generate incorrect results beyond 1999.

[3]Chief Information Officers: Ensuring Strong Leadership and an Effective Council (GAO/T-AIMD-98-22, Oct. 27, 1997).

that agencies may wish to establish CIOs for major components and bureaus.[4]

We believe that where utilized, such component-level CIOs should have responsibilities, authority, and management structures that mirror those of the departmental CIO. However, USDA could not readily provide information to identify the current organizational structures across USDA, where each of its component agency CIOs was positioned, or a description of their roles and responsibilities. We were told by the department's CIO that the role of the CIO at the component level has not been defined consistently across USDA agencies.

According to the CIO's office, USDA agencies and departmental offices have a total of 16 positions that are either CIOs or senior IT officials with equivalent leadership roles. We were told that the roles and responsibilities of these officials differ from one agency to the next; some control all IT staff resources and others do not. Additionally, we were told that in most cases these officials report to their component management; USDA's CIO then works with these individuals through the department's Information Resources Management Council. The council has responsibility for planning, approving, and overseeing departmentwide IT projects. The bill would consolidate these agency CIO positions under the departmental CIO.

Annual Comptroller General Report on Compliance

This section requires that, not later than January 15 of each year, the Comptroller General shall submit to the Congress a report evaluating compliance by USDA's CIO and the department with this proposed legislation. The bill provides that the report should include a review and compilation of spending by the department on information resources necessary to assess compliance with the annual transfer of funds to the CIO and use of these funds, as well as the CIO's performance under this proposed legislation. It also provides that the report should include an evaluation of the department's success in creating a departmentwide information system and ensuring that all mission-critical systems are Year 2000 compliant. In addition, this section provides for the Comptroller General to include other recommendations and evaluations considered appropriate.

We are prepared to assist the Subcommittee in its efforts to ensure USDA's compliance with any new legislative requirements. It is worth noting,

[4]H.R. Conf. Rep. No. 104-450 at 977 (1996).

however, that because USDA's Inspector General is responsible for auditing the department's annual financial statements, it may be more efficient to have that office review and compile spending data on information resources pertaining to the annual transfer and use of funds.

The Bill: GAO'S Perspective

Mr. Chairman, we support your effort and that of the Subcommittee and Mr. Latham to ensure strong and effective CIO leadership at USDA by providing for more accountability and responsibility over the substantial investments the department makes in information technology. We see the thrust of this bill as, for the most part, consistent with the goals of Clinger-Cohen and other legislation designed to strengthen executive leadership in information management.

We testified last October on the importance of strong CIO leadership at federal agencies. At that time we said that various approaches exist as to how the CIO position can best be utilized to implement legislative requirements under Clinger-Cohen and other federal laws.[5] These laws, along with guidance from the Office of Management and Budget and our best practices experience with leading organizations, define common tenets for the CIO position. What is important is that the approach be consistent with these tenets. Specifically, agencies should

- appoint a CIO with expertise and practical experience in technology management;
- position the CIO as a senior partner reporting directly to the agency head;
- ensure that the CIO's primary responsibilities are for information management;
- have the CIO serve as a bridge between top management, line management, and information management support professionals, working with them to ensure the effective acquisition and management of information resources needed to support agency programs and missions;
- task the CIO with developing strategies and specific plans for the hiring, training, and professional development of staff in order to build the agency's capability to develop and manage its information resources; and
- support the CIO position with an effective CIO organization and management framework for implementing agencywide information technology initiatives.

Having an effective CIO with the institutional capacity and structure needed to implement the management practices embodied in the broad set

[5] GAO/T-AIMD-98-22, Oct. 27, 1997.

of reforms set out in Clinger-Cohen and other legislation is crucial for improved planning and management of IT investments. Success at USDA will depend on how well the department implements such legislation, and how well the CIO exercises whatever authority she possesses to make positive change—and the degree to which this individual is held accountable for doing so.

Mr. Chairman, this concludes my statement. I would be happy to respond to any questions you or other members of the Subcommittee may have at this time.

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