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Information Technology

Divider Title: _____



Al Gore, Vice President

National Performance Review
750 17th Street
Box 101
Washington, DC 20006

U R G E N T

NOTE TO: Agency Liaisons to the National Performance Review
NPR Policy Group/Select Reviewers

FROM: Chuck Brownstein, NSF
Jim Flyzik, Treasury
Co-Team Leaders, Information Technology Team

SUBJECT: Review of Draft Materials

DATE: August 3, 1993
(Comments due back by 2:00 p.m. Monday August 9)

Attached is a **CONFIDENTIAL "UNEDITED" DRAFT** of the Accompanying Report for the Information Technology Team of the National Performance Review (NPR). Thank you in advance for your review of this material. We look forward to your comments and will incorporate as many as possible.

I want to emphasize that this report is still in draft stages; the final recommendations may be different from those contained in this draft. The White House NPR Policy Group and the Vice President are reviewing this draft simultaneously with the agencies. For these reasons, please hold this document closely within your agency, sharing copies only with those who need to review it to brief your Secretary or Agency Head and/or to provide substantive comments to the NPR.

We know your review will enhance the quality of the final product and the steps necessary to reinvent government. We are particularly interested in:

- 1) your agency's reactions to the draft report (e.g., whether our recommendations are clear and on the right track to accomplish the goals laid out);
- 2) checks of factual accuracy, particularly if examples of your agency's activities are included in the draft;
- 3) specific examples from your agency that have not yet been included but would enhance the arguments for the recommendations, including both:
 - horror stories of specific impacts on your agency from current practices that support the need for change;
 - success stories that prove the proposed changes have been tried in your agency and worked; and
- 4) any other suggestions you want to make.

The tight deadlines we are under require your comments by 2:00 p.m. Monday, August 9. To process all the agency and other reviewer comments, we need your comments in writing. Please send your comments by fax or messenger to:

FAX COMMENTS TO: Mike Dunham, Information Technology Team
(202) 632-1040

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If you have questions or concerns, please call Jim Flyzik at 202-622-1592, or Chuck Brownstein at 202-357-1201 or Mike Dunham at 202-632-0294 (extension 124).

MILESTONE 5

**REENGINEERING THROUGH
INFORMATION TECHNOLOGY**

NATIONAL PERFORMANCE REVIEW

Accompanying Report Number XX
September 1993

- A. Summary of Recommendations, by Type of Implementation Action Needed
- B. Methodology
- C. Acknowledgments
- D. Glossary

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Information Infrastructure Task Force of the White House National Economic Council. An initial task of the Working Group is to recommend how to substantially improve individual agency IT leadership and authority, and the coordination of information resource management planning with strategic mission planning.

- Upgrading the Office of Management and Budget (OMB) information management activities in the Office of Information and Regulatory Affairs and throughout OMB, to convene and facilitate the work of interagency teams to coordinate federal IT policies and programs, and to assure IT plans are consistent with IT budget submissions.

Electronic Government consists of using information technology to conduct the "business" of government, including direct services to the citizens and activities within government agencies. The Federal government is too often behind the private sector and other nations in using readily available technologies, and in leveraging the innovation of our own information industries and those of our government. Government action today will have major impacts on future commerce of all kind.

The transition to electronic government can be initiated by creating new or empowering existing cross-agency teams with charter and oversight from the Government Information Infrastructure Working Group and the Office of Management and Budget, to lead government-wide efforts to plan and coordinate implementation of service and operations reinventions starting with the following:

- Integrated Electronic Benefits Transfers;
- Integrated access to government services;
- A national law enforcement/public safety network;
- Intergovernmental tax filing reporting;
- An international trade data system;
- A national environmental data index;
- An integrated Geographic Information System;

Summary

Government activities involve processing large volumes of information to provide a vast array of services and perform increasingly complex functions. Information Technology (IT) offers the potential for reducing the complexity of government programs, streamlining bureaucratic processes, and making vast improvements in the manner in which government provides services.

Information technology provides the means to remove the barriers of distance, time, and physical location. It is key to a system of government wherein customers have timely and simplified access to federal, state and local government services via easy-to-use information technology systems.

Information technology is a strategic tool to integrate activities and remove duplication of effort among government agencies. Its application requires a procurement process which allows government workers to form strategic partnerships with state and local governments and private sector counterparts to quickly deploy state-of-the-art information technologies.

Achievement of this vision will require interrelated strategic action in several areas.

Leadership anchors the foundation for reinventing government using information technology. Federal approaches to the issues in using IT have been ad hoc, and lack of agency coordination has slowed progress in transferring good ideas and gaining the economies of common action. Today's needs and opportunities can be realized by capitalizing on emerging technology, the strategic partnerships between American industry and government in advanced Research & Development, the state of government and the leadership of the Clinton Administration. Executive branch IT leadership can be improved by:

- Creating a Government Information Infrastructure Working Group as part of the

privacy practices that provide sufficient privacy safeguards to gain citizen trust, and sufficient security to have safe, sustainable electronic government.

- Support and encourage the adoption of a Digital Signature Standard and the promulgation of encryption standards for applications requiring sensitive, unclassified information, and
- Implement a National Industrial Security Program; encourage improvements in security in the public switched network; and develop a concept of operations for Universal Personal Telecommunications.

Procurement rules affect the use and cost of technology. The present system works poorly, adds costs and inhibits innovation. Change from regulatory to market approaches, from short term to long term, and to total systems views are needed. The government must:

- Cut acquisition time and cost by replacing GSA schedules with a real time, network accessible electronic marketplace.
- Raise the existing low limits on Agency Delegations of Procurement Authority and credit card purchases for IT.

Innovation incentives need to be put into place to facilitate change. Innovation is shortchanged in the government's annual \$25 billion expenditure for procuring and operating information technology. The dollars are too often used just to work faster, not smarter. Innovations which have enabled industry to re-engineer their business practices are not being deployed. Incentives are needed to use what exists now, and to take the risks required to explore the future. A great deal can be done jointly and strategically with industry. These incentives for innovation can be continually encouraged by:

- Creation of a government-wide venture capital fund. The Fund is to be "seeded" in its first year by a 1 percent draw from the present \$25 billion budget for expenditures for information resources management programs. Agencies would have incentives to "compete" to develop innovative IT solutions which would be financed by the Fund as pilot projects.
- Allowing a portion of savings from IT modernization and innovation to be

- Government-wide electronic-mail.

These eight initiatives were selected because they demonstrate key concepts of electronic government and can be implemented with available technology. Government agencies have performed the necessary preliminary analysis which indicates the potential for significant savings and service improvements.

The following discussion provides the "framework" required to transform these recommendations into actual implementations.

"Government Information Infrastructure" (GII) is composed of the essential conceptual, organizational and physical links across people, agencies, distance and time. The degree to which agencies take advantage of the growing flexibility and "openness" of information technology will influence the very "openness" of future government. Many opportunities are available to better use what currently exists, and to work strategically with industry for the common economic benefit of the country.

- The GII Working Group should provide the leadership to develop the GII, relying on commercial technology and systems emerging in the National Information Infrastructure.
- The GII Working Group should assure that the consolidation of the current existing infrastructure is implemented in a manner to be consistent with the emerging National Information Infrastructure.
- The GII Working Group should identify ways to reduce duplication of effort throughout the existing government infrastructure. Prime candidates for consideration are the integration of existing data processing centers and common applications systems.

Privacy, security and the degree of trust provided will ultimately determine the Nation's *will* to broadly use information technology. Today's ad hoc approach is hopelessly incapable of insuring the degree of safety and trust needed to move optimally towards the future, and demands systematic and continuing attention. Support is needed to:

- Develop generally acceptable principles for information security and uniform fair

PART 1:
STRENGTHEN LEADERSHIP IN INFORMATION TECHNOLOGY

returned to agencies for reinvestment in agency priority programs.

- Increasing use of performance-based contracts with "Award-Fee" provisions and "Value Engineering" clauses to create "Win-Win" scenarios in the strategic partnerships between the government and industry. Contractors would be encouraged to find ways to use IT to save the Government money since a portion of the savings could be returned to the contractor as increased profits.

Finally, we must reinvent the government's approach to *improve human resources* for IT management and use. Skills in and out of government both affect and are affected by what the government does with information technology. A full scale shift from minimal training to continual strategic learning in our organizations is required to keep pace with the service demands of citizens and the pace of advances in technology. This can be accomplished by:

- Upgrading training and qualifications in IT and information processing across all levels of employees.
- Designating "Centers of Excellence" for interagency training and demonstration purposes. Centers would operate on a fee for service basis.
- Supporting and encouraging informal networks of knowledgeable colleagues throughout the government who serve as "on line pals," to assist colleagues in using information systems.

Need for Change

The federal government's attempts to integrate information technology into the business of government have produced some successes and many costly failures. Despite spending \$25 billion annually on technology, many federal executives continue to overlook IT's strategic role in re-engineering business practices. Too often agency Information Resource Management (IRM) plans and mission plans are not integrated. Agency information resource managers typically lack the tools or the opportunity to be an effective partner with top executives in developing strategies to use technology effectively. Without clear direction and support from the top, modernization programs tend to degenerate into loose collections of independent systems solving unique problems and automating the existing ways of doing business. For example, three bureaus in the Department of Agriculture were to share a "Processed Commodity Inventory Management System" to improve the management of food acquisition and price support programs. However, five years after work on the system had begun, no mechanism had been established to resolve disagreement that arose in testing, installation, or maintenance.²

The oversight community -- OMB, GSA, Congressional committees, the Inspectors General, GAO -- often aggravates this situation by focusing on details such as the acquisition costs of individual information technology projects. Instead, effective oversight agencies would foster the analyses of work processes and formulation of strategic plans that integrate agency missions with information technology. Oversight agencies are in an excellent position, given their independent status, to identify and promote opportunities for cross-agency sharing of capabilities.

In particular, OMB's Office of Information and Regulatory Affairs (OIRA) is charged under the Paperwork Reduction Act to provide leadership and oversight for the information resources management activities of the federal agencies. Historically, OIRA has placed more emphasis on its regulatory and paperwork review responsibilities than on leadership in information resources management. The Clinton Administration has committed

IT01: PROVIDE CLEAR, STRONG LEADERSHIP TO INTEGRATE INFORMATION TECHNOLOGY INTO THE BUSINESS OF GOVERNMENT

Background

Reinventing government is an enormous and complex undertaking that begins with leadership, not technology. Reinventing includes using information technology as a change agent. But that use requires both a clear vision of how government can benefit from technology to change the way it does business, and a commitment to making the vision a reality. Leadership is that combination of vision and commitment that will enable sound investments in information technology to support the redesign of Federal business processes. A prime contribution of information technology to reinventing government is to help break down bureau and agency lines and promote solutions on a functional basis.

The Clinton Administration has begun to take responsibility for improving the government's use of information technology. As part of a larger effort to develop the National Information Infrastructure (NII), the National Economic Council and the Office of Science and Technology Policy (OSTP) have created a committee of the Deputy Secretaries of the Federal departments to coordinate the Administration's efforts to advance the nation in the information age. The Information Infrastructure Task Force (IITF), chaired by the Secretary of Commerce, is responsible for articulating and implementing the President's technology vision in the information realm for the nation as a whole.¹ The IITF is also uniquely positioned to assist and provide vision in the development of the government portion of the future infrastructure.

Similarly, the Paperwork Reduction Act gives responsibility within each agency for leadership in information management to a senior official reporting directly to the Agency Head. With proper vision and direction, these officials could fulfill their potential as change agents, using information technology to help reinvent the agency's approach to its mission.

Information Infrastructure (GII) working group. The working group should:

- include state and local governments and private industry advisers to promote cooperation and information sharing.
- develop a strategic vision for using government information resources. The vision should include specific models of operation, goals for the improvement of government use of information technology in mission performance, both across and within agencies, and measures for improving service to the public.
- develop strategies to improve leadership and authority within Federal agencies, and to include information resources management in agencies' mission strategic planning.
- establish a continuous improvement plan and process to design, develop and implement technology-enabled, government-wide business initiatives -- the "electronic government" described in Section II of this report.
- identify additional opportunities and set priorities for sharing information resources across agencies to improve program performance.
- provide policy advice to OMB on GII matters.

2. Coordinate and oversee plan implementation. (1)

Beginning October 1, 1993, OMB's OIRA should, building on the strategic directions identified through the GII working group described in Recommendation 1:

- convene (or use existing) interagency teams ("virtual agencies"), chaired by an appropriate program agency, to share information, solve common problems, and represent the government to the public on specific cross-cutting information technology matters.
- establish for each agency strategic mission plans and performance measures which tie information technology to mission plans and budgets via revision of OMB Circular A-130;

to improving the performance of OIRA in the information area.³ Thus the seeds for change have been sown. Nurturing them will require resources and expertise in OIRA, and a new partnership between OIRA and the agencies.

In the few cases where oversight agencies have attempted coordination, the results have been remarkable. For example, in 1988, OMB analyzed the use of information technology by the Customs Service, the Immigration and Naturalization Service (INS), and the State Department to check the names of persons entering the United States. Finding duplication of effort and little sharing of information, OMB worked with the agencies to create the Interagency Border Inspection System (IBIS), jointly funded and operated by the three agencies. IBIS allowed Customs and INS to redesign their work processes -- INS agents now conduct all name checks, freeing Customs agents to inspect baggage -- improving enforcement and speeding the processing of legitimate passengers.

An even more powerful example has been the work of the High Performance Computing, Communications, and Information Technology Subcommittee, which coordinates the multi-agency High Performance Computing and Communications Initiative. This interagency working group, under the leadership of the Office of Science and Technology Policy (OSTP), has created a \$1 billion program that is expanding the nation's capabilities in computing, by coordinating and sharing resources and expertise among 12 federal agencies.⁴ These are models for the type of coordination across government that is needed to realize the full potential of information technology to reinvent government.

Recommendations

- 1. Plan for effective use of information technology throughout government. (1)**

By October 1, 1993, the President should direct the Secretary of Commerce should expand the work of the Information Infrastructure Task Force to charter a Government

End Notes

1. John Gibbons, Director of OSTP and Robert Rubin, Assistant to the President for Economic Policy, Memo dated July 8, 1993, p. 1.

2. "Agricultural Stabilization and Conservation Service Computer Systems: Building Another Hubble?" Hearing before the Government Information, Justice, and Agriculture Subcommittee of the Committee on Government Operations, House of Representatives, September 18, 1990.

3. Sally Katzen, Administrator of OMB/OIRA, Confirmation Testimony before the Senate Governmental Affairs Committee, May 14, 1993.

4. President William J. Clinton and Vice President Albert Gore, Jr., *Technology for America's Economic Growth* (Washington, D.C.: U.S. Government Printing Office, 1993).

- ensure adequate OMB staff expertise to exercise effective leadership of Federal information and information technology activities. This function should combine technical expertise in information computing and communications, government operations, and service sector innovation. This activity must combine management and budget oversight functions.

Fiscal Implications

Fiscal Impact is minimal

Cross-References to Other NPR Issues

None

Background

Information technology provides the means for a fundamental revision in the relationship between the Federal Government and everyone served by it. The new technologies will provide the essential infrastructure for the government of the twenty-first century. This government will allow citizens broader and more timely access to information about availability of services, and provide them more efficiently using processes that are more responsive to their needs. A number of concepts underlie the operation of the "Electronic Government."

Electronic "information highways" will carry the information necessary to support governmental operations. These information highways will connect federal, state and local governments. The context for such a system is the National Information Infrastructure (NII) made up of public and private transmission circuits and information services. Components of the NII are the nations common and value added carriers, public libraries, the Internet that serves both government and private industry as a pathway for electronic mail and data, and the electronic settlement services that support the Automated Teller Machines (ATM) and credit cards which facilitate the flow of funds nationwide.

A subset of the NII is the Government Information Infrastructure (GII). The GII is the federal portion of the NII and is composed of all the electronic services and paths that support government operations. Examples of the GII are (1) the computer systems that facilitate the payment of monthly Social Security benefits, (2) the new FTS2000 telecommunications system the Federal Government uses for voice and data communications, and (3) internal networks run by individual government agencies, and the wealth of data and information which government makes available. -

Those systems that support the operation of both the NII and GII are the information infrastructure. They include the computer hardware, software and telecommunications equipment necessary to make data flow across the information highways as well as the policies, procedures, and standards of operation that support daily operation. Operations

**PART 2:
IMPLEMENT "ELECTRONIC GOVERNMENT"**

organizations, processes, and forms. The existing service delivery system is largely based on the hierarchical design structures developed in the 1930s. The result is slow, inefficient service which may not satisfy actual needs. The information required for sound decision making and for providing customer service is not coordinated across government agencies, thus increasing cost and time to provide services. Government structures, processes and business practices are designed for a former era and today cannot keep up with the types and volumes of customer demands.

The efficient use of information technology is a key to providing more cost effective and "user-friendly" government services. Industry provides several examples where exploiting technology provided superior customer service, significantly decreased cost, increased quality and improved overall effectiveness and competitiveness. Additional successful applications of information technology can be found in federal, state, and local government and include initiatives by the Department of Veteran's Affairs,⁷ the State of Iowa,⁸ and the City of Phoenix, Arizona.⁹

OMB estimates that by the year 2000, approximately 75 percent of public transactions will be processed electronically.¹⁰ The requirement to address the ever more constrained operating budgets, makes integration of information technology into all phases of the federal work force a key to meeting service demands of the American public.

The following eight initiatives are recommended for implementation on a fully operational or pilot basis. These initiatives are among a large number of opportunities for improving service to recipients of government services, increasing the efficiency of government, and providing significant return on investment. These initiatives address critical issues of leadership, human resources, privacy and security, acquisition, as well as the information infrastructure to deliver electronic government to its customers. Many others are emerging from federal state, and local governments, and this report recommends ways to continually stimulate innovation and to transfer knowledge and technology. The eight exemplary innovations described below have the common quality of being "ready to go" and of immediate payback.

standards, for example, assure that hardware and software are able to "talk with" each other-- interoperability. Additionally, security and privacy standards assure adequate protection of systems integrity.

As the GII becomes a reality, the basic data flows that it will handle can be categorized as follows. Generically, all data that flow on the GII do so as Electronic Data Interchange (EDI). This includes document and file transfers, electronic mail, financial transactions, et al.⁵ As subsets of EDI, data that support the electronic transfer of funds between government or private financial institutions is known as Electronic Funds Transfer (EFT), and information that supports the electronic payment of benefits are known as Electronic Benefits Transfer (EBT). These are examples of "Electronic Government" and are central to understanding the context within which our recommendations are made. (EBT is addressed in this report--EFT is addressed in the Improving Financial Management Report).⁶

Electronic Government includes another basic concept as part of government operations: the "virtual agency." The virtual agency is the view of government the public perceives as services from several agencies are jointly provided. A good example is EBT. An unemployed person registering for government assistance would at one location obtain the entire menu of services for which they are eligible no matter which agencies are involved. The recipient or beneficiary would not have to deal with each individual agency separately. From the citizen's standpoint, a "virtual agency" dealing with unemployment assistance has served as their interface with the entire government. In reality, services would be coordinated across the GII, the interconnected agencies sharing the same information to provide services in a seamless manner.

The Need for Change

The complexity of modern government makes it necessary for citizens and government workers to contend with an increasingly complicated array of agencies,

End Notes

5. Herman Haberman and Peter Weiss, Electronic Data Interchange in the United States Statistical System, working paper presented to the conference on "New Techniques and Technologies for Statistics, Bonn, February 24-26, 1992.

6. Improving Financial Management Report--FM03: Increase the Use of Technology to Streamline Financial Services.

7. Federal Information Resources Management Policy Council (FIRMPoC), *Better Government through Information Management*, Washington, D.C.

8. The Iowa Communications Network Study, Prepared for the House Subcommittee on Treasury, Postal Service and General Government, dated April 1, 1993.

9. Allan E. Alter, The CIO 100 - Top Performers for Tough Times: The People's Choice, CIO (Chief Information Officer) Magazine, vol. 5, No. 16, August 1992, pp. 74-76.

10. Comptroller General's 1989 Annual Report, United States General Accounting Office, *Facing Facts*, p. 28.

- Integrated electronic benefits transfer
- Access to integrated government services
- National Law Enforcement/Public Safety Network
- Intergovernmental Tax Filing, Reporting and Payments Processing.
- International Trade Data System
- National Environmental Data Index
- Integrated Geographic Information System .
- Government-wide electronic mail and document exchange

The following sections discuss in detail each of these eight initiatives.

delivered through inefficient, outmoded, paper-based systems. These aging systems can be replaced by proven, cost-effective technology found in industry. Changing from paper, such as coupons, checks and vouchers, to plastic access cards can provide significant savings.

Major expansion of electronic delivery of benefits has not been possible up to now for several reasons:

- lack of banking service accessibility,
- lack of availability of a low-cost alternative to receiving and cashing a government check,
- legislative restrictions on prescribing a particular method of payment, and
- people's natural resistance to change, e.g., trusting electronic direct deposit.

By adopting specific standards and rules, promoted by the American Banking Association and used by the major regional and national, commercial, direct debit point of sale (POS) and Automated Teller Machines (ATM) networks, EBT can be processed concurrently with industry transactions. Compatibility with the commercial, electronic transaction networks is a critical requirement for retail merchants and financial institutions. This would allow government transactions to be processed along with the existing commercial financial transactions, exploiting previously defined nationally and internationally accepted standards. Industry's support is vital to successfully implement EBT, especially for federal-state administered programs such as Food Stamps, WIC and AFDC.

The potential for savings by converting to EBT are significant. Currently, direct federal payments programs such as Social Security, Supplemental Security Income (SSI), federal pensions, and veterans benefits are a mixture of electronic direct deposit and paper check issuance. For example, approximately 55 percent of Social Security recipients receive their benefits through electronic direct deposit while only 18 percent of SSI recipients have direct deposit.¹⁵

It is important to keep in mind, however, that the roughly 450 million paper check payments made per year cost the taxpayers up to six times more to deliver than those

IT02: MIGRATE TO INTEGRATED ELECTRONIC BENEFITS TRANSFER**Background**

Electronic benefits transfer (EBT) is the adoption of commercial electronic payment practices for the delivery of government assistance services. Examples of benefit programs that are capable of electronic payment include: food stamps, veterans benefits, student loans, medical assistance, housing assistance, unemployment insurance, Social Security, Supplemental Security Income (SSI) benefits and the Special Supplemental Food Program for Women, Infants, and Children (WIC). EBT can use existing commercial infrastructure, including electronic funds transfer circuits, commercial banking, credit/debit card authorization and settlement/interchange networks, and the Federal Reserve's Automated Clearing House system.

Each year tens of millions of citizens receive government services, directly from the Federal Government or indirectly through state and local governments or third parties. These services rely upon paper-based systems -- such as checks, vouchers or coupons. These paper-based systems are not always customer friendly, are inefficient and expensive to operate, and are subject to fraud and abuse.

The number of recipients of direct government benefits is large and the volume of transactions which deliver these benefits is projected to grow. In the food stamp program alone, enrollment averaged 25.4 million persons per month in 1992¹¹, and was at 27.4 million persons in March 1993.¹² There are approximately 31.4 million low income persons who are aged, disabled or otherwise disadvantaged and receive monthly authorization for medical assistance through the Medicaid program.¹³ Monthly Disability Insurance benefits are drawn by more than 4.3 million former workers and their dependents. By the year 2000, the Social Security Administration is expected to distribute more than \$450 billion annually to 44.3 million beneficiaries.¹⁴

The cost to deliver these services today is also quite large -- as most services are

checks, WIC vouchers, Medicaid authorization cards, state general assistance checks, housing assistance checks, etc.

For direct federal payments, the presumed method of payment would be direct deposit into the recipients' own bank accounts. For recipients without bank accounts, i.e., the "unbanked", or those who prefer not to involve their banks, a federally sponsored electronic account would be established. For those recipients without a bank account, who are at or below the poverty level, a free electronic service (e.g., three ATM or Point of Sale (POS) transactions per month) would be provided. Funding for this service would come from savings achieved by the Federal Government through conversion to direct deposit. Recipients could seek waivers to receiving electronic payments through EBT for special circumstances. For those recipients who also receive public assistance benefits such as SSI, the state-administered EBT service could be used instead of the federally sponsored account.

For joint federal-state administered public assistance programs, EBT could dramatically simplify the delivery of separate program benefits to eligible recipients. Cash recipients would receive the same free level of EBT service as provided to federal direct delivery recipients. Non-cash benefit recipients would receive EBT service in accordance with program regulations. Moreover, one can easily envision issuing a single government services, plastic benefits card, bearing an official seal of both the Federal and state government and applicable to both federal and state government recipients instead of separate plastic benefits cards for each program.

By using one comprehensive EBT infrastructure, federal and state agencies can share both start-up and ongoing operating costs associated with the delivery of government benefits to the public. As a result, all stakeholders should experience lower operating costs and provide measurably improved customer service.

Need for Change

electronically deposited. Making the transition from physical paper transactions, which cost 36 cents per transaction compared to 6 cents per electronic transaction, is a desirable move to reduce benefits delivery cost by over \$100 million per year.¹⁶

Joint federal-state administered public assistance programs such as Aid to Families with Dependent Children (AFDC), Food Stamps, and Medicaid are very paper intensive. A recipient, for example, might receive cash assistance in the form of an AFDC check, and also receive various forms of non-cash assistance such as Food Stamp coupons, WIC vouchers and Medicaid drug prescriptions.

Nowhere is paper more voluminous than in the U.S. Department of Agriculture's (USDA) Food Stamp Program. Over 2.5 billion Food Stamps are printed yearly and distributed monthly in the form of coupon booklets to over 10 million households. Each month 210,000 authorized food retailers receive the coupons in exchange for eligible food items. The retailers carry stacks of Food Stamps to 10,000 participating financial institutions which credit the store accounts for their value. The banks send the redeemed food stamps to a Federal Reserve Bank which again counts the coupons, credits the banks' account, bills the U.S. Treasury for the value of the food coupons and destroys them. Food stamps cost federal and state governments approximately \$400 million per year in administrative expenses to print, ship, store, distribute, reconcile and destroy.¹⁷ Administrative costs for coupon issuance vary substantially among the states, but range from \$3.00 to \$4.00 per case per month, due to variations state-by-state in labor costs and in types of Food Stamps issued. The paper aspect of food stamps also creates management control vulnerabilities and ample opportunities for fraud and abuse. At the end of 5 years, there is nothing to show for the \$2 billion in paper infrastructure expense but bags of shredded used food stamp coupons!

EBT can replace this obsolete Food Stamp coupon system and in the process dramatically improve recipient services, combat fraud and abuse, and save millions in yearly operating costs for USDA and the states. EBT's electronic infrastructure, which utilizes plastic card reader terminals and ATM system networks, can also replace AFDC

Recommendations

1. By Executive Order construct an integrated EBT implementation plan (2)

OMB should be directed to charter an interagency team, chaired by the Deputy Director for Management, that will report to the Vice President by March 1, 1994. The team should be required to define roles, responsibilities and changes required in present practices to implement EBT nationwide.

The most effective implementation of EBT is nationwide delivery of multiple, integrated benefits which leverage the existing commercial infrastructure. The efforts to implement electronic delivery of food stamps, now underway by the Food and Nutrition Services (FNS) of the Department of Agriculture, and Financial Management Service (FMS) of the Department of the Treasury should be accelerated.

Concurrently, the recommended initiative will press for integrated electronic delivery of benefit services, sequencing EBT program implementations and accelerating Food Stamps issued by FNS and, Social Security (SSA), and Aid to Families with Dependent Children (AFDC) in the Department of Health and Human Services (HHS). The initiative will build upon government and local EBT experiences to pilot and implement integrated benefits delivery, nationwide.

The implementation plan will include recommendations on various resource issues, such as cross-agency administrative cost pooling; funding strategy; and organization and staff support, and will establish a calendar with key milestones for progress measurement and review.

2. The interagency team, named above, should draft needed policies and/or legislation to facilitate implementation of EBT nationwide. (2)

Recent pilot projects to replace paper-based benefits systems with EBT confirmed that electronic benefits delivery can reduce costs. The Secretary of Agriculture, has stated that results of using EBT for government issuance of food stamps saved 24 percent in administrative costs in the State of New Mexico project and 3 percent in the Ramsey County, Minnesota project. Retailers also benefit: the study showed that cost to retailers dropped by \$3.98 per \$1,000 in benefits in New Mexico, and by \$9.09 in Minnesota. EBT issuance of food stamps also benefits banks who participated in the pilot; their cost fell by \$3.17 and \$5.48 per \$1,000 of benefits redeemed in New Mexico and Minnesota, respectfully.¹⁸ The estimated loss due to fraud related to food stamp benefits dropped by 75 percent in New Mexico and 81 percent in Minnesota.¹⁹

The individual state efforts have validated the possibility of electronic delivery of benefits. More implementation efforts are underway in several states, including New Jersey, South Carolina and Texas. The retail food industry is proceeding independently in equipping their stores such as in Washington, D.C., with electronic "checkout" payment machines which could be used also for EBT.

Although much benefit is gained by leveraging the existing infrastructure, there are several liability and policy issues. For example, the Federal Reserve Board in February 1993 proposed making Regulation E of the Electronic Funds Transfer Act applicable to EBT. Regulation E governs electronic transaction liability in the private sector. This would make federal/state governments liable for the replacement of recipient benefits reported lost or stolen, without regard to recipient responsibilities. If Regulation E stands as written, some form of intergovernmental EBT insurance fund and stronger program recipient disqualification regulations might have to be established. The cost of this regulation and the potential increase in welfare fraud could effectively deter or even halt EBT expansion.

In order to avoid incompatible systems being developed and to realize substantial operating cost reductions through volume (economies of scale) pricing, EBT efforts will need to be coordinated nationally, while these systems are still in their infancy.

programs on how to combine program requirements into a uniform set of EBT rules and responsibilities.

On-going efforts to adapt industry's electronic transfer operating rules, now targeted for October, 1994, should be reviewed and modified by the recommended interagency team, comprised of federal and state membership. The interagency teams who are directing the implementation of EBT should coordinate with private sector entities to define the government EBT systems. This includes operating rules, specifically, roles and responsibilities of all parties, technical standards, liabilities, indemnifications, pricing structures and settlement timing.

- Define benefits delivery options. The presumed method of payment for all new enrollees in direct federal programs would be EBT. While total conversion from paper checks to electronic payments is the goal, it probably is best to start with a highly publicized voluntary program and gradually phase in EBT over a 3-year period. However, a voluntary EBT system is not the preferred method for the federal-state administered programs -- especially for the Food Stamp Program.

The objective shared by the FNS, food retailers and financial institutions for the Food Stamp Program is to replace paper coupons. The goal is to eliminate coupons, not create a dual delivery system. A dual system would be too costly to manage; it would hinder the interstate flow of transactions, cripple efforts to obtain economies-of-scale pricing; and defeat efforts to combat fraud and abuse in the trafficking of coupons. Consumer and recipient advocacy groups will need reassurance that strong recipient preference exists for EBT and that adequate privacy safeguards are in place. Additionally, how fast EBT can be implemented in 210,000 grocery stores nationwide is debatable, but a 4- to 5-year time frame appears to be feasible.

OMB should direct the interagency team draft a report by February 1, 1994., which address the following key policy and legislative issues:

- Review existing legislation and regulations for each program which may impact nationwide implementation of EBT and draft appropriate changes. For example, one key issue concerns the applicability of Regulation E to EBT. Examine the comments submitted in response to the Regulation E (Reg E) proposal making it applicable to EBT, and determine a government-wide position on recipient liability in electronic benefits transaction processing.
- Adopt a uniform EBT services pricing structure and attendant funding agreements. Identify standard categories and construct an EBT processing pricing structure, to include point of capture, interchange of transactions by and among processing centers and networks--including industry and federal and state operations. Within the pricing structure, address cross-program cost effectiveness. This will maximize the benefits of economies of scale, leverage the commercial direct debit infrastructure and ensure cost effective criteria is used to facilitate and expedite the migration to EBT.
- Define settlement process which is the financial reconciliation of all debit and credit transactions on a daily basis. High volume/same day settlement processing is required to support electronic transfer of benefits. This processing closely aligns with and can leverage the financial services industry's settlement exchange system. FMS and the Richmond Federal Reserve Bank are in the process of assessing implementation approaches.
- Develop integrated EBT program and operating rules. Recipient responsibilities currently vary among different benefit programs. Obtain agreement across

End Notes

11. See Vee Burke, Library of Congress, Congressional Research Service, "Welfare," January 6, 1993, p. 1; and "Food Stamp Users Up Sharply in Sign of Weak Recovery," The New York Times, March 2, 1993, p. A1.

12. "27.4 Million Receiving Food Stamps - Record High Reported for March Enrollments," Washington Post, May 29, 1993

13. Melvina Ford, Library of Congress, Congressional Research Service, "Medicaid: FY 1994 Budget," CRS Issue Brief, Updated June 30, 1993, Summary.

14. Stephen B. Gould, "Computing and Telecommunications in the Federal Government," CRS Review, U.S. Library of Congress, Congressional Research Service, July-August 1990, p. 19.

15. Working paper from FMS-Joe Leo to call with title of paper

16. cite GAO per transaction costs and extrapolate by actual/expected food stamp delivery numbers (monthly, times 12 to annualize)

17. [to be provided]

18. Summary of "The Impacts of State Initiated EBT Demonstrations on the Food Stamp Program" United States Department of Agriculture, Food and Nutrition Services, undated - released in July, 1993.

19. United States Department of Agriculture, Office of Public Affairs, News release No. 0588.93, "Espy Encourages Electronic Issuance Of Food Stamps by All States," Washington, July 19, 1993, p. 1.

Cross-References to Other NPR Issues

State and Local

Agriculture

Financial Systems Teams FM.02, FM.03, FM.04

Internal Revenue Service (IRS) are by telephone. The IRS has made major improvements in the accuracy of its telephone service information and is able to resolve many taxpayer problems in a single phone call (including accepting oral statements over the phone). The Social Security Administration (SSA) now receives 56 million requests for information and services calls a year over its national "800" number.² The Office of Consumer Affairs coordinates a working group of 25 federal information lines that receive from 5-10 million calls per year.

Use of one-stop "800" calling service has been implemented in a number of industries. For example, American Express receives its customer calls for all questions through one toll free number instead of having each customer call every department to receive an answer to each question.

Kiosk Access. Federal and state governments are developing approaches to providing information and services through interactive customer activated terminals called kiosks, which are modeled after automated teller machines (ATMs) with interactive video display.

SSA is developing a new customer service initiative using kiosk technology to provide a wide range of services. This pilot program, to begin in late 1993, will include information provisions (retirement and disability benefits information, Supplemental Security Income eligibility requirements, etc.) and direct services provisions (processing of entitlements, status of pending claims, etc.).³ Expected results from the pilot program include the following:⁴

- reduction in claims processing time;
- reduction in paper flow and file retention;
- enhanced customer service through a "one-stop" shopping concept, and;
- increased productivity.

In conjunction with this initiative, SSA, the Department of Veteran's Affairs (VA), and the U.S. Postal Service (USPS) are in the development stages of creating a combined government services kiosk.⁵ This kiosk will serve as a single access point to services

IT03: DEVELOP INTEGRATED ELECTRONIC ACCESS TO GOVERNMENT SERVICES.

Background

The government's primary role is to provide quality and timely services to the public. However, access to government services is cumbersome, uncoordinated and not customer friendly. It can take months for someone to find out what benefits they are entitled to. If more than the one agency is involved, the client must go through two or more rounds of inquiries, often being routed from one government employee to another.

The Government Printing Office Electronic Information Access Enhancement Act of 1993 was signed into law by the President on June 8, 1993. The act ensures that the public will have electronic access to the *Federal Register*, the *Congressional Record*, other documents distributed by the Superintendent of Documents, a directory of government electronic information, and information that other federal agencies specifically request to be made available electronically.¹

Individual government agencies provide numerous services by means of information technology. These access methods include telephone, kiosk, and computer on-line bulletin board systems. However, access to these services is uncoordinated among agencies and not implemented by standard and user friendly practices. A number of recent federal initiatives to make government information more readily available are improving service to the citizen.

Telephone Access. Industry pioneered the use of the telephone to provide services to customers. Toll free numbers and guided questions by either a human or computer speed the callers to the needed services. Call receipt is logged, automatically distributed, and responsiveness to customers is managed.

The government has begun to incorporate some of these telephone based services to improve access to its services. For example, 70 percent of taxpayer contacts with the

- Multimedia and multilingual service delivery - special needs of clients could be met by providing information with the use of video, audio, or multiple languages..

The kiosk concept is proving itself viable in delivering fast and efficient government services to the public. However, before it is used to collect and deliver sensitive information such as financial data, critical issues including user authorization, privacy and network security must be addressed (see the Privacy and Security section of this report).

Access to information through the electronic kiosks could be controlled in the same manner as automated teller machines. A kiosk access card could be used to access all governmental services information, including social security account balances, personal information access in government files, licenses, and government "yellow" and "white" pages directories.

The functionality of a kiosk access card could also be expanded through "smart" card technology. "Smart" cards could be used for additional purposes such as storing and distributing data. This card could then be used for electronic transfer of funds and allow the user to receive federal, state, and local benefits.

Expanding this customer focus application of technology to a national scale would be beneficial--from a customer services viewpoint as well as providing cost savings and increased revenues.

Additional Access Methods. All of the services provided and communications infrastructure of telephone and kiosk access should be developed to support alternative access methods, such as the use of personal computers. Special access and security/privacy issues are addressed separately. There have been several recent initiatives begun to provide access to federal agencies. All of these initiatives provide access from a personal computer.

For example, the Library of Congress has placed a searchable version of its catalog on the Internet. For computational scientists, the Department of Energy, the National Aeronautics and Space Administration, and the National Science Foundation research centers have established Internet-accessible libraries of government-sponsored software.

provided by either of the three agencies. The combined kiosk will decrease costs by reducing duplicate efforts and improving service by providing access from more locations.

The use of kiosks can also create savings and generate revenues. For example, the "Info/California" kiosk, a customer-activated terminal implemented by the State of California, has generated major benefits. Savings include "job match," where customers pre-register at a kiosk to determine their best fit vis-a-vis openings, state-wide. Prior to the kiosk based service, the job match cost was \$150 per applicant. With pre-registration at the kiosk, the cost is now \$40 per applicant, a savings of \$110 per transaction. A California department of motor vehicle address change costs \$5 in person, \$2 if received via mail, and \$1 if the transaction is received via the kiosk.⁶ The State of Iowa estimates that kiosk technology saves \$6 per birth certificate issued (\$7 manually versus \$1 by kiosk technology).⁷

Information collection and distribution could be accomplished directly by the public using electronic kiosks, personal computers, interactive telephone voice response equipment or other electronic off-the-shelf devices. Interactive computers or electronic kiosks could deliver a wide variety of government services, such as the following:

- Government-wide services directories - directory of services, addresses, telephone, and facsimile numbers to locate information and services.
- Change of address services - with a single transaction a new address is automatically transmitted to all service agencies selected by a citizen.
- Forms and publications - ability to locate and request copies of government forms and publications. These could be delivered and filled out on-line, printed at the kiosk, or delivered by the post office.
- Tax filing - ability to electronically input the necessary financial data-to allow the IRS to perform tax computations for the federal, state, and local governments.
- Government licenses - ability to request and complete forms on-line, and pay any fees electronically. Licenses could be printed at the time of the transaction or delivered later by the post office.

The French formula includes a widespread network, low cost user friendly terminals with direct system access, a billing system that meters individual use, and provides incentives to information suppliers.⁹

The U.S. government should form partnerships with private sector service providers to provide services as universal as today's telephone. Using the French model, both government and business services would be accessible. These partnerships will allow the Federal Government to provide additional services at less cost. For example, in 185 U.S. Post Offices nationwide a services kiosk known as "Postal Buddy" is in place. This service dispenses stamps, provides change of address cards, and other services. This kiosk service was funded jointly by the U.S. Postal Service and private industry.¹⁰

Need for Change

The growth in the number of government services provided and in the number of recipients of government services make it imperative for government to vastly simplify citizen access to services. In a time of constrained resources, new and innovative techniques must be developed to enable access to these services. Information technology can be used to speed access, integrate services, and produce significant cost savings. The use of information technology has become a part of mainstream business practices. Thus, a steady stream of innovations for delivering customer services is expected by the public.

Citizen access to federal government services is uncoordinated and not customer friendly. Individuals must frequently contend with several different organizations and processes in order to complete a single transaction. In turn, the federal government expends an inordinate amount of resources to complete actions. In order to be provided service, a customer must know who to contact and how to contact that organization. Government has not made public access to it easy. Information technologies may be employed to reduce the complexities that citizens face and consolidate actions required for providing services.

Presently there are several organizations that are recommending (to different

Hundreds of thousands of scientific software programs have been downloaded from the National Center for Supercomputer Applications at the University of Illinois.

Agencies like the National Science Foundation (NSF) and the National Institutes of Health (NIH) place their program announcements and various documents in an easily searchable and retrievable form on the Internet. NSF's Science and Technology Information Service is accessed nearly 10,000 times each week for information about NSF activities, funding opportunities, abstracts about research grants, and a variety of reports about science and technology. Access is easy to use and is provided at no charge.

Planning is underway to place a collection of government databases administered by the National Technical Information Service on the Internet. These databases are presently available on a dial up basis.

The Clinton administration has established Internet mailboxes for the President and the Vice President (e.g., president@whitehouse.gov) for direct electronic mail access by the citizen. The House of Representatives has a pilot project underway to provide public e-mail to seven congressmen, and the Senate is expected to announce a similar program shortly. If successful, all members of Congress will eventually be accessible through the Internet.

Partnering with industry. Most of the new information technology initiatives have roots in the private sector. It is the private sector, not government, that is usually first to adapt new information technologies to improve customer service. Government should partner with industry to develop and implement ideas on how to use information technology to provide new and better services.

One example of government and industry working cooperatively to provide services is France's Minitel system. In the early 1980s, the French Government opened its telephone network in order to provide a wide range of services.⁸ Minitel service is routinely used in homes and businesses. It includes online retrieval services, credit reporting services, airline reservations, telephone directories, and government information. The French Government provided the infrastructure (telephone system) while private industry provided the services.

of simple "Yellow Pages" databases of federal programs, and automated links to the information and services providers. Customer access to this one-stop service shop should be available through a variety of means. Access methods should include telephone, information kiosk, and other appropriate methods such as personal home computers. A draft strategic plan for development and implementation of the one-stop service shop should be completed by July 1, 1994. This one-stop shop should include access not only to information (e.g, how to apply for a program) but the capability to process information (e.g. ability to accept an application on-line from the user).

Significant applications developed by individual agencies or organizations should be directed to this team for informational purposes. The team will then determine whether those initiatives may be appropriate for government-wide application. Recommendations from private industry and public sector organizations should also be forwarded to this team.

2. Implement an integrated government-wide one-stop "800" calling service. (2)

The "Customer Service Improvement" team will lead this effort. An implementation plan for this should be developed by July 1, 1994. The intent is for a customer to be able to call up a single number (e.g., 1-800-FED-GOVT) and then have their call routed to the appropriate agency and official. This "800" service should supplement a telephone network of individual agency "800" numbers. Customers who do not know what agency (or number) to call may call this federal government-wide "operator," otherwise they will contact the agency directly. As a first step, implementation plans for those agencies which currently do not offer "800" calling services should be developed by January 1, 1994.

3. Implement an integrated government-wide one-stop service shop kiosk based on the SSA\VA\USPS initiative. (2)

The "Customer Service Improvement" team will coordinate the development and

government entities) ideas for employing information technology government-wide to improve services, for example:

- The Service to the Citizen Intergovernmental Task Force - "Develop one-stop, easy citizen access to information."¹¹
- The National Academy of Public Administration - "Provide electronic access to government services."¹²
- The program on Strategic Computing and Telecommunications in the Public Sector - "Replace face-to-face services with teleservice and self-service, where feasible."¹³

These organizations are but three of many who are organized and committed to improving government. In particular, they advocate that the increased usage of information technology is one key to improving customer service. However, as similar as their recommendations may be, the suggested implementations are dissimilar. There is no lead agency/organization which can act to coordinate the implementations of customer service initiatives, no matter how advanced the plans. An authoritative charter is needed to trigger progress.

Recommendations

1. **Coordinate, recommend, and implement information technology initiatives to improve customer service.** (2)

An interagency team should be chartered to coordinate, recommend, and implement information technology initiatives to improve customer service. OMB should work with this interagency team to develop funding strategies.

This "Customer Service Improvement" team should be chartered by OMB/OIRA by January 1, 1994. An existing interagency team, the Service to the Citizen Intergovernmental Task Force, may be appropriate for this role. As one of its first tasks, this team should develop and test an integrated government-wide "one-stop service shop." This would consist

implementation of this one-stop service shop kiosk. A preliminary implementation plan should be developed by July 1, 1994.

4. Implement an integrated government-wide one-stop electronic bulletin board system. (2)

The "Customer Service Improvement" team will coordinate and develop the one-stop electronic bulletin board system (BBS) in conjunction with the agencies. A preliminary implementation plan should be developed by July 1, 1994. This BBS should enable customer access from a personal computer and then via a menuing system access to services and databases government-wide.

5. The "Customer Service Improvement" team should work with private industry to form strategic partnerships to advance the implementations of technologies that provide citizen access to government services. (2)

This team should also actively encourage private sector investment in technologies that will enhance public access to the government. Access methods examined should provide all the informational and many of the application uses that kiosk access would provide.

Fiscal Implications

To be determined.

Cross-References to Other NPR Issues:

Improving Customer Service

State and Local Delivery Systems

IT04: ESTABLISH A NATIONAL LAW ENFORCEMENT/PUBLIC SAFETY NETWORK.

Background

Whether the situation is the Air Florida crash in Washington, D.C., natural disasters such as hurricane Andrew, the flooding in the Midwest, counter-drug operations in cities or along U.S. borders, aircraft and ground force search and rescue or interdiction activities - all require coordination between the federal, state, and local law enforcement and public safety communities. The effective utilization of the limited law enforcement resources is vital to the safety and well being of the citizenry. All law enforcement depends heavily on the use of tactical land mobile radio systems for command, control and coordination. A critical requirement that is severely limited today in law enforcement and public safety operations is the interoperability of telecommunications systems.

Interoperability is difficult to achieve because federal, state and local law enforcement agencies operate in different parts of the radio spectrum, often using different techniques to achieve spectrum efficiency. Complicating this problem is the lack of security on most systems, leaving them open to interception and monitoring by private citizens, criminal elements, and terrorist organizations. When security is applied to the radio systems, as is done with many federal radio systems, interoperability depends on having the correct encryption key to communicate.

Need for Change

The ideal law enforcement/public safety wireless network would operate in the same frequency band, be secure, spectrally efficient, and use standard equipment. The frequency spectrum is a natural resource. As such, the federal government must allocate this resource efficiently to accommodate applications ranging from high definition television to radar

End Notes

1. Public Law 103-40.
2. The Program on Strategic Computing and Telecommunications in the Public Sector, John F. Kennedy School of Government, "Service to the Citizen: Information technology and customer service excellence in government," Harvard University, May 1993, p. 83. (Draft.)
3. Social Security Administration, "SSA Strategic Priority Tactical Plan, Fiscal Year 1993 - Smart Machines - (Other User Friendly Machines) - KIOSK," p. 6.
4. *ibid.*, pp. 3-13.
5. Phillip Dulaney, Office of Telecommunications, Social Security Administration, July 21, 1993.
6. Shirley Marshall, Public Sector Industry Marketing, IBM Corporation, June 1, 1993.
7. State of Iowa. **[to be provided]**
8. Wallys W. Conhaim, "Maturing French Videotext Becomes Key International Business Tool," *Information Today*, vol. 9, no. 1 (January 1992), p.28.
9. Donald T. Hawkins, "Lessons From the Videotext School of Hard Knocks," *ONLINE*, vol. 15, no. 1 (January 1991), p. 87.
10. Charles Chamberlain, United States Postal Service, July 29, 1993.
11. Service to the Citizen Intergovernmental Task Force, "Report of the First Service to the Citizen Conference, Richmond, Virginia, June 1993," Washington, D.C., July 1993, p. 4. (Draft)
12. National Academy of Public Administration, *The Information Government: National agenda for improving government through information technology*, -Washington, D.C., July 1993, p.14.
13. The Program on Strategic Computing and Telecommunications in the Public Sector, John F. Kennedy School of Government, "Service to the Citizen: Information technology and customer service excellence in government," Harvard University, May 1993, p. v. (Draft.)

quality of service advantages.

Recommendations

1. **The President should direct, by Executive Order, that a national law enforcement/public safety network be established for use by federal, state, and local governments.** (2)

Capitalizing on this window of opportunity to implement a coordinated, interoperable federal, state and local government tactical law enforcement system, the focus should be on standards and methods to ensure interoperability. This network approach would include not only law enforcement entities but the Federal Emergency Management Agency (FEMA) and state and local disaster entities including the State National Guard.

2. **The Agency Heads of the Treasury and Justice Departments should co-sign a Memorandum of Understanding (MOU) which formalizes the Federal Law Enforcement Wireless Users Group (FLEWUG).** (1)

The MOU should be signed by November 1, 1993. The MOU must define the charter and membership of the Working Group and include, at a minimum, representation from all Justice and Treasury law enforcement bureaus, with participation from other federal, state, and local law enforcement and public safety entities. The Working Group should be assigned responsibility to work with OMB and NTIA to further define the cost/benefits and develop an implementation plan for the national law enforcement/public safety network to cover the next ten years.

Current budget conditions make it critical that the federal law enforcement and disaster response agencies coordinate the transition to digital, narrowband systems. Only through a coordinated approach will the cost savings be realized and the serious interoperability problems

consistent with evolving technology to preserve this natural resource.

The National Telecommunications and Information Administration (NTIA) has mandated that federal radio users begin the transition to more spectrally efficient (digital narrowband) radio systems beginning in 1995.¹⁴ The Federal Communications Commission (FCC) is currently addressing this same issue applicable to state and local law enforcement and public safety. The Association of Public Safety Communications Officers (APCO) is sponsoring a federal, state, local, and industry effort to develop technical standards for the next generation narrow-band digital radio systems (APCO Project 25).

The Treasury and Justice Departments have formed a Federal Law Enforcement Wireless Users Group (FLEWUG) to plan and coordinate future, shared-use wireless telecommunications systems and resources. The Communications Interoperability Working Group (CIWG), consisting of representatives from Department of Defense, Coast Guard and federal law enforcement agencies, under the auspices of the Office of National Drug Control Policy (ONDCP), has been successful in defining minimum baseline requirements for current, secure interoperable federal radio systems. These cooperative efforts by the agencies are indicative of the recognition of the need for coordination and interoperability of tactical telecommunications systems.

There is an exciting opportunity to address these complex issues and save considerable dollars by creating a National Law Enforcement/Public Safety Wireless Network. Over the next ten to fifteen years all federal government radio systems will be replaced with digital technology. If this is done on an agency-by-agency basis, as was done in the past, the cost will be enormous and the same inability to interoperate will recur with resulting costly redundancies in equipment and staffing.

These new technological advances will permit the deployment of intelligent radio systems that are more feature enhanced, spectrally efficient, and secure. Interoperability will be accomplished while connection of the radio system to other fixed networks will improve the flow of information, such as fingerprints, mug shots or criminal records to the uniformed officer or special agent on the street. A consolidated approach will result in numerous cost and

considered to expand the network nationwide. The total costs would be several billion dollars less than past practices wherein every agency built separate networks.

[More detailed costs being developed..]

of the past be overcome. The FLEWUG has been functioning as an informal users group for several months. However, as an informal group, it is not feasible to coordinate the efforts of such a widespread, diverse community. The liaison with the state and local law enforcement and disaster agencies should begin immediately after completion of the MOU.

Responsibility must be clearly defined since the issue of which agency or activity funds and controls the network will be a point of contention. Establishment and use of the network must be handled at the highest level to avoid "turf" conflicts and to focus on goals, roles, methods and relationships.

Fiscal Implications

There is potential for billions in cost savings over the next five years with this option. The present practice of each federal law enforcement agency establishing independent radio networks results in multiple systems established in the same geographical area. Presently, every federal, state, and local law enforcement agency operates separate tactical networks in every metropolitan area in the country. Oftentimes, there are several independent network control centers operating within the same federal building with no interoperation. This is an expensive duplication of effort. It prevents the use of spectrally efficient equipment and results in less than optimum coverage for many agencies. In addition, technical and administrative support is also duplicated throughout the federal government.

Providing an option for state and local governments to use the system would benefit many fiscally stressed state and local governments who might like to enhance their capabilities, such as the addition of mobile data, but lack funding. Under this option the federal government would fund all costs associated with the backbone network and the state and local governments would fund their respective mobile and portable equipment.

Funding sources that could be considered with legislation are the Treasury and Justice Department Asset Forfeiture Funds and funds allocated to the Office of National Drug Control Policy. Following initial start-up funding from these sources, agency base funds could be

IT05: PROVIDE INTERGOVERNMENTAL TAX FILING, REPORTING AND PAYMENTS PROCESSING

Background

The American taxpayer today prepares financial data for a variety of reasons including the reporting and filing of information for tax purposes. This information is prepared separately for each of the federal, state, and local governments. While in some cases, the base level information required by the Internal Revenue Service (IRS) is used by the states, the filing form or information input follow separate and distinct paths.

Efficient business practices require that a framework for a "single information flow" be developed based on the premise that once data is entered, it serves the needs of the enterprise. This enterprise could be defined as all federal, state, and local government agencies that require the same data from a reporting source. For example, corporations or small businesses would report employee wages and withholdings to a single government access point. Upon receipt by the agency, the data could be used, at the taxpayer's request, to update the appropriate records held by Social Security, IRS, Veteran Affairs, state agencies, et al. This approach is but one of a series of steps toward a virtual agency and the one-stop shop concept.

The IRS's annual operating budget for fiscal year 1992 was \$6.7 billion to collect \$1.12 trillion in revenues. To collect these revenues, IRS processed 1 billion tax information documents and 204 million tax returns.¹⁵ The federal, state, and local aggregated collection costs are unknown due to the many types of taxes levied and the circuitous filing paths for taxes such as sales, real estate, property, income, and payroll. Innovative approaches to tax collection could lower overhead costs significantly and simultaneously improve customer service by reducing the burdensome, redundant filing techniques used today.

Cross-References to Other NPR Issues

None

1. Integrate government financial filings, reporting, and payments processing.

(2,3)

An Executive Order should be issued to the Department of the Treasury to initiate the planning needed to integrate financial filings, reporting, and payments processing by January 1, 1994.

To fully implement joint electronic filing of federal, state, and local tax returns, enabling legislation is required authorizing the IRS to disclose the tax data to the states. Without this legislation, the citizen would have to submit the tax data twice, once for the IRS and once for the state of residence. Even though citizens are taking advantage of joint federal/state electronic filing in several states, the electronic data must be transmitted at least twice. Separate federal and state tax filings defeat the purpose of trying to eliminate duplication and make government more efficient.

In order to make electronic filing efficient, a digital signature standard¹⁶ that can stand on its technical merits in a judicial court challenge must be adopted. Presently, when citizens file returns electronically, they are required to sign and mail a paper certificate to the IRS to be matched with the electronic return. The issue of electronic signatures goes far beyond the IRS to government agencies at all levels and the private sector as well. The Privacy and Security section of this report discusses this issue in greater detail.

To protect the privacy and confidentiality of individuals and corporations, a method of electronic authentication must be employed. Without these safeguards,¹⁷ public acceptance concerning privacy and governmental concern for data integrity would remain a problem. Enabling legislation for the IRS to accept payments via credit or debit cards has been introduced.¹⁸

This program should be piloted by IRS, to prove the concepts and quantify the benefits not only to the citizen for enhanced governmental services, but to the governmental process at large. A network such as Treasury's Consolidated Data Network (CDN) and its successor, the Treasury Communications System (TCS) could provide an evolutionary,

Need for Change

Federal, state and local government policies should foster close, cooperative intergovernmental and interagency relationships that eliminate unnecessary duplication of effort and promote enhanced citizen access to information and services. Joint electronic filing of financial data is perhaps one of the best examples of an application that embodies this policy.

For a large number of taxpayers, tax information is already known by the IRS prior to the annual filing by taxpayers. Financial institutions, businesses and others report comprehensive financial information to the IRS. Reported information about individuals includes wages, interest earned on accounts, certain financial transactions and other related data required for tax purposes.

While the Internal Revenue Service (IRS) is embarking on a comprehensive tax modernization program, many of the processes to be automated remain unchanged. Although many of the IRS automation projects will significantly lower the cost of filing, auditing and processing annual income tax data, re-engineering must be a vital part of the overall modernization strategy including the integration of state and local government requirements where possible. IRS, to successfully implement the multi-billion dollar tax modernization program must re-examine two aspects of the overall program. These aspects are: (1) Identify the processes that should be validated, re-engineered and automated or eliminated; and (2) Examine and determine what changes in the tax code would be necessary to enable new ways to collect taxes including the elimination of filing of routine tax returns. Item 1 is an agency business process now underway. The second item goes to the heart of the Tax Code itself which should be examined to seek new ways to lower the overhead of assessing and collecting taxes.

Recommendation

taxpayer would confirm that tax computations are accurate and then settle his/her account electronically by either paying taxes due by a credit or ATM card or by directing the refund to a designated account using electronic funds transfer. At any time during the year, the taxpayer would have the ability to determine if withholdings track with projected year-end tax obligations.

Cross-References to Other NPR Issues

None

migration path to full implementation minimizing the incremental costs.

An intergovernmental, single information flow concept for tax filing, reporting and payment processing will provide a seamless government for the benefit of the taxpayer. Technology is present that will enable the concept. Cultural issues and institutional resistance remain a problem at all levels of government--federal, state and local.

One possible scenario might be that the citizen goes to a user friendly electronic government services kiosk, or would use a personal home computer, to file tax return information with the IRS, including appropriate data the states may require. The data would be transmitted to an IRS service center to be processed, verified for accuracy, and then forwarded to the states, thus meeting the filing requirements of both entities in one step. This approach could readily be expanded to include the joint auditing of financial data and the joint collection of taxes--the genesis of a virtual tax financial data agency for business and individuals.

Disclosure, Digital Signature Standards and Privacy considerations related to this recommendation are covered under issue IT-11 in this report.

2. Determine ways to eliminate the need for filing routine tax returns. (2,3)

An Executive Order should be issued to the Department of the Treasury to determine ways to eliminate the need for filing of routine tax returns by January 1, 1994.

The entire IRS filing process could be re-engineered to be less paper-intensive. Most of the required financial information is already reported by business and financial institutions to the IRS. Taxpayers would only be required to file exceptions to the norm e.g., unreported income or transactions, unusual deductions, etc. An annual closing statement could then be prepared and provided electronically to the taxpayer for review, validation, and acceptance or reconciliation.

In this case, the taxpayer could also access the IRS data files on the same basis as the scenario listed in recommendation one above but the objective would be different. The

IT06: ESTABLISH AN INTERNATIONAL TRADE DATA SYSTEM**Background**

The United States is competing in a global economy. The vast amount of trade data is used by over 40 government agencies, for the enforcement of compliance with trade and contraband statutes. The U.S. Customs Service has produced a computer system that collects complete trade data on 95 percent of current import transactions; facilitates the movement of goods by means of electronic releases; and interacts with more than 1,500 trade participants.

Customs has established information sharing capability with some agencies, such as Fish and Wildlife, Food and Drug Administration, Internal Revenue Service, and the Department of Transportation. Work is in process to develop data exchange capabilities with Food Safety Inspection Service, the Environmental Protection Agency, and the Bureau of Alcohol, Tobacco and Firearms.

Additionally, data exchange capability exists with some foreign governments, such as Canada and Singapore, for trade statistics and visa verification. Canada, Mexico, and the United States are developing ways to develop uniform trade documentation and procedures among the three countries.

The Customs service system maintains 855 million trade records. Transactions are processed at a rate of 600,000 per day.¹⁹

Need for Change

Federal trade agencies must have access to trade data rapidly and accurately not only to enforce compliance with existing laws and to account for revenues, but also to compete effectively in a global marketplace. The existence of a reliable and easily accessible source of trade information would streamline the trading process, eliminate duplication and

End Notes

14. [to be provided]

15. IRS Annual Report, 1992, pp. 3,4,12.

16. The Digital Signature Standard (DSS-DSA) for further information see IT11: Privacy and Security of this report.

17. For further information see IT11 "Privacy and Security" of this report.

18. HR 13 - Introduced in January, 1993.

Treasury to begin the development of a International Trade System by October 1, 1993.

This project would be accomplished by establishing an inclusive database for the collection and dissemination of all international trade data through the expansion and redesign of the Customs Automated Commercial System. Furthermore, to implement the recommendation, the Customs Service must continue the development and implementation of the Future Automated Commercial Environment Team (FACET). This team is responsible for the development of a system design for a commercial environment that will reflect the future needs of the U.S. Government and the trade community.

Fiscal Implications

A cost savings study has yet to be performed. However, initial budget outlay projections by the Customs Service indicate that approximately \$250 million are needed to enhance and improve the system over the first five years.²⁰ Savings are anticipated through the elimination of duplicative data collection and reports as well as enhanced financial controls. Additionally, the business community will benefit through a savings in time (and money) by a simplified trade process.

Cross-References to Other NPR Issues

None

unnecessary reporting (three million redundant forms would be eliminated annually), and enhance American competitiveness in the international marketplace. Financial controls are essential.

Government agencies do not stand alone in the need for accurate trade data. These agencies need to provide or make available selected trade information to partners of the United States. These partnerships include the trade community (brokers, importers, exporters), the transportation data community (Bureau of Transportation Statistics), carriers, freight forwarders, couriers, and foreign governments. Furthermore, the existing system within Customs is limited in its ability to provide a single communications network linking the numerous law enforcement agencies responsible for guarding against money laundering, the export of controlled high technology, and the importation of narcotics, hazardous waste, and other contraband.

An International Trade Data System, an expansion of the current U.S. Customs Service system, is needed to provide the following enhancements:

- accurate trade statistics and data
- standardization of both import and export data collection
- reduction of government and trade community processing time and costs
- knowledge to promote informed compliance with trade statutes
- elimination of duplication and unnecessary reporting
- enhanced fraud detection capabilities
- improved financial controls

Recommendations

1. **Develop and implement a U.S. Government International Trade Data System.** (2)

The President, by Executive Order, should direct the U. S. Department of the

IT07: CREATE A NATIONAL ENVIRONMENTAL DATA INDEX**Background**

Environmental data and related information are created by several federal agencies. For example, the Department of Interior has databases developed from biological surveys; the Environmental Protection Agency (EPA) collects information through the Environmental Monitoring and Assessment Program (EMAP); the National Aeronautics and Space Administration (NASA) collects data from Earth Observing System (EOS) instruments; and the National Oceanic and Atmospheric Administration (NOAA) collects data from vast ocean, atmosphere, and geophysical systems. The data collected from the various observing systems are usually acquired for a particular purpose, but frequently have multiple uses, such as the use of weather data to investigate global climate change.

Innovative use of this available environmental data through integrated data analysis and interpretation would be facilitated by knowing what information is available and the source. There are many potential government and non-government users of these databases in addition to the agency collecting the data. Among these users are the general public, the business community, and researchers and government policy makers concerned about the global environment.

The nation's investment in environmental data collection is very high. Satellite observing systems cost billions of dollars. Similar high dollar amounts are invested in observing systems on the ground, in the upper atmosphere, and at sea.

Need for Change

In spite of the amount of dollars invested in the observing systems, it is difficult for a user to find out what data exists, where it is located, and how to gain access. For example, ocean temperature data is critical to the study of climate, but there is no central

End Notes

19. 1992 Customs Annual Report

20. [to be provided]

Costs are associated with the potential upgrading of existing telecommunication systems. Most agencies are already building an agency specific data directory or index. This recommendation requires that the data systems be made available through cross-agency coordination. Availability of data will assist in major environmental policy decisions that affect the U.S. and the world.

Cross-References to Other NPR Issues

Commerce/SBA Team

focal point where researchers can determine where the primary data is located and where related data resides for correlation. At least four agencies and ten data centers are involved in holding and archiving environment data.²¹

Recommendations

1. Organize the implementation of a national environmental data index. (1)

By December 1, 1993, the President, by Executive Order, should direct the U.S. Department of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), to organize the implementation of a national environmental data index. NOAA, as the major holder of federal environmental data, is a focal point for federal environmental databases. Additionally, NOAA should determine the frequency and method of updating the databases for the national environmental data index. To implement the index, each agency would provide descriptions of their databases to NOAA. This description should include items such as type of data held, geographical area, data elements available, access arrangements including methods for automating access. The purpose of this index is to coordinate the development and use of environmental data gathered by government agencies. Since most agencies are currently developing separate indexes, integrating the information into a common system should not be a major problem. By using electronic data interchange, users requiring the data would benefit from easy location and access to the data. This index would allow citizens, private industry and academia to locate and access needed information.

The creation of a unified environmental data index will result in substantial progress toward making environmental data acquired by the government available to the many users that require or desire the data.

Fiscal Implications

IT08: ESTABLISH AN INTEGRATED GEOGRAPHIC INFORMATION SYSTEM

Background

A geographic information system (GIS) is a computer system capable of assembling, storing, manipulating, and displaying geographically referenced information (i.e., data identified according to location). For example, Alhambra and Irvine, California, have developed geographic or map databases. Within the database are geographic features, such as streets, property boundaries, parks, and police reporting districts. Also included are attribute information related to these features. For example, for a feature "school," the attributes might be the school address, phone number, school hours, and the principal's name. A GIS can also provide the means for a user to combine information from both the attribute and the geographic databases to answer questions. Users of this type of database, or similar ones containing other geographic characteristics, may be city planners, city maintenance crews, permits and licensing staff, utility companies, or anyone needing an accurate base map with an unlimited number of overlay maps.¹ GIS developers consider a complete system to include the operating personnel, procedures, and the data that go into the system.

GIS technology can be used for scientific investigations, resource management, and development planning. The primary element of GIS is source data containing the locations of various features. Locations may be described by x, y and z coordinates of longitude, latitude and elevation, or by systems such as ZIP codes, or highway mile markers. Any variable that can be located spatially can be fed into a GIS.²

Geographic data and their relationships are useful for aiding decision making. There is a need for access to accurate and timely geographic data and the ability to integrate, model, and analyze information, whether the data are addresses for building permits, welfare recipients, or zoning; or emergency preparedness or response for environmental

End Notes

1. NPR issue paper - Commerce/SBA Team

within the private sector to communicate what geographic data are available and what data are needed, to access existing geographic data at minimal cost and effort, and to coordinate data collection efforts. It is intended that the NSDI will link geographic data users and producers via electronic networks and foster shared use of technology and geographic data for decision making among federal, state and local levels of government and within the private sector.

Although the creation of a NSDI is underway, there is a need to define roles and responsibilities, standards and authorities. By creating this cooperative framework, it will facilitate a public-private partnership to identify, collect, and maintain processes associated with creating accurate, complete, accessible and non-redundant geographic data. Initiatives already in progress address the establishment of a data clearinghouse which provides the ability to search, query, and document existing geographic data at user and producer sites.

Recommendations

1. **The National Spatial Data Infrastructure (NSDI) participants' roles, responsibilities, and authorities should be defined.** (2)

The NSDI mission as well as the processes to acquire and work with partners must be defined by the Federal Geographic Data Committee (FGDC) by January 1, 1994,

2. **Establish partnership agreements with industry and state and local governments.** (2)

This partnering establishes the framework to resolve problems associated with using, accessing, and collecting geographic data. This can be achieved by the Federal Geographic Data Committee (FGDC) through use of Memoranda of Understanding (MOU) with state

compliance assessments.

Combined federal, state and local government expenditures for GIS technology tools and data capture are presently between \$7 and \$10 billion annually. This high expenditure has prompted groups such as Automated Mapping/Facilities Management International, Central Arizona Regional GIS Consortium, and the Federal Geographic Data Committee to examine ways of exchanging information and data for GIS use. Furthermore, many innovative spatial data applications have already been created. For example, the Command Tactical Information System, developed at Elmendorf Air Force Base in Alaska, provides information electronically for command-wide decision making. This information includes elements such as data on weather, equipment, flight tracks and map details.

Need for Change

Data collection is often duplicated at federal, state and local government levels and by the private sector. Moreover, different entities are often unaware of the existence of much needed data that are available from others. Even when specific spatial data are known to exist, non-standardized collection methods and incompatible data communications systems often restrict use by others.

Additionally, there is much to be gained by converting today's analog maps to digital, spatial (geographic) electronic data which depicts environmental, soil, agriculture, climate, geology, transportation, and urban development information. Current analog maps increase costs, lower the quality of data, and limit available information as well as the numbers of users.

To provide a geographic data framework, the government needs full implementation of a National Spatial Data Infrastructure (NSDI), as proposed by the Federal Geographic Data Committee (FGDC). The FGDC is a federal government interagency group of spatial data users and producers. The geographic data framework is needed to allow users and producers of geographic data across all levels of government and

cycle time, steps and pieces of paper handled.⁶ For example, an examination of the steps required by the manual process to obtain property ownership information provided the information needed to streamline the process with the help of automation. The result was a reduction of processing times from a 5 day maximum to 5 -10 minutes. Departments who need to view property records which were formerly paper-based and located in a different physical location now access GIS directly. All departments that access paper property records are assessing work flow changes and constructing their cost/benefit equation from integration of this and other applications of GIS workflow reengineering and integration. These benefits depend on being able to find, access, and share geographic data.

5. Develop federal policies on charging for services related to geographic data. (1)

The Federal Geographic Data Committee (FGDC) should develop federal policies on charging for services related to geographic data in accordance with OMB Circular A-130.

Dade County, Florida, for example, provides public access to GIS services, largely the making of maps, at an hourly rate of \$50. Occasionally, digital information is sold to those entities who have software capable of reading geographic data. The goal is to provide on-line public access, for a fee, to available GIS layers via a query based tool that runs on a personal computer.⁷

and local governments. MOU's should be prepared by June 30, 1994.

3. Begin conversion of geographic data from multiple sources to a single source and from analog to digital. (1)

By August 1, 1994, the National Spatial Data Infrastructure (NSDI) participants should begin conversion of geographic data from multiple sources to a single source and from analog to digital.

Data conversion, combined with partnership agreements, provides cost sharing opportunities and reduces duplicate efforts. For example, the City of Phoenix partnered with a utility company to share the cost of data conversion, and is working with two other utilities that service the city. Conversion costs saved to date, from public/private partnerships to convert elements of spatial data across selected thematic layers is about \$200,000 in this city alone.³ Partnering is already performed on the local level. The City of Providence, Rhode Island, partnered with the State and private industry to use GIS in determining where to locate its community health centers. Highest quality centers were expanded and service boundaries were redrawn to best serve citizens needs.⁴

4. Develop mechanisms to find, process, and share geographic data. (1)

By August 1, 1994, the Federal Geographic Data Committee (FGDC) should develop mechanisms to find, process, and share geographic data. State and local government should be encouraged to use workflow reengineering approaches. Reengineering to incorporate access to electronic geographic data into workflows and processes has yielded substantial savings. The City of Minneapolis saved approximately \$40 million in street design costs through integration of GIS into their design process.⁵

The City of Phoenix expects to save over \$100,000 in recurring costs from reducing

End Notes

1. W. Hanson, "GIS Updates Itself," *Government Technology*, vol. 6, no. 4 (April 1993).
2. U.S. Department of the Interior, U.S. Geological Survey, Geographic Information Systems brochure, 1991.
3. City of Phoenix project paper, May, 1993.
4. Thomas J. Anton, Brown University correspondence: Providence: Creating a Data System for Urban Strategic Planning, April, 1993.
5. City of Phoenix, PTI roadmap, Greg Binder.
6. City of Phoenix, Budget Decision Package, January, 1993.
7. Florida statute, s.119.07(1).

Fiscal Implications

Savings would result from cost avoidance when partnerships in data element conversion occurs. Additional savings result from reduced cycle time to locate data and a reduction in the number of processes and pieces of paper handled.

Cross-References to Other NPR Issues

None

across bureaucratic boundaries and across agencies. As such, it breaks down barriers to information sharing. Key information-sharing programs such as the global change initiative and the High Performance Computing and Communication Committee conduct much of their business of coordination and joint planning through the use of e-mail. Agencies also use e-mail for rapid interaction with contractors and clients outside of the government. Increasing, e-mail is being used for direct interaction among citizens and government officials. But more connections are needed - every Federal employee should be reachable by e-mail. However, much work needs to be done before this can happen - there are issues of standards and capability which must be worked through. Many agencies have electronic mail but few make it available throughout an agency or use it to maximum advantage. The Federal government as a whole has an often incompatible mix of systems. As the utility of linking internal systems together to carry out agency business became apparent (and linking agency internal systems with more global systems) several ad hoc inter-agency groups formed to examine various problems. However, none of these groups have authoritative charters to accomplish the myriad number of tasks that must be completed for the government to optimize e-mail use. For example, several pilot projects already exist for linking diverse e-mail systems across agencies.

In addition, the Federal Records Act (FRA) requires that agencies document their work regardless of the media that is used to transact official business. Because official agency business will be conducted over electronic mail systems, agencies must take steps to ensure that the recordkeeping requirements of the Federal Records Act (FRA) are met. The FRA defines "records" as:

all books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business... (44 USC 3301)

The Freedom of Information Act (FOIA) (5 USC 552) requires disclosure of Federal records when a request is received from the public, with certain exceptions. Any Federal

IT10: PLAN, DEMONSTRATE, AND PROVIDE GOVERNMENTWIDE E-MAIL**Background**

In 1969, the Advanced Research Projects Agency Network (Arpanet) was created so that researchers at universities and other facilities might share data and computational resources. A capability was later created for linking sites for communicating short text messages. Universities then connected their own internal systems to Arpanet creating the Internet. Today, this cooperative network of networks links millions of computers throughout the world in an information superhighway. Electronic mail (e-mail) has become an important strategic asset of industry and a growing market driver.

Workers in one part of the country (or the world) use the e-mail network to collaborate with colleagues in another part. The advantages of electronic mail are many. Besides the obvious boon of avoiding telephone tag and time zone dissonance, e-mail gives organizations flexibility. Managers can assemble teams by tapping the best people for the project without concern for their location, then disband them when the project is done. Electronic mail can also minimize the need for transfers or expensive temporary assignments. For example, 53 engineers at Digital Equipment Corporation - spread across Massachusetts, Arizona, Colorado, Singapore, and Germany - collaborated on a design project but had never met and had talked on the phone rarely. Digital estimates that this group finished its project one year sooner and needed 40 percent fewer people than a team assembled in one building.¹ E-mail is also cost effective. According to Hewlett-Packard's calculations, any two-page electronic mail message between any two HP employees worldwide averages US \$0.22; a letter averages \$0.51, and a fax averages \$1.66.²

Need for Change

Electronic mail is an enabling technology for innovation. It permits easy access

Office of Science and Technology Policy, Department Legislative Affairs and the White House Legislative Liaison Office. Pilots could also require the electronic transmission of selected documents between the Departments and the Executive Office of the President. Representative examples include: Congressional testimony, views letters on draft legislation, legislative proposals, and other documents which could be jointly prepared.

- (2) Develop and issue a Request for Information (RBI) to industry. The RBI will outline the challenges faced by the Federal government in its progress toward electronic mail interconnection and solicit possible technical solutions. The task force will evaluate industry responses and use this information to fulfill its other goals.
- (3) Analyze the current use of the Internet by federal agencies and its potential contribution to both near and long-term e-mail requirements. Coordinate proposals for improving mail interoperability with the High Performance Computing and Communications Initiative via the High Performance Computing and Communications Information Technology Subcommittee of the Federal Coordinating Committee for Science, Engineering, and Technology.
- (4) Develop a near-term (24 month) Program Plan, including financial and technical resource requirements, to assist agencies in improving their capabilities for electronic mail and electronic commerce.
- (5) Develop program options for long-term, governmentwide, electronic commerce.
- (6) Identify technical, administrative, and policy issues that need to be resolved.

2. **Issue a government-wide e-mail records management policy.** - (2)

In consultation with OMB and agencies, National Archives and Records Administration (NARA) should issue a government-wide e-mail records management policy by March 1, 1994. Some issues that NARA should consider in revising its policy should

record, as defined by the FRA, is subject to the FOIA. The FOIA may also apply to documents not considered records under the FRA (e.g. an individual's preliminary draft of a document, or office chronological files).

All agencies create "records" under the FRA and must comply with its requirements. Guidance for agencies in meeting this requirement is not adequate and should be strengthened and extended to reflect changes in records management, privacy, and computer security.

Recommendations

1. Improve electronic mail and messaging among federal agencies. (2)

The existing interagency task force established by OIRA to improve electronic mail and messaging among federal agencies should report by April 1, 1994. The Department of Health and Human Services (HHS) presently chairs an interagency working group, the E-mail Task Force, supported by the General Services Administration and the National Institute of Standards and Technology. As authorized by the Paperwork Reduction Act, OMB/OIRA is overseeing the task force's work and coordinating it with other initiatives. The task force is drawing expertise from existing inter-agency information technology groups such as the Federal Information Resources Management Policy Council, the FTS 2000 Interagency Management Council, and the High Performance Computing and Communications Information Technology Subcommittee of the Federal Coordinating Committee for Science, Engineering, and Technology. Six goals for this group include:

- (1) Identify support for, provide advice to, and evaluate the results of electronic mail pilots currently underway. These pilots include, but are not limited to: establishing electronic mail capabilities among horizontal inter-agency working groups such as Departmental Chiefs of Staff and the White House Cabinet Secretary, Departmental Science and Technology Advisors and the White House

should make clear who may use an agency's electronic mail system and what kinds of activities are authorized.

Cross-References to Other NPR Issues

None

include records management, privacy, security, and permissible use.

Records Management. Because official agency business will be conducted over electronic mail systems, agencies must take steps to ensure that the recordkeeping requirements of the FRA are met. Agencies should train employees as to what constitutes a record. If it is determined that electronic mail will not be used as the official record of an agency action, then employees should be instructed how to record official business which is transacted over the system. Agencies should also develop a system for identifying and discarding non-record material. Special consideration should be given to preserving the privacy of individuals whose unofficial personal messages may be commingled with Federal records.

Complying with the Privacy Act. The retrieving of records by an individual's name or other identifier triggers the access, amendment and due process rights of the Privacy Act. The confidentiality of information about individuals must be maintained when it is transmitted over the system by employees who work with Privacy Act. Also, access to an employee's electronic mail by an employer is a potentially contentious area that should be directly addressed. Choices range from treating all electronic mail as accessible at any time, to limiting access to particular circumstances when such access is necessary. In any case, it is important to notify the employee in advance what the rules are.

Security Considerations. Electronic mail systems also introduce security vulnerabilities which should be considered when systems are designed. The electronic link to external computers or electronic mail servers must prevent unauthorized access to sensitive information. E-mail systems should safeguard the identity of authors and not allow the ability to send mail in the name of someone else, or to alter mail before being resent, and should allow the ability to positively identify the sender and the recipient. Electronic mail systems must be protected from power outages and software failures, and backup systems should be available. Finally, users should be trained to exercise caution so as not to send or forward messages to persons who should not receive them.

Permissible Use. Sound management practice also suggests that agency policy

PART 3:
ESTABLISH SUPPORT MECHANISMS FOR THE
ELECTRONIC GOVERNMENT

End Notes

1. Tekla S. Perry and John Adam, "E-mail: Pervasive and Persuasive," *Institute of Electrical and Electronics Engineers* (October 1992), p. 24.
2. *ibid.*, p. 26

savings in the billions of dollars, there will be some initial start-up costs to start innovative interagency projects. Therefore, included are recommendations for financing pilot programs: the creation of a government-wide "venture capital" fund which would be initially seeded by taking a small percentage from existing agency IT budgets to avoid the need for new spending appropriations; multi-year funding of IT programs; and retention of savings from IT projects for reinvestment in new IT initiatives.

PART 3: ESTABLISH SUPPORT MECHANISMS FOR THE ELECTRONIC GOVERNMENT

The preceding sections discussed the implementation of an electronic government and the leadership required to direct its accomplishment. But vision and leadership are not sufficient to make electronic government a success. There are several other critical issues that need to be addressed.

An information "infrastructure" must be in place to support the implementations of the electronic government applications. This consists of the technologies necessary to allow information to flow smoothly, as well as the policies, procedures, and standards of operation that support electronic government applications. Recommendations for evolving the government's information infrastructure are included in the following sections.

An effective government information infrastructure will lead to complementary and cooperative "interagency" programs and an integration of databases among these programs. Therefore, the issues of privacy and security must be dealt with up front to assure proper controls are in place to guarantee the integrity, security, and privacy of the information the government maintains. The following sections of this report include many recommendations in this sensitive, vital area.

The government also needs to improve the way it buys information technology. The horror stories of government IT procurement are well known. Although specific recommendations are deferred to separate NPR reports- Reinventing Federal Procurement and Reinventing Support Functions, several concepts for IT procurement reform are identified as prerequisites to reinventions using IT.

The applications discussed in this report require the support and backing of federal, state, and local government as well as the IT industry. Therefore, several recommendations for incentives for rewarding federal managers and private sector contractors for innovations that result in successful re-engineering programs are identified.

Finally, although the recommendations contained in this report offer potential

not be experts in computer use. Computer interfaces based on graphics, icons, pen movements, and voice commands will open the access to the infrastructure beyond those users who are comfortable with the jargon of computing specialists.

- *Tools for interaction and collaboration.* The infrastructure can enable the sharing of ideas, expertise, and knowledge to enhance collaboration among coworkers. For example, the people drafting this report exchanged document text and suggested revisions via computer mail, making possible very short revision cycles.
- *Tools for Modeling and simulation.* Computer networks can provide access to models of complex processes, be they economic, or behavioral, and this capability can be exploited for evaluating “what if?” scenarios. Simulations are used to examine the potential consequences of global climate change, to train pilots to react to situations too dangerous to reproduce in real airplanes, and to train soldiers in the use of complex and dangerous weapons systems. These capabilities can be extended to program design and planning as well.

The computer and communications industry is in the midst of a period of rapid technological innovation producing a “continuous revolution” in information processing capabilities and products. Notable among these are: (1) vast price/performance decreases via advances in integrated circuit design and manufacturing, architecture, and software, (2) quantitative improvements in user friendliness and the automation of complex procedures, (3) enhanced interoperability among interconnected systems, and (4) universal access to networks by both wireless and land-line connections. At the same time, rapidly changing computing and communication industry structures are creating new integrated voice and data communications networks. These will provide the critical underlying structure for rapidly accessing and receiving information from assorted sources, rapidly coordinating actions, and sharing resources across diverse, geographically distributed organizations.

Elements of a nationwide information infrastructure are already being incorporated into baseline Federal, state, and local government operations, based on capabilities provided by the private sector. The federal government has in place contracts to take advantage of

IT10: ESTABLISH AN INFORMATION INFRASTRUCTURE**Background^{3,4}**

Electronic Government requires computer hardware, software and telecommunications equipment necessary to make the data flow smoothly across the nation's information highways, and the policies, procedures, and standards of operation that support operations. Practices and standards, for example, assure that newly acquired hardware and software are compatible with existing equipment and interoperable with other systems to which they must be linked. Security and privacy standards must assure adequate user protection and systems integrity.

An effective information infrastructure requires high levels of interoperation and integration, among diverse users. For example, a large enterprise might require high performance, high capacity and expensive technology, such as a fiber optic line leased from the phone company for a few thousand dollars per month. An individual, on the other hand, could link to the same information infrastructure, at lower capacity, lower performance and lower cost, via a residential telephone phone and a modem for as little as \$20 per month. Requirements for bandwidth and speed are based on the amount of information transmitted.

There are other components to the infrastructure in addition to access links. Infrastructure provides its users with the critical underlying technologies to support information and communication-intensive aspects of information-based work processes. For government work, these include the following:

- *Capabilities for Data acquisition, search, navigation, and retrieval.* The infrastructure has "services" that help users find what they need from the vast quantity of accessible information. Procedures for common requests can be captured and automated. More complex requests may require intelligent assistance from the software components of the infrastructure to help the user navigate through complex collections of databases.
- *Tools for interface and access.* The vast majority of users of the infrastructure will

connection to publicly available communications networks, such as Internet, Prodigy, and America On-line, as well as dial-up access to government-sponsored bulletin boards. Agencies must ensure that their formats for information storage and linkages for interconnection are compatible with these access methods.

Telecommuting is a potentially important application and part of the infrastructure. Concepts include working from home; or from facilities located at the outer edge of large metropolitan areas; dividing time between a regular office and a remote workplace; and combinations which involve using remote or roving workplaces.⁵ Recent action by Congress directs GSA to facilitate the development of three pilot federal telecommuting centers in Virginia and Maryland.⁶ Telecommunications to the base office will require high speed data links for work flow and video conferencing to promote office interactions, training, and business meetings. These inter-workplace telecommunications facilities will merge with the government-wide information infrastructure and the more widespread National Information Infrastructure thus blurring the workplace/home distinction.

State and local governments are moving forward on their own plans to create comprehensive information infrastructures. An excellent example of a statewide infrastructure is the Iowa Communications Network (ICN).⁷ It is envisioned as an advanced information network providing voice, data, and video information services to state and local agencies, libraries, local schools, community colleges, and universities within Iowa. The state has been coordinating its efforts with GSA, Treasury, the Department of Veterans Affairs, and US Postal Service to investigate how such a comprehensive network could be used to integrate the delivery of federal and state government services. They have been exploring how the network could support many of the electronic government applications outlined in the previous section. California, Texas, and North Carolina all have major initiatives underway working with local telecommunications carriers.

The Government Information Infrastructure (GII) strategy will be refined and improved in the future as the national strategy, vision, policies, and technology for the National Information Infrastructure emerges. Actions is needed now to insure the

existing telecommunications infrastructure, for voice, video, and some data communications services. The standard vehicles for agencies to acquire these services are the FTS2000 contracts awarded to AT&T and Sprint by the General Services Administration in 1988. The various services available under the present contract make it possible for a given agency to craft its own network services based on its own requirements.

FTS2000 provides the basic intercity telecommunications infrastructure for the federal government. The Internet is a basic data communications infrastructure for (computer-based) communications for some Federal agencies and much of the rest of the nation and the world. Loosely defined as all interconnected networks that use a particular open interconnection standard, TCP/IP, the Internet is a globe-spanning meta-network, connecting millions of computers and tens of millions of users. Over 17,000 networks are linked in 102 countries, and many of these networks contain thousands of computers. The Internet makes possible collaboration and resource sharing among hundreds of thousands of government workers, academics, educators, researchers, and a growing list of commercial organizations and services. Nearly half of the presently attached networks are non-academic in nature. It is a rapidly evolving testbed for new information-based services, like wide-area search and retrieval in distributed document databases. Private citizens and business can gain access to the Internet for as little as \$20/month. The Internet is a "common-ground" for linking governmental, academic, and commercial networks for electronic mail. All of the major commercial on-line information and electronic mail services (Prodigy, America On-Line, MCI, and AT&T) provide gateways to the Internet. Major segments of the US component of the Internet are funded by DOD, NSF, DOE NASA and other agencies which are involved with research and development programs.

Recent federal initiatives to make the access of government information in electronic form more readily available to the public, such as revised OMB Circular A-130 and the Government Printing Office Electronic Information Access Enhancement Act of 1993, will accelerate the need for electronic connections to the outside world for most agencies and the Congress. A wide variety of access methods will need to be supported, including

laboratories, universities, and the nation's information technology industry and in coordination with the nation's broader research and development initiatives (e.g., the National Information Infrastructure Initiative of the Federal High Performance Computing and Communications Program). The GII should make use of the emerging information infrastructure supplied by American industry. A key role that government can play is to require greater interoperability among government systems by focusing its procurement requirements on systems that can interoperate, and by working with industry to explore new applications independently of present regulatory barriers.

2. Consolidate and Modernize Government Data Processing. (2)

The Government Information Infrastructure Working Group, in cooperation with OMB/OIRA, should be directed by the President to develop in 12-months a government-wide data processing modernization plan, and OMB should manage its implementation. The plan should complement the working group's strategic IT vision for government resources; use the GII to implement wide spread sharing of IT resources among agencies; contain budget recommendations to support shared use of computing systems and networks; and provide a roadmap for reducing the number of data processing centers by a factor of 10 within two years following the plan's approval. OMB should review the plan to assure that these targets are met, and should require special justification of new requirements for stand-alone data processing installations. OMB/OIRA, in cooperation with the Government Information Infrastructure Working Group, should update and review the plan annually in conjunction with agency budget submissions. Additional opportunities for consolidation and downsizing should be proposed by the Government Information Infrastructure Working Group and incorporated into annual government data processing modernization plans. (The Department of Defense developed a consolidation and modernization plan, now being executed, which will consolidate over 1,000 data processing installations into 15 large efficient centers. Savings anticipated from this consolidation were estimated to be \$200

compatibility of intergovernmental systems.

Need for Change

The underlying technologies for the information infrastructure are evolving rapidly, and no one can accurately predict the technology of choice in the year 2000. Therefore, the government must develop a coherent technology policy with a coordinated investment strategy in research and development to incorporate new technologies and experiment with innovative applications.

The government must also develop a coherent information infrastructure to support electronic government. A cross-government, coordinated plan for infrastructure deployment, is needed to reduce duplication, system redundancy, and costs. A recommendation for securing this plan was described in the Leadership section of this report. Significant opportunities exist for sharing existing data and computing resources, improving the quality of service and decreasing costs. No single data center or a single communications network can serve all government information needs. The flexibility afforded by high capability networking and new computing technologies can however offer significant opportunities for cost savings by facility sharing and downsizing of local systems.

Recommendations

1. **Develop a Government Information Infrastructure (GII) for effectively using government information resources and supporting electronic government applications. (2)**

OMB/OIRA should coordinate the development of a GII which implements the strategic vision and policy directions of the Government Information Infrastructure Working Group. The GII should be pursued as a joint partnership between government, national

End Notes

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4. William J. Broad, "Doing Science on the Network: A Long Way from Gutenberg," The New York Times, (May 18, 1993), p. C1.

5. Department of Transportation, "Transportation Implications of Telecommuting," April 1993.

6. Public Law 102-393.

7. *op.cit.*, "Iowa Communications Study," 1993.

million, over fiscal years 1994-1999.

3. Consolidate and Standardize Government's "Basic Function" Applications. (2)

The Working Group on Government Information Infrastructure, in cooperation with OMB/OIRA, should be directed by the President to develop in 12-months a government-wide "basic function" applications consolidation and standardization plan. The plan should be submitted to the Director of OMB/OIRA for approval, and OMB should manage implementation of the plan. The plan should identify functionally similar applications which are presently implemented in needlessly incompatible ways, but could be standardized or shared among agencies. These presently include systems for electronic benefits transfer, payroll, personnel record-keeping, management information systems, financial accounting, and general ledger accounting. OMB should mandate consolidation and standardization of such applications systems for government-wide use, and propose an architecture that provides for wide-spread software and system sharing and interoperability but with reasonable flexibility to incorporate for agency-specific features. The plan should contain budget recommendations to encourage shared use of applications and the GII; and provide a roadmap for reducing the number of redundant or similar central application systems by a factor of 10 within two years following the plan's approval. OMB should review agency performance to assure that these targets are met. OMB/OIRA, in cooperation with the Government Information Infrastructure Working Group, should update and review the plan annually in conjunction with agency budget submissions.

Cross-References to Other NPR Issues

None

and analyze far more information, some it personal.

As electronic services and information systems in the government increase in number and have more widespread use (e.g., applications such as electronic benefits transfer and online informational databases) government and citizens will begin to demand more confidentiality and integrity in the information processed. Also, as government, private sector businesses, and organizations rely more on electronic records and information, they will also demand more access to diverse, interconnected databases. However, the increased use of information technology, although beneficial, can permit inappropriate, unauthorized, or illegal access to information.

In addition to accentuating traditional, known privacy and security challenges and vulnerabilities, new electronic government applications, particularly those focused on "service to the citizen programs," present non-traditional, accuracy, authentication, privacy, and security challenges and vulnerabilities. These challenges and vulnerabilities are both technical and policy related.^{10,11}

Although overcoming the technical challenges is straightforward, a tradeoff must be made between cost and risk. Nearly complete information technology based solutions and prototypes (cryptography, digital signatures, security protocols) for protecting distributed internetworked systems exist today. The implementation of these purely technical solutions to achieve full security should be weighed against all identifiable risks. Affordable, appropriate security can be achieved by employing a mixture of technological, personal, procedural, and physical measures.

Overcoming the political and policy challenges, however, is not straightforward. Prominent among these today is the appropriate role of the Federal government in privacy and security. Examples of particularly challenging policy issues include: balancing national security interests with private sector business interests, or maintaining a balance between individual privacy and government efficiency.

The vision for the future is simple. The American people want trusted, highly available information and computer systems that are secure, protect individual privacy, and

IT11: DEVELOP SYSTEMS AND MECHANISMS TO ENSURE PRIVACY AND SECURITY

Background

Automated Teller Machines (ATMs) are one of the most successful examples of using information technology to improve service. Viewed with skepticism at their initial introduction, they are now the principal means used to conduct routine banking transactions. Fundamental to their success is public confidence in trustworthiness of the electronic banking system. Indeed, the principal anxiety associated with ATMs is the fear of being mugged while making a withdrawal. Yet recently instances of a new type crime, a high tech mugging, have occurred using ATMs. Personal and access information has been stolen and used to make unauthorized withdrawals. In a recent Brooklyn, NY, case, crooks used a hidden video camera to look over the shoulder of people withdrawing money at ATMs. The camera recorded their personal identification numbers (PINs) and later matched them with discarded receipts to make unauthorized withdrawals. In another ATM caper, a bogus ATM machine was placed in a Connecticut mall. The bogus machine not only recorded hundreds of PINs, it also read the private account information stored on each ATM card. The bogus ATM machine returned cards to the unsuspecting owner and displayed a message indicating that the transaction could not be completed. These criminals later used the information to withdraw money. In both of these high-tech muggings, the crooks succeeded in stealing over \$100,000. These cases illustrate real money loss by exploiting system security vulnerabilities. However, they also illustrate the real potential for losing the public's confidence in electronic government.^{8,9}

Unless the information systems and electronic services delivery systems protect the information being processed and individual privacy, the electronic government just will not work. Government is beginning to use the explosive advances in information technology seen in the last decade to lower costs, increase efficiency and productivity, and collect use,

information. Privacy is a broad value representing concerns about autonomy, individuality, liberty, personal space, solitude, intimacy, anonymity, and a host of other factors valued in American society, yet its meaning, especially for policy purposes, is often unclear.

Although they like the added service and efficiency that easily accessible databases can provide, Americans are becoming increasingly concerned about threats to their personal privacy resulting from wider use of information technology to collect, maintain, and manipulate personal information. A Louis Harris and Associates poll conducted in 1990 showed that concern for personal privacy is at an all time high and rising.¹⁸ In 1970, a similar poll showed that only 33 percent were concerned about personal privacy.¹⁹ By 1978, the number had jumped by 31 points to 64 percent,²⁰ and by 1990 polls measured an additional jump of 14 points to 79 percent.²¹ Good customer service may come at a price. For example, credit bureaus are essential to modern commerce. Yet one such bureau, Equifax, and Lotus, a computer software company, announced a planned product, "Lotus MarketPlace: Households." It would have distributed for a fee, on inexpensive CD-ROM technology for personal computers, the names, addresses, marital status, sex, income bracket, dwelling type, purchasing habits, and other marketing or life style information on over 120 million consumers.^{22,23} The project was eventually canceled, but only after the project came under heavy criticism from privacy advocates and individuals concerned for their privacy.²⁴ Many other similar lists, however, are for sale in electronic form from different information brokers.

Although advancing technology, like personal computers and networks, can enable many new opportunities for misuse, it is not the culprit. The real culprit in most misuse cases is the lack of adequate management controls over those with access to personal records. For example, in a recently well publicized case, the U.S. Attorneys announced the arrest of over two dozen individuals who engaged in schemes to buy and sell information from Social Security Administration (SSA) computer files.²⁵ Most of those arrested in this case were current or former employees of the Social Security Administration or the Department of Health and Human Services' Office of Inspector General. They were caught

acceptable to the public, private sector, and government. These systems must:

- use technology solutions to safeguard information, facilities, information systems, and networks against unauthorized access, modification, or disclosure; illegal use; or sabotage;
- balance access to information and records among government record-keeping agencies with appropriate privacy controls;
- respect private ownership of information and provide appropriate policies and disclosure procedures for Government use of individual information; and
- incorporate privacy and security safeguards early in the design of the system.

Finally, as the nation develops information superhighways and expands the national information infrastructure, it should be designed and used within a framework which:

- protects national security interests,
- permits legitimate law enforcement activities,
- enhances global competitiveness and productivity for U.S. business and industry, and
- ensures the privacy and civil liberties of all citizens.^{12,13,14,15,16,17}

Need for Change

Public acceptance and reliance on electronic information and data requires:

- providing a high degree of security against unauthorized access or use and maintaining the accuracy of the information stored or processed, and
- striking the proper balance between an individual's personal privacy and an information-age government's information processes.

Need for Privacy. There are several reasons why the Federal Government needs to give increased attention to personal privacy in its operations, in particular the policies and practices for distinguishing between appropriate and inappropriate uses of personal

essential.

OMB estimates that by 2000 more than 75 percent of government's information or business transactions will be electronic.²⁹ The private sector already uses electronic transactions widely. One trillion dollars in world-wide banking and financial transactions occurs each day.³⁰ Yet, the best security systems in use today lose money, credit and financial reports, and private and proprietary data to electronically perpetrated theft and browsing. For example, in the U.S., computer crime losses alone total \$15 billion per year.³¹ These losses, however, are minor when compared to the potential losses from harmful and illegal acts including service disruption, terrorism, and industrial espionage. The cost could be billions for a single debilitating disruption of service or criminal act.

More than dollar losses are at stake. In distributed, electronic-based information systems, if access controls and security concerns are not addressed as government proceeds with reinvention, vulnerabilities to U.S. national security may be inadvertently created by making information readily available to foreign governments, competitors, or criminals.^{32,33} Finally, large scale service disruptions could adversely affect recipients of Federal benefits and information-based services of all kinds.

Recommendations

The following recommendations affect various stakeholder communities. These stakeholder communities include: the American people, Federal security community, U.S. Industry, Congress, judicial and law enforcement community, and civil libertarian organizations. The stakeholder community is large; a division between sensitive unclassified and classified information is statutorily mandated by the 1987 Computer Security Act (Public Law 100-235); within the classified communities, numerous bodies exist; and finally, there is a growing number of interfaces with public and business bodies. Consequently, numerous privacy and security boards, councils, or groups are already chartered. The following recommendations use these existing bodies for implementation.

selling social security earnings information from agency files to individuals known as information brokers. This case brought to the forefront that SSA employees in over 1300 offices all across the country have unrestricted access to over 130 million records on working Americans. These records contain information ranging from individual Social Security Numbers, to employer supplied information showing the amount of an individual's wages, to birth certificate information. SSA has experienced other, similar misuse. In another case investigated by SSA's Inspector General, social security number fraud was found.²⁶ A SSA employee had used Social Security Numbers queried from the SSA records to obtain and establish credit. In yet another case where policies and controls would have made a difference, the Justice Department through the U.S. Attorney's Office in Lexington, KY, sold surplus computers with disks that still contained sensitive, personal information about confidential informants and witnesses.²⁷

In addition, giving increased attention to personal privacy policies and procedures would allow the Federal Government to better represent American business interests abroad, particularly in Europe where privacy protection approaches differ from U.S. approaches.²⁸ Information, and the records associated with this information, is a global commodity, which readily flows between international borders. Trade conflicts and issues may arise for U.S. businesses when dealing with the privacy laws of other countries such as the restrictions implied by recent privacy laws advocated within the European Community for transborder flow of information.

As the shift to a more electronic Government progresses, the complexity and importance of ensuring individual privacy will require a government-wide vision and plan for privacy protection.

Need for Security. As society becomes more dependent on computers and computer communications systems for the conduct of business, government, and personal matters, it becomes more reliant on the availability, confidentiality and integrity of the information these systems process. Information security has become especially important for applications, such as electronic transactions, where accuracy, authentication, or secrecy are

The President should immediately direct the creation of an inter-agency task force under the auspices of OMB to create uniform privacy protection practices for information systems and generally accepted methods for implementing these practices which are applicable to Federal agencies and a model for private sector companies and organizations. The task force should include: (1) membership from key government organizations such as Treasury, Justice, Commerce, Defense, Energy, Health and Human Services, Education, State, OMB and the Office of Science and Technology Policy (OSTP); (2) representation from the Privacy Study Council; participation and input from sectors such as business, consumer, computer science, telecommunications, civil liberties, and state and local governments.

OMB should have a coordination and advisory role and the chair should be selected from the participating Federal agencies. The task force should be directed to prepare a report within 12 months following its creation that details uniform privacy protection practices and provides generally accepted methods for implementing these practices. Methods for implementing the uniform privacy protection practices may differ by sector, e.g., health care, personnel, or law enforcement. These practices and methods should be viewed as the recommended privacy standards Federal agencies will follow and the private sector will consider.

The direction to the task force should require that the generally accepted implementation methods aggressively use information technology, including use of distributed interconnected systems, and should effectively use technology to balance Government's responsibility to provide individuals a reasonable degree of control of information about themselves and appropriate confidentiality with government's desire for efficient and high quality record keeping; detection and prevention of fraud, waste, and abuse; and effective law enforcement investigations.

The President should further direct OMB to issue new guidance (e.g., a circular), within 6 months of receiving the task force's final report, that adopts and orders government-wide use of "uniform privacy protection practices" and generally accepted

Exceptions are the creation of two, near-term task forces to develop high priority, essential standards or generally acceptable principles needed for rapid progress in implementing an electronic government.

Privacy

1. Establish a Privacy Protection Board. (2, 3)

The President should immediately announce his intention to establish an independent Privacy Protection Board within the Executive Branch. Among the stakeholders, consensus exists on the need for a Privacy Protection Board, but consensus does not exist for key implementation issues such as membership, authority, powers, duties (including budget and legislative relationships), and staff size. Consequently, prior to establishing the Board, the President should empanel a 12-month Privacy Study Council to advise the President on these issues. Following receipt of the Privacy Study Council's recommendations, the President should issue an executive order creating the Privacy Protection Board.

The President's direction to the study council should clearly indicate that the Board would need to have statutory authority, and direct the Council to include draft legislation, as needed, to implement its recommendations. The Privacy Study Council shall have nine members, including chair, selected by the President. The Council shall be co-chaired by OMB and a representative from the private sector, shall have four members from stakeholder communities within the Federal Government, and shall have three members from stakeholder communities within the private sector. All members should be selected for their knowledge and expertise in privacy issues as they relate to government, law, civil rights and liberties, information technology, social sciences, or business practices.

2. Establish Uniform Privacy Protection Practices and Generally Acceptable Implementation Methods for these Practices. (2)

issued by April 1, 1994. More than one set of "generally acceptable principles" may be required for the affected major communities.

5. Develop a "national" crisis prevention and response team. (2)

By April 1, 1994, NIST, in coordination with OMB and NSA, should solidify the existing group of agency crisis response teams into a multi-agency, multidisciplinary, hierarchical "national crisis prevention and response team" to address security problems, including collection, analysis, technical vulnerability assessment, and disseminate information about incidents government-wide. This national hierarchical structure can be created by formalizing Memoranda of Agreement which facilitate networking and coordination among various existing, but independent, crisis response bodies.

6. Emphasize need for computer security in sensitive unclassified systems. (2)

OMB and NIST should: (1) improve planning capabilities for security by requiring an information security plan to be part of each agency's strategic IT plan; (2) identify computer security as a material weakness in the Federal Managers Financial Integrity Act report if it does not meet established thresholds; (3) require employees and contractors to complete awareness and training; (4) improve planning for contingencies; (5) establish and employ formal contingency response capabilities. These requirements should be included in future revisions to OMB Circular No. A-130, "Management of Federal Information Resources." to be issued no later than October 1, 1994.³⁴

7. Reevaluate security practices related to national security data. (2)

By October 1, 1994, the interagency "PRD 29 Task Force" chaired by the Information Security Oversight Office, the recently formed "Joint Security Commission"

implementation methods for implementing these practices.

Following completion of its report a relevant core of the task-force membership should be chartered by OMB as a permanent interagency advisory group to the Privacy Protection Board. The interagency advisory group should focus on interagency coordination; perpetual improvements to the uniform information practices; perpetual improvement of the implementation methods; reviewing, creating and advocating implementation methods; and advocating adoption of similar principles and methods within the private sector.

Security

3. **Develop standard encryption capabilities, such as digital signatures, for sensitive, unclassified data.** (2)

Commerce's National Institute of Standards and Technology (NIST), in coordination with OMB and with technical assistance from the National Security Agency (NSA) should issue a final Digital Signature Standard by October 21, 1994. NIST, in coordination with OMB and NSA, should develop the encryption capabilities required for protection of networked distributed systems and make that information available to the federal managers. A priority should be given to finalizing and promulgating Digital Encryption Standards and Security Protocol Standards.

4. **Develop generally accepted principles for information security.** (2)

NIST, in coordination with OMB and NSA, should plan and coordinate the development of "generally acceptable principles for security" which are to be applied in the use, protection, and design of government information and data systems, particularly front-line systems for electronically delivering service to citizens. Draft guidance should be

and standards organizations: continue to foster Government and industry liaison for developing security for Universal Personal Telecommunications capabilities, explore Universal Personal Telecommunications security architecture; continue participating in standards bodies to ensure National Security and Emergency Preparedness needs are addressed.

The development and issuance of appropriate Technical Information Bulletins for shared industry use which address security assessments of wireless access to commercial systems. The Office of the Manager of the National Communication System and the Federal Communications Commission, working cooperatively and voluntarily with public telecommunications services providers, should ensure such bulletins address assumed threats to the communications paths of monitoring/eavesdropping, traffic flow analysis, masquerading, information modification, and denial of service. The analyses and assessments required in developing such bulletins should be provided to and used during the development of the required security architecture(s).

Working with industry to cooperatively improve security, integrity, and availability of the public switched network (PSN) provided by the telecommunications carriers. The Office of the Manager of the National Communications System and industry, through the National Security Telecommunications Advisory Committee and its supporting groups, should foster: conducting vulnerability assessments, sharing lessons learned, identifying improvements in legislation to protect PSNs, developing security checklists, performing audits, reporting on vulnerability incidents, and research on telecommunications security areas.

9. Implement the National Industrial Security Program.

(2)

The Information Security Oversight Office (ISOO), currently in GSA, should aggressively continue to work with industrial organizations under contract with the Government to assure the protection of classified information while pursuing the reduction

and the National Advisory Group for Security Countermeasures should aggressively pursue the reevaluation of information security and information systems security practices, methodologies, procedures, dissemination, classification and safeguarding for the purposes of improving security within rapidly changing technological and threat environments, eliminating duplication, fostering national competitiveness, facilitating trust, and enhancing law enforcement. This reevaluation should be accomplished within the context of the Presidential Review Directives (PRDs) titled "National Security Information" and "Advanced Telecommunications and Encryption," as well as the Presidential Decision Directive (PDD) titled "Public Encryption Management" and should serve as the basis for a new executive order.

8. Foster the Industry-Government Partnership for Improving Services and Security in Public Telecommunications.³⁵ (2)

Since Government relies heavily on public telecommunications systems (e.g., about 90 percent of DoD's telecommunications are provided by public carriers), improved security, integrity, and assurance of services is crucial. Electronic government will rely even more heavily on public carrier telecommunications for services. Fostering this relationship includes:

The voluntary and cooperative development of a unified concept of operational security for Universal Personal Telecommunications. The Universal Personal Telecommunications concept provides personal telecommunications services regardless of location, terminal or network access point. For example, individuals are assigned a unique personal network number so that services may reach them anytime and anywhere in the network. Within this context, the standards community needs to address national security/emergency preparedness, priority, access, fraud and information privacy issues. It is recommended that the Office of the Manager of the National Communications System working through the National Security Telecommunications Advisory Committee (NSTAC)

The President should direct the Office of Science and Technology Policy's Federal Coordinating Council on Science, Engineering, and Technology (FCCSET) to coordinate for Federal R&D initiatives such as the National Information Infrastructure the development of a Government-wide plan for security R&D. The plan should be completed by October 1, 1994. It should provide a baseline assessment of the current R&D investment in privacy and security. The plan should address development and prototyping of the next generation of information systems within the context of appropriate, adequate security and individual privacy features. The plan should also describe a process for continuous technology improvement or advancement, which includes evolving basic research into technology development and prototyping initiatives followed by the introduction of mature features into operational systems. Finally, the plan should recommend prototyping experiments to accelerate use of new technologies in trusted systems and systems having individual privacy protection features.

Fiscal Implications

Cross-References to Other NPR Issues

None

of costs, redundant requirements and improving efficiency as described in Executive Order 12829, January 8, 1993, National Industrial Security Program (NISP).³⁶ ISOO along with the Secretary of Defense, Secretary of Energy and the Director of Central Intelligence should continue to cooperatively work with industry to implement the NISP. The following should be considered as a minimum: publication of a NISP Operating Manual; changes to the Federal Acquisition Regulations relative to NISP; develop cost collection and tracking mechanisms; develop government-wide standardized background investigation forms and processes, as appropriate; standardized policy on reciprocity of investigations and inspections; portability of security clearances across agencies; development of uniform, standardized training and education requirements for industry and associated curricula and competency evaluation for government industrial security representatives; and the implementation and enforcement of NISP standards.

10. Develop comprehensive Internet security plan. (2)

The Federal Networking Council, chaired by the National Science Foundation (NSF), should develop and promulgate a Federal Internet Umbrella Security Plan for interconnecting the Federal community with appropriate state, local, commercial, public and private, and foreign government activities. Such a global architecture should allow for security differences between networks. Use of layered protocol standards and techniques can be employed with a range or set of security service standards with appropriate "gateway" protection devices so that small restricted communities and large open communities can safely interoperate. The security architecture should identify, as a minimum, the grades of services offered, how each is implemented and assured, how interconnections between networks should be made, and what can be done for those users not adequately served by any of the agreed upon standard grades of service.

11. Coordinate Security Research and Development. (2)

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IT12: IMPROVE METHODS OF INFORMATION TECHNOLOGY ACQUISITION

Background

Most Americans are used to the annual model change in the automobile industry inspired in the 1930s by Alfred P. Sloan, Jr., of General Motors.³⁷ The extraordinarily rapid pace of technological change in information technology (IT) hardware and software creates the equivalent of three to five "model" changes each year.³⁸ The microprocessor - the engine of IT change - is an example of the exponential rate of change being experienced.³⁹ Despite this hectic pace of change, Federal government IT acquisition processes remain based on hierarchical bureaucratic approval processes and dollar thresholds established in the 1960s. In the 1960s, computer systems were costly, often complex, frequently custom-designed resources available only from a limited number of vendors. Similarly, application software was expensive; typically available only from a limited market dominated by a few vendors or developed by centralized, in-house personnel. The IT acquisition rules and regulations of this era were written, not unexpectedly, to encourage competition, control large dollar expenditures, and avoid waste when buying uniquely designed systems.

In addition, most government IT acquisition processes involve excessive layers of management oversight and regulatory rigidity which add to procurement costs by requiring vendor and government teams to remain in place for lengthy time periods and by ignoring the short technology lifecycle of many of the items being procured. It is not uncommon for the hardware and software ultimately delivered to a government agency to be immediately upgraded to stay current with commercial standards. An excessive part of the IT acquisition process is also devoted to obtaining approvals in advance of the actual IT procurement commencement. Existing agency standard authorization levels from the General Services Administration are far too low - currently \$2.5M. Even government VISA card levels are so low - \$500 in some agencies - as to preclude use of the credit cards to purchase even

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unusual marketplace success. In addition, IT product offering and price comparisons between different vendor's products are also difficult to make rapidly and easily when paper documents are utilized, thus reducing competition. The slow change process of the GSA schedule further mitigates against government agencies being able to take advantage of the often lower "street" prices for many IT products. Great effort is then frequently expended justifying going "off schedule" to obtain products desired at the lowest cost. Updating Federal government procurement processes for "off-the-shelf" and commodity-type IT products to dramatically shorten the IT acquisition process will result in substantial savings because government will buy in the same manner as many commercial firms and private citizens.

Finally, there are virtually no mechanisms which allow IT procurement officials and their staffs to see how IT acquisition process documentation and time delays represent real, quantifiable, costs. In addition, there are no accounting techniques in the government which would allow these costs to be reflected as a part of the total recorded cost of the IT goods or services being acquired.

The Need For Change

The basic "rules of the road" for IT acquisitions are found in Section 111 (commonly referred to as the "Brooks Act") of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 759). When originally passed, the only IT items being purchased were large, expensive, mainframe computer systems. Although computers are now more wide-spread in government offices than typewriters were twenty years ago and software is often published in the tens of thousands of copies and is shipped to users in shrink wrapped boxes, the same IT procurement rules and processes continue to be utilized. As a result, Federal government agencies now frequently spend excessive amounts of time and effort acquiring IT items not commensurate with either the cost or the technology lifecycle of the items being procured. Even simple procurements for "off-the-shelf" items

simple personal computers and associated items. A reasonable increase of such levels for IT items would instantly lower the time required by procurement processes, thereby allowing government managers to quickly implement new programs. Real taxpayer savings that would occur by not wasting valuable government staff time in process issues are currently being lost.

Within the current government IT acquisition process cycle, one of the most time consuming and costly aspects is the use of paper documents in the preparation and exchange of solicitation, proposal, and negotiation information and subsequent contracts, reports, invoices, and payments. Many vendors feel that the IT acquisition process is more focused on the production of documents rather than the acquisition of IT goods and services. The importance most government acquisition staffs place on bureaucratic process issues delays the solicitation process and raises vendor costs. The emphasis on process also deflects vendor efforts away from providing the best IT products at the lowest price. An important part of the IT acquisition function is to facilitate industry access to agency IT buying plans and requirements as well as to facilitate agency access industry IT product and service offerings and technology plans in an arena where short technological lifecycles have demonstrated the need to fundamentally change acquisition processes. For more effective government IT acquisitions, there needs to be an improved ability to better judge state-of-the-art from state-of-the-practice technology.⁴⁰

A number of private sector firms - particularly in the automobile manufacturing sector - have begun to integrate information systems with those of their suppliers.⁴¹ This approach permits both an elimination of virtually all of the paper involved with the acquisition process and facilitates close and continuing information exchange between buyer and supplier through the product acquisition lifecycle.

With IT hardware and software technological lifecycles now frequently measured in time periods as short as a few months, existing IT procurement processes (such as the GSA Multiple Award Schedule system with its infrequent updates) can simply not keep up with the opportunities for introducing new products or reducing prices for products achieving

of the accompanying program office and vendor staff time involved with the IT acquisition process.⁴³

Implementation of any dramatically new acquisition process like an "Electronic IT Marketplace" is not easily accomplished. Because virtually all of the existing statutes and regulations were developed with paper-based transactions in mind, many adjustments will be required. The promise of a dramatically faster reengineered IT acquisition system and the benefits it would provide both in process and program cost savings and in the acquisition of up-to-date IT tools are more than sufficient to justify the preparatory work required to permit testing the concept.

The use of antiquated, paper-based, processes in much of the Federal government impose a substantial cost on top of the business being conducted. Because these costs are not captured by government accounting systems, they are often thought invisible. Chrysler Corporation, for example, attributes much of its ability to bring new models to market more quickly than its competitors to the combination of an innovative staff "team" approach and the building of a new, IT-intensive, Automotive Technology Center in Auburn Hills, Michigan. The technology in this new center allows for easier and more rapid communication of information among all team members, regardless of whether or not they are physically immediately adjacent. Using IT tools instead of paper, new body designs existing only on a computer's screen are used to directly control the carving of clay models of proposed new designs. This innovative use of IT, eliminating the paper and most of the hand work previously required with traditional approaches, allows new models to be brought to market quicker than competitors can be measured in competitive and cost advantages. Government can similarly slice substantial amounts of time and cost from its acquisition process, not just for IT items, but for everything it buys simply getting rid of the need for paper documents and records.⁴⁴ Measured over any reasonable lifecycle, getting the paper out of the system will pay the taxpayers dividends in the form of lower taxes just as a IT-intensive environment has enabled Chrysler to bring new models to market at lower prices. Other than additional government automation and networking resources, there

take far too long thereby delaying arrival and utilization of hardware and software necessary for effective program implementation.

GSA, through existing IT procurement authority delegation levels, has maintained Executive Branch agencies on a short \$2.5M leash. While agency size and IT competence obviously vary, it seems reasonable that a more enlightened approach to GSA oversight is overdue. The increased levels should be allow agencies substantially increased freedom to manage their own affairs. The existence of a vigorous General Accounting Office, agency Inspector Generals, and GSA Information Resource Management program reviews would seem adequate to provide the necessary oversight for those agencies unable or unwilling to effectively manage their own IT affairs.

Because "off-the-shelf" IT tools are now often integral to even simple program implementation, the frequent delays in government program execution caused by an inability to quickly acquire IT tools need to end. Such delays, although quantifiable, are rarely recorded in government accounting systems or even recognized as an added cost of government operations. Program or line managers, having received budget authority for the function under his or her direction, should also have the authority to go out and buy a fully-configured personal computer and relevant software when program conditions require immediate action.

To accommodate the extraordinary rate of change in IT technology over the past fifteen years, process "reengineering" techniques hold the most promise for allowing government users to be quickly supplied with state-of-the-art IT tools acquired at competitive prices.⁴² The goals for a "reengineered" IT acquisition process for short technological lifecycle "off-the-shelf" IT tools common in Federal government offices would be to create an "Electronic IT Marketplace" which allows:

- (1) a dramatic decrease in the length of time it takes to get from product announcement or requirement definition to contract award so as to speed up the implementation of government programs dependent on IT tools, and
- (2) a substantial decrease in the costs - both of the IT acquisition process itself and

recommendation 4.

2. Increase delegation of authority to agencies. (2)

The Administrator, GSA, should raise delegations for competitive IT procurements detailed in The National Performance Review's "Federal Procurement" report, Part 2, PROC.09, recommendation 1.

3. Expand use of commercial credit card. (2)

The Administration should adopt the recommendations for expanding the use of the International Merchants Purchase Authorization Card (IMPAC) detailed in The National Performance Review's "Federal Procurement" report, Part 3, PROC.10, recommendations 1 - 4.

4. Pilot test innovative approaches under the Multiple Award Schedule program. (2)

GSA should begin a pilot test of an "Electronic IT Marketplace" detailed in The National Performance Review's "Reinventing Support Services" report, Part 2, SUP.04, recommendations 1 - 7.

5. Expand Electronic Commerce. (2)

The Administration should adopt the recommendations for expanding electronic commerce detailed in The National Performance Review's "Federal Procurement" report, Part 5, PROC.15, recommendations 1 and 2.

are believed to be relatively few impediments to moving to a paperless, EDI, acquisition system. Vendors are believed to be ready to embrace a EDI approach enthusiastically because it will reduce their costs as well.

Providing visibility to IT acquisition process costs and including them as part of program implementation costs is of exceptional urgency if IT tools are to be obtainable on a more rapid basis commensurate with their technology cycle and if program or line managers are to be able to make rational program implementation judgements. If IT acquisition costs are removed from overhead accounts, the fees charged by Federal Executive Branch acquisition entities can be budgeted for within program activity budget submissions and included in program activity accounting systems as a separately identifiable expense for each individual acquisition requiring such support. The added costs the present IT acquisition process imposes on IT tools when they are purchased by the government will thus be highlighted allowing managers to manage more effectively.⁴⁵ For example, at the present time, the costs of IT acquisition support provided by the Defense Commercial Communications Office, a "fee-for-service" organization, are capped at 2%. Taking IT acquisition staff costs out of overhead accounts and placing them on a "fee-for-service basis," combined with program manager freedom to negotiate the most cost-effective arrangement possible from any IT acquisition office, will promote competition among acquisition organizations and give program managers the opportunity to be held accountable for their own and their program's effectiveness.⁴⁶

Recommendations

1. Modernize the "Brooks Act." (3)

Congress should amend section 111 [commonly referred to as the "Brooks Act" of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 759)] detailed in The National Performance Review's "Federal Procurement" report, Part 2, PROC.09,

Cross References to Other NPR Sections

FM.06	Franchise Internal Services
PROC.09	Reform Information Resource Management (IRM) Procurements
PROC.10	Expand Use of Commercial Credit Card
PROC.15	Expand Electronic Commerce
SUP.04	Streamline and Improve Contracting Strategies for the Multiple Award Schedule Program

6. Provide incentives for improved IT acquisition service efficiency. (2)

The Executive Branch should adopt, on a priority basis, the recommendations for franchising internal services detailed in the National Performance Review's "Improving Financial Management" report, Part 2, FM.06, recommendations 1 - 3, for IT acquisition activities. Simultaneously, Federal Executive Branch agency program and line managers should be allowed the option of utilizing any officially established IT acquisition entity conducting business in accordance with the Federal Acquisition Regulations.

IT13: PROVIDE INCENTIVES FOR INNOVATION**Background**

Federal agencies spent over \$25 billion in fiscal year (FY) 1992 to buy and use Information Technology (IT),⁴⁷ but the dollars are being used so agencies can work faster, not smarter or cooperatively. Agency use of IT has failed to keep pace with private industry where IT innovations have enabled companies large and small to re-engineer their business practices. More IT dollars must be focused on the innovation needed for government re-invention as opposed to automating existing processes.

To promote innovation, the government needs to reinvent its funding of information technology and its relationships with the IT industry. Agencies must be encouraged to experiment and accept managed risks which are inherent in innovation. Agencies, the IT industry, and the public will benefit from funding mechanisms and contract terms that encourage the continual introduction of IT solutions which make government more responsive. Agency innovation, coupled with the appropriate contract incentives for the IT industry, are the keys to changing the relationship.

Four recommendations are presented here to foster much needed IT innovation in and among agencies by overcoming fiscal, procedural, and cultural barriers and by providing opportunities for creative partnerships between government and the IT industry:

1. Retain a portion of agency IT savings to reinvest in IT;
2. Promote performance-based contracting for IT;
3. Use multi-year funding for agency IT projects; and
4. Establish a government-wide venture capital fund for innovative IT projects.

Need for Change

Today, agency IT managers have few organizational incentives to innovate. In

End Notes

37. Alfred P. Sloan, Jr., *My Years With General Motors* (New York: Doubleday & Co., Inc., 1964), pp. 150, 152, 163, 165-68, 238-47.
38. William R. Synnott, *The Information Weapon - Winning Customers and Markets with Technology* (New York: John Wiley & Sons, Inc., 1987), pp. 307-09.
39. Don Tapscott & Art Caston, *Paradigm Shift - The New Promise of Information Technology* (New York: McGraw-Hill, Inc., 1993), p. 20.
40. Philip J. Kiviat, "Information Sharing Between Industry, Agencies Key to Procurement Success," *Federal Computer Week*, June 21, 1993, p. 13.
41. William R. Synnott, *The Information Weapon - Winning Customers and Markets with Technology* (New York: John Wiley & Sons, Inc., 1987), p. 4.
42. Thomas H. Davenport, *Process Innovation - Reengineering Work through Information Technology* (Boston: Harvard Business School Press, 1993), pp. 37-93.
43. Michael Barzelay & Babak J. Armajani, *Breaking Through Bureaucracy - A New Vision for Managing in Government* (Berkeley: University of California Press, 1992), pp. 115-133.
44. Peter G. W. Keen, *Shaping the Future - Business Design through Information Technology* (Boston: Harvard Business School Press, 1991), pp. 1-21.
45. Michael Barzelay & Babak J. Armajani, *Breaking Through Bureaucracy - A New Vision for Managing in Government* (Berkeley: University of California Press, 1992), pp. 102-114.
46. Steven Kelman, *Procurement and Public Management - The Fear of Discretion and the Quality of Government Performance* (Washington, D.C.: The AEI Press 1990), pp. 24-26.

Contract terms need to "incentivize" the contractor to perform as a partner, potentially permitting the contractor to share in actual cost-savings realized by the agencies by implementing new solutions while minimizing the financial risks where agencies accept new solutions in place of old. Agencies need to create "win-win" scenarios for government-industry relationships. This points to improvements in the contract vehicle itself.

Major re-inventions based on innovative uses of IT may begin with discrete, well-defined pilots but are typically implemented as complex, multi-year programs. Such programs experience schedule changes due to a variety of unpredictable circumstances with corresponding adjustments in required funding. The annual appropriation process is inconsistent with the funding flexibility required to effectively conduct these programs and efficiently acquire IT. On the contrary, the year-end spending phenomenon of annual appropriations works against IT innovation by encouraging agencies to acquire IT commodities which support current agency automation practices. Existing IT solutions and technologies are perpetuated and become more difficult to re-engineer based on the ever increasing sunk cost. The multi-year characteristics of IT programs demand more flexible funding mechanisms to provide effective funding support.

In today's budgetary environment, proposals for innovative interagency use of IT are viewed as low priorities in comparison to the operation, maintenance, and "modernization" of existing agency systems. Even promising IT pilots often fail to achieve full implementation or cross-agency potential. Senior managers are too often unwilling to risk scarce agency dollars on IT innovations with current agency operations and personal careers at stake. This business-as-usual approach to IT funding by agencies will not generate the innovative solutions which are the core of government re-invention. A new funding mechanism is urgently needed to provide funding for the government's most-promising IT innovations.

Recommendations

addition to the cultural resistance which re-invention can generate, funding of new IT initiatives has become increasingly difficult. Agencies face budget reductions in direct response to any savings generated by IT innovation. IT managers are thereby provided negative incentives to challenge the prevailing culture and accept the risks inherent in innovation. New investment in and experimentation with IT is relegated to a low priority in the face of recurring budget constraints.

A change in the budget paradigm is needed. Agency budgets must include the funds for IT innovation as well as the funds to operate, maintain, and "modernize" existing information systems. Agencies which have successfully innovated using IT must be financially empowered to continue IT investment and experimentation. Success-based funding of IT innovation would provide incentive for managers to re-invent agency business practices since the funds available for new IT investment would be relatable to the savings previously achieved.

With the technical complexity of IT procurements, most agencies have favored low risk, fixed price contracts which place the IT industry in the role of a supplier of commodities rather than a partner in innovation. This may work when agencies want IT commodities, but is unresponsive to agencies seeking creative IT solutions since the contractor is encouraged to sell as much of the offered product or service as the agency is willing to buy. These contracts often act as dumping grounds in the recurring year end "spend it or lose it" syndrome of fiscal year funding.

Furthermore, agencies frequently lease equipment from the contractor due to fiscal constraints. Since the contractor needs to fully depreciate the investment in capital equipment being leased to the government, the contractor is discouraged from recommending solutions which would result in termination of the lease. The leased equipment remains in the agency despite the availability of new, more cost-effective products. Under these circumstances, there are few incentives for the IT industry to partner with agencies to get current technologies in place.

Contractors must be allowed to be more than suppliers of goods and services.

Success-based funding must be grounded in an auditable baseline of agency performance in terms of outcomes and costs in order to attribute specific savings to IT innovation. Only those agencies which meet the challenge of demonstrating auditable results would receive the benefits of success-based funding. Consistent accounting procedures and performance measurement criteria must be employed across agencies to clearly identify savings result from IT innovations. Instructions from OMB to initiate this budget process should be available to agencies no later than August 1, 1994 for agency use in the fiscal year 1996 budget cycle.

2. Promote performance-based contracting for information technology (IT). (2)

The objectives of major IT initiatives are not easily met by a single contract type. Acquisition of IT innovation often requires a complex systems-integration effort which may best be articulated as a combination of fixed-priced, cost-reimbursement, incentive, indefinite-delivery, time-and-materials, and labor hour provisions within an overall contract structure. Integral to the contract, clauses incorporating performance incentives, award fees, and value engineering must be crafted as positive instruments of re-invention through IT innovation rather than high-risk exceptions to accepted procurement practice. OMB should direct the FAR Secretariat to lead a government-wide effort to promote performance-based contracting for IT, starting with its submission of an action plan to OMB by April 1, 1994.

Agency IT managers and contracting officials must be educated and encouraged to use performance-based contracting techniques for IT. As a starting point, a re-education process is needed to change the common perception of the Federal Acquisition regulation (FAR)⁴⁹ as imposing an inflexible structure to government contracts. Too few government IT acquisitions have effectively utilized the latitude provided by the FAR. A concerted effort by the FAR Secretariat is essential to consistently promote performance-based contracting on a government-wide basis to include revision of agency IT acquisition

1. Retain a portion of agency information technology (IT) savings to reinvest in IT. (2)

A percentage of savings (for example, 25 percent) realized by an agency through the innovative use of IT should be retained by the agency for added investment in IT. This could be accomplished in two ways. For the current year, recognized savings would be transferred to an agency's working capital fund (WCF)⁴⁸ to support IT innovation. For future years, recognized savings to be retained in agency appropriations would be identified within the annual budget and appropriations process. Through these two mechanisms, a percentage of recognized savings would effectively be carried forward to fund credible programs for IT innovation and experimentation. Such programs would specifically take advantage of new IT technology, demonstrate measurable improvements in agency services, and realize additional savings. The President should direct OMB to instruct agencies to identify IT savings for potential reinvestment starting with the fiscal year 1996 agency budget submissions.

Agreement between OMB and Congressional appropriations committees would be needed to establish annual guidelines on agency savings to be recognized. This agreement would be reflected in OMB instructions for agency budget submissions. The potential for revised agency WCF legislation also exists, and this is addressed in a following recommendation.

The President should also direct OMB to collaborate with the General Accounting Office (GAO) to establish the accounting procedures and performance measurement criteria needed to identify agency savings resulting from IT innovation. The close relationship between projected agency savings from IT innovation, agency budgets, and the appropriations process point to the central role of OMB in implementing success-based funding. As part of its instructions to agencies, OMB would need to establish reporting requirements by which agencies would identify savings and track the retained percentages across multiple fiscal years as part of agency budgets.

innovations. Agency funds could be operated in an analogous fashion to the government-wide fund for IT innovation recommended earlier. Current legislation authorizes several agencies to operate such funds.⁵⁰ However, the legislation does not consistently address IT services within the scope of these funds. New legislation to revise working capital funds to support IT innovation may be required following an agency-by-agency review of current WCF legislation conducted under the direction of OMB to be completed during fiscal year 1994. Based on the results of the review, OMB should assist agencies to establish or revise working capital funds to support multi-year funding for agency IT innovation.

Effective use of multi-year funding requires concerted agency effort. As the fund manager, an agency must have in place the expertise and procedures to ensure accountability of the funds expended for each IT program on a continuing basis over multiple fiscal years. This can present a challenge to agencies unfamiliar with this funding arrangement, but the experience of agencies with successful track records managing similar funds can serve as a resource base. For example, the Department of the Treasury publishes a handbook⁵¹ which documents the specific procedures which that department has used to successfully manage major IT programs funded through its WCF.

4. Establish a government-wide Venture Capital Fund for innovative information technology (IT) projects. (3)

No mechanism currently exists to identify and fund cross-cutting innovations which will have multi-agency or government-wide impact. This IT innovation should be fostered through the creation and operation of a government-wide fund which operates as the analog of a venture capital firm in the private sector. The President should direct OMB to develop proposed legislation by April 1, 1994 to establish a government-wide venture capital fund for innovative IT projects.

Operation of the venture capital fund would allow agency innovators to compete for available funding, agency initiatives to be screened through a critical due diligence process;

practices, development of training materials, and publication of case studies to exemplify performance-based contracting. Consideration should also be given to include specific language in the FAR encouraging performance-based contracts and clarifying the latitude available for IT procurements.

Through effective management of a performance-based, award fee contract with value engineering clauses, industry IT providers can be given incentives for making the government more effective and efficient. If contract terms and conditions allowed the industry provider to increase profits by "saving" the government money, a "win-win" scenario is created.

The price curves in IT hardware and the rapid pace of technology evolution make this scenario possible. For example, a creative solution that uses IT to save an agency \$1.00 can be shared as 50 cents in savings to the government and 50 cents in increased profits to the industry provider. This truly puts the government and industry in a strategic partnership working together and using IT-based approaches to re-engineer government.

Hybrid contract types and contractual relationships based on partnership represent a significant culture change to many in both the government IT and contracting communities. Success stories will need to demonstrate the advantages of this approach on a pilot basis before the risks of trying something new will be accepted more broadly.

3. Use multi-year funding for agency information technology (IT) projects. (3)

Major IT innovations that are authorized by specific appropriation should provide multi-year funding. Although multi-year funding can be accomplished now through the appropriation process, it is done selectively. OMB needs to collaborate with the Congressional appropriations committees to make this practice normative rather than the exception.

Alternately, OMB should encourage and support the use of legislatively-established working capital funds (WCFs) as a means to provide multi-year funding for agency IT

Information Infrastructure Working Group. In addition, the views of state and local government and the private sector would be considered through an advisory role for industry groups and government associations and/or a consultant role for distinguished innovators.

The criteria by which initiatives are evaluated and selected for fund sponsorship are critical to the value of the fund. It is envisioned that the criteria be established, reviewed, refined, and published in a process open to public comment. Collectively, the criteria will have as their objective the identification of those initiatives that present the best-value to the government considering both return on investment and risk. The criteria would obviously address the potential improvement of agency, interagency, and intergovernmental operations. Implementation costs, demonstrated savings, agency competency, technological feasibility, agency/interagency/intergovernmental commitments, and the participation of the IT industry would all be carefully weighed.

Fiscal Implications

Since the retention of savings (Recommendation 1) will be funded through projected budget savings, it has short-term budgetary impact; agency budgets will not be fully reduced to realize immediate savings of IT innovation. However, significant budgetary savings can be expected on a continuing basis as the savings are reinvested in new IT innovations that would otherwise not be possible. The extent of the savings which could be achieved government-wide cannot be estimated with any accuracy.

Promoting performance-based contracting (Recommendation 2) has no short-term budgetary impact since it can be implemented through administrative change and revision of current agency procurement practices. However, significant long-term operational efficiencies can be expected based on improved IT solutions which facilitate greater government re-invention.

As an example of the potential of performance-based contracting, the Department of

and agency resources to be augmented by the fund to enable selected re-invention projects to proceed. However, the fund's benefit is not just as a dollar pool for funding IT. A government-wide program would draw the attention and participation of state and local governments and the IT industry, all who stand to benefit from IT innovation in government. Thus, the manager of the fund would be positioned to broker the expertise and resources of other interested parties in fund-sponsored projects further leveraging fund dollars.

Enabling legislation for the fund would parallel the legislation for existing agency working capital funds (WCFs) where appropriated monies are transferred to a fund and retained without fiscal year spending restrictions until expended on fund-sponsored initiatives. However, the legislation would also contain provisions establishing the funding procedures and operating mechanisms which distinguish the Venture Capital Fund from the traditional WCF.

For example, a surcharge of 1 percent on the fiscal year 1995 dollar expenditure for IT by agencies would provide approximately \$250 million to initially seed the fund. The actual transfer of funds from each agency's appropriations could be accomplished following the annual Congressional appropriations process. This method of capitalization together with procedures for periodically reviewing the funding level and setting the surcharge rate in succeeding fiscal years would be key ingredients of the enabling legislation.

Considerations in the legislation and operational framework must also insure that the fund is established and operated with the conditions necessary to promote partnership with the IT industry; leverage the fund with other resources of federal, state, and local agencies and the private sector; and manage the risk of IT innovation.

The relationship of the fund and fund-sponsored initiatives to agency information system plans, budgets, and appropriations point to the Office of Management and Budget (OMB) as the appropriate fund manager. As the fund manager, OMB would exercise fiscal management of the fund and also implement its operational framework. Selection of projects to be sponsored by the fund would be accomplished by the Government

End Notes

47. Estimate provided to NPR by Bruce McConnell of OMB based on FY 1992 IT expenditures as reported by Federal agencies.

48. Agencies with a legislatively-enacted WCF include the Departments of Commerce, Health and Human Services, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, and Treasury.

49. The Federal Acquisition Regulation (FAR) is issued as Chapter 1 of Title 48, Code of Federal Regulations.

50. An Information Technology Fund was authorized for the General Services Administration by the Paperwork Reduction Reauthorization Act of 1986. Various agency funds have also been authorized. For example, the Departments of Transportation and Treasury have long-established working capital funds.

51. Treasury Directive Publication (TD P) 84-02, Management Plan for Information Systems Programs, September 1991.

52. See Treasury Directive (TD) 84-02, Establishment of Executive Agents, September 4, 1991, p. 2.

the Treasury estimates that approximately 7 percent of the projected expenditures for its Treasury Communications System (TCS) can be avoided using contractual mechanisms to create a strategic partnership with the vendor. That program is currently in acquisition with contract and government furnished services totaling \$850 million for a possible cost avoidance of \$60 million over a ten year contract life.

Multi-year funding of agency IT projects (Recommendation 3) has minimal short-term budgetary impact since it will not change current appropriations. However, significant long-term budgetary savings can be expected. Although the extent of the savings which could be achieved government-wide cannot be estimated with any accuracy, one current example of the benefit of multi-year IT funding is available from the Treasury Department. The department operates its working capital fund in conjunction with its Executive Agent Program⁵² to fund selected agency-wide IT projects. This approach has generated documented savings conservatively estimated at \$45 million. Treasury attributes these savings directly to the multi-year aspects of its fund. Additional savings have also been realized through the reduced staffing requirements and economies of scale inherent in an agency-wide program.

Establishment of a government-wide Venture Capital Fund (Recommendation 4) has a continuing budgetary impact since it will be funded through the on-going fiscal year appropriations for IT. However, significant long-term budgetary savings can be expected through the implementation of IT innovations that would otherwise not be possible. The extent of the savings which could be achieved government-wide cannot be estimated with any accuracy.

Cross-References to Other NPR Issues

None

Skills enhancement efforts at all levels of the federal workforce are crucial, because IT is a fundamental enabler of organizational change. IT awareness must also be improved at all levels of the federal workforce to encourage and support continuing reinvention efforts. Itemized practical steps for optimizing government IT management include finding more ways to initiate IT awareness and training programs.⁵⁶

Senior managers lack a well established management process for taking charge of IT. Senior managers consequently have not developed the kind of experience and expertise in IT that they have in finance, human resources, and accounting.⁵⁷ Senior management should have basic knowledge of how to ensure the development and utilization of management information systems and other technological resources that meet their agency's needs.⁵⁸ In order to obtain the basic knowledge, an IT course should integrate: technology into the workplace; include development strategies for using new technology to manage and improve program effectiveness; and explain the impact of technological changes on the organization.

GAO recommends that the agency's senior official for information resources management should play a leading role in defining the vision and preparing the agency's technology plan, and then ensure that the ongoing and proposed systems development projects fall logically within this plan.⁷ In order for the federal government to have qualified officials to lead IT, quality control measures should ensure that competent individuals have the background and capabilities to administer Information Resources Management (IRM).

Managers often ignore the importance of training in the name of cost savings. However, not training or training insufficiently have their own cost. In the extreme, people don't use their computers, and the organization's investment in hardware and software is wasted. Every time a user relies on a formal support function, the organization pays at least \$25 in overhead and salaried time. Every time a user goes to a colleague for support, it costs from \$15 to \$100.⁸

Federal agencies are increasingly dependent on the skills and capabilities of their

IT14: PROVIDE TRAINING AND TECHNICAL ASSISTANCE IN INFORMATION TECHNOLOGY TO FEDERAL EMPLOYEES

Background

Every year, increasing numbers of federal workers are expected to use Information Technology (IT) skills and knowledge in performing their jobs.⁵³ However, many members of the federal workforce lack sufficient training and background to use new technologies effectively. Also, in comparison with private industry, the Federal government invests few dollars and little time in IT training and retraining.⁵⁴ Without this investment, the federal workforce is unable to keep pace with the rapid changes in technology and customer demands. There are insufficient incentives to motivate the workforce to seek education and training, and insufficient opportunities to obtain training even when it is desired and necessary. Additionally, information technology training is generally not incorporated in the planning processes used to achieve the mission of federal agencies.

Many management executives believe that education about the potential effect of IT on their organization is not important. Management executives tend to learn either basic computing -- how to extract the information they want from the PC at hand -- or high-level awareness of how much it costs to have that information available. At the same time, training is perceived as something appropriate for middle managers and line employees -- senior management tends to plan training for others, not for themselves.⁵⁵ Senior management needs a basic understanding of the terms and general nature of IT relevant to their business, the impact of IT on their business, how to apply technology to management functions, and how to overcome fear of IT and IT projects.

Need for Change

Modest changes could improve the knowledge and skills of the federal workforce.

implemented through Centers of Excellence such as the Information Resource Management College of the National Defense University, the Federal Executive Institute, Harvard University, Syracuse University and George Washington University. The seminars will introduce non-technical senior managers to the use of information technology through discussions, case studies, and hands-on demonstrations of leading edge technology, including the wide range of state-of-the-art applications already in use in federal, state, and local agencies as well as in the private sector. Seminars will examine the role of technology in stimulating service redesign. This redesign will provide critical information and capabilities to middle managers, line employees, and to satisfy the needs of our clients.

For example, the New York City (NYC) Department of Personnel identified ten broad program components for its Executive Development Program (EDP) which could be used as a starting point for this program. These components are: strategic planning/top down planning; reengineering; implementing systems; electronic mail; video conferencing; voice enhanced technologies; geographic information systems; database management systems; imaging; multi-agency complaint & inspection systems; and other emerging technologies. The federal program could be modeled after the NYC-EDP which consist of monthly half-day sessions. An eight session seminar should be scheduled to begin by January 1, 1994.

2. Require "minimum competency" in information technology for senior executive service candidates. (1)

Agencies and OPM should jointly require that prior to appointment in the SES, the candidate demonstrates a minimum competency in IT and that IT competency be included in the SES recertification program. OPM surveyed 22,000 federal supervisors, managers and executives and identified the managerial competency for technology management as (1) integrating technology into the workplace, (2) developing strategies using new technology to manage and improve program effectiveness, and (3) understanding the impact

workforce to enhance productivity and ensure quality service to the American public.⁹ Each agency should be required to establish a process that links its training and development plans and resources to the agency's mission, strategic plans, performance goals, and priorities. In addition, the federal government lacks a mechanism that would allow the end-user to receive on-the-spot assistance with simple IT questions. Most of the assistance relates to hardware configuration, new technologies, application software packages and information resources necessary in carrying out their program and administrative responsibilities. A component of the human resources management in the federal government should be to attract, develop, and retain a quality, balanced workforce trained in varying levels of IT capabilities.

Recommendations

1. **Establish a program to train non-technical senior executives and political appointees in information technology.** (2)

This program should begin by May 1, 1994 and can be accomplished through one of three strategies: (1) jointly administered by OPM and GSA; (2) implemented at the agency level; or (3) conducted through the proposed President's Management Council.¹⁰ This program should provide a clear vision of how the organization can benefit from information technology, focus on effective uses of IT, and intensify the commitment to using, managing and implementing IT. Suggested curriculum components should include: IT acquisition and implementation; principles of organizational change and the impact of new technologies; case studies; customer service.¹¹ In addition, the program should provide an opportunity for executives to share their experiences in IT implementation with their peers, and to learn about effective uses of new technologies planned or implemented throughout the federal system.

This Program would take the form of executive technology seminars which could be

of general purpose data processing and telecommunications systems, facilities, and related services. Various components of the IRM Executive Institute could partner with programs such as GSA's Trail Boss Program, the Federal Acquisition Institute and/or Centers of Excellence [identified in Recommendation(1)] to achieve or develop competency/skill components.¹⁴

4. Promote collegial assistance for IT. (1)

Throughout the workforce there are individuals who have both the expertise and desire to assist colleagues in solving problems as they use information technology. This cadre of skill and knowledge should be supported and rewarded for their efforts. This source of support can be institutionalized to improve workforce productivity continuously as technology changes. The network of such individuals will make colleagues with specific skill sets accessible in real time via electronic or personal interaction. They can function as "on-line pals" to provide agencies with help-desk functions were none presently exist, and as the diffusers of innovation. Each agency should develop a mechanism that will identify individuals with varying levels of IT expertise who desire to participate as an "on-line pal". FIRMPoC (Federal Information Resources Management Policy Council) should be responsible for coordinating the government-wide collegial assistance program. Information technology itself can be used to provide interconnected assistance for services such as bulletin boards, e-mail, on-line databases, hardware and software.

5. IT contracts/acquisitions should incorporate training as part of the contract and not as a separate training budget item. (1)

Each agency, by November 1, 1993 should incorporate IT training as part of the IT contract or acquisition. This recommendation seeks to demonstrate the importance of IT training as part of the overall design of the IT contract and acquisition process. A study

of technological changes on the organization.¹² This recommendation will seek to establish a foundation for managers to understand the current technology base and issues, develop plans for the implementation of new technologies, and provide comprehensive knowledge of the acquisition process in the each agency.

In addition, the recertification competencies for IT should ensure the development and utilization of management information systems and other technological resources to meet the agency's current and future needs. Recently, OPM started working with a task force of Senior Executives to refine the SES executive/managerial qualifications. The project was initiated to link SES qualifications to the 22 competencies/skills identified in conjunction with the recent update of the Management Excellence Framework competencies.¹³ In addition, the project will make other refinements which would simplify and strengthen the process for reviewing the executive qualifications of career SES appointees. However, this process only addresses meeting core qualifications to certify candidates. Including IT competency in the SES recertification program will emphasize IT as an integral part of the continuous and comprehensive learning organization.

3. Require IRM management education. (1)

OPM and GSA should establish IRM competencies/skills requirements and identify Programs or Centers of Excellence for implementation. All federal employees pursuing an appointment to an IRM management position would be required to complete the program or demonstrate mastery of competencies before receiving the appointment. The program should begin by April 1, 1994. The two year program will consist of courses and seminars administered by OPM and GSA and tailored to achieve the individual IT needs of each agency. The program will provide a clear vision of how an organization can benefit from information technology and provide the skills needed to develop a department-wide IRM management strategic plan that is linked to overall department goals and objectives. In addition, the Program will build the competency required to manage major IT acquisitions

End Notes

53. U.S. General Accounting Office (GAO), Information Management and Technology Division, "Meeting the Government's Technology Challenge," results of a GAO Symposium, February 1990.

54. James E. Kendrick, "IT Management Focus Must Extend Beyond Tip of the Iceberg: (In Perspective: How Government Information Technology Management Can Improve Cost-Effective Performance," *Federal Computer Week*, vol.6 issue 29 Pagination p17(1), Sept. 21, 1992.

55. Wendy Grossman, "Training at the Top: Finding the Right IT Training for Senior Executive is Difficult. (Part of a special section on executive attitudes towards information technology)," *Which Computer?* vol. 14, no. 11 p. 14(1), November 1991.

56. James E. Kendrick, "IT Management Focus Must Extend Beyond Tip of the Iceberg: (In Perspective: How Government Information Technology Management Can Improve Cost-Effective Performance," *Federal Computer Week* vol. 6, no. 29, p. 17(1), Sept. 21, 1992.

57. Peter G.W. Keen, *Shaping the Future; Business Design through Information Technology*, (Harvard Business School Press, 1991), p.9.

58. Susan Roehmer, Office of Executive & Management Policy Human Resources Development Group, Office of Personnel Management, Attachment to FPM Letter 920-Exhibit 5-A, "Senior Executive Service Executive/Managerial Qualifications".

7. U.S. General Accounting Office (GAO), Fact Sheet for the Chairman, Committee on Government Operations, House of Representatives, "Information Resources; Summary of Federal Agencies' Information Resources Management Problems," February 1992.

8. Elliot Masie and Rebekah Wolman, *The Computer Training Handbook; How to Teach People to Use Computers* (National Training & Computers Project, 1989), p. 12.

9. U.S. General Accounting Office (GAO), Information Management and Technology Division, "Perceived Barriers to Effective Information Resources Management," results of GAO Panel Discussions, September 1992.

10. Leadership & Management Systems Team's recommendation: LMS 1.4 - Create the President's Management Council. The mission of the Council is to provide for effective management, coordination, and alignment among agencies, a structure for identifying and addressing cross-agency operating and programmatic issues, and a voice that advocates the new management culture, "Managing for Results", within departments and agencies. The Council is accountable to and reports to the President.

conducted by NSF in the early 1980s reflected that most IT acquisitions resulted in sizable costs for hardware, software and implementation in the first few years, however, training represented half of the cost of a new system.¹⁵

Fiscal Implications

IT training costs can be offset by using intra-agency training initiatives. For example, the State of Texas has established contracts with four statewide training vendors to train all state employees for \$60-\$110 a day in a wide variety of end-user areas. The federal government should be able to obtain a better bargain through GSA contracts or something similar, so each agency would not have to invest heavily in training setup in all locations. The New York City Department of Personnel has established the IT Institute for Senior Executives instead of providing individual agency training for senior executives. The IT Institute consists of the Leadership Institute which is designed to develop its managerial workforce; and the Certificate Programs designed for supervisors and staff.

Cross References to other NPR Issues

Leadership & Management Systems Team - LMS 1.4.

Appendix A.

IMPLEMENTATION CATEGORIES

Agencies can do themselves

IT01:(1) Plan for effective use of information technology throughout government.

IT01:(2) Coordinate and oversee plan implementation.

IT04:(2) The Agency Heads of the Treasury and Justice Departments should co-sign a Memorandum of Understanding (MOU) by October 30, 1993, which formalizes the Federal Law Enforcement Wireless Users Group (FLEWUG). The MOU should define the charter and membership of the Working Group and include, at a minimum, representation from all Justice and Treasury agencies and bureaus, with participation from other federal, state, and local law enforcement and public safety entities. The Working Group should be assigned responsibility to work with OMB to further define the cost/benefits and develop an implementation plan for the national law enforcement/public safety network to cover the next ten years.

IT07:(1) By December 31, 1993, the President, by Executive Order, should direct the U.S. Department of Commerce through the National Oceanic Atmospheric Administration (NOAA), to implement a national environmental index.

IT08:(3) By July 30, 1994, the NSDI participants should begin conversion of geographic data from multiple sources to a single source and from analog to digital.

IT08:(5) By July 30, 1994, the FGDC should, in accordance with OMB Circular A-130, develop Federal policies on charging for services related to geographic data.

11. U.S. General Accounting Office (GAO), Briefing Report to the Chairman, Subcommittee on Federal Services, Post Office, and Civil Service Committee on Governmental Affairs, U.S. Senate, "Federal ADP Personnel: Recruitment and Retention," February 1989.

12. U.S. General Accounting Office (GAO), Fact Sheet for the Chairman, Committee on Government Operations, House of Representatives, "Information Resources; Summary of Federal Agencies' Information Resources Management Problems," February 1992.

13. The Management Excellence Framework competencies - individuals certified for SES career appointment must possess a minimum level of competence in these areas.

14. Richard Wolfe, "Three-time trail boss gets procurement right," *Government Computer News*, June 7, 1993.

15. locating cite information

implement information technology initiatives to improve customer service. OMB should work with this interagency team to develop funding strategies.

IT03:(2) Implement an integrated government-wide one-stop 800 calling service.

IT03:(3) Implement an integrated government-wide one-stop services kiosk based on the SSA/VA/USPS initiative.

IT03:(4) Implement an integrated government-wide one-stop electronic bulletin board system.

IT03:(5) The "Customer Service Improvement" team should work with private industry to form strategic partnerships to advance the implementations of technologies that provide citizen access to government services.

IT04:(1) The President should direct, by Executive Order, that a national law enforcement network/public safety network be established for use by federal, state, and local governments.

IT05:(1) Issue an Executive Order which assigns a to the Department of the Treasury the requirement to integrate intra-intergovernmental financial filings, reporting and payment processing by December 31, 1995.

IT05:(2) Issue an Executive Order to the Department of the Treasury to determine ways to eliminate the need for filing routine tax returns by December 31, 1995

IT06:(1) By October 1, 1993, the President, through an Executive Order, should direct the U.S. Department of the Treasury to expand the current U.S. Customer Service system to begin the development and implementation of a U.S. Government International Trade Data System.

IT14:(2) Agencies and OPM should require that prior to appointment in the SES the candidate demonstrate a minimum competency in IT and that IT competency be included in the SES recertification program.

IT14:(3) GSA should (1) establish an IRM Executive Institute Program for mid-level government personnel to develop competencies/skills, or (2) OPM and GSA should establish IRM competencies/skills requirements and identify Programs or Centers of Excellence for implementation.

IT14:(4) All agencies should (1) establish a new priority for IT training in existing training budgets, and (2) include information technology competencies/skills in employee job descriptions and performance evaluations.

IT14:(5) Each agency should establish an IT Help-desk.

President, Executive Office of the President, or Office of Management and Budget can do

IT02:(1) By Executive Order, direct OMB to charter an interagency team , chaired by the Deputy Director for Management, reporting to the Vice President, to construct an integrated EBT implementation plan by March 1, 1994 which defines roles, responsibilities and changes required to implement EBT nationwide.

IT02:(2) OMB should direct the interagency team to draft needed policies and/or legislation, by February 1, 1994, which address the following as well as other key policy and legislative issues, to facilitate implementation of EBT nationwide.

IT03:(1) OMB/OIRA should charter an interagency team to coordinate, recommend, and

IT11:(7) Reevaluate security practices related to national security data.

IT11:(8) Foster the Industry-Government Partnership for Improving Services and Security in Public Telecommunications.

IT11:(9) Implement the National Industrial Security Program.

IT11:(10) Develop comprehensive Internet security plan.

IT11:(11) Coordinate Security Research and Development.

IT13:(1) Retain a portion of agency information technology (IT) savings to reinvest in it.

IT13:(2) Promote performance-based contracting for information technology (IT).

IT14:(1) Establish a program to train non-technical senior executives and political appointees in information technology.

Requires legislative action

IT05:(1) Issue an Executive Order which assigns a to the Department of the Treasury the requirement to integrate intra-intergovernmental financial filings, reporting and payment processing by December 31, 1995.

IT05:(2) Issue an Executive Order to the Department of the Treasury to determine ways to eliminate the need for filing routine tax returns by December 31, 1995.

- IT08:(1) By January 1, 1994, the NSDI participants' roles, responsibilities, and authorities should be defined.
- IT08:(2) By June 30, 1994, the FGDC should establish partnership agreements with industry and State and local governments.
- IT09:(1) Require that the interagency task force established by OIRA to improve electronic mail and messaging among Federal agencies report by April 1, 1994.
- IT10:(1) Develop a Government Information Infrastructure (GII) for effectively using government information resources and supporting electronic government applications.
- IT10:(2) Consolidate and Modernize Government Data Processing.
- IT10:(3) Consolidate and Standardize Government's Central Applications.
- IT11:(1) Establish a Privacy Protection Board.
- IT11:(2) Establish Uniform Privacy Protection Practices and Generally Acceptable Implementation Methods for these Practices.
- IT11:(3) Develop standard encryption capabilities, such as digital signatures, for sensitive unclassified data.
- IT11:(4) Develop generally accepted principles for information security.
- IT11:(5) Develop a "national" crisis response team.
- IT11:(6) Emphasize need for computer security in sensitive unclassified systems.

Appendix B.

Methodology

The Reengineering through Information Technology (IT) Team was comprised of information technology professionals, budget and logistics personnel from federal and state government as well as members with private industry backgrounds.

The team undertook a Total Quality Management (TQM) exercise, known as a Quality Functional Development (QFD) to define the project and provide a framework for its decision-making and ongoing activities. A QFD is a structured exercise used by planning groups to clarify issues and problems to be addressed, and identify strategies to obtain optimal results in achieving its product within predetermined timeframes. The principles developed for guiding the IT Team in the creation of its recommendations, were a product of QFD.

The issues which were identified as priorities to be addressed in order for information technology to adequately support the delivery of government services were:

- (1) the information technologies currently employed by the federal government are not delivering what the customer needs, nor is its potential being fully utilized,
- (2) the federal government does not adequately coordinate the systems currently in place,
- (3) there is not sufficient understanding as to who the customers are for information technology, and their needs, -
- (4) too many barriers exist within the government, both regulatory and legislative, to effectively use information technology, and
- (5) all levels of the government workforce need continuous education for

IT13:(3) Use multi-year funding for agency information technology (IT) projects.

IT13:(4) Establish a government-wide Venture Capital Fund for innovative information technology (IT) projects.

Appendix C.

Acknowledgements

Members of the Reengineering through Information Technology Team were:

Charles Brownstein	Co-Team Leader	National Science Foundation
Jim Flyzik	Co-Team Leader	Department of the Treasury
Brian Carman	Member	Department of the Treasury
Michael R. Dunham	Member	Department of Health and Human Services
Anne Eastman	Member	General Services Administration
Samuel H. Ewell	Member	Department of the Treasury
Daniel W. Grulke	Member	Department of Defense
Lonn Henrichsen	Member	Department of Transportation
Randy H. Katz	Member	Advanced Research Projects Agency
Bruce McConnell	Liaison	Office of Management and Budget
James A. Mitchell	Member	Department of Education
Laraine Rodgers	Member	City of Phoenix
Jasmeet Seehra	Liaison	Office of Management and Budget
Gil Weigand	Member	Advanced Research Projects Agency
Thomas A. Weisz	Member	Presidential Management Intern

Other individuals who made contributions to this project at varying times during the process include:

Jack Brock	Liaison	General Accounting Office
John Grimes	Liaison	Department of Defense
Robin Nazzaro	Liaison	General Accounting Office
Frank Reilly	Liaison	General Accounting Office
Vic Reis	Liaison	Department of Energy

information technology.

It is within the framework of solving these problems that all of the decisions, that are the body of the recommendations, were made.

Having developed its framework, the IT Team then proceeded to review federal agency planning documents, studies, reports, and issue papers, and review the current literature on innovative approaches being piloted or planned in the government and private sectors. There were also a series of meetings with government and private industry representatives to discuss the latest developments in new technology. Review was also made of the federal regulatory framework for information technology acquisition.

Recommendations were coordinated with the NPR agency and cross-cutting teams.

Appendix D: Glossary of Terms

[definitions to be provided]

Association of Public Safety Communications Officers

automated teller machine (ATM)

"Centers of Excellence"

Communications Interoperability Working Group (CIWG)

digital signature

digital encryption

direct federal payment program

Electronic Benefits Transfer (EBT)

Electronic Data Interchange (EDI)

Electronic Funds Transfer (EFT)

electronic mail (E-mail)

Executive Order

Federal Geographic Data Committee (FGDC)

Federal Law Enforcement Wireless Users Group (FLEWUG)

Geographic Information System (GIS)

Government Information Infrastructure (GII)

Information Infrastructure Task Force (IITF)

information technology

Internet

joint federal-state administered public assistance program

local area network

Management Excellence Framework

National Communications System

National Industrial Security Program

National Information Infrastructure (NII)

National Spatial Data Infrastructure (NSDI)

Harold Schoolman	Liaison	National Institutes of Health
Stephen Squires	Liaison	Advanced Research Projects Agency
Fred Wendling	Liaison	National Science Foundation

The Reengineering through Information Technology Team would also like to recognize and offer thanks to the following individuals and groups who gave of their time to assist on this effort:

one-stop shopping

point of sale (POS)

Public Switched Network

security protocol

Senior Executive Service (SES)

"smart" card

Universal Personal Communications

Venture Capital Fund

virtual agency

Working Capital Fund

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REINVENTING HUMAN RESOURCE MANAGEMENT

**NPR Accompanying Report Number xx
September 1993**

Contributing to this report: Roberta Peters (Team Leader), DON; Bryce Baker, OPM; Joe Coffee, ATF; Mary Ellen Dix, USDA; Marilyn Donald, NASA; Denise Flanagan, OPM; Roy Tucker, HHS.

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APPENDICES

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SUMMARY

All levels of the Federal Government are being asked to provide higher quality services at less cost. Faced with similar demands, corporations, non-profit organizations, state and local governments, and other countries have responded by moving to more flexible, flatter organizational structures; delegating authority to empowered employees and managers; eliminating procedural controls and emphasizing results; treating workers as strategic resources rather than costs; and working closely with clients or customers to understand and meet their needs. Changes such as these are emerging in the Federal Government as well.

While the demand for higher quality, lower cost services is a relatively recent phenomenon, reform of federal personnel management systems has been advocated and proposed for many years. The Civil Service Reform Act of 1978 (CSRA), which was the most comprehensive reform of federal human resource management in one hundred years, did not fulfill its promise. Given the failures of CSRA to meet its objectives, informed, concerned observers (e.g., the National Academy of Public Administration) have prepared reports and developed proposals for reform of federal personnel management systems with the same basic objectives: decentralize, deregulate and make personnel management systems more responsive to the needs of federal managers. These reform initiatives, however, have not become law or policy. Indeed, the Federal Personnel Manual, which was described in a 1983 report as being 8,814 pages in length has, according to the Office of Personnel Management, grown to more than 10,000 pages in length in 1993.

As a result of these failed reform efforts, federal managers continue to view the personnel management system as an incomprehensible obstacle that they must overcome to do their jobs. Furthermore, because of the complexity of personnel management rules and regulations many federal managers are reluctant to accept responsibility for personnel management, viewing it as "personnel's problem." The National Performance Review (NPR) builds on and is informed by these previous efforts to improve personnel

management systems in the Federal Government.

NPR is guided by several assumptions:

- The Federal Government is both a single employer and a multiple employer. The executive branch can be viewed as a conglomerate made up of numerous subsidiaries designed along product or service lines. Personnel systems are arrayed along a centralization-decentralization continuum: for example, certain benefit programs may be governmentwide whereas performance management programs may be agency-specific.
- The federal manager has the basic responsibility for hiring, developing, using, and rewarding or disciplining employees under his or her supervision. Executives and managers must be given full responsibility for personnel management and held accountable for actions and results.
- Personnel management is not an end in itself. Personnel management effectiveness must be measured in terms of its contribution to the achievement of organizational mission or goals.
- Federal managers must "own" personnel management systems, i.e., they must accept them in principle, know how to make them work, and be confident that the systems will achieve the desired results. If managers believe that a personnel system "belongs to" the personnelists, it cannot work effectively.
- Personnelists consult with and provide staff assistance to executives and managers. They must be seen as part of management rather than either the servants of management or the police of the civil service system.
- Personnel management systems must be tailored by federal agencies to meet their unique needs in accordance with their organizational culture. These systems will be developed in accordance with a limited set of basic principles, and without the extensive regulations that have too frequently resulted in an emphasis on process rather than substance.
- Mistakes or failure to comply with regulation or policy should not result in additional or more stringent regulatory requirements; rather, managers must be held accountable for their actions.

- Personnel management authority and responsibility should be delegated to the lowest possible level in the organization.
- Employee involvement will evolve; organizational leadership will be increasingly shared with employees and their representatives.

Given these assumptions, NPR's vision is one where the human resource management system:

- enables managers to adjust work and people to meet mission demands in a cost-effective manner;
- enables managers to create and maintain a quality, diverse workforce;
- enables managers to empower, develop, train, reward and discipline employees;
- holds managers accountable for adherence to principles of merit and equal opportunity;
- fosters a quality work environment that enables employees to manage work and personal responsibilities;
- promotes cooperative relationships among management, employees, and employee representatives; and
- is self-renewing and continuously improving.

INTRODUCTION

Civilian employees in the executive branch (excluding the U.S. Postal Service) numbered about 2.2 million at the end of fiscal year 1992. The policy recommendations contained in the following proposal are intended to apply to employees in this group.

Background

The U.S. civil service system is designed around merit system principles which require that federal positions be filled following fair and open competition and that the best qualified candidate be selected without regard to political affiliation or other nonmerit factors; and which protect career workers from arbitrary dismissal.

The Director of the Office of Personnel Management (OPM) is the President's personnel officer and is responsible for:

... aiding the President, as the President may request, in preparing such civil service rules as the President prescribes, and otherwise advising the President on actions which may be taken to promote an efficient civil service and a systematic application of the merit system principles, including recommending policies relating to the selection, promotion, transfer, performance, pay, conditions of service, tenure, and separation of employees.¹

The Director discharges this responsibility by promulgating personnel policy directives which support, interpret or otherwise implement Title 5, United States Code; the Code of Federal Regulations; miscellaneous Executive Orders; governmentwide classification and qualification standards; case law from various adjudicative bodies, for example, the Federal Labor Relations Authority (FLRA) or the Comptroller General; Civil Rights Acts; Equal Employment Opportunity Commission (EEOC) Management Directives; and individual agency guidance.

In addition to OPM, organizations with authority to regulate, direct or enforce

human resource management policy include EEOC, the Merit Systems Protection Board (MSPB), the Office of Special Counsel, FLRA, the Department of Justice, the Department of Labor, and the General Accounting Office. In total, 41,000 people help run the Federal Government's personnel system.

While executive branch agencies vary dramatically in size from a few dozen employees to several hundred thousand, they all have in common an internal structure for administration of human resource management programs. At the department or agency level are directors of personnel and directors of equal employment opportunity (EEO), responsible for advising and supporting the agency head, developing agency policies and guidance, executing authorities delegated to the agency, preparing required reports, acting on behalf of the agency with external organizations such as OPM and EEOC, and generally administering programs related to human resource management. The personnel directors are linked to OPM through membership on the Interagency Advisory Group.

Headquarters staffs support the personnel directors by performing functions at the agency level which are similar to those performed by OPM for the entire federal service. In large departments, headquarters staffs are also located at subordinate organizational levels such as regions and bureaus. Operating personnel offices and EEO staffs exist at the field or service delivery levels, providing day-to-day advice to managers and employees and processing personnel actions.

Problems with the Current System

The federal personnel system contains major impediments to efficient and effective management of the workforce. It is a patchwork of rules and requirements that confound rather than serve customer needs. It is a process-driven system in which results are a by-product rather than a measure of accountability. At the day-to-day operating level, it is just not user-friendly -- to managers, to employees and their representatives, or to personnel specialists.

Problems with the current system and urgent pleas for reform are well documented. In October 1983, a National Academy of Public Administration (NAPA) Project Panel observed that "the present personnel management system is far too process oriented. It is

much too rigid and needs major change . . . process drives out substance."² The Panel also noted that "Management processes, centrally designed and dictated, often become overly proceduralized . . . Personnel technicians rather than line managers end up making personnel decisions, thus putting further distance between the line managers and their personnel responsibilities."³ These problems have been compounded over time. In 1988, OPM acknowledged that:

For two hundred years anecdotal mistakes prompted additional rules. When the rules led to new inequities, even more rules were added. Over time . . . a maze of regulations and requirements was created, hamstringing managers, doing little to convince employees that their employer treats them fairly, and often impeding Federal managers and employees from achieving their missions and from giving the public a high quality of service.⁴

In May 1993, OPM Director James King explained that, "Most of the personnel laws we use today were written for a troubled civil service of 1883 . . . We must cut the cord to regulations that were right for their time a century ago, but which hog-tie managers today. In their place, we need systems and mentalities that, while still based in merit and fairness, will let managers manage today and into the future."⁵

The functional operating components of the federal personnel system present a burdensome array of barriers and obstacles to effective personnel management. The hiring system is complex and rule-bound -- managers are unable to explain to applicants how to get a federal job. The classification and pay systems are inflexible and often stand in the way of effective government. The performance management system is not adequately linked to the mission and goals of the organization. The labor relations program is adversarial in nature. The federal workplace is not "family-friendly" with its overly restrictive leave practices and limited implementation of available programs. Diversity programs are fragmented and affirmative action planning and reporting processes are duplicative and resource-intensive. Federal agencies perceive little value added by the efforts of central guidance agencies to monitor and control their activities.

At the operating personnel office level, processes used to deliver personnel services have largely remained unchanged for years and are accepted by customers as the norm for

doing personnel business. In a 1993 special study of federal personnel officers, MSPB concluded, "Unfortunately, for a variety of reasons, some of the functions assigned to personnel offices are too often simply not done or are of little relevance to line managers in their focus on mission accomplishment."⁶ The personnel function is forms-driven, labor intensive, and time-consuming. Managers and personnelists alike labor under rules and procedures requiring meticulous handling of paper. For example, Navy's Human Resources Office in Crystal City processed enough forms in 1991 to create a mountain of paper 3,100 feet in height -- roughly six times as high as the Washington Monument. The Department of Agriculture recently determined that the total weight of the federal personnel laws, regulations, directives, case law, and departmental guidance required to make human resource management decisions was 1,088 pounds.

Given the seemingly incomprehensible procedural and regulatory requirements, managers are reluctant to learn or accept responsibility for personnel management.⁷ A recent NAPA study makes a succinct summary observation: "It is not a question of whether the federal government should change the way it manages its human resources. It must change."⁸

Root Causes

To what can we attribute this proliferation of external controls and procedural constraints? In a forthcoming book, professor of public administration Patricia Ingraham observes that:

In the pulling and hauling between the President and Congress . . . the permanent bureaucracy remains a target for control by both. The pattern of control is similar in both cases: discretion for members of the career service is to be limited whenever possible; control is to be exerted through additional levels of political appointees or other staff responsible to the President and/or Congress; and accountability will be defined as responsiveness to those controls.⁹

Understanding the extent to which accountability has been defined in terms of procedural controls is critical to understanding both the need for change and the nature of the changes required. In 1983, the NAPA Panel found that ". . . accountability is divided and varies by

functional areas within personnel management in such a manner that everyone and no one is fully accountable."¹⁰ In his 1993 study of the role of the federal inspectors general, Light concluded that:

Despite experiments with performance incentives, such as merit pay, and occasional investments in civil service reform, the definition of accountability in government has remained relatively constant over the past fifty years: limit bureaucratic discretion through compliance with tightly drawn rules and regulations . . . accountability is seen as the product of limits on bureaucratic discretion -- limits that flow from clear rules (commands), and the formal procedures, monitoring and enforcement that make them stick (controls).¹¹

Thus the task of reinventing human resource management becomes one of redefining accountability in terms of results within the context of decentralization and substantially increased delegations of authority.

The Ideal System

The specific recommendations described in the sections that follow are designed to support an ideal system which enables managers to adjust work and people to meet mission demands in a cost-effective manner; create and maintain a quality, diverse workforce; and empower, develop, train, reward and discipline employees. The ideal system holds managers accountable for adherence to principles of merit and equal opportunity; fosters a quality work environment that enables employees to manage work and personal responsibilities; promotes cooperative relationships among management, employees, and employee representatives; and is self-renewing and continuously improving.

How will such a system be designed and what is the regulatory context in which it will operate? In 1983, the NAPA Panel recommended "maximum delegation of authority, decentralization of operations, and relinquishing of detailed controls by the central agency (OPM)."¹² A number of OPM's demonstration projects have been characterized by this approach. In 1990, OPM noted that its "experience with deregulation and decentralization of the personnel function . . . does not support the assumption that simplification leads to merit system abuse. OPM is committed to moving toward optimal delegation of authorities

and operating responsibilities to agencies and deregulation of required processes, accompanied by effective oversight . . . "13

The NAPA Panel recommended that "(a)gency executives and managers take primary responsibility, and be held strictly accountable, for observance of merit principles and the prevention of prohibited personnel actions; for enforcing high standards of employee performance and conduct, and for taking necessary actions when such standards are not met."14 MSPB, in its 1992 study of the Canadian Civil Service, recommended that:

(OPM) and individual Federal agencies . . . give strong consideration to increasing the authority of individual managers and supervisors to make and effect sound, merit-based personnel management decisions. This can be done, in part, by moving from a system that relies on limiting Federal managers' options as a way of preventing abuse to one of holding managers more accountable for the consequences of their decisions.¹⁵

How will agencies and individual managers be held accountable in such a system?

Accountability within a reinvented human resource management system must necessarily focus on results and outcomes rather than adherence to procedural requirements.

Performance standards must be redesigned to measure the extent to which managers are achieving a quality, diverse, and productive work force. The redefinition of accountability is at the core of this proposal and provides the foundation for the recommendations that follow.

This ideal system will also demand dramatic changes in the roles and responsibilities of line managers and personnelists and the relationship between labor and management. Managers and supervisors will have more latitude to exercise judgment in their actions which affect employees. This freedom to decide carries a large element of risk and concomitant accountability for the results of the decision. These managers must have access to quality, responsive advice and assistance from personnel professionals who truly understand the human resource management needs of the organization. Personnel offices must shift from reactive processors to responsive consultants and advisors. This paradigm shift requires personnelists to develop an absolute orientation to the manager as customer whose needs are anticipated and met with responsive value-added service, including

electronic decision support systems. This change in roles and relationships must include a similar orientation towards the workforce. Cooperative relationships with organized labor must be established and maintained, with unions viewed as partners in this "brave new world."

End Notes

1. Title 5, United States Code, Government Organization and Employees (April 1993), sec. 1104(a)(7).
2. National Academy of Public Administration (NAPA), *Deregulation of Government Management Project: Personnel Management*, interim panel report (Washington, D.C., October 1983), p. i.
3. Ibid., p. 1.
4. U.S. Office of Personnel Management, *Simplifying the Federal Manager's Job*, Washington, D.C. (Pamphlet.)
5. "OPM Takes Wrecking Ball to Personnel Structure," *U.S. Office of Personnel Management News* (May 28, 1993).
6. U.S. Merit Systems Protection Board, "Federal Personnel Offices: Time for Change?" (Washington, D.C., August 1993), p. iv.
7. U.S. Merit Systems Protection Board, "Federal Personnel Offices: Time for Change?" July 1993 (Draft), p. 18.
8. NAPA, *Leading People in Change: Empowerment, Commitment, Accountability* (Washington, D.C., April 1993), p. vii.
9. Patricia Ingraham, "The Foundation of Merit," July 1993 (Draft), p. 26.
10. NAPA, *Deregulation of Government Management Project: Personnel Management*, p. 11.
11. Paul Light, *Monitoring Government: Inspectors General and the Search for Accountability* (Washington, D.C., 1993), p. 12.
12. NAPA, *Deregulation of Government Management Project: Personnel Management*, p. 2.
13. Office of Personnel Management, "Proposed Demonstration Project; Department of Agriculture," *Federal Register*, vol. 55, no. 47, March 9, 1990, p. 9063.

14. NAPA, *Deregulation of Government Management Project: Personnel Management*, p. 4.

15. U.S. Merit Systems Protection Board, *To Meet the Needs of the Nations: Staffing the U.S. Civil Service and the Public Service of Canada* (Washington, D.C., January 1992), p. xiv.

Part 1

Creating and Maintaining a Quality, Diverse Workforce

HRM. 01: CREATE A FLEXIBLE AND RESPONSIVE HIRING SYSTEM.

Background

The system through which applicants are considered for competitive appointment to positions in the Federal Government is a merit system -- candidates must be selected based on their ability to perform the job without regard to nonmerit factors, including political affiliation. There are nine merit system principles, covering (1) recruitment to achieve a work force from all segments of society, and selection and advancement following fair and open competition; (2) employment without regard to nonmerit factors; (3) equal pay for work of equal value; (4) standards of conduct; (5) efficient and effective use of the federal work force; (6) retention and separation based on performance; (7) effective education and training; (8) protections against arbitrary action and prohibition against interfering with an election; and (9) protection against reprisal for disclosing violations or mismanagement.¹

The law also defines prohibited personnel practices, such as discrimination on the basis of nonmerit factors, nepotism, and political coercion,² and stipulates that, "The head of each agency shall be responsible for the prevention of prohibited personnel practices, for the compliance with and enforcement of applicable civil service laws, rules and regulations, and other aspects of personnel management."³

The first merit principle deals with recruitment and hiring. The merit system requires that (1) individuals are qualified; (2) appropriate sources are identified; (3) all segments of society are represented in the work force; (4) selection and advancement are determined solely on the basis of relative ability, knowledge and skills; and (5) fair and open competition are afforded to assure that all receive equal opportunity.⁴ Inherent in the concept of relative ability is the notion of excellence.

The competitive examining system for external candidates which has developed around these requirements is controlled by OPM. Although OPM may delegate examining authority to agencies, by law OPM must conduct examinations for positions which are

common to agencies. With OPM approval, agencies may directly hire candidates in a limited number of occupations where recruitment shortages have been identified, that is, where there is potentially a job for every qualified applicant.

Throughout the year, OPM issues general notices or open announcements soliciting applications for particular occupations for which it retains examining authority. Managers wishing to fill vacancies from external sources must ask the personnel office to submit a request for a certificate of eligibles to OPM. Using an internal, unpublished rating scale, OPM rates and ranks candidates who are then forwarded to the manager in ranked order. The actual list of candidates forwarded to the manager may not represent the best candidates, as higher-ranking individuals may have already been referred out to another agency. The rules surrounding selections are exactly the same for both OPM-generated certificates of eligibles and certificates issued by agencies with delegated examining authority. Although the certificate may contain many names, the manager is bound by law to select one of the top three available candidates, and may not pass over a veteran to select a nonveteran unless a request to pass over the veteran for reasons of qualifications or suitability is approved. Although authority to approve requests to pass over veterans is delegated to agencies, OPM must rule on requests to pass over veterans who are 30 percent or more compensably disabled. Managers may choose to interview all, some, or none of the candidates, but in no case may they subject candidates to further examination. Certificates may be returned unused when managers determine that candidates are unsatisfactory, which can result in significant time delays in filling positions as alternative methods must then be considered.

OPM rules which govern competition among internal candidates, commonly termed "merit promotion," are found in Federal Personnel Manual Chapter 335. Agencies typically construct internal rating and ranking procedures in order to identify the best qualified. Candidates are evaluated by personnelists, a subject matter expert, or a panel of subject matter experts, then either forwarded to the selecting official as best qualified or eliminated from further consideration for that vacancy based on a cutoff score established by the evaluator(s). In most agencies, the selecting official does not participate in the rating, ranking and referral process. Managers are free to select any candidate from among those

referred by the panel.

Although OPM does not conduct examinations for positions in the Senior Executive Service (SES), the managerial qualifications of individuals selected for career SES positions must be approved by a Qualifications Review Board which is convened by OPM.

In 1989, in connection with a study to explore OPM's simplification initiatives, MSPB concluded that:

(T)he OPM initiatives which agencies thought were the most effective were those which the agencies felt would assist in the hiring of high-quality employees and those that expedited the hiring process. Clearly, the provision of prompt recruitment and placement services to operating officials is a priority in agencies' personnel programs.⁵

Can today's civil service hiring system meet the needs of federal managers for the 21st century? Most would maintain that the system cannot even meet current needs, and that reinvention is already long overdue, for the reasons summarized below.

Need for Change

The need for change is well documented. When describing the federal hiring system in 1988, OPM Director Constance Horner noted that:

The current system is slow; it is legally trammelled and intellectually confused; it is impossible to explain to potential candidates. It is almost certainly not fulfilling the spirit of our mandate to hire the most meritorious candidates.⁶

In that same year, the Hudson Institute's *Civil Service 2000* predicted that "... hiring and retention (will become) much more competitive in the years ahead. Because these tight labor markets are likely to develop in different ways in different states and to shift quickly in response to economic and population changes, it is essential to decentralize responsibility and to provide more flexibility in hiring and personnel management than is characteristic of the current system."⁷ Dwindling resources, shifting markets, and emerging technologies compound the need to ensure that every single employee becomes a vital partner in mission attainment and program delivery. Thus, identifying the impediments to carrying out an effective hiring program and exploring the extent to which these impediments can be

alleviated become an absolute business necessity to ensure an organization's survival.

The problems with the hiring system fall into the following major categories:

- (1) **Lack of accountability.** The single greatest failing of the hiring system is lack of managerial involvement in the front-end recruitment and evaluation of candidates for employment -- in other words, lack of accountability. Managers who do attempt to participate in the external recruitment process in most cases must send potential applicants to OPM or to delegated examining units to be examined, in striking contrast with the ability of private industry recruiters to make immediate offers of employment to qualified candidates and to establish closer ties to professional and community recruitment sources. Managers must wait to receive candidates who have been rated and ranked by OPM or delegated examining units, and are required by law to choose from among the top three available candidates, which effectively prevents them from considering other candidates who may in fact be more qualified. When considering internal candidates, they make selections from among candidates who have been determined by others to be the best qualified. Managers are then able to "blame the system" for undesirable outcomes, such as perceived inequity or underrepresentation, if they have followed all of the rules.
- (2) **Failure to meet customer needs.** In 1989, The National Commission on the Public Service observed that, "Even when the public sector finds outstanding candidates, the complexity of the hiring process often drives all but the most dedicated away."⁸ In 1990, the Merit Systems Protection Board (MSPB) observed that, "Potential applicants are frequently discouraged by the confusion they experience when trying to get a job with the Federal Government."⁹ The system is time-consuming and unresponsive; despite improvements in the automated delivery of examining services, the best candidates frequently go elsewhere before federal managers are able to make firm offers of employment. The fact that managers are forced to send some potential applicants to OPM to be examined is of particular concern at remote field locations where access to OPM services is necessarily limited. The issue is not merely convenience; more importantly, the public's perception of the Federal Government as a responsive employer suffers tremendously when agency managers

are forced to send applicants to OPM for examination, with no guarantee they will ever be "within reach" for positions at that agency on a centralized register. In 1989, the National Commission on the Public Service found that:

Government faces an enormous challenge in recruiting America's top college graduates. On the one hand, outstanding graduates doubt that the public sector can fulfill their dreams of meaningful, challenging careers. On the other hand, they find that the complexity of entry makes public sector jobs among the toughest to get.¹⁰

- (3) **Restricted competition.** Qualified candidates are automatically eliminated from managers' consideration based on narrow point score distinctions reflecting only some of the attributes of individual candidates. The system undermines recruitment initiatives as managers recruit candidates who may not be "within reach" on certificates of eligibles, and therefore are unavailable for selection. Overly restrictive qualification standards and time-in-grade requirements can eliminate candidates who are in fact able to perform the duties of the position. When centralized OPM registers are filled and examinations are closed, candidates are prevented from applying for position vacancies. Temporary employees as a rule may not apply to be considered for vacancies being filled under internal (merit promotion) procedures. Thus, the "open competition" required in the merit system principles becomes subject to arbitrary limitations.
- (4) **Complexity.** The system is so complex and rule-bound that managers are unable to explain to applicants how to get a federal job. Staffing law, regulations, and Federal Personnel Manual guidance comprise hundreds of pages, to which departments and agencies add their own interpretive guidance and implementing directives. The system is overly constrained by statute and regulation; over 300 appointing authorities provide little useful management information and require interpretation by personnel specialists.

This complexity has evolved over time as particular statutes, regulations, and related guidance were developed and implemented to address specific situations or perceptions of mismanagement. For example, the law requires that temporary

assignments to other positions (details) be made in 120-day increments¹¹ as a means to control the internal movement of employees. However, the centralized and highly controlled systems designed to ensure the equitable delivery of examining services in fact serve to prevent managers and applicants from either understanding or making full use of available options. In 1993, the National Research Council concluded that, "The federal civil service system, with its strong emphasis on internal equity, has long hampered the government's abilities to compete for scarce talent in the labor market and to reward exceptional individual performance."¹²

An ideal hiring system would enable managers to hire, develop, and retain a quality, diverse, productive and ethical workforce in constantly changing labor markets; empower managers to balance the competing demands of multiple stakeholders; and hold managers accountable for adherence to principles of merit and equal opportunity through a performance-based assessment of staffing outcomes. The ideal system would be decentralized to create a link between an agency's recruitment efforts and those candidates who are actually hired. A decentralized system would permit agencies to establish their own priorities for agency-based recruitment initiatives. Tailored approaches designed to tap into local labor markets could provide managers with expanded opportunities to increase the diversity of the candidate pool. Flexible and responsive agency-based systems would permit managers to adapt to fluctuations in the labor market. Federal recruiters would be empowered to compete with private sector recruiters. A significantly enhanced, automated employment information system could immediately link candidates with nationwide, or communitywide, job opportunities by occupational specialization. Freed from constraining layers of mind-numbing regulations, personnel specialists would become partners with management in the development of staffing initiatives to support overall strategic planning objectives.

Experience has shown that such a system can be successful. In July 1990, a formal demonstration project to test an alternative staffing system was implemented within the Department of Agriculture (USDA) at approximately 140 experimental and 80 comparison locations nationwide within the Forest Service and the Agricultural Research Service. The project's key initiatives include a streamlined, agency-based recruitment and hiring system

which completely replaces the OPM register process; recruitment incentives; and an extended probationary period for research scientists. In connection with their ongoing responsibility to conduct a formal evaluation of project impact and implementation, the Pennsylvania State University reported that ". . . the demonstration initiatives are widely seen as providing a flexible and responsive set of recruitment and selection procedures that are preferable to pre-existing procedures (e.g., central registers). The reported benefits from the demonstration project include increased access to the local labor market, greater control over the hiring process, and increased likelihood of quality candidates in the candidate pool, among others."¹³ The evaluators proceed to describe ". . . a possible unanticipated benefit associated with increased recruitment of labor from local labor markets . . . the sense that public perceptions of the agency as an employer and community member have (improved)."¹⁴

Recommendations

- 1. Decentralize all recruitment and examining authority, including that which applies to positions in the Senior Executive Service, directly to federal departments and independent agencies. Abolish centralized registers and standard application forms.¹⁵ (Category 3)**

By September 1994, OPM should forward draft legislation to Congress delegating to departments and independent agencies full and complete authority to develop and implement merit systems for employee selection and advancement based on the merit system principles. Legislation is required to allow departments and agencies to conduct examinations for positions which are common to agencies in the Federal Government, and to redefine the roles of OPM and agencies with respect to the examining process. Within 30 days of enactment by Congress, OPM should develop the broad policies and general principles through which the new legislation will be implemented.

Federal departments and independent agencies would establish merit systems for recruiting and evaluating candidates for selection and advancement. These

systems would be based on the policies and principles established by OPM in accordance with applicable statutes and which reflect the input of the federal human resource management community. Individual federal departments and agencies would be permitted to conduct examinations with respect to positions that have requirements which are common to agencies in the Federal Government. OPM could compete with departments and agencies to provide examining services. Department secretaries and agency heads would be responsible for holding managers accountable for the judicious use of these authorities. OPM would be responsible for (1) notifying department secretaries and agency heads if violations are identified, and (2) ensuring that corrective actions are taken, as appropriate. In cases where violations are identified which involve secretaries and agency heads, OPM would be authorized to conduct an investigation and recommend an appropriate course of action to the President.

Completely decentralizing the hiring process should result in the establishment of agency-based, market-driven hiring systems, which will, in turn, improve managers' ability to hire, develop and retain a quality workforce, reflective of our nation's diversity. Streamlined, agency-based systems will permit more timely offers of employment and be more readily understandable to applicants. Access to increased numbers of candidates will facilitate the attainment of workforce diversity goals and objectives.

How will accountability be defined in the context of decentralization and substantially increased delegation of authority? Some may believe that increased flexibility will lead to increased incidence of merit system abuse. However, decentralization of responsibility for recruitment and examining is expected to increase managers' participation in and control over the staffing process, thereby reducing their ability to "blame the system" for unsatisfactory outcomes. Managers will become even more accountable for adherence to merit principles and for preventing prohibited personnel practices as increased flexibility leads to correspondingly increased performance expectations. An April 1993 National Academy of Public Administration report described this shift in the definition of

accountability:

The means for accountability focuses on the exercise of leadership and judgment within broad guidelines, rather than on detailed rules and procedures and prior controls . . . (deriving from) clear principles of fairness, equity and individual rights . . . Accountability measures should be mission oriented and results driven . . . the new framework emphasizes measuring accountability by: measuring accomplishment of mission, goals and objectives; assessing results, e.g., product and service quality and customer satisfaction; assessing public trust (customer satisfaction) and institutional health (e.g., employee morale, attrition rates); and evaluating compliance with civil service laws, regulations and policy.¹⁶

Managers' responsibility for ensuring adherence to merit principles and preventing prohibited personnel practices will increase as they become more closely involved in all phases of recruitment and hiring. Extensive training must be provided to ensure that managers understand how the merit principles are applied in the context of making personnel decisions. The success of managers' efforts will be evaluated using performance-based outcome measures, for example, employee morale and workforce diversity. Experience has shown that greater flexibility permits managers to become more involved in and, therefore, more accountable for program results. The Pennsylvania State University reported that, using the decentralized approach being tested under the USDA demonstration project, "both managers and personnelists reported greater participation in the recruitment process, and viewed manager-personnelist interactions as more important in determining the success of the hiring process."¹⁷

2. Allow federal departments and agencies to determine that recruitment shortages exist and directly hire candidates without ranking.¹⁸ (Category 3)

By September 1994, OPM should forward draft legislation to Congress to allow OPM, and departments and agencies, to establish categories in which candidates can be directly hired to coincide with the establishment of decentralized, agency-based hiring systems.

Federal departments and agencies would have the authority to directly hire

candidates without ranking when recruitment shortages exist after considering the following factors, as applicable: (a) the failure of recent efforts to recruit high quality candidates for similar positions; (b) recent turnover in similar positions; (c) labor market factors that may negatively impact the ability of the agency to recruit high quality candidates for similar positions now or in the future; or, (d) special qualifications needed for the position that are in short supply. OPM should establish additional categories where candidates may be directly hired, for example, persons with targeted disabilities, candidates with outstanding academic qualifications, or other categories as appropriate.

3. Reduce the number of competitive service appointment types to 4.¹⁹ (Category 3)

By June 1994, OPM should forward draft legislation to Congress to streamline and redefine appointments in the competitive service. Within 30 days of enactment by Congress, OPM should revise its guide for processing personnel actions and related instructions to reflect the new system of appointments. By June 1994, OPM should revise or otherwise issue regulations to redefine the length and frequency of probationary periods.

Appointments to positions in the competitive service would fall into one of the following categories:

- Competitive/permanent (full benefits)
- Competitive/indefinite (not permanent, without time limitation, full benefits)
- Temporary (not to exceed one year, with option to renew for one additional year, limited benefits)
- Excepted (positions of a confidential or policy-determining character (Schedule C); positions for which eligibility depends upon factors other than education and experience, for example, family income (such as student aid), local residence, acceptability to foreign officials, etc.) Agency flexibility to

design merit-based hiring systems should substantially reduce the need for the majority of excepted service appointments currently established under Schedules A and B.²⁰

To provide an adequate period of time in which to make career tenure decisions, the duration of the initial probationary period upon permanent appointment without time limitation to a position in the competitive service and the probationary period upon initial appointment to a supervisory or managerial position would be extended from one to a maximum of three years. Agencies would be permitted to determine an appropriate length of time for specific occupations or positions which would be announced to candidates in advance.

[OPM should establish a mechanism through which less than fully successful performers would automatically revert to probationer status, with attendant ease of removal. *NOTE TO REVIEWERS: This option is still under discussion.*]

4. Permit nonpermanent employees to compete for permanent positions under agency procedures for internal placement.²¹ (Category 3)

By June 1994, OPM should forward draft legislation to Congress to allow nonpermanent employees who were initially hired using competitive procedures to be considered along with internal candidates for permanent positions being filled under merit promotion. Following two years of performance within a five-year period which meets established expectations, temporary and indefinite employees would be permitted to apply to be considered for selection and appointment to permanent positions under internal placement procedures. Within 30 days of enactment, OPM should issue appropriate guidelines for implementation.

5. Abolish the time-in-grade requirement.²² Create a general qualifications framework which permits agencies to augment or modify qualification standards for both internal and external placement actions. (Category 1)

By January 1994, OPM should revise its regulations to abolish the

time-in-grade requirement. By January 1994, OPM should revise its guidance concerning governmentwide qualification standards.²³ OPM should continue to implement a framework of generic qualification standards which permits agencies to identify and develop experience requirements for specific series. Agencies would be permitted to modify standards for both external and internal placement actions, including promotions, when the agency determines that candidates could successfully perform the work of the position although they may not fully meet the qualification requirements in the generic standards. Agencies may augment standards with selective placement factors but may not require additional amounts of education or experience beyond those required by the standards. Decisions to either augment or modify standards will be made before vacancy announcements are issued and will be publicized in the announcement.

6. Eliminate all statutory guidance on detailing employees to temporary assignments.²⁴ (Category 3)

By January 1994, OPM should forward draft legislation to Congress to repeal the statutory time limitation on details of employees. Within 30 days of enactment of the legislation, OPM should issue appropriate guidelines for implementation. The 120-day limitation on details would be removed, and agencies would have the authority to determine the appropriate duration of a temporary assignment.

7. Create a governmentwide employment information system to inform the public of job opportunities. Coordinate the development and operation of common automated systems to facilitate agency staffing policies and operations. (Category 1)

By September 1994, OPM should develop and implement an expanded job information service featuring a user-friendly, state-of-the-art electronic information network to which customers can easily gain access. By September 1994, OPM and agencies should collaborate in developing a core automated personnel operations

support network to reduce the cost and inefficiency of separate agency systems.

A substantially refined and expanded automated employment information system would be installed to which applicants could gain telephone or electronic access. Services provided at Federal Job Information Centers would be expanded. Agency access to the Central Personnel Data File (CPDF) would be increased. CPDF would be extensively reconfigured to provide management information for the purpose of monitoring workforce statistics, including those which relate to managerial accountability, such as employee turnover and selection data by race, gender and disability categories.

8. Decentralize authority to conduct background investigations to federal departments and agencies.²⁵ (Category 1)

By January 1994, OPM should repeal relevant sections of the regulation and issue appropriate implementing instructions. Federal departments and agencies would have full and complete authority to conduct or to otherwise accomplish background investigations, for example, through contractors, using criteria established by OPM; 5 CFR 736.201(a) and (b)²⁶ would be repealed. OPM would be required to compete with other providers of investigative services to conduct investigations.

Fiscal Impact

The short term impact is expected to be budget neutral; that is, devolution of centralized functions to agencies is expected to require the concomitant development and implementation of agency-based systems and methods of program evaluation. Moderate administrative savings may be realized in the long term.

Cross References to Other NPR Recommendations

End Notes

1. Title 5, United States Code, Government Organization and Employees (April 1993), sec. 2301.
2. Title 5, United States Code, sec. 2302.
3. Title 5, United States Code, sec. 2302(c).
4. Title 5, United States Code, sec. 2301(b)(1)
5. U.S. Merit Systems Protection Board (MSPB), *Delegation and Decentralization: Personnel Management Simplification Efforts in the Federal Government* (Washington, D.C., October 1989), p. 18.
6. Constance Horner, Office of Personnel Management, 1988, quoted in National Commission on the Public Service, *Leadership for America* (Washington, D.C., 1989), p. 29.
7. Hudson Institute, *Civil Service 2000* (Washington, D.C., June 1988), p. 27.
8. National Commission on the Public Service, *Leadership for America*, p. 28.
9. MSPB, *Attracting and Selecting Quality Applicants for Federal Employment* (Washington, D.C., April 1990), p. 1.
10. Ibid., p. 26.
11. Title 5, United States Code, sec. 3341.
12. National Research Council, *Improving the Recruitment, Retention, and Utilization of Federal Scientists and Engineers* (Washington, D.C., 1993), p. 37.
13. The Pennsylvania State University, *U.S. Department of Agriculture Personnel Management Demonstration Project Second Annual Evaluation Report* (The Pennsylvania State University, April 1993), p. vii.
14. Ibid., p. 12.
15. Title 5, United States Code, sec. 1104; 1302; Chapter 31, Subchapter II; sec. 3304; 3305; 3324; and 3325.
16. National Academy of Public Administration (NAPA), *Leading People in Change: Empowerment, Commitment, Accountability* (Washington, D.C., April 1993), p. 18.
17. The Pennsylvania State University, *U.S. Department of Agriculture Personnel Demonstration Project*, p. 22.

18. Title 5, United States Code, sec. 1302; 3304; and 3361.
19. Executive Order 10577; Title 5, Code of Federal Regulations, Administrative Personnel (January 1, 1993), Part 315.
20. Title 5, Code of Federal Regulations, Part 213.
21. Title 5, United States Code, sec. 3304.
22. Title 5, Code of Federal Regulations, Part 300, Subpart F.
23. Handbook X-118, Qualification Standards for Positions under the General Schedule (reprinted December 1991), Office of Personnel Management.
24. Title 5, United States Code, sec. 3341.
25. Title 5, Code of Federal Regulations, Part 736, Subpart B, sec. 736.201(a) and (b).
26. Title 5, Code of Federal Regulations, Part 736, Subpart B, sec. 736.201(a) and (b).

Part 1

Creating and Maintaining a Quality, Diverse Workforce

HRM. 02: REFORM THE GENERAL SCHEDULE (GS) CLASSIFICATION AND BASIC PAY SYSTEM.

Background

Approximately 1.6 million federal civilian employees -- about 75 percent of the nonpostal civilian workforce -- are covered by the GS classification and basic pay system. (The remaining 25 percent are covered under a variety of special pay systems, the largest of which is the Federal Wage System, which covers over 300,000 blue-collar employees in trades and crafts occupations.) The GS system was established in 1949 and was intended to provide a standard framework for establishing the pay hierarchy for federal employees in white-collar occupations.

The central core of the GS classification system is codified in law. The law establishes 15 grades and describes the level of work at each grade. As stated in the law, the purpose of the classification system is to ensure that equal pay be provided for substantially equal work (by ensuring equal grade for equal work) and that work be classified based on its difficulty, responsibility, and qualification requirements. The law provides OPM with a central role in establishing classification standards and reviewing agency classification actions (through periodic audits and hearings of employee appeals). OPM has final authority in classification matters.

OPM has established over 450 separate job categories called "series." For example, there are 34 different series in the field of biological sciences alone, including such series as Plant Pathology, Plant Physiology, Plant Protection and Quarantine, Soil Science, and Irrigation System Operation. For many of these 450 series, OPM has published classification standards that agencies must apply in assigning grades to jobs. The series-specific classification standards describe the nature of work and set forth criteria or rules for determining the appropriate grade level. Series standards tend to be fairly detailed and can require considerable time and classification expertise to apply. Many of the standards

have not been revised for many years and are viewed as out-of-date.¹

The GS basic pay structure is directly based upon the grades in the classification system. There are 15 overlapping pay ranges that correspond with the 15 grades. Until passage of the Federal Employees Pay Comparability Act of 1990 (FEPCA), the GS basic pay structure consisted of a single nationwide pay schedule (although higher "special salary rates" could be paid in response to significant recruitment and retention problems). However, FEPCA now provides for locality-based comparability payments based on average pay disparities between federal and non-federal workers. The same locality pay percentage will apply to all employees in a given local pay area, thus maintaining on a local basis the pay relationships among all jobs in the GS hierarchy of grades, consistent with the equal pay principle.

By law, basic pay rates within any GS grade are set at one of ten fixed "step" rates. Employees performing at an "acceptable level of competence" progress through the rate range in accordance with statutory waiting periods (1 to 3 years depending on the step). In addition, employees may receive additional step increases -- called "Quality Step Increases" (QSI) -- based on outstanding performance, subject to a limit of one QSI per year. While a special merit pay progression scheme applies to managerial employees covered by the Performance Management and Recognition System, that system is set to expire on September 30, 1993.

In recent years, several federal agencies have been conducting special demonstration projects that tested "broadbanding" classification systems within the GS framework. A broadbanding system involves both the consolidation of job categories (job banding) and the merging of grades or pay ranges (grade banding). Tailored within-band pay progression schemes were also developed for each project. The oldest and most well-known broadbanding demonstration project is a Department of the Navy project covering two research laboratories in Southern California (commonly referred to as the "China Lake" project).

Need for Change

A strong case can be made that the current federal classification and basic pay

system is in need of significant reform. The problems with the current system are summarized below:

1. **Lack of Mission Focus** - The GS classification system was premised on the idea that internal equity would help the government more effectively and efficiently accomplish its various missions by ensuring that employees are compensated based on the difficulty and responsibility of their work, by addressing employee concerns about pay fairness, by reducing interagency competition for employees based on pay, and by simplifying the pay setting process. Over time, the ideal of internal equity has emerged as the supreme goal of the system, instead of being viewed as a means to attaining the larger goals associated with effective government. Consistent with the focus on internal equity, system administrators have sought to achieve greater precision, even though the additional precision did not result in -- and perhaps even worked against -- more effective government. A new and better balance is needed -- a balance that can be achieved by a less precision-oriented classification system that provides for greater agency flexibility and is more supportive of agency missions without undermining the long-term governmentwide interests that originally prompted establishment of the system.

The degree of precision with which jobs are classified under this [the General Schedule classification] system is neither warranted by the methodology nor necessary to support pay equity or to organize work efficiently. (National Academy of Public Administration, 1993)²

2. **Low Credibility** - According to a recent survey of federal employees conducted by OPM, only 31 percent of employees agree that their pay is fair considering what other people in their organization are paid.³ Thus, despite all the attempts to build precision into the system through central control and rules, the fairness of the system appears to be questioned by the vast majority of the people whose opinion is perhaps most important. Ironically, it appears that the more precision that is sought in job evaluation, the more likely that the measurements of equity will be incomplete (because equity factors that could be considered under a less precise approach have been eliminated) and open to criticism (due to the specificity of the measurements as

well as the high expectations created by the precise approach). Furthermore, a precise system that cannot be easily enforced invites rule bending and breaking, which further undermines system credibility. In meetings with federal managers and personnel specialists, NPR staff were repeatedly told how agency managers are able "beat the system" to get the results they want. There is a strong argument that the classification system would be viewed as more fair by employees if it were less "precise" but more honest about its reliance on human judgment.

The current classification system allows the manager to be precisely wrong. What the manager needs is the opportunity to be roughly right. (James E. Colvard, former Deputy Director of OPM, 1991)⁴

3. **Complexity** - The GS classification system is difficult to understand and to use. This prevents managers -- who actually best know the work being classified and its value to the organization -- from assuming the primary role in classifying jobs. Instead, the system is largely run by OPM and agency personnel specialists with classification expertise (2,000 of whom are classified in a special Position Classification job series). The system's complexity promotes excessive paperwork and slow, cumbersome administrative procedures. It also makes it difficult to maintain currency. About 40 percent of OPM's classification standards are over 20 years old.⁵

In an era of growing pressures for efficiency, productivity, flexibility, customer satisfaction, and goal-directed results, the [General Schedule] classification system is mired in expensive, time-consuming, rule-driven complexity. (National Academy of Public Administration, 1993)⁶

4. **Fragmented Accountability** - Accountability for classification is fragmented among OPM, agency personnel offices, and agency program managers. Not only does this fragmentation produce tension and conflict among the parties, but it also prevents any one party from assuming responsibility for the consequences of classification decisions. Since many federal managers do not operate under a fixed payroll budget or total cost budget, they do not necessarily feel an obligation to consider the long-

term cost consequences of classification actions. On the other hand, OPM and agency personnelists do not have to face the consequences that classification actions have on program missions. There is a clear need to consolidate accountability for mission and for classification in one place. This suggests giving classification authority to line managers while ensuring that they are accountable for managing budget dollars prudently and paying employees fairly (in accordance with governmentwide standards).

The role of the personnel professional must be redefined to emphasize the desired shift to a consultative relationship with managers, rather than the heretofore traditional role of classification decision-maker. (Federal Section of the International Personnel Management Association, 1991)⁷

5. **Inflexibility** - One-size-fits-all rigidity characterizes the GS classification and pay system. Agency managers point out that agencies have diverse missions, challenges, organizational structures, values, and cultures, and that they must respond to ever-changing external conditions. The classification system must not be so immutable that it cannot respond to new ways of designing work, the changing value of jobs, or changes in the work itself. While some flexibilities have been incorporated within the pay system (e.g., special salary rates and entry pay above the minimum rate) to compensate for the classification system's rigidity, the restrictions that accompany many of these pay flexibilities severely limit their usefulness. Even if the classification system is made more flexible, additional pay flexibilities are needed to allow agencies to respond to localized labor market fluctuations and to use pay progression schemes that better fit the culture and goals of the organization.

These [General Schedule] grade level criteria have come to be viewed as 'cast in stone' [r]esulting in virtually fixed and therefore unresponsive standards Since the classification standards aren't readily adapted to changes which may occur in how society values certain kinds of work, the classification system can rarely, if ever, be a proactive tool of personnel management policy. (Merit Systems Protection Board, 1989)⁸

6. **Hierarchical Orientation** - As currently administered, the GS classification system seems to facilitate or reinforce hierarchical structures. Part of the reason may lie in the reliance on specialized, narrow jobs, which tends to lead to the creation of organizational "stovepipes" structured by function instead of by mission. Perhaps more important is the fact that the classification system more readily provides higher grades for supervisory work than for expert-level nonsupervisory work. NPR staff heard from many different sources that supervisory positions are frequently created as a means of providing employees with higher grades. All of this suggests that a more flexible classification system designed to encourage more broadly defined jobs and to more readily permit dual career ladders could facilitate the streamlining or delayering of federal organizations.

Billions of dollars in precious tax revenues are squandered annually to support a federal management structure that is excessively bloated and that is unavailable to perform 'front line production' work. These needless layers upon layers of management are not benign. They significantly delay work product getting out timely and they micromanage to justify their existence thereby ultimately creating customer (public) dissatisfaction. The related pay and classification problems have contributed to this 'pyramiding' of supervisors upon supervisors to justify grade levels. (John N. Sturdivant, National President, American Federation of Government Employees, 1993)⁹

The interrelated problems described above point to the need for a new mission-driven classification and basic pay system -- a system that achieves a better balance between flexibility and accountability, that is simpler to understand and administer, and that can be used proactively as a tool to help reshape the Federal Government. To achieve change in the classification and pay area without producing chaos, it is essential to develop a flexible system that allows agencies to take incremental steps based on their needs and levels of readiness to assume greater responsibilities.

Recommendations

1. **Remove all grade-level classification criteria from the law. (Category 3)**

OPM should submit proposed legislation to Congress no later than January

1994 that would repeal the classification criteria for the 15 grades in the General Schedule system that are now codified in 5 U.S.C. 5104.

The statutory classification criteria have remained essentially unchanged since 1949.¹⁰ The government should have the flexibility to make changes in the classification criteria in response to changes in the work world without going through the legislative process. Initially, OPM could administratively adopt the longstanding criteria and then make changes as warranted.

In addition to providing needed flexibility, removing the classification criteria from the law should also help reinforce the idea that, like private sector employees, federal employees do not have a statutory entitlement to a precise grade or pay level.

2. Provide agencies with flexibility to establish broadbanding systems built upon the General Schedule framework. (Category 3)

OPM should submit proposed legislation to Congress no later than January 1994 that would (1) authorize OPM to approve the banding of GS grades (and associated pay ranges), subject to the condition that the content definition of any band be linked to the GS grade-level definitions, and (2) reduce the restrictions on the demonstration project authority so that it can be a more proactive management tool. Within 1 year of enactment of this legislation, OPM should publish detailed information on the initial set of options available to agencies under these new authorities.

OPM would work with agencies to develop standard banding patterns that incorporate job banding, grade banding, and within-band pay progression schemes. Agencies could choose among the menu of standard patterns without need for OPM approval. In addition, agencies could request OPM approval of minor variations in the standard patterns. OPM approval of these minor variations would not be time-limited.

Unique broadbanding systems that do not fit under one of the standard patterns could be approved under a revised demonstration project authority. The demonstration project authority would be revised by eliminating (1) the limit on the

number of employees covered by any project, (2) the limit on the number of active demonstration projects permitted, (3) the requirement that Congress be notified regarding the tentatively approved project plan 180 days in advance of the beginning of the project, and (4) the requirement that OPM promulgate regulations. OPM regulations on demonstration projects would be repealed and replaced with written guidance. OPM would require the minimum amount of data needed to evaluate the project and overly burdensome quantitative research methodologies would not be imposed. Demonstration projects would be approved by OPM for a 5-year test period, after which a successful project could be converted to a permanent "alternative system." For broadbanding demonstration projects, OPM would publish special project approval criteria so that any agency meeting the criteria would be assured of approval.

Based on tests in the Federal Government (e.g., the Navy's China Lake demonstration project) and on the experience of private sector companies with broadbanding systems, broadbanding does not appear to be a panacea. It carries its own set of challenges and may not be a good fit for every organization or every occupational group. Broadbanding can meet resistance in organizations in which hierarchical rank is important. It can also lead to increased salary costs if the organization does not have (1) managers who are skilled at managing employee pay, (2) an effective performance management system, or (3) appropriate budget controls. However, broadbanding does offer many potential benefits, including simplified classification procedures, empowered managers, more broadly skilled employees, greater lateral job mobility, more flexibility in establishing dual career ladders, and the opportunity to redesign work and create flatter organizations.¹¹ The recommended approach allows agencies, that are ready, to move toward broadbanding under a structured approach that manages the associated risks.

3. Modify the standard 15-grade classification system that applies to those employees not covered by a broadbanding system. (Category 3)

OPM should submit proposed legislation to Congress, no later than January

1994, that amends the classification law to give employing agencies authority to make final classification decisions and to eliminate OPM's review and compliance authority, effective 1 year after enactment. During the 1-year interim period, agencies should provide line managers who will be given classification responsibilities with appropriate training and develop appropriate decision support systems (e.g., human resource planning and costing models). OPM should immediately begin the process of simplifying the standard classification system by reducing the number of job categories used for classification purposes and by developing abbreviated standards that focus solely on full-performance (i.e., journeyman) levels of work. In addition, OPM should issue regulations, no later than January 1994, deleting the requirements that employees serve some minimum amount of time at a lower grade level to qualify for a higher grade (i.e., "time-in-grade" requirements).¹²

OPM would be responsible for developing and maintaining the classification tools to be used by agencies participating in the modified standard 15-grade classification system. OPM would publish the primary classification standard setting forth the basic evaluation criteria that would guide all classification decisions. In the first stage of the simplification effort, it would also publish 30 to 50 job-specific classification standards that cover the most populous jobs and selected benchmarks. Eventually, all paper standards would be eliminated and replaced by a manager-friendly automated classification program. Since OPM standards would focus solely on full-performance levels of work, agencies would be free to assign grades to entry and developmental levels under their own authority and standards, consistent with job qualification requirements.¹³

Agencies would classify full-performance level jobs using the OPM standards, subject to a requirement that final classification decisions be made at a level of management that operates under a fixed budget that includes all pay-related costs. OPM would not have authority to overrule an agency classification action. Each department or agency would be required to provide for internal reviews of a position's classification when requested by an employee. The employee could

appeal a department's or agency's final classification decision to the Merit Systems Protection Board (MSPB), but only on grounds that the classification is based on a prohibited personnel practice (5 U.S.C. 2302), such as the use of discriminatory factors. MSPB's role would be limited to determining whether the agency has classified the employee's position through prohibited means. It would not be authorized to apply the standards and substitute its value judgments for an agency's.

A governmentwide job titling system would be retained to support a governmentwide human resources data base and external salary surveys; however, job categories would be consolidated to the maximum extent appropriate. It is expected that the number of job series (currently over 450) would be reduced by at least one-half. As under current law, special job evaluation systems could be approved by the President's Pay Agent¹⁴ for occupational categories that do not fit well in the standard classification system.

The modified standard classification system should greatly simplify the job classification process and provide agencies and their line managers with greater flexibility along with accountability for proper administration. The link between classification and budget would be strengthened. With the elimination of its review and compliance authority, OPM would no longer have the role of classification "police." Employees would be protected from discriminatory treatment by ensuring that internal agency reviews and MSPB hearings are available. The elimination of the time-in-grade requirements would allow managers to promote qualified employees without delay; in addition, since the minimum time-in-grade requirements seem to be viewed by many employees as length-of-service requirements triggering automatic promotion, their elimination could help reinforce the principle that promotions are based on qualifications and abilities, not longevity.

4. Provide agencies under the standard 15-grade system with additional flexibilities in setting base pay rates. (Category 3)

OPM should submit proposed legislation to Congress, no later than November 1993, that would modify the GS within-grade pay progression scheme.

In addition, OPM should submit proposed legislation to Congress, no later than January 1994, that would provide employing agencies with certain additional flexibilities in setting base pay rates, effective 1 year after enactment (to correspond with the effective date of the classification system modifications).

The 15-grade pay structure and a standard within-grade pay progression scheme similar to the current scheme would be retained. However, the rigid 10-step framework for progression within each pay grade would be abandoned. Within-grade increases would be equal in dollar value to the current step increases and the waiting periods would remain essentially the same.¹⁵ The main differences would be that Quality Step Increases or QSI's (perhaps renamed as "Exceptional Performance Increases") could be less than a full within-grade increment and that an employee's initial rate in grade (upon hire or promotion) would not be required to equal a fixed step rate. This modified standard within-grade progression scheme would also apply to GS-13 to 15 managerial employees who are now covered by the Performance Management Recognition System, which is scheduled to expire on September 30, 1993.

Agencies could also establish special, alternative within-grade pay progression schemes through a revised demonstration project authority. (See recommendation 2.) For example, agencies may wish to experiment with schemes that base within-grade pay progression on the acquisition of specific skills or that move toward greater use of variable pay (i.e., one-time bonuses and awards) instead of base pay adjustments.

Agencies would be given discretionary authority to approve a base pay differential of 10 percent (of the GS base rate) for mission-critical positions with a grade no higher than GS-14 that, in the agency's judgment, are significantly undervalued under the standard classification criteria, based on the value assigned by the agency to those mission-critical positions relative to the value (i.e., grades) of other positions in the agency. *[NOTE TO REVIEWERS: This proposal is still being analyzed. It may not be necessary if agencies have flexibility to classify jobs without OPM review. The mission-critical factor could be built into the primary*

classification criteria.]

Agencies would be given discretionary authority to set entry pay up to 10 percent higher than the minimum rate of the entry grade if, in the agency's judgment, it is necessary to meet its recruitment goals. (The authority to set entry pay at any rate in the entry grade based on superior qualifications would also continue.)

Agencies would be given discretionary authority to establish, for grades GS-14 and below, local special rate schedules up to 10 percent higher than regular rates (including any locality pay adjustment) for occupations in which recruitment and retention efforts are significantly handicapped due to inadequate pay levels. These special rates could be phased out, at agency discretion; however, the phase-out must be conducted in a way that prevents any employee from suffering an absolute reduction in pay. Thus, agencies would be required to time the phase-out of a special rate to coincide with the effective date of general pay increases. (OPM's authority to approve higher special salary rates upon agency request would also continue. However, the rules for administering OPM-approved special rates would be modified expressly to allow agencies to phase out special rates at their discretion, consistent with the rules for agency-approved special rates.) *[NOTE TO*

REVIEWERS: Under current law, employees' special salary rates can be reduced or terminated; however, such employees are covered by statutory pay retention rules that may provide partial annual increases, instead of an absolute pay freeze. At the same time, the current law makes it difficult to not apply annual increases to special rates. This proposal would make it clear that employees are not entitled to have their special rate adjusted by the general increase percentage factor.]

The intent of the recommended changes is to provide agencies with greater flexibility. While the modifications to the standard within-grade pay progression scheme are not dramatic, they would eliminate unnecessary rigidity and allow agencies to make finer distinctions with respect to certain pay decisions. Also, those agencies that would like to adopt a special pay progression scheme could do so through the liberalized demonstration project authority, which would allow for

permanent adoption of a successful project as an alternative system. The new flexibilities to increase base pay would empower agencies to respond quickly to special situations and reduce the temptation to manipulate the classification system. Given the visibility of the proposed pay flexibilities, agencies would have strong internal and external incentives to use them prudently. OPM reports on agency pay practices would reinforce accountability. The new rules for phasing out special salary rates would make clear that special rates are paid at agency discretion and are not a matter of statutory entitlement.

5. Establish public reporting requirements that apply to both the modified standard system and any broadbanding system. (Category 3)

In conjunction with the law changes proposed above, OPM should submit proposed legislation to Congress, no later than January 1994, that would expressly authorize OPM to collect compensation data from agencies and to require advance public notice of significant classification and pay actions. OPM would develop specific reporting requirements, including the following:

- o Agencies would be required to issue a 60-day advance public notice regarding their intention to upgrade or downgrade any group of positions with 100 or more incumbents, or to authorize special salary rates.
- o Agencies would be required to provide OPM with specific types of data on compensation practices. To the maximum extent possible, the data would be collected through OPM's Central Personnel Data File system, which would be enhanced as necessary. OPM should issue an annual public report providing selected compensation data (e.g., number and percentage employees in full performance level grades by job category and agency, average and median salaries by job category and agency, total payroll costs by job category and agency, etc.), with historical data also provided for comparison purposes.

Fiscal Impact

The overall fiscal impact of the proposed changes to the classification system (i.e., broadbanding and decentralization) can be monitored and controlled within agency budget constraints. Agency decisions could produce additional costs in some areas while providing offsetting savings in other areas. As the classification system is simplified and automated and as line managers assume responsibility for classifying positions, the amount of staff years devoted to classification by personnelists (and associated administrative costs) should be significantly reduced in the long term.

No cost estimate can be assigned to the special pay flexibilities being proposed since they are discretionary. It is presumed that agencies will have to absorb within their budgets any increased costs associated with use of these discretionary authorities. As noted, the visibility of the pay flexibilities should ensure agency accountability. It should be noted that elimination of the fixed steps in the GS pay system would prevent \$80 million in conversion costs (not anticipated in the President's budget) that would otherwise result from slotting PMRS-covered managers back into a fixed-step schedule.

Cross References to Other NPR Recommendations

End Notes

1. National Academy of Public Administration (NAPA), *Modernizing Federal Classification: An Opportunity for Excellence* (Washington, D.C., July 1991), pp. 20-21.
2. NAPA, *Leading People in Change: Empowerment, Commitment, Accountability* (Washington, D.C., April 1993), p. 38.
3. U.S. Office of Personnel Management, *Survey of Federal Employees* (Washington, D.C., May 1992), p. 60.
4. NAPA, *Modernizing Federal Classification*, back cover.
5. U.S. Merit Systems Protection Board (MSPB), *OPM's Classification and Qualification Systems: A Renewed Emphasis, A Changing Perspective* (Washington, D.C., November 1989), p. 12.
6. NAPA, *Leading People in Change*, p. 38.

7. International Personnel Management Association, Federal Section, "Critical Personnel Management Issues: Position Classification," February 1991, p. 6.
8. U.S. MSPB, *OPM's Classification and Qualification Systems*, p. 10-11.
9. Letter from John N. Sturdivant, National President of the American Federation of Government Employees, to Roy Tucker, member of Reinventing Personnel Management Team of the National Performance Review, May 14, 1993, p. 6.
10. Minor changes to the GS-5 and GS-7 definitions were made in the Federal Employees Salary Increase Act of 1958.
11. Carol A. Braddick, Michael B. Jones, and Paul M. Shafer, "A Look at Broadbanding in Practice," *Journal of Compensation and Benefits* (July-August 1992), pp. 28-32; and U.S. Office of Personnel Management, *Broad-banding in the Federal Government* (Washington, D.C., February 1993), pp. 14-22.
12. See also HRM. 01, recommendation 5.
13. See also HRM. 01, recommendation 5.
14. By Executive Order, the President's Pay Agent consists of the Director of OPM, the Director of OMB, and the Secretary of Labor.
15. See HRM. 03 regarding proposed change that would bar a period of inadequate performance from being counted toward the waiting period for a within-grade increase.

Part 2

Empowering, Developing, Training, Rewarding and Disciplining Employees

HRM. 03: AUTHORIZE AGENCIES TO DEVELOP PROGRAMS FOR IMPROVEMENT OF INDIVIDUAL AND ORGANIZATIONAL PERFORMANCE.

Background

With the Civil Service Reform Act of 1978, the Federal Government, following the lead of the private sector, established governmentwide performance management systems for federal employees that linked employee pay to individual performance.

The system was designed to serve as a vehicle to improve agency and individual performance through improved communications of performance expectations between employees and supervisors. A yearly work plan, consisting of critical elements and performance standards, was envisioned to support agency planning and accomplishment of work. Ongoing feedback from the supervisor, including a formal, end-of-year appraisal, would provide feedback to the employee. Management decisions on promotions, awards, training and retention were to be linked directly to the performance management process.¹

Currently, there are separate performance management systems for supervisors and general managers (GM) included in the Performance Management and Recognition System (PMRS), and employees included in the General Schedule (GS). PMRS sunsets on September 30, 1993, and thus new legislation is required. Congress established a PMRS Review Committee as part of the PMRS Amendments of 1991 to advise OPM on improvements to PMRS. Congress reaffirmed its commitment to the linkage of pay and performance in the Federal Employees Pay Comparability Act (FEPCA) of November 5, 1990, and directed OPM to establish a Pay for Performance Labor Management Committee to advise OPM on the design and establishment of pay for performance systems for GS employees; FEPCA provides that any necessary legislation should be enacted in time to permit implementation by October 1, 1993. In May 1993 OPM circulated a working draft

proposal for changes in performance management systems entitled "Principles and Features of Performance Reform." The OPM recommendations are virtually identical to the NPR recommendations.

Need for Change

Performance management systems for GS and GM employees, in the view of virtually all observers (e.g., the General Accounting Office, Merit Systems Protection Board, National Academy of Public Administration, National Research Council, and academic researchers such as Perry and Ingraham), have not resulted in the desired improvements in individual and organizational performance. The failure of performance management systems to improve performance results from several factors:

- performance management systems were designed to meet multiple, conflicting purposes (performance, pay, retention, development) and as a result meet none of them;
- systems are governmentwide, inflexible and not responsive to the varying needs and cultures of diverse federal agencies;
- systems are not "owned" by managers who must make them work but are, instead, seen as belonging to OPM;
- there is an overemphasis on dealing with the poor performer, and insufficient emphasis on improving the performance of the majority of employees who meet expectations now but can do even better in the future;
- systems are perceived as top-down control mechanisms rather than tools for empowering employees and supervisors to improve performance;
- systems emphasize individual performance, and do not support emerging efforts to manage group and organizational performance;
- employees report that too frequently there is inadequate communication of performance expectations and feedback on performance;
- there are perceived inaccuracies in performance ratings, perceived rating quotas and negative perceptions of the fully satisfactory rating;
- the performance appraisal is often threatening to employee and supervisor alike,

inhibiting the opportunities for meaningful communication;

- performance ratings are generally thought to be inflated, e.g., the average rating for a GM employee in 1991 was 4.1 on the required five point scale, and for GS employees the average rating was 3.95;
- performance ratings are unevenly distributed by grade, gender, occupation, geographic location, ethnic group and agency.

The ideal performance management program will have one objective: improvement of individual and organizational performance. Agencies will be required to develop performance management programs that meet their unique needs and are consistent with the culture of their organization. Performance management programs will seek to improve the performance of all employees, both the majority of employees who meet performance expectations now and the few who do not. Employees and their representatives will be involved in design and implementation of performance management programs, and with development of performance expectations. Feedback on performance -- during and at the end of the period -- will be developmental in nature, focusing on how to improve future performance. To reinforce the emphasis on improvement of future performance, performance ratings and awards will be disassociated and independent of each other; i.e., after a determination is made that performance meets expectations, a further determination would be made to decide which of the employees who meet expectations will receive special recognition, and decisions about recognition could include factors unique to work group and organization mission and culture.

Recommendation

1. Enact legislation which authorizes agencies to design their own performance management programs. (Category 3)

Congress should enact legislation similar to that proposed by OPM to authorize agencies to design and implement performance management programs based on the following principles:

- performance management is a developmental tool with one objective: improvement of individual and organizational performance;

- employees and/or their representatives must be fully involved in design and implementation of performance management programs; in the case of employees represented by a union, collective bargaining would be required;
- agencies are permitted, but not required, to negotiate performance standards with employee unions;
- employees must be involved in development of performance expectations and receive feedback for improvement of future performance;
- at least two levels of performance must be identified: "meets" and "does not meet" expectations.

Complete decentralization of performance management within a framework of broad, governmentwide principles is expected to result in development of agency-based performance management programs that meet each agency's unique needs. Agencies will be able to develop performance management programs that seek improved performance of all employees. Development of agency-based programs will result in programs that are "owned" by agency managers. Involving employees and their representatives in development and implementation of performance management programs will result in programs that are "owned" by employees. Permitting bargaining on performance standards will enable agencies that have developed cooperative relationships with employee unions to advance that relationship into new areas. Identifying a single objective for performance management makes it easier to achieve that objective, and to evaluate the success of performance management programs. Disassociating performance ratings and awards reinforces the emphasis on the objective of performance improvement. Agency heads, who are responsible for organizational performance, will be held accountable for development and use of performance management programs. Results-oriented accountability factors include improvements in organizational performance; distribution of performance ratings among employees by grade, gender, geography, occupation and ethnic group; "ownership" of the system by employees and supervisors; and the vigilance of employee unions and associations of management-level employees.

Fiscal Impact

The short term impact should be cost neutral. If agency performance management programs enjoy the success anticipated, agency performance will improve, resulting in significant savings in the long term.

Cross References to Other NPR Recommendations

End Notes

1. International Personnel Management Association, "Critical Personnel Management Issues: Performance Management" (Dec. 1989), pp. 1-2.

Part 2

Empowering, Developing, Training, Rewarding and Disciplining Employees

HRM. 04: AUTHORIZE AGENCIES TO DEVELOP INCENTIVE SYSTEMS TO IMPROVE INDIVIDUAL AND ORGANIZATIONAL PERFORMANCE.

Background

Performance incentive systems in use across government include systems for providing merit pay (i.e., performance-based salary increases), monetary bonuses or awards, and non-monetary recognition for exceptional performance, as well as systems for providing discipline for poor performance. Federal law provides for monetary awards for various categories of employees, and requires OPM to issue regulations to govern agency awards programs. Agencies also establish nonmonetary and honor award programs under their own broad administrative authority.

Since 1978, Congress, following the lead of the private sector, has attempted to link pay and performance through merit pay and other pay for performance programs. The current merit pay system for nonmanagerial GS employees provides that employees with a fully successful rating receive within-grade step increases at scheduled intervals (from 1 - 3 years depending on position in rate range). In addition, employees may, no more than once a year, receive additional step increases -- called Quality Step Increases or QSIs -- based on outstanding performance. The Performance Management and Recognition System (PMRS) applies to supervisors and managers at grades 13-15. Employees covered by PMRS who are rated fully successful receive a comparability increase and an annual merit increase, and are eligible for performance awards. Employees rated less than fully successful receive a partial or no comparability increase, but are not eligible for merit increases and performance awards.

In 1991, two congressionally mandated committees made recommendations for improving pay for performance for Federal Government employees: "Advancing Managerial Excellence: A Report on Improving the Performance Management and Recognition System," and "Strengthening the Link Between Pay and Performance: Report

of the Pay for Performance Labor Management Committee." The Performance Management and Recognition System (PMRS), for supervisors and general managers (GM) in grades 13-15, sunsets on September 30, 1993. Congress reaffirmed its commitment to pay for performance in the Federal Employees Pay Comparability Act of 1990, and asked that any changes in the pay for performance system for General Schedule employees be enacted in time to permit implementation by October 1, 1993. In May, 1993 OPM circulated a working draft proposal, "Principles and Features of Performance Management Reform," which describes reform of employee performance planning, assessment and recognition systems. The OPM draft proposal is almost identical to the NPR proposal.

Given the September 30, 1993, sunset of PMRS, legislation will be needed to provide a substitute performance incentive system for GM employees. Congress has asked that legislation for improving pay for performance be enacted in time to implement beginning October 1, 1993.

Proposed congressional action to eliminate cash awards and bonuses in order to protect cost of living adjustments and locality pay removes the most effective tool for improving employee performance and seriously impairs the ability of managers to recognize and motivate exceptional performance.

Need for Change

Pay for performance programs have had mixed results in both the public and private sectors. After several years of experience and study, informed observers (e.g., the General Accounting Office (GAO), the Merit Systems Protection Board (MSPB), the National Research Council) agree that there is insufficient empirical evidence that pay for performance programs are effective, and that variable pay or bonuses are superior to base pay adjustments for improving employee performance. Federal employees generally do not believe that pay and performance are in fact linked, and the majority of employees do not believe they were treated fairly with regard to awards. Governmentwide incentive programs are not responsive to organization-specific needs and objectives, workforce characteristics, and agency cultures. The emphasis is primarily on incentives and awards for individual performance, not those that recognize organizational or team performance, or

even individual contributions to team accomplishments. The approach to awards generally is not holistic -- each award is treated separately. Monetary awards tend to be emphasized and non-monetary awards deemphasized. Finally, it is generally believed that pay for performance initiatives have been insufficiently funded, which contributes to their lack of effectiveness.

It is generally thought to be too difficult to remove poor performers; however, informed observers (e.g., GAO, MSPB) argue that effective managers can and regularly do deal with poor performers. MSPB reported that 90 percent of the supervisors counseled and worked with poor performers informally, and that 88 percent of supervisors would take formal action if and when informal actions fail.¹ GAO concluded that, "Contrary to general perceptions, supervisors were generally willing to deal with their poor performers and expressed a willingness to deal with them in the future. Although implementing the process was considered unduly difficult and time-consuming, supervisors were generally able to correct or otherwise deal with the performance problems they identified. Actions were generally taken to deal with employees whose performance remained unacceptable."² GAO went on to recommend that "agency management . . . focus on creating an environment within which supervisors are encouraged and motivated to identify poor performers and are properly trained and supported when they attempt to deal with them."³

An ideal performance incentive system provides managers with the tools they need to reward and motivate excellent performance and discipline the few consistently poor performers. Base pay adjustments are predictable -- which is important to employees - and variable pay or bonuses can be used as an incentive for improving employee performance - which is important to managers. Managers are encouraged and supported -- by the performance management and incentive system, and the culture of the organization - in dealing with poor performers. The rewards available are both monetary and non-monetary, and are designed to be consistent with the unique characteristics of the work, the workforce, and culture of the organization. Individuals, teams and organizations are rewarded and recognized for performance.

Recommendation

1. Enact legislation which authorizes agencies to develop their own incentive programs. (Category 3)

Congress should enact legislation similar to that proposed by OPM to authorize agencies to design and implement incentive programs based on the following principles:

- the objective of incentive programs is improvement of individual and organizational performance;
- an employee who meets performance expectations is eligible for recognition through an incentive program which includes both monetary awards or bonuses, and/or non-monetary awards (base pay adjustments are discussed in HRM. 02, Classification and Pay).
- employees and their representatives will be involved in development of incentive programs which, in the case of employees represented by an employee union, will be through collective bargaining;
- an employee who fails to meet performance expectations must be given assistance in improving performance so that expectations are met;
- the waiting time for a within-grade increase will be extended for the period of time an employee's performance does not meet expectations, i.e., only the time that an employee's performance meets expectations will be creditable toward the required waiting period;
- if an employee's performance does not improve, appropriate action (e.g., reassignment, demotion or removal) must be taken;
- managers and supervisors must be given support (e.g., job aids, expert systems, top management support) and assistance (e.g., consultation as needed) in improving the performance of all employees, especially the poor performers, and in removal of employees if performance does not improve;
- departments and agencies are encouraged to experiment with alternatives to traditional employee incentive programs, e.g., organizational and team recognition, gainsharing, and non-monetary recognition (e.g., increased authority, additional resources, a menu of reward options from which employees or teams or teams of

employees can choose). Additional guidance, description of successful models, and enhanced support for productivity gainsharing should be provided.

Complete decentralization of incentives within a framework of governmentwide principles is expected to result in development of agency-based incentive systems that are holistic, consistent with agency cultures and "owned" by managers and employees who will help develop them. Employee involvement is required, which in the case of employees represented by an employee union will be accomplished through collective bargaining. Base pay adjustments remain predictable and uniform, per the recommendation of the Pay for Performance Labor Management Committee. Variable pay in the form of non-monetary and monetary incentives is available as a tool for performance improvement, and additional guidance and support for gainsharing will be provided. While the focus should remain on improving the performance of those employees who meet performance expectations, the NPR proposal provides agencies the flexibility and tools for development of systems to support managers in dealing with employees who do not meet performance expectations.

Fiscal Impact

In the short term, this proposal should be cost neutral. In the long term, if individual and organizational performance improve as anticipated, there should be significant quality and productivity gains with commensurate cost savings.

Cross References to Other NPR Recommendations

End Notes

1. U.S. Merit Systems Protection Board, "Federal Personnel Policies and Practices -- Perspectives from the Workplace," (Washington, DC: 1987), pp 9-12.
2. U.S. General Accounting Office, "How Well is the Government Dealing with Poor Performers?" (Washington, DC: October 1990), p. 2.
3. Ibid., p. 3.

Part 2

Empowering, Developing, Training, Rewarding, and Disciplining Employees

HRM. 05: CLEARLY DEFINE THE OBJECTIVE OF TRAINING AS THE IMPROVEMENT OF INDIVIDUAL AND ORGANIZATIONAL PERFORMANCE; MAKE TRAINING MORE MARKET DRIVEN.

Background

The Government Employees Training Act (GETA) of 1958 authorizes agencies to manage their own training, determine their own training needs, and select and fund training to meet those needs. The Volcker Commission offered the following assessment of agency effectiveness in exercising that authority: "Federal training is suffering from an identity crisis. Agencies are not sure what they should train for (short term or long term), who should get the lion's share of resources (entry level or senior level), when employees need additional education (once a year or more often), and whether mid-career education is of value. Career paths are poorly designed, executive succession is accidental and unplanned, and real-time training for pressured managers is virtually nonexistent. At both the career and presidential level, training is all-too-often ad hoc and self-initiated."¹ To strengthen training in government, OPM assumed a more active leadership role and in 1992 developed a series of human resource development policy initiatives including requirements for comprehensive training needs assessment, employee orientation, and management development.

In the high performing organization -- most commonly found in the private sector - training is seen as an investment in a strategic resource and thus is funded to the extent required for achievement of organizational mission; "learning organization" is a term used to describe these excellent organizations. The ideal training program is designed to improve individual and organizational performance. Training must be based on a careful needs assessment, and rigorously evaluated to insure that it is cost effective. Based on a training needs assessment, one or more "tools" may be selected to help employees, individually or in teams, develop the knowledge, skills and abilities they need to improve

performance. Some of the more common learning methodologies that may be employed include coaching, counseling, on-the-job training, developmental job assignments, computer-based instruction, job aids, expert systems, independent study, and classroom instruction.

Need for Change

Training is frequently not seen as a tool for improving individual and organizational performance; GETA cites "increasing economy and efficiency in the Government" as the purpose of training. GETA places a series of limitations on use of training from non-governmental sources which results in extensive regulations on how training is to be managed; limitations appropriate in 1958, when training was in its infancy in both government and the private sector, are no longer relevant. GETA requires that training be related to the official duties of an employee, which has been interpreted by some to preclude retraining and multi-skilling of government employees. Training is too frequently ad hoc and employee-originated, and seldom linked to strategic/human resource planning. Information for more strategic management of training is generally not available. Managers generally are not able to determine the effectiveness or the return on their investment in training.

Many observers believe that training in the Federal Government is inadequately funded; the Volcker Commission found that in 1989 the government spent about three-quarters of 1 percent of its payroll dollars on civilian training, compared with 3 to 5 percent in the most effective private firms.² Training is usually seen as a cost, not an investment. Training costs are not generally included in cost estimates for new systems/programs, and usually are not a part of the budget process. Training is too often a "quick fix" even though it may not be the best solution to a performance problem or the best way to impart knowledge about a regulation or requirement. Training is frequently seen as something that happens only in the classroom, and, as a result, other methods for improving performance such as job aids, expert systems, on-the-job training, coaching, mentoring, developmental work assignments, job redesign, and computer-based instruction are not considered.

Recommendations

1. **Deregulate training make it more responsive to market sources. (Category 3)**

OPM should submit draft legislation to Congress by January 1994 that would amend GETA:

- to identify the objective of training: improvement of individual and organizational performance;
- to change the requirement that training be related to performance of "official duties" to relate it to mission achievement;
- to eliminate the distinction between government and non-government training.

Clarifying the purpose of training in GETA will strengthen the emphasis on performance improvement and results. Removing the distinction between government and non-government training will help deregulate training and make it more responsive to market forces. Linking training to the mission of the department or agency rather than the official duties of the employee will facilitate retraining and multi-skilling during a period of transition and change.

2. **If funds requested by an agency are reduced through the budget process, fully fund employee training by reducing the total number of employees requested rather than reducing the funds needed to train and support those employees. (Category 1)**

Agency budgets for operating costs should include adequate funds for training to ensure a quality federal workforce. The estimate of funds required for employee training that is included in an agency budget submission should be based on a realistic cost projection which is developed as a result of a careful training needs assessment. If the full amount requested for operating costs is not or cannot be made available, the funds requested for employee training should not be reduced. Reducing training funds would deny employees the training needed to develop required knowledge and skills, and would deny the organization a well-trained workforce. A reduction in operating funds by a central agency budget office, OMB or Congress, should then result in a reduction in the total number of employees rather than a reduction in funds available for employee training. Adoption of this

recommendation will result in a smaller federal workforce, but a workforce better prepared for the reinvented government and better able to serve the public.

Fiscal Impact

Adoption of the "fully funded FTE" will increase the investment in training; increased investment should result in a return on the investment in the form of improved performance. Increased competition should also decrease costs.

Cross References to Other NPR Recommendations

End Notes

1. "Leadership for America: Rebuilding the Public Service," The National Commission on the Public Service (1989), p. ?
2. "Leadership for America: Rebuilding the Public Service," The National Commission for the Public Service, Washington, DC (1989), p. 43.

Part 3

Enabling Employees to Manage Work and Family Responsibilities

HRM. 06: ENHANCE PROGRAMS TO PROVIDE FAMILY-FRIENDLY WORKPLACES.

Background

The Federal Government has traditionally been viewed as a family-friendly employer with many programs in place to help employees balance work and family responsibilities. The Federal Employees Flexible and Compressed Work Schedules Act of 1978¹ gives agencies the authority to provide flexible and compressed work schedules for their employees. The Federal Employees Part-time Career Employment Act of 1978² requires federal agencies to increase part-time opportunities for federal employees at all grade levels. In 1990, Congress again tried to increase the availability of part-time employment for interested individuals by requiring OPM to establish a job sharing program.

The Federal Employees Leave Sharing Act of 1988³ authorizes agencies to participate in voluntary pilot leave transfer and leave bank programs. The federal government does not provide short-term disability benefits for its employees so leavesharing helps employees maintain some or all income through a period of temporary disability or family medical crisis. The Family and Medical Leave Act of 1993⁴ provides up to 12 administrative workweeks of unpaid family and medical leave for Federal employees.⁵

In January 1990, GSA and OPM implemented the Federal Flexible Workplace Pilot Project (Flexiplace) to gain experience and information in work-at-home programs, satellite work center programs, and flexiplace accommodations for disabled workers. Congress demonstrated continued support for Flexiplace in September 1992, when it appropriated \$5 million to the General Services Administration to establish three telecommuting centers. The telecommuting centers will provide alternate worksites for Federal employees who currently commute long distances between their homes and worksites in the Washington, D.C. area.

Need for Change

Changes in societal values and demographics indicate that family-friendly policies and workplaces will become increasingly critical for recruitment, retention, and improved productivity of employees. Family-friendly policies serve the needs of a diverse workforce struggling to manage child care, elder care, family emergencies, and other personal responsibilities while at the same time remaining committed to professional development and advancement. Governmentwide implementation of these policies will enable agencies to foster a quality work environment that meets the needs of their employees and customers. The benefits of family-friendly policies are well documented:

Recent studies of such companies as Johnson & Johnson and American Telephone & Telegraph show that helping employees resolve work and family conflicts boosts morale and increases productivity. The J&J study found that absenteeism among employees who used flexible time and family-leave policies was on average 50% less than for the work force as a whole. It also found that 58% of the employees surveyed said such policies were "very important" in their decision to stay at the company--the number jumped to 71% among employees using the benefits.⁶

The federal government should be viewed as a "model employer" in the availability and flexibility of quality of worklife programs that emphasize the tools employees at all levels need to manage their work responsibilities and personal lives more effectively.⁷ Successful programs will foster interagency and intergovernmental partnerships, encourage cooperation between management and employees, spark collaborative ventures between public and private organizations, and bring harmony to the workplace and community in which they reside.

Some of the problems and barriers faced by agencies and employees include:

1. **Barriersto innovation** - Federal agencies are stymied in their efforts to address emerging employee needs because most employee benefit policies are codified into law--literally requiring an act of Congress to modify them. In a 1992 report, the General Accounting Office stated:

The likelihood of federal agencies falling behind their nonfederal counterparts in the work/family area may be even greater in the future. The rapid growth of nonfederal work/family programs, such as flexible benefits, flexible spending accounts, and child care assistance, suggest that these

programs could well become standard employment policies in the future. Thus, whereas the adoption of work/family programs today may give an employer a competitive advantage, in the future, employers may need to offer these programs just to avoid being at a competitive disadvantage.⁸

2. **Lack of clear agency support and implementation of available programs** - Many agencies have not developed policies advocating the use of flexibilities available to help employees balance work and family responsibilities. In a recent survey of federal employees conducted by OPM, only 53 percent of employees believe their agencies understand and support family issues. Approximately 38 percent of employees indicated that their agencies do not provide any dependent care services beyond Employee Assistance Programs. Approximately 77 percent of employees with dependent care needs who do not work flexible/compressed work schedules are interested in doing so.⁹ OPM found that:

(T)he employee survey data suggest that certain agencies may have internal barriers that make supervisors reluctant to approve employee requests to work part-time. Of the supervisors who have denied employee requests to work part-time, at least 19 percent did so because of internal barriers, i.e., the agency's internal systems made it difficult and/or that their agency stressed full-time employment.¹⁰

3. **Barriers exist in law** - Legislative barriers prevent many agencies from implementing flexible work arrangements with their employees; these barriers were waived for the duration of the pilot project when Congress passed legislation¹¹ in November 1990. Some examples of the limitations placed upon agencies attempting to provide dependent care services include a law that limits agencies to providing the facility and services related to the maintenance and operation of child care centers located solely in federally owned or leased space,¹² and a September 31, 1992, decision of the U.S. Comptroller General that prohibits agencies from using appropriated funds for adult day care programs or contributing any financial resources to private adult day care centers.

Recommendations

1. Implement family-friendly workplace practices while ensuring accountability for customer service. (Category 2)

The president should issue an Executive Order in September 1993 advocating (a) adoption of compressed/flexible, part-time, and job sharing work schedules for all occupations; and (b) implementation of flexiplace and telecommuting where appropriate. In 1991, the Conference Board concluded:

Flexitime improves basic work conditions by allowing adjustments in commuting times, reducing anxiety about tardiness, and shifting management's focus away from monitoring attendance. Flexible work schedules increase employee responsibility, independence and growth potential, thus motivating the employee... Flexitime was typically mentioned as the arrangement found most advantageous in reducing absenteeism and turnover.¹³

A federal employee writing to Vice President Al Gore stressed that part-time employment and job sharing is an important option for many federal employees:

(W)orkers should be offered a chance to convert to part-time status whenever possible, if they think their finances will permit it, in order to have more time with their young children or aging and infirm parents, or to attend to their own health problems, or to continue their education to stay abreast of changing technology.... Some individuals might want part-time work as an alternative or precursor to full retirement.¹⁴

The Progressive Policy Institute's *Mandate for Change* emphasized that the federal government should take a leadership role in telecommuting:

The federal government, which as one of the nation's largest employers led the way in the use of flex-time schedules, should begin to offer telecommuting options to qualified interested employees. In addition to the parenting advantages that telecommuting provides for families with small children, it offers economic and environmental advantages for society by reducing the number of commuters.¹⁵

Flexiplace and telecommuting reduce individual and family stress, save valuable commuting time, reduce commuting and work-related costs for the employee, and increase civic involvement and volunteerism in nearby communities. Evaluation of the federal government's Flexiplace pilot found that:

After one year in the project . . . 82 percent of the participants indicated reduced rush hour usage of their private vehicles; 35 percent of the participants indicated reduced non-rush hour vehicle usage. Less than 6 percent of the participants indicated increases in sick leave or vehicle usage.¹⁶

The evaluation went on to say:

More than 90 percent of the supervisors and 95 percent of the participants judged that Flexiplace job performance was either unchanged or improved relative to pre-Flexiplace performance levels.¹⁷

2. Provide telecommunications and administrative support necessary for employees participating in flexiplace and telecommuting work arrangements. (Category 3)

Congress should repeal section 1348 of title 31, United States Code which prohibits federal agencies from: paying for telephone installation and service in private residences with appropriated funds; installing residential phone lines to connect to the new FTS 2000 service -- the FTS 2000 fiber optic network that will carry a varied mix of voice, data, and video services on a single line; and purchasing a fax machine for installation in a private residence.¹⁸

OPM's final evaluation of the Federal Flexiplace Pilot concluded:

Flexiplace shows promise as a mechanism for reducing Federal operating and health care costs. Indications of improved job performance (productivity), reduced usage of sick leave (benefits), improved health(health care), and reduced vehicle usage (transportation/energy issues) for a significant portion of the participant group suggest long run reduction in costs associated with these areas.¹⁹

The evaluation found that actual organizational costs of flexiplace were minimal: a substantial majority of the supervisors (81 percent - first six months and 86 percent - final six months) reported spending less than \$200 (total) on equipment....we anticipate long run reductions in facility costs with expanded utilization of Flexiplace. The ability of agencies to implement successful Flexiplace pilots with minimal funding, however, is a strong indication of the applicability of Flexiplace to diverse organizations.²⁰

Flexible work arrangements will generate environmental and energy conservation benefits by alleviating traffic congestion, reducing air pollution, and

reducing consumption of fossil fuels. Significant monetary savings will occur as agencies begin to include flexible workplace arrangements in their federal building planning and technology purchasing plans.

**3. Expand the authority to establish and fund dependent care programs.
(Category 3)**

Congress should remove its statutory limitations and give agencies the authority to focus on the needs of their employees and develop programs that would enhance organizational effectiveness and improve employee productivity.

Agencies should work with employees to develop the most effective and beneficial ways to meet the needs of a workforce struggling with the responsibilities of child care, elder care and caring for ill family members. Agencies could decide to implement sliding fee payment schedules for dependent care, contribute financial resources to privately-led consortiums, allow reimbursement of dependent care expenses incurred as a result of emergency assignments or emergency travel, and/or permit employees to use official time to carry out responsibilities associated with membership on a federally-sponsored center's board of directors. Some of the changes require amending 40 U.S.C. 490(b), and 18 U.S.C. 203(a).

4. Allow employees to use sick leave to care for dependents.²¹ (Category 1)

OPM should draft regulations by September 1993 that would allow employees to use accrued sick leave for dependent care. Sick leave could be used to care for sick or elderly dependents or to make adoptive arrangements. The definition of child, spouse and parent should be consistent with definitions contained in the 1993 Family and Medical Leave Act.

This policy indicates that the federal government recognizes the burden family illness places on employees, and was recommended in part by the Merit Systems Protection Board in 1991.²² The Bureau of Labor Statistics found that in the private sector, 36 percent of employees could use sick leave to care for dependents.²³ OPM found that in the public sector:

Forty-six state governments, whose sick leave accrual policies generally are more comparable to those of the federal government, allow use of sick leave for (family illnesses). (1991 State Employee Benefits Survey, Workplace Economics, Inc.) The State of New York, for example, implemented such a policy by regulation in 1957. New York State allows employees to use up to 15 days of sick leave each year in the event of family illness or death and reports that this benefit has not generated administrative problems or pressure to expand the circumstances under which sick leave may be used.²⁴

5. Give returning employees credit for previously accrued unused federal sick leave. (Category 1)

OPM should draft regulations by September 1993 that would recredit unused sick leave to employees if they were separated and reemployed by the federal government, regardless of the length of separation.

Current regulations which recredit sick leave only if employees return to federal service within three years do not take into account the changing needs of employees and the change in demographics since their implementation in 1962. Although only a relatively small number of employees are affected by the three year limitation, OPM found that "about 60 percent of all federal employees who are reemployed after a break in service of more than 3 years are women, and about 65 percent are reemployed in grades GS-1 through 7."²⁵

6. Expand the demonstration project authority to allow projects on employee benefits and leave.²⁶ (Category 3)

Congress should remove its statutory limitations and authorize agencies to address creatively and innovatively the needs of their employees while stimulating change throughout the system through measured analysis of empirical cost and benefit information.²⁷

7. Extend/reauthorize voluntary leave transfer/bank programs. (Category 3)

Congress should reauthorize "The Federal Leave Sharing Act of 1988,"²⁸ which terminates October 31, 1993, with minor technical changes. This legislation

is currently before Congress with minor technical changes to benefit program operations, including a provision to eliminate the restriction that prohibits interagency transfers of annual leave between agencies covered by the leave transfer and leave bank programs.²⁹

Voluntary leave transfer programs enable employees who experience a personal or family medical emergency and who exhaust all their available annual paid leave to receive donated annual leave from their fellow federal employees. Employees in voluntary leave bank programs make contributions of annual leave to their agency leave bank and can receive annual leave from their agency leave bank if they experience a personal or family medical emergency and have exhausted all their available paid leave. James King, Director of OPM, indicated that:

Agencies like the leave sharing program largely because it enables them to retain valuable employees throughout a personal or family emergency. Agencies have reported that this benefit far outweighs any hardship caused by employee absences. In many cases, employees who were leave recipients under the leave sharing program were able to work intermittently while participating in the program. Several agencies have experienced a decline in the number of employee requests for leave without pay and advanced leave as a result of leave sharing.³⁰

During fiscal years 1991 and 1992, the program served more than 23,100 employees and over 3,742,600 hours of annual leave were donated/used.³¹ "More than 96 percent of Federal employees with dependent care needs are satisfied with the Federal leave sharing program."³²

Fiscal Impact

Private and public sector research has indicated that many of these changes are no-cost (flexitime/compressed schedules),³³ low cost (sick leave for dependent care/recredit sick leave for returning employees), or have the potential for high monetary returns (flexiplace/telecommuting).³⁴

Cross References to Other NPR Recommendations

End Notes

1. 5 U.S.C. 6120-6133.
2. 5 U.S.C. 3401.
3. Public Law 100-566.
4. Public Law 103-3.
5. Title II of the Family and Medical Leave Act of 1993 pertains to most federal employees covered by the annual and sick leave system established under chapter 63 of title 5, U.S.C., and certain other employees covered by different federal leave systems. Title I covers non-federal employees and certain federal employees not covered by Title II.
6. Michele Galen, Ann Therese Palmer, Alice Cuneo, and Mark Maremont, "Work & Family," *Business Week*, no. 3325 (June 28, 1993), p. 82.
7. U.S. Merit Systems Protection Board, *Balancing Work Responsibilities and Family Needs: The Federal Civil Service Response* (Washington, D.C., November 1991) p. 82.
8. U.S. General Accounting Office, *The Changing Workforce: Comparison of Federal and Nonfederal Work/Family Programs and Approaches*, report no. GAO/GGD-92-84 (Washington, D.C., April 1992), p. 15.
9. U.S. Office of Personnel Management, *A Study of the Work and Family Needs of the Federal Workforce* (Washington, D.C., April 1992), pp. 5, 6, 20.
10. U.S. Office of Personnel Management, *A Study of the Work and Family Needs of the Federal Workforce*, p. 26.
11. Public Law 101-509.
12. 40 U.S.C. 490(b).
13. The Conference Board, *Linking Work-Family Issues to the Bottom Line* (New York, N.Y., 1991), p. 51.
14. Letter from Marilyn S.G. Urwitz, federal employee, to President Bill Clinton, March 4, 1993.
15. Elaine Ciulla Kamarck and William A. Galston, "A Progressive Family Policy for the 1990s," in Will Marshall and Martin Schram, ed. *Mandate for Change*. (New York: The Berkley Publishing Group, 1993), p. 177.

16. U.S. Office of Personnel Management, *The Federal Flexible Workplace Pilot Project Work-At-Home Component* (Washington, D.C., January 1993), p. v.
17. Ibid., p. iii, iv.
18. President's Council on Management Improvement, "Guidelines for Pilot Flexible Workplace Arrangements," Washington, D.C., January 1990, p. 19.
19. U.S. Office of Personnel Management, *The Federal Flexiplace Workplace Pilot Project Work-At-Home Component*, p. 45.
20. Ibid., p. 31, 32.
21. 5 C.F.R. Section 610.401.
22. U.S. Merit Systems Protection Board, *Balancing Work Responsibilities and Family Needs*, p. 79.
23. U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments*, 1991 (Washington, DC: GPO), p. 16.
24. U.S. Office of Personnel Management, "Options for Leave Reform," Washington, D.C., September 1991, p. 5.
25. U.S. Office of Personnel Management, "Options for Leave Reform", p. 6.
26. 5 U.S.C. 47.
27. U.S. Merit Systems Protection Board, *Federal Personnel Research Programs and Demonstration Projects: Catalysts for Change* (Washington, D.C., December 1992) p. xi.
28. Public Law 100-566.
29. 5 U.S.C. 6373.
30. U.S. Congress, House Committee on Post Office and Civil Service, Subcommittee on Compensation and Employee Benefits, "Leave Sharing Programs in the Federal Government," testimony by Jim King, Director of OPM, May 13, 1993.
31. U.S. Office of Personnel Management, *Report to Congress on the Federal Employees Leave Sharing Act of 1988* (Public Law 100-566) (Washington, D.C., April 30, 1993), p. 1.
32. U.S. Office of Personnel Management, *A Study of the Work and Family Needs of the Federal Workforce*, p. 96.

33. Marianne A. Ferber, Brigid O'Farrell and La Rue Allen, ed., *Work and Family: Policies for a Changing Work Force* (Washington, D.C.: National Academy Press, 1991), p. 127.

34. U.S. Office of Personnel Management, *The Federal Flexiplace Workplace Pilot Project Work-At-Home Component*, p. 45.

Part 4

Adhering to Principles of Merit and Equal Opportunity

HRM. 07: IMPROVE PROCESSES AND PROCEDURES ESTABLISHED TO PROVIDE WORKPLACE DUE PROCESS FOR EMPLOYEES.

Background

Workplace due process includes the various avenues of redress which employees may pursue when they believe agency management has treated them unfairly. For example, the EEO complaint process is available to employees who believe an action is discriminatory. An individual who has been suspended, reduced in grade or pay, or removed may file an appeal. Other management actions may be grieved using an administrative or negotiated grievance procedure. Unions (or management) may file unfair labor practice charges or negotiability disputes.

These various avenues of redress are governed by separate legal and regulatory authorities. Due process is typically pursued first within the employing agency and, failing resolution, may then be taken before a third party for adjudication (the main exception is an administrative grievance process which occurs entirely within the agency). Since enactment of the Civil Service Reform Act in 1978, four agencies adjudicate disputes between employees and agency management: the Merit Systems Protection Board (MSPB), the Office of General Counsel (OSC), the Equal Employment Opportunity Commission (EEOC), and the Federal Labor Relations Authority (FLRA). It is possible for a "mixed case" arising from the same set of circumstances to be pending at the same time before two or more of these agencies.

Decisions by these agencies may be further appealed to the courts. The United States Court of Appeals for the Federal Circuit has exclusive jurisdiction over all appeals from MSPB decisions. EEO and labor cases are handled by the other circuit courts, usually based on geography. These courts may conflict with one another in deciding similar cases, causing uncertainty in the law as it applies to federal employees.¹

Internal agency processes and procedures which must be used prior to access to the third parties vary by subject matter. They also tend to be functionally "stovepiped," with grievances handled by employee relations specialists; EEO complaints handled by EEO specialists; and unfair labor practice charges dealt with by labor relations specialists.

In addition to stovepiping, internal agency systems of redress tend to be driven to inflexibility by adherence to process and procedural correctness. Managers are advised of this necessity based on the fear of being overturned in a third party forum due to "harmful error." Strict adherence to established administrative procedures governing the large number of appeals and complaints filed by federal employees every year has also contributed to high cost and lengthy delays involved in exercising due process rights.

Implementation of NPR recommendations will dramatically change the workplace for managers in particular. Increased flexibility and elimination of mandatory processes and procedures will give managers greater freedom to exercise judgment. For managers and employees alike, this represents a high risk environment and an unprecedented culture change. Managers must be held accountable for their actions and employees must have ways to take issue with perceived unfair or discriminatory treatment. Sensitive, responsive and fast avenues of due process protect the rights of both managers and employees and provide a powerful mechanism for ensuring that managers are held accountable for their human resource management decisions.

Many federal agencies are turning to alternative dispute resolution (ADR) methods as a way to improve their internal systems of redress, with the clear objective of solving problems at the worksite and reducing the number (and the associated costs) of cases appealed to third parties. In 1990 Congress enacted two federal laws that endorse the use of ADR in the way agencies resolve disputes.² According to the authors of a recent article,

Both the scope and the goals of the Administrative Dispute Resolution Act are ambitious. In effect, the new law endorses the use of facilitation, mediation, and other more formal procedures (such as arbitration) as a means to resolve the conflicts that inevitably arise in the conduct of federal government business. The goal of the legislation is to encourage agencies to use dispute resolution techniques that can achieve more cost-effective and satisfying results than traditional administrative procedures or litigation.³

The Department of Health and Human Services has made noteworthy progress with interest-based problem-solving approaches to ADR developed in cooperation with the National Treasury Employees Union. Their methods include a Negotiated Discrimination Complaint Arbitration Process, the Early Complaints Resolution Process, and the Departmental Appeals Board Mediation Service.

Need for change

Critics of the current forums and mechanisms for due process have recommended the establishment of a single adjudicatory body for federal employee appeals, complaints and labor disputes. The primary reason cited for change is the issue of overlapping jurisdiction in the processing of complicated "mixed cases," which causes confusion and frustration on the part of everyone involved.⁴ An additional complication is the jurisdiction of the United States Courts of appeals with review authority over federal EEO and labor matters. While the Court of Appeals for the Federal Circuit has exclusive jurisdiction of appeals from MSPB, jurisdiction of the other courts in other areas is restricted only by geography. Thus, federal employees governed by common nationwide policies and laws may receive inequality of justice as a result of nothing more than their residence in different parts of the country.⁵ Additionally, the lack of nationally uniform resolution of issues in EEO and labor matters may contribute to legal confusion about the governing laws from circuit to circuit, may increase the cost of litigation, and may be wasteful and inefficient.⁶

In addition to the procedural constraints, internal agency systems of redress are often adversarial in nature and do not have the confidence of managers or employees. They are costly and time-consuming. Workplace problems which are not resolved in a timely and sensitive way have a negative effect on productivity and morale and impede mission accomplishment. Use of ADR methods during the informal or early stages of due process can alleviate these problems, thereby improving the workplace climate, reducing the number of formal cases pending before third parties, and reducing the costs of litigation.

Recommendations

1. Eliminate jurisdictional overlaps. (Category 4)

By memorandum, the President should direct the MSPB Chair to establish a working group to examine and make recommendations for eliminating jurisdictional overlaps in administrative due process cases. The memorandum should also direct EEOC, FLRA and OSC to provide staff to the working group; require the group to draft any legislative proposals needed to eliminate mixed-case processing; and to submit proposed administrative and legislative proposals in a final report by 30 June 1994. By separate memorandum, the President should direct the Attorney General to examine the feasibility/desirability of creating a single court of appeals with nationwide jurisdiction over all "people issues," such as EEO, labor relations, veterans affairs, civil service, et al. A single court would ensure greater consistency of decisions, focus legal and judicial expertise, and alleviate the workload problems in the circuit courts caused by escalating criminal and other litigation. The results of this examination should be presented to the President by 30 September 1994.

2. Establish in all agencies alternative dispute resolution (ADR) methods and options for the informal disposition of employment disputes. (Category 1)

By December 30, 1994, each agency should make available to all worksites methods and options for resolving disputes which are alternatives to established procedures governing EEO complaints, labor disputes, grievances and appeals. OPM should eliminate by December 30, 1994, all regulations governing internal agency grievance and appeal procedures, thus freeing agencies to tailor ADR techniques to various situations. EEOC should continue to provide guidance and assistance in application of ADR to the complaint process and should eliminate regulations requiring specific processes to be used in the informal stage, thus also freeing agencies to creatively apply ADR. OPM and EEOC should jointly develop comprehensive training programs for managers, employees, and dispute resolution specialists. Training should cover ADR techniques and options and should be made available to agencies, for example as "train-the-trainer," to eliminate duplication of effort among agencies.

Fiscal Impact

There will be up-front costs associated with establishing and maintaining a truly effective ADR effort, especially using mediation and arbitration options and investing in training. However, the benefits gained from timely resolution of employee problems and reducing litigation are well worth the expenditure.

Cross References to Other NPR Recommendations

End Notes

1. The United States Court of Appeals for the Federal Circuit, *A History, 1982-1990*, p. 3.
2. Administrative Dispute Resolution Act (Public Law 101-552) and Negotiated Rulemaking Act (Public Law 101-648).
3. Lawrence E. Susskind, Eileen F. Babbitt and Phyllis N. Segal, "When ADR Becomes the Law: A Review of Federal Practice," *Negotiation Journal*, Volume 9, Number 1, January 1993, pp. 59-73.
4. David L. Feder, "Pick a Forum - Any Forum: A Proposal for a Federal Dispute Resolution Board," *Labor Law Journal* (May 1989), p. 268.
5. U.S. Court of Appeals History, p. 3.
6. *Ibid.*, p. 4.

Part 4

Adhering to Principles of Merit and Equal Opportunity

HRM. 08: IMPROVE EQUAL OPPORTUNITY AND AFFIRMATIVE EMPLOYMENT THROUGH LEADERSHIP AND ACCOUNTABILITY

Background

The objective of Congress in enacting Title VII of the Civil Rights Act of 1964 was to achieve equality of employment opportunity and to remove artificial, arbitrary and unnecessary barriers that in the past operated to favor some groups of employees over others. Title VII makes it an unlawful employment practice to discriminate on the grounds of race, color, religion, sex, national origin, age, handicap and reprisal.

Congress established the Equal Employment Opportunity Commission (EEOC) as the administering agency for Title VII. The Equal Employment Opportunity (EEO) Act of 1972 expanded the coverage of Title VII and provided the EEOC with litigation authority to enforce fair employment practice policies.

The Civil Service Reform Act (CSRA) of 1978 clearly provided, for the first time in law, that federal human resource management should be implemented to provide a competent, honest, and productive federal work force that is reflective of the nation's diverse population. Federal agencies are required to examine the representation of women and minority employees at the different pay grades and in key jobs. Key jobs are jobs with 100 or more employees and that have advancement potential to senior management positions.¹

Most federal employees hold white collar occupations and are under a white collar pay schedule that includes pay grades 1 to 15. Employees in grades 13 to 15 are often considered middle managers. The government's top career managers are in the Senior Executive Service (SES).

For affirmative employment purposes, the appropriate comparison is the distribution of the various race/ethnic/sex groups in the civilian labor force.² A large disparity exists between the relative proportion of women and minorities in the Federal Government's

middle and upper grades and their proportion in the lower grades.

Despite their dramatically growing presence in the federal work place, progression into the middle and senior management positions has been elusive for minorities and women. There is a glass ceiling. The term "glass ceiling" refers to invisible, yet real and perceived, barriers that stymie advancement opportunities for minorities and women.³

Constance Berry Newman, former Director of OPM, said that "...the percentages of women and minorities in the SES and the pipeline to the SES are unacceptable."⁴ Most of the SES positions are held by white men. Women hold only 12 percent of these positions, and minorities hold only 9 percent.⁵

A fundamental means of enabling qualified women and minorities to be appropriately represented in the pipeline to the SES is to ensure that they are appropriately present in agencies' key jobs--jobs that can lead to middle and upper management positions. There is a great disparity in the promotion rates for women and minorities in professional occupations at the grades 9 and 11 levels. This disparity has a significant impact on the number of women and minorities in high graded jobs, as grades 9 to 11 are the gateways between entry level jobs and senior level jobs for most Federal Government employees.⁶

At a September 1991 national conference, officials from EEOC, OPM, the Merit Systems Protection Board, and the Federal Labor Relations Authority said in public forums that shattering the glass ceiling in the Federal Government will depend on (1) getting women and minorities into the job tracks that lead to top management and (2) providing them with the necessary training and development opportunities to progress within those job tracks.⁷

There is a critical need for improved equal opportunity and affirmative employment leadership and accountability in the Federal Government. Being accountable for accomplishing missions is how leaders define themselves; it is the essence of leadership.⁸ The lack of management accountability is a critical flaw in and barrier to current efforts to accomplish equal opportunity and affirmative employment in the federal work force.

Despite the existence of relatively broad agreement on the need to achieve a work force that reflects the nation's working population, the Federal Government has not been successful in bringing women and minorities into the executive ranks. Political and career

executives have failed to assume responsibility for achieving results.⁹

While some Federal Government agencies have created, developed and maintained effective strategies for ensuring equal opportunity and accomplishing work force diversity, this commitment is not governmentwide. Numerous GAO reports cite racism, sexism and nepotism within federal agencies.

While it is important to deregulate, decentralize and provide a certain degree of management flexibility, increased flexibility in the absence of appropriate accountability could undermine equal opportunity and affirmative employment efforts.

Dr. Harriette Jenkins, Director, Office of Senate Fair Employment Practices, states, "although the federal work force is better integrated now, there is still a very real glass ceiling that keeps most women and minorities out of the middle and upper management positions. There is subtle discrimination, and employees don't believe that there are any credible efforts to eradicate discriminatory barriers and resolve complaints. Employees must perceive credible efforts, and those credible efforts must be real and visible governmentwide."¹⁰

Linda Winikow, corporate policy expert, states, ". . . on the one hand, civil rights legislation has done an enormous amount to wipe out the legal impediments to inequality. But all too many of the attitudes that prevented the flowering of diversity still exist. Executives have an obligation to recognize that this isn't simply a side issue. It is a fundamental management issue. A manager's first job is to manage -- to bring people to their full potential. The glass ceiling does exist, but senior management's job is to do everything possible to provide the training and the climate for success."¹¹

EEOC recognized the tremendous harm caused by some agencies treating the EEO functions as "side issues," and addressed this concern in EEO Management Directive 110 (EEO MD-110), signed October 22, 1992. The directive states:

"In order for the agency to implement a continuing affirmative employment program to promote equal employment opportunity and to identify and eliminate discriminatory practices and policies, the agency shall appoint a Director of Equal Employment Opportunity, who shall be under the immediate supervision of the agency head. Agencies must avoid conflicts of position or conflicts of interest as well as the appearance of such conflicts . . . In order to maintain the integrity of the EEO investigative and decision making processes, those functions must be kept

separate from the personnel function."

Yet, some federal agencies still treat EEO as a "side issue" or a "subset" of other functions, i.e., staffing, employee relations or other personnel functions. In some agencies, the senior person responsible for EEO functions either is or reports to the senior person responsible for personnel functions.

Equal opportunity and multi-culturalism should be an integral part of the mission of each and every federal agency, and the federal EEO function must be a top priority. Agency heads and their managers must be held accountable to the President, Congress and the American public for creating, developing and maintaining a work force that is reflective of our nation's citizenry.¹²

Need for Change

While improvements have occurred, the federal civilian work force, particularly in the middle and senior management positions, does not reflect the nation's diverse population. Much work is still needed to address the challenges of recruiting, hiring, promoting, and retaining a diverse work force. Currently, there is neither a consequence system for agency heads who do not plan, develop, and implement creative ways in which to accomplish equal opportunity goals nor a reward system for those who do.¹³

Government is paying an enormous cost for the glass ceiling that keeps qualified women and minorities underrepresented in the Federal Government's middle and senior management positions. This is a fundamental management issue. The Federal Government is underutilizing a major segment of its human resources and delaying attainment of an important goal of the Civil Service Reform Act -- full representation of all segments of society at all grade levels in government.

The Federal Government needs a career executive leadership cadre reflecting the diversity of the American people. Today there is neither sufficient leadership nor adequate diversity among career executives. The government can develop a diverse group of leaders, but it must take dramatic action to mount an effective governmentwide program and to hold management responsible for achieving results. Core elements of a plausible approach

include: Presidential and senior management commitment, ambitious goals, a clear chain of management accountability, and new personnel development infrastructures.¹⁴

The expected high turnover in executive ranks in the 1994-1996 period creates a unique window of opportunity to increase the number of qualified women and minorities in executive leadership positions over the next two years. Organizations need to identify and support already qualified, as well as high potential, women and minority candidates.¹⁵

The government should reaffirm its commitment to equal employment opportunity, and federal agencies should make special efforts to increase the representation of qualified women and minorities in middle and senior management positions.

Recommendation

- 1. The President should personally charge all federal agency heads with the responsibility for ensuring equal opportunity and increasing integration of qualified women and minorities into middle and senior management positions.**

The President should issue an Executive Order to all agency heads in January 1994 stating his commitment to attaining a federal work force that is reflective of the American citizenry and the importance of increasing the numbers of minorities and women in higher level management and supervisory positions. The Executive Order should also include provisions to:

- build a critical element on equal opportunity and affirmative employment leadership into agency head performance agreements with the President;
- appoint a Director of EEO in each federal agency who shall report directly to the agency head and who shall be separate from the Director of Personnel.(In accordance with EEO MD-110);
- require executives, managers and supervisors to assist in the development, implementation, and monitoring of their organizations' affirmative employment (AE) plans and report annual accomplishments to the appropriate secretary for signature;
- require each new department secretary to sign and actively uphold policy statements on EEO, AE, and workforce diversity to provide employees a

visible sign of credible efforts;

- require agency heads to identify qualified, as well as high potential, women and minority candidates in their agencies and implement developmental programs to prepare these individuals to effectively compete for and hold executive leadership positions in that organization;
- provide recognition of those agencies and managers who consistently perform well in the EEO and AE areas; and
- ensure appropriate disciplinary action in cases where there is a finding of discrimination.

These recommendations are consistent with the views and recommendations of the Council for Excellence in Government.¹⁶

Presidential leadership and an Executive Order which mandates management accountability for attaining and maintaining a federal work force which is reflective of the American citizenry would instill trust, concern, and commitment between management and employees.

In addition, it will ensure that federal agencies are actively pursuing equal opportunity and affirmative employment in the federal work place. It will reassure employees, applicants and the American public that there is governmentwide commitment to and accountability for creating a federal work force that reflects America's diverse citizenry.

This will help us to find great hope and optimism, as well as unexpected benefits, in transforming the federal work place to one in which all employees are valued as individuals, their diverse viewpoints are supported, potential is fully used, quality of life and lifestyles are high, and performance is at its competitive best.¹⁷

Fiscal Impact

GAO reports that federal agencies spent over \$139 million in fiscal year 1991 for complaint counseling and processing.¹⁸ By demonstrating a real top-down commitment to equal opportunity and affirmative employment, and raising employees' awareness of this commitment, the Federal Government could possibly reduce the number of employee

complaints. Significant savings can be accrued through "cost avoidance" by a reduction in personnel costs for processing discrimination complaints as well as reducing the number of pay out settlements and findings of discrimination.

End Notes

1. U.S. General Accounting Office (GAO), Status of Women and Minority Representation in the Federal Workforce, report no. GAO/T-GGD-92-2 (Washington, D.C., October 23, 1991), p.1.
2. GAO, report no. GAO/GGD-93-65 (March 1993), p. 64.
3. The Bureaucrat, Valuing Differences and Managing Diversity, Volume 20 Number 4 (Winter 1991-1992), p.8-32.
4. GAO, report no. GAO/GGD-92-27BR (November 1991), p.3.
5. Council for Excellence in Government, Bringing Leadership and Diversity Into the Federal Career Executive Ranks (Washington, D.C., June 14, 1993), p.2.
6. U.S. Merit Systems Protection Board, A Question of Equity: Women and the Glass Ceiling in the Federal Government (Washington, D.C., October 1992), p.37.
7. GAO, report no. GAO/T-GGD-92-2 (October 23, 1991), p.11.
8. Council For Excellence in Government (June 14, 1993), p.3.
9. Ibid., p.3.
10. Interview with Dr. Harriette Jenkins, Director, Office of Senate Fair Employment Practices, U.S. Senate, Washington, D.C., July 1993.
11. Linda Winikow, Vice President for Corporate Policy and External Affairs, Orange and Rockland Utilities, Inc., quoted at the Women's Bureau Conference (Washington, D.C., October 23, 1990).
12. Interview with Oceola Hall, Director, Discrimination Complaints, National Aeronautics and Space Administration, Washington D.C., July 1993.
13. Ibid.
14. Council for Excellence in Government, p.2.
15. Ibid., p.3.

16. Ibid.

17. Jamieson, David and Julie O'Mara, *Managing Workforce 2000: Gaining the Diversity Advantage*, (San Francisco, CA, 1991).

18. GAO, report no. GAO/GGD-92-64FS (March 1992), p. 2.

Part 4

Adhering to Principles of Merit and Equal Opportunity

HRM. 09: IMPROVE INTERAGENCY COLLABORATION AND CROSS TRAINING FOR HUMAN RESOURCE PROFESSIONALS.

Background

Total integration of equal employment opportunity (EEO) into every aspect of personnel policy and practice in the selection, placement, training, and advancement of civilian employees of the Federal Government is critical. Such integration is vital to creating and maintaining a federal work force that is truly reflective of our nation's diverse citizenry. In order to accomplish this integration, there must be effective collaboration between federal personnel professionals and federal equal opportunity professionals.

The Civil Service Reform Act of 1978 created the Federal Equal Opportunity Recruitment Program, which requires agencies to conduct affirmative recruitment for those occupations and grades in which women and minorities are underrepresented. The Act assigned the Office of Personnel Management (OPM) responsibility for assisting agencies in their affirmative recruitment efforts and for overseeing the Federal Equal Opportunity Recruitment Program.¹

Executive Order 12067 (June 30, 1978) assigned to the Equal Employment Opportunity Commission (EEOC) responsibility for providing coherence and direction to the government's EEO efforts. It also provided for standardized data collection procedures.

Strong EEO and affirmative employment (AE) plans play vital roles in the management of diversity. They are steppingstones to valuing diversity wherein differences are identified and an atmosphere is created that promotes respect for these differences as well as ways to benefit from them.² EEOC and OPM require agencies to prepare affirmative employment and recruitment plans. As part of plan development, each agency is required to analyze its workforce, comparing the representation of women, minorities, disabled persons and disabled veterans in its work force with the representation of the same groups in the appropriate civilian labor force.³

Currently, federal EEO and AE reporting requirements are fragmented. While agencies must submit data to OPM's Central Personnel Data File (CPDF), similar data must be submitted to EEOC since the OPM system does not provide affirmative employment data. The responsibilities of EEOC and OPM present an opportunity for them to work together to provide leadership and training necessary to integrate EEO into every aspect of personnel policy and practice. This integration will require that all federal human resource professionals receive cross training in all areas of human resource management.

Cross training is the first step to creating a competent federal human resource management team. Personnel professionals must understand and adhere to basic EEO and civil rights guidelines in order to ensure that personnel functions and actions are fair and equitable for all employees and applicants. Likewise, EEO and civil rights professionals must understand and adhere to the basic personnel guidelines.

There must be a concentrated effort to ensure ongoing communications and understanding of EEO and AE efforts to achieve a diverse, competent and productive federal work force. EEOC and OPM must provide joint leadership to EEO, AE, civil rights and personnel professionals to create, develop, review and improve effective ongoing governmentwide efforts.

Need For Change

It is imperative that EEOC and OPM jointly provide the necessary leadership and cross training to ensure an effective approach to and outcome of federal human resource management efforts. These efforts must include effective EEO and affirmative employment initiatives necessary to achieve workforce diversity.

Affirmative action plans generally raise the level of awareness and usually lead to increased opportunities for qualified women and minorities in employment. However, there needs to be one comprehensive, automated EEO/AE report for federal agencies.

While the information contained in each of the current four reports is vitally important to fostering agency commitment to and awareness of EEO/AE efforts of their organizations, the four reports are duplicative. An inordinate amount of resources are devoted to preparing these reports separately. More importantly, treating the four groups

(women, minorities, disabled persons and disabled veterans) separately is contradictory to the vital mission of accomplishing overall work force diversity and streamlining government functions.

Recommendations

1. Establish an Interagency Equal Opportunity and Affirmative Employment Management Committee under the joint chair of EEOC and OPM. (Category 2)

The President, by memorandum, should direct the EEOC Chair and the OPM Director to establish an Interagency Equal Opportunity and Affirmative Employment Management Committee to convene no later than 1 January 1994. The purpose of the committee should be to provide leadership and coordination to federal human resource professionals governmentwide. The committee must aid governmentwide communication that focuses on EEO/AE concerns and issues, and shares successful initiatives. It must also aid communication between EEO/AE functions and personnel functions. Most importantly, the committee must advocate effective cross training for all federal human resource professionals.

This committee must comprise directors of federal equal employment opportunity, affirmative employment and civil rights from a cross section of federal agencies, including small agencies.

The committee should convene monthly for the first six months. After that, the EEOC Chair and OPM Director should establish the appropriate schedule for meetings, conferences, and seminars.

2. Require appropriate cross training for human resource management professionals. (Category 1)

Agencies should be required to ensure that all federal EEO and civil rights professionals receive cross training in federal personnel management. They must also ensure that all personnel professionals receive cross training in federal EEO and civil rights. The EEOC Chair and the OPM Director must jointly identify the

appropriate core training, as well as the time frame in which the training must be obtained, to ensure total human resource management competence throughout federal agencies.

3. Combine all equal opportunity and affirmative employment reports into one comprehensive assessment of the total work force EEO/AE data. (Category 2)

By memorandum, the President should direct the Chair of EEOC in coordination with the Director of OPM, to blend the necessary requirements for agencies to compile one comprehensive assessment of agencies' equal employment opportunity and affirmative employment efforts, including specific actions needed to eradicate barriers and increase representation of minorities and females in middle and upper management positions.

EEOC and OPM must conduct a thorough examination of all current EEO/AE reporting requirements to ensure that the new comprehensive agency assessment report contains all necessary information now contained in the four reports.

EEOC should propose any legislation needed to enable consolidation of these reports. These changes should be effective with the fiscal year 95 submission requirements.

4. Redesign the Central Personnel Data File to enable total automation of the EEO/A data reporting requirements. (Category 2)

By memorandum, the President should direct the Director of OPM, in coordination with the Chair of EEOC and a working group of agency officials, to redesign the CPDF to generate all data needed to meet EEO/A reporting requirements. Prior to redesign, all current EEO/A data reporting requirements should be examined for necessity and value. This examination of requirements and subsequent redesign of the CPDF should begin immediately.

Implementation of these recommendations would reduce, simplify and automate the reporting requirements, while maintaining the requirement for agencies to submit the

necessary information. Agencies can spend more time and effort focusing on results rather than on paper processes.

In addition, implementation of these recommendations would create a coordinated effort to ensure governmentwide commitment to creating and implementing equal opportunity and affirmative employment initiatives to create a federal work force that is reflective of the American citizenry. This would require ongoing commitment and coordination between EEOC and OPM. This "partnership" is critical to the accomplishment of a competent, productive and diverse federal work force.

Fiscal Impact

The costs for most of these actions would be minimal since it would require using current resources (people and training) to improve governmentwide efforts. However, developing a comprehensive EEO and A reporting system could require an up-front investment in a new or redesigned computer program. This cost can not be estimated until EEOC and OPM determine the necessary requirements for the new comprehensive report and evaluate the current CPDF's capability for providing the data.

The savings would outweigh the costs. There would be a substantial reduction in administrative costs of EEO and A programs. This would be tremendously beneficial to the overall federal equal opportunity and affirmative employment initiatives to create a truly diverse federal work force.

End Notes

1. U.S. General Accounting Office (GAO), Continuing Need for Federal Affirmative Employment, report no. GAO/GGD-92-27BR, (Washington, D.C., November 1991).

2. The National Treasury Employees Union, Strategic Plan for Agency Diversity Management (Washington, D.C.).

3. Ibid.

Part 5

Self-Renewal and Continual Improvement

HRM. 10: STRENGTHEN THE SENIOR EXECUTIVE SERVICE (SES) SO THAT IT BECOMES A KEY ELEMENT IN THE GOVERNMENTWIDE CULTURE CHANGE EFFORT.

Background

The Civil Service Reform Act of 1978 established the SES as a separate personnel system. The incumbents of the SES include most of the top policy and managerial positions in the Executive Branch except for those requiring Senate confirmation. SES executives potentially serve as key links between the top political appointees and the rest of career civil servants that staff federal agencies.

By the end of 1992, the SES comprised about 8,200 positions; about 10 percent of these were filled by political appointees. The political appointees provide the necessary policy controls, while the career SES managers provide a politically neutral, responsive, skilled group of managers and leaders. As originally envisioned, SES members:

Serve the objective of change and continuity: on the one hand, helping the top officials of a new administration to steer their agencies in the policy directions desired by a new President; on the other, carrying forward the institutional memory of government and maintaining high standards of public service. It is a balancing act of great delicacy.¹

To achieve these objectives, the SES would consist of generalist managers with the ability and incentives to take on assignments where they would be most effective in accomplishing agency missions. These objectives have not been met, for many reasons.

Need for Change

The original vision of the SES, as outlined above, is still valid. Missing, at this juncture of its history, is an institution and process to give its members a focus and mission that takes them beyond their individual job and agency performance concerns.

Change involves a long term commitment. The SES can provide the continuity and long term tenacity required for significant change governmentwide. The following identifies areas where change is needed. These changes cannot be made immediately, rather they will take time to allow for adequate research, experimentation, learning and consultation with an array of stakeholders. The recommendations provide for such a beginning.

There is a small group of senior executives who occupy key leadership positions linking the President's top appointed officials with those charged with carrying out public policy. These key executives can be career or non-career. They should play a pivotal role in the success of government programs and policies and in "reinventing" the Executive Branch.

The majority of SES executives, however, now serve in the SES because of their technical expertise, often as key advisors and managers of support staffs or as operational managers responsible for parts of line (legislative) programs, rather than as key leaders and program managers. Nevertheless, all are important positions and most incumbents deserve to be in the SES at the pay levels provided. This mixture of roles makes it difficult to develop and manage the SES as a resource for agency management as originally intended.

Both the Merit Systems Protection Board and the General Accounting Office have pointed to the poor relationships that often exist between career SES members and political appointees.² These relationships often emerge as significant management problems. A certain amount of tension is natural; however, there are a number of aggravating circumstances that should be alleviated.

Over the years there has been an increase in the number of non-career SES appointees. This in turn has meant fewer career executives in key leadership positions and fewer career jobs that are meaningful.³ In addition, the short tenure of political appointees means that they provide less program stability and continuity because of the abbreviated timeframes in which they operate. Change in large organizations takes time, is usually incremental, and needs tenacious and persistent leadership over a period of years.

Compounding this problem has been agency behavior in selecting, developing, using, and rewarding executives. Whereas some agencies have done a good job at creating an

effective executive cadre, others have not treated their senior executives as a key resource or integrated the selection and development of their executives with their vision of a more effective agency.

The need to more effectively select and develop agency SES cadres is compounded by the expected exodus of SES members in the coming years. A National Academy of Public Administration study estimates that over "one third of the SES -- or 2,600 executives -- will be eligible to retire" by January 1994.⁴ This not only provides opportunities to select executives who can contribute quickly to agency change efforts, but allows agencies to improve the diversity of their SES membership. To achieve this, agency leadership must focus on these needs and incorporate solutions into their strategic planning efforts.

For the most part, the executive branch projects an image of a hierarchical, highly conservative and risk-averse culture. Trust levels are low at all levels of government and in most organizations. Most employees including executives are uncomfortable with this situation and are ready to work towards solutions.

Vice President Gore has offered one alternative. He expects that the National Performance Review (NPR) will result in and require significant culture change in the executive branch.. The real drivers of change will have to be the career and non-career executives. In other words, significant culture change must rely on leadership.

The "reinventing government" effort intends to decentralize authority and accountability to a greater extent. Management will have fewer rules, will be held accountable for results, and will be responsible for significant changes in the years to come. Because culture change on a scale as envisioned by the President, Vice President, and Cabinet is a long-term endeavor, institutions and processes must be put into place to support it. The following recommendations would create one such institution and a number of supporting processes.

Recommendations

- 1. The proposed President's Management Council should establish an SES Board of Directors to hold agencies accountable for an effective SES and oversee the SES to ensure that the government's "corporate" leadership needs are met.⁵**

(Category 3)

Although agencies will have the primary authority and responsibility for an effective SES cadre, a Board that reflects governmentwide policies and needs can be a valuable force to create a more dynamic, mobile, trusted and change-oriented SES. This role is best undertaken by those who have the largest stake in SES effectiveness and success -- the executives themselves.

The Board will consist of 14 members. Twelve members will be SES executives appointed by the Chair of the proposed President's Management Council. Four of the twelve will be non-career SES members. Another member will be nominated by the Senior Executive Association and approved by the proposed Council. The Chairperson of the Board will be appointed by the Chair of the proposed Council. The Board Chairperson should be a member of the council. Because the Director of the Office of Personnel Management will be a Council Member, it is most likely that he or she will be appointed as the Chairperson. Terms of office will be staggered to avoid complete turnover of membership: four for one year, five for two years and four for three years. The chair will serve at the pleasure of the President. Because the quality and motivation of the first Board members will be critical to its success, the selection process will involve an independent body. This process will be similar to the rule the American Bar Association uses for selection of judges. In this case, the Professional Development League of the Senior Executive Association, with possible assistance of the National Academy of Public Administration, will establish qualification criteria. Agencies will be asked to provide nominations, the panel established by the League will screen nominations and forward all those meeting the qualifications to the Chair of the Council for final selection. [See NPR Leadership Team recommendation and OPM recommendation.]

Establishment of this Board does not eliminate all of OPM's responsibilities for SES, rather it removes OPM's involvement of day-to-day agency SES operations such as classification of positions and qualifications review. OPM's role will involve policy development and executive and management development in

conjunction with the Board. It will also continue to provide data, research and best practices. The main thrust will involve OPM's eliminating unnecessary operations that agencies can and should perform.

Assuming the Director of OPM becomes the Board Chairperson, the current staff serving SES functions should become the staff to the Board and continue to be involved in SES policy development and other functions not delegated to agencies.

2. The President's Management Council should charge the Board of Directors with the objective of creating and reinforcing a corporate perspective within the SES that supports governmentwide culture change.⁶ (Category 3)

To change the culture of the executive branch, a corporate approach to managing executive resources will be needed. Although the agencies have the primary responsibility for change, the Board can provide one linkage between the government as a whole and the agencies. It can help create groups of executives who are both mobile and change oriented, protective of civil service values and principles, but interested in fostering change over the long term.

In addition to brokering mobility among agencies and encouraging agencies to manage their executive corps in concert with their vision of the future, the Board would foster a more effective and corporately focused SES in the following ways:

- providing overall policy guidance and oversight of governmentwide management development institutions (e.g. Federal Executive Institute and Management Development Centers). The Board would ensure that development emphasizes the vision of government in the 21st century, how executives will foster that change effort, and concepts for a more effective governmentwide SES Corps.
- recommending to the proposed President's Management Council governmentwide SES policies and management development strategies in support of government culture change efforts. For instance, would dividing "the SES into a Career Executive Service over which the Board should exercise oversight and a Political Executive Service made up of the 10%

current non-career executive cadre . . . help solve the problem of suspicion by new career appointees of whether SES employees are, in fact, non-partisan career employees" as the Senior Executive Association suggests?⁷

- overseeing an executive information system which both supports the executive search process and provides status reports on the SES in support of policy decisions, agency succession planning and development efforts. Initially the information system will only focus on the top 1,000 executives, subsequently, including all SES executives .
- monitoring appointments and reassignments.

3. The SES Board of Directors should establish memoranda of understanding with departmental and independent agency heads or Executive Resource Boards that allow delegation for the SES to agencies and lead to a more mobile, flexible, dynamic and change oriented SES.⁸ (Category 3)

One of the first orders of business of the Board will be to establish the criteria for developing SES memoranda of understanding. These memoranda will contain the incentives for agencies to manage and develop their SES executives as a key "corporate" resource. Examples of contract content include:

- the process and responsibilities for managing, selecting, and developing the SES cadre including how the process will be institutionalized and continuity maintained;
- a description of how the development of executives, SES position allocation and succession planning will be linked to the agency's strategic plans, and budget;
- the agency's processes for candidate and career development, reviewing qualifications of SES nominees, and awarding incumbents;
- the role for the agency's Director General (see recommendation #5);
- the framework and process for advancement in rank, and executive mobility;
- the results expected from an agency's SES management process; and
- the process for developing and building the career/political interface

including orientation.

the Senior Executive Association and a variety of studies admit that "agencies do not have a good track record with regard to managing the SES under the current system."⁹ By delegating more authority to agencies for SES and expecting more accountability (creating the Board of Directors, and providing additional flexibilities), agencies may have additional incentives to manage their SES cadres more effectively.

4. The SES Board of Directors will oversee the creation of an executive search and information system that allows for voluntary mobility and agency head selection in the top SES positions in government.¹⁰ (Category 3)

Evidence indicates that prior to entering SES, incumbents have held a variety of positions and moved functionally and geographically; yet, once in the SES, career paths have been relatively insular, indicating that the SES corps has been underused.¹¹ In other words, once in the SES, many executives stay in the same functional area or agency and are not encouraged to make use of their abilities to serve in a wider range of jobs or different agencies. The National Academy of Public Administration has called for enhanced and broadened mobility strategies geared not only to agency requirements, but to the corporate objectives of the government as a whole.¹²

One method for achieving the corporate objective and encouraging agencies to promote mobility is to provide the Board of Directors with sufficient resources to begin an executive search and mobility system that targets top leadership positions in the federal government. Initially, the Board will focus on identifying executives who have demonstrated, through actual performance, the ability to bring about change or manage in different circumstances and possess the values inherent in "reinvented government" principles and system realities. This is similar to one of the roles performed by the Committee of Senior Officials for the Canadian government -- a committee that has functioned effectively for over 20 years.¹³

This identification effort will take place at both agency and governmentwide

levels. In other words it will be up to agencies to identify, use, and develop their executives in the best possible manner and in conjunction with this change effort. At the governmentwide, corporate level, a process will exist that identifies current SES executives who have an excellent track record in bringing about significant improvements in government organizations. As agency heads identify needs for certain high level positions (initially those positions with incumbents mainly at ES-5 and 6 levels), they will be able to review resumes and evaluations of other incumbent executives submitted and screened by a select group of senior government executives. The agency head, or his or her designee, can then select from the list provided or select someone else within or outside the agency.

This recommendation provides a catalyst to establish an SES cadre that not only takes a governmentwide view of its role but is a vehicle to help individuals move to positions where their special expertise is needed. By no means does this proposal intend to make every SES executive mobile and a generalist. This proposal protects those executives whose expertise, experience, and desires are tied to a particular agency, occupation, or position. In fact most executives have been chosen for their technical program expertise and need to remain where they are most effective. This is normally an agency issue and needs to be left in the hands of agency management with suitable safeguards in place.

5. **The Board will oversee the process for designating certain key sub-cabinet positions as career reserved and designating at least one Director General in each agency having 50 or more SES positions.¹⁴ (Category 3)**

In 1989, GAO expressed concern about the increasing number of political appointees as well as the belief that such a large number of appointees is not necessary to achieve an Administration's political agenda.¹⁵ One of the Volcker Commission's key goals involved making "more room near the top for career executives."¹⁶ Although political appointees provide "fresh ideas" and "help ensure the government is responsive to changing needs," a better balance is needed.¹⁷

Providing more flexibility to agencies for managing the SES will cause a

legitimate suspicion that the SES will be politicized further.¹⁸ By reserving some high level positions for career executives, some of this fear will be mitigated.

"Designating Directors General (such as in the Foreign Service) will also alleviate some of the concerns."¹⁹ Although the roles (to be spelled out in the memoranda of understanding) would be somewhat different in each agency, Directors General would normally be Chairs or Deputy Chairs of Executive Resources Boards, intimately involved in executive development, placement, career counseling and protecting executives from improper practices and violation of merit principles. Most Directors General will encumber the top career reserved subcabinet position thus performing two key roles for the agency.

Fiscal Impact

There will be minimal additional costs associated with these recommendations since they will be supported from existing resources. Because the executive search system will evolve incrementally, it will only focus on a relatively small number of executives and positions. For this reason it will probably be developed within a personal computer based system. The current OPM system will continue to be used as the data base for overall SES information.

Cross References to Other NPR Recommendations

End Notes

1. U.S. Office of Personnel Management, "Draft of the Handbook for the Senior Executive Service" (Washington, D.C., July 1993), p.3.

2. U.S. Congress, House Committee on Post Office and Civil Service, Subcommittee on Civil Service, "Political Appointees in Federal Agencies," testimony by Bernard L. Ungar, Director, Federal Human Resource Management Issues, General Government Division, GAO, October 26, 1989, p.13. Also see U.S. Merit System Protection Board, "The Senior Executive Service: Views of Former Federal Executives", (Washington, D.C., October 1989.).

3. Ibid.

4. National Academy of Public Administration, "Paths to Leadership Executive Succession Planning in the Federal Government: Report Summary" (Washington, D.C., December 1992), p.1

5. Title 5, United States Code, sec. 3131, 3151.

6. Ibid.

7. Letter from Carol Bonosaro, President, and Jerry Shaw, General Counsel, Senior Executive Association, to the National Performance Review, July 12, 1993, p. 4.

8. Title 5, United States Code, sec. 3131, 3151.

9. Letter from Bonosaro and Shaw, p. 6.

10. Title 5, United States Code, sec. 3131, 3151.

11. Ron Sanders, Principal Director, Civilian Personnel Policy and Equal Opportunity, Office of the Assistant Secretary (Personnel and Readiness), Department of Defense, "Reinventing the Senior Executive Service," Virginia, June 1993. (Draft.)

12. National Academy of Public Administration, "Paths to Leadership, Executive Succession Planning in the Federal Government," Report Summary (Washington, D.C., December 1992), p. 5.

13. Telephone interview with Rick Cameron, Assistant Secretary, Human Resources Development, Treasury Board, Canadian Government, Ottawa, Canada, June 15, 1993.

14. Title 5, United States Code, sec. 3131 through 3151, and 3391 through 3394.

15. U.S. Congress, "Political Appointees in Federal Service," p. 13.

16. Paul A. Volcker, *Leadership for America: Rebuilding the Public Service* (Washington, D.C., 1989), p.16.

17. Ibid., pp. 17-19.

18. Sanders, p. 15.

19. Ibid.

Part 5

Self-Renewal and Continual Improvement

HRM. 11: ELIMINATE EXCESSIVE RED TAPE AND AUTOMATE PERSONNEL FUNCTIONS AND INFORMATION.

Background

The federal personnel system is clogged with unnecessary process constraints and thousands of pages of regulations. In 1983, the National Academy of Public Administration concluded:

. . . the present personnel management system is far too process oriented. It is much too rigid and needs major change
. . . Thousands of pages of personnel regulations tend to remold personnel managers into personnel technicians. Because of the complexity of these regulations, line managers tend to abdicate their responsibilities for personnel decisions and fail to give personnel management the high priority it deserves.
Process drives out substance¹

Ten years later, in 1993, the Federal Personnel Manual (FPM) has expanded to over 10,000 pages of policies, regulations, guidance, and processing instructions. Additional agency directives parallel and often supplement the FPM. While agency directives and the FPM contain information needed by line managers, they are primarily written for the personnel administrators upon whom managers must depend for "interpretation."

The past 10 years have also seen a technology explosion. Every agency has a data system which supports internal operations and feeds into OPM's Central Personnel Data File (CPDF). However, agency systems are not interoperable; they are outdated; complex processes contained in the FPM or agency regulations have been automated; and automation has focused primarily on internal personnel office operations almost to the exclusion of managers' needs. Additionally, until recently OPM has not led any governmentwide efforts to creatively use technology to reduce the number of manually prepared reports required by the agency or to enhance agency accountability systems.

Need for change

Managers and personnelists must be freed from unnecessary process constraints in order to focus on mission instead of the endless pursuit of overcoming the obstacles to its achievement. As process constraints are reduced and eliminated, use of technology needs to expand to provide access to information, support management decision-making, and monitor organizational performance.

Recommendations

1. Sunset the entire FPM and all agency implementing directives on December 31, 1994. (Category 2)

The President should issue an Executive Order declaring the sunset of the FPM; directing OPM to involve agencies in identifying those FPM chapters, provisions, or supplements that are (a) essential, should be retained and for whom; (b) useful and to whom; and (c) unnecessary; restricting agency supplementation of law and regulation; and requiring maximum delegation of personnel management authorities to the lowest practical organizational level within agencies and to line managers.

The positive implications of this recommendation are the short-term elimination of unnecessary red tape and the potential for streamlining and simplifying all aspects of the personnel system. On the other hand, 14 months may not be sufficient time to implement fully especially in light of other NPR recommendations. However, the objective can be met if pursued as a priority and if agencies are involved in the governmentwide effort. Additionally, the process itself will ensure that all NPR personnel recommendations are addressed.

2. Replace the FPM and agency directives with automated personnel processes, electronic decision support systems and "manuals" tailored to user needs. (Category 1)

OPM should accelerate and expand efforts already underway to streamline and automate personnel processes in coordination with the FPM sunset process, and

to avoid redundant development costs. Governmentwide deployment of the Department of Defense/Navy automated personnel action processing system application should be examined for potential cost savings. Costs for centrally developed systems or applications should be shared on a pro rata basis among all participating agencies with OPM providing "seed" money.

3. Identify and develop useful accountability measures which can be automated. (Category 1)

OPM with the assistance of agency managers and staff experts (personnel, planning, information management, budget) should develop by 31 December 1994 automated methods or accountability measures for use by agency heads to monitor exercise of delegated personnel management authorities. A variety of data sources can be tapped, including OPM's CPDF, the Survey of Federal Employees, and any reports which may continue to be necessary. Indicators which could be used to measure accountability include cash award trends to note unusual patterns; conversions from excepted to career appointments to identify potential violations of merit principles. Such management information systems can be powerful tools for use in ensuring that managers are properly exercising the increased delegations envisioned by NPR. They also should be an element of the "reinvented oversight program" called for in NPR Accompanying Report Number xxx on the Office of Personnel Management.

Fiscal Impact

Cross References to Other NPR Recommendations

End Notes

1. National Academy of Public Administration, *Deregulation of Government Management Project: Personnel Management*, interim panel report (Washington, D.C., October 1983), p. i.

SUMMARY OF RECOMMENDATIONS BY TYPE OF IMPLEMENTATION ACTIONS NEEDED

CATEGORY 1 (Agency Action)

Rec. No.	Summary of Recommendation	Agency	Deadline
HRM. 01-5	Abolish regulatory time-in-grade requirements & revise OPM guidance on qualifications standards to provide more agency flexibility.	OPM	January 1994
HRM. 01-7	Create a governmentwide employment information system to inform public of job opportunities & coordinate develop of common automated staffing information systems for agencies.	OPM	September 1994
HRM. 01-8	Decentralize authority to conduct background investigations to agencies.	OPM	January 1994
HRM. 05-2	Require agencies to protect percentage of payroll devoted to training in response to reductions in agency budget requests.	OMB	
HRM. 06-4	Revise regulations to allow employees to use sick leave for dependent care .	OPM	September 1993
HRM. 06-5	Revise regulations to require that rehired employees's accrued sick leave (from past federal service) is reccredited, regardless of length of break in service.	OPM	September 1993
HRM. 09-2	Require that EEO and civil rights professionals receive core training in personnel and that personnel professionals receive core training in EEO and civil rights.	EEOC & OPM	
HRM. 10-4	Develop an automated executive search and information system for the SES. (See HRM. 10-1 regarding creation of SES Board.)	SES Board	
HRM. 11-2	Replace FPM and agency directives with automated personnel processes and manuals.	OPM	
HRM. 11-3	Develop useful accountability measures that can be automated.	OPM	

CATEGORY 2 (Presidential Action)

Rec. No.	Summary of Recommendation	Agency	Deadline
HRM. 06-1	Issue Executive Order advocating family-friendly work schedules, flexiplace, and telecommuting.	OPM	September 1993
HRM. 07-1	Issue Executive Order to require use of alternative dispute resolution methods to deal with employee disputes.	OPM & EEOC	September 1994
HRM. 07-2	Issue Presidential memorandum directing that MSPB oversee study of ways of improving coordination and reducing jurisdictional overlap among MSPB, EEOC, OSC, and FLRA and provide report by June 1994.	NPR	September 1993
HRM. 08-1	Issue Executive Order to all agency heads on EEO and affirmative action.	NPR	September 1993
HRM. 09-1	Issue Presidential memorandum establishing an interagency EEO/AE management committee under joint chair of EEOC and OPM (to first convene in January 1994).	NPR	September 1993
HRM. 09-3	Issue Presidential memorandum directing EEOC and OPM to combine all EEO/AE reports into single, comprehensive assessment.	NPR	September 1993
HRM. 09-4	Issue Presidential memorandum directing OPM to redesign CPDF to generate all data needed to meet EEO/AE reporting requirements.	NPR	September 1993
HRM. 11-1	Issue Executive Order sunsetting the entire Federal Personnel Manual & all agency implementing directives.	OPM	December 1994

CATEGORY 3 (Law Change)

Rec. No.	Summary of Recommendation	Agency	Deadline for Submission to Congress
HRM. 01-1	Authorize agencies to establish own recruitment and examining programs, consistent with merit principles. Abolish central registers and standard application forms.	OPM	September 1994
HRM. 01-2	Authorize agencies to directly hire candidates without ranking in specified situations.	OPM	September 1994
HRM. 01-3	Reduce number of types of competitive appointments to four.	OPM	June 1994
HRM. 01-4	Permit competitively hired nonpermanent employees to compete against permanent employees for permanent positions being filled through internal placement.	OPM	June 1994
HRM. 01-6	Eliminate all statutory rules on detailing employees to temporary assignments.	OPM	January 1994
HRM. 02-1	Remove all grade-level classification criteria from the law.	OPM	January 1994
HRM. 02-2	Provide agencies with flexibility to establish broadbanding systems built upon the General Schedule framework. Reduce restrictions on demonstration project authority. (OPM would issue information on options within 1 year after enactment.)	OPM	January 1994
HRM. 02-3	Modify standard 15-grade classification system (effective 1 year after enactment).	OPM	January 1994
HRM. 02-4	Modify within-grade progression scheme for GS employees under the 15-grade system.	OPM	November 1993
HRM. 02-4	Provide agencies with several new flexibilities in setting base pay rates (effective 1 year after enactment).	OPM	January 1994

HRM. 02-5	Authorize OPM to collect compensation data from agencies and to require advance public notice of significant classification and pay actions.	OPM	January 1994
HRM. 03-1	Authorize agencies to design their own performance management programs.	OPM	November 1993
HRM. 04-1	Authorize agencies to design their own bonus and awards programs.	OPM	November 1993
HRM. 05-1	Amend GETA to eliminate (1) precondition that training be related to "official duties" and (2) preference given to government training over non-government training.	OPM	January 1994
HRM. 06-2	Repeal statutory provision that bars agencies from paying for telephone and fax machine installation and service in private residences (to promote flexiplace arrangements).	OPM	
HRM. 06-3	Expand authority to establish and fund dependent care programs.	OPM	
HRM. 06-6	Expand demonstration project authority to allow projects on employee benefits and leave.	OPM	
HRM. 06-7	Reauthorize the voluntary leave transfer program.	OPM	October 1993
HRM. 10-1 & 10-2	Establish an SES Board of Directors to oversee SES.	OPM	
HRM. 10-3	Authorize SES Board to delegate certain SES program management responsibilities (e.g., establishment and evaluation of qualifications) to agencies.	OPM	
HRM 10-5	Authorize SES Board to oversee process of designating key sub-cabinet positions as career reserved and designating at least one Director General in each agency with 50 or more SES positions.	OPM	