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OFFICE OF TECHNOLOGY ASSESSMENT • U.S. CONGRESS

REPORT brief

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Equitable and cost-effective electronic delivery of services is not assured

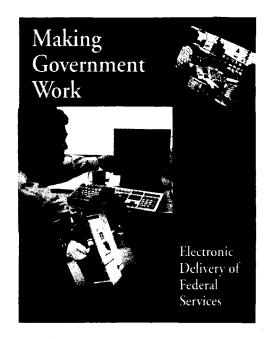
he American public wants better services from government at less cost. This is a tough order at a time when demand is growing and budgets are tighter. The administration's "National Performance Review (NPR)" and "National Information Infrastructure (NII)" initiatives place high hopes on information technology to help improve the overall performance of the Federal Government. OTA's Making Government Work: Electronic Delivery of Federal Services concludes that computer and telecommunications technologies will play an important role, but emphasizes that improvements in service delivery are by no means assured.

Will information technology make it easier for all Americans—rural and urban, young and old, affluent and impoverished—to obtain the government services to which they are entitled? Or will electronic delivery further widen—rather than narrow—the gap between the information technology "haves" and "have-nots" and simply increase the advantages that educated, technically proficient citizens have over those less so? Many of the potential social benefits of electronic delivery will be lost if information technology is not widely accessible, usable, and affordable.

Will electronic delivery simplify the provision of government services and improve cooperation among Federal agencies and their State and local government counterparts, resulting in less costly and more effective delivery? Or will electronic delivery add yet another complication to the already confusing, cumbersome manner in which governments organize and deliver many services? Many of the potential economic benefits of electronic delivery will be lost if the Federal Government fails to capitalize on

opportunities for innovation or does not develop economies of scale and scope through partnerships among Federal, State, and local agencies and the private sector.

These challenges are immense. The administration's NPR and NII initiatives provide important vision and general direction, but neither offers detailed policy guidance and actions that are needed to speed the transition toward cost-effective and equitable electronic delivery.



A STRATEGY FOR SUCCESS

OTA identifies seven key strategic elements of successful electronic delivery. These would, if implemented, constitute the backbone of a governmentwide electronic service delivery initiative and a shift towards a creative, accessible, citizen- or client-centered approach to service delivery. These elements include:

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Table 1 Illustrative guidance to Federal agencies on electronic service delivery

Success factor	Possible congressional or Office of Management and Budget guidance
Grassroots citizen involvement	Required component of all electronic delivery project plans; 0.25% minimum set-aside from agency information technology (IT) budget
Community infrastructure development	Optional component of project plans; but 0.25% minimum set- aside from agencywide IT budget allocated to infrastructure development
Encouraging innovation	Required agencywide program; 0.5% minimum set-aside from agency 1T budget; required participation in innovation clearing-house
Creating directories	Required; each agency to plan and implement directory (or directories) to agency services and information; required participation in governmentwide directory
Creating alternative futures	Required component of agency annual and 5-year Information Resource Management (IRM) plans
Strategic partnering	Required component of agency annual and 5-year IRM plans; optional component of project plans, but must be considered
Pre-operational (pre-op) testing:	Prerequisite for all medium- to large-scale regional or nation-wide electronic delivery systems
■ Pre-op evaluation	Required component of pre-op testing plans; 5% minimum set-aside from pre-op testing budget
■ Policy development	Required component; 5% minimum set-aside from pre-op budget

The Office of Technology Assessment is an analytical arm of the U.S. Congress.
OTA's basic function is to help legislators anticipate and plan for the positive and negative effects of technological changes.

- involving local citizens and recipients of Federal services at the grassroots level;
- developing the community infrastructure of schools, libraries, community centers, and other local agencies that can facilitate electronic delivery through training, education, and implementation;
- encouraging innovation by Federal agency employees, clients, and others in trying new ways of delivering services electronically;
- creating directories to agency services (including information services and information about other services);
- creating alternative futures for electronic delivery by generating new ideas for the

- use of information technology and matching electronic opportunities with agency missions;
- strategic partnering between Federal and State/local government agencies; voluntary, not-for-profit, or philanthropic organizations; and commercial companies engaged or interested in electronic delivery; and
- pre-operational testing of electronic delivery systems on a regional or national scale prior to full deployment, including explicit early attention to performance evaluation and policy development.

Congress could: a) require that these strategic elements be included in Federal agency

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Policy Area	Action options
Electronic delivery success factors	Include in Paperwork Reduction Act (PRA) reauthorization Office of Management and Budget (OMB) guidance (see table 1)
Agency and governmentwide directories	Include in PRA, OMB review and guidance
Information resources management (IRM) for electronic delivery	Use PRA to redefine IRM role in service delivery strengthen IRM leadership and training refocus Federal IRM organizations redefine agency annual and 5-year planning mandate a clearinghouse on electronic delivery innovations
	mandate electronic delivery technology plan
Information policies for electronic delivery	Include pricing and access policies in PRA Update and extend applicability of Privacy Act, establish a Privacy Protection Commission Update open government statutes (Government in the Sunshine Act, Federal Advisory Committee Act, Federal Records Act, Freedom of Information Act) Update Computer Security Act Revise procurement practices
Telecommunications infrastructure	Rethink role of FTS2000 follow-on Redefine use of FTS2000 in electronic delivery Mandate interoperability Revise the concept of universal telephone service
Computer networking	Mandate Federal agency use for electronic delivery Mandate universal, affordable access to networking, including rural and remote access

plans and budgets for electronic delivery; b) reinforce their importance when reauthorizing the Paperwork Reduction Act (PRA) and through annual appropriations; and c) work with, and monitor, the Office of Management and Budget (OMB) to develop detailed guidance for delivery of government services. A possible set of directives (table 1) includes specific budget set-asides (a proportion of each agency's information technology budgets) for grassroots involvement, community infrastructure development, innovation, and pre-operational evaluation—activities that otherwise are likely to be underfunded.

OTHER CONGRESSIONAL ACTIONS

Citizens need to know what services exist and how to obtain them. They also must be able to access the electronic systems needed to receive the services. Congress could direct the executive branch to develop directories or "electronic road maps" to help citizens identify and locate needed services and direct OMB to review agency activities to assure access for citizens who might otherwise fall through the cracks of electronic delivery.

The management structure for Federal information technology applications is outdated and needs to be redesigned, as some States Table 2 Setting policy on electronic delivery

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Figure 1
Role of
telecommunications
infrastructure in
delivering Federal
services via six
points of access

Note: The Federal services and infrastructure components shown are illustrative, not comprehensive.

Key: EBT=Electronic Benefits
Transfer; EDI=Electronic
Data Interchange;
FTS2000=The Federal
long-distance
telecommunications
program.

Federal Government Services Monetary and in-kind benefits Information dissemination/collection Citizen participation in government Grants and contracts Job training Telecommunications Infrastructure Computer networks (Internet, etc.) Homes and Mobile Commercial networks offices access **Businesses and** Neighborhood health care providers: electronic electronic commerce & EDI kiosks Community Stores and one-stop banks: service centers **EBT**

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have begun to do. This will be a difficult process. Significant change is needed to jump-start the Federal Information Resources Management (IRM) bureaucracy in directions that emphasize service to the citizen and electronic delivery. Congress could use amendments to the PRA, or equivalent legislation, to provide a clear sense of legislative intent. (See table 2.)

The telecommunications infrastructure is an essential part of electronic delivery. (See figure 1.) The Federal Government has not linked electronic service delivery needs and opportunities with the capabilities offered by private sector vendors. For electronic delivery to reach its potential, citizens need easily available and affordable access to advancing telecommunications and computer networking. Congress must play an active role to achieve this.

Federal information policies are becoming more and more outdated as the trend toward electronic delivery accelerates. This requires that statutes on privacy, security, records management and archiving, pro-curement, open government, and freedom of information be updated.

Congress also can use electronic delivery for its own purposes: videoconferencing for committee hearings; electronic bulletin boards for hearing schedules and legislative materials; and computer conferences for public input and dialogue. Delivering services electronically could further open Congress to the people, strengthen the role of Congress as the people's branch of government, and, in the process, set an example for the executive branch and the Nation.



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