

**Calendar No. 581**

105th Congress }  
2d Session }

SENATE

{ REPORT  
{ 105-335

**GOVERNMENT PAPERWORK ELIMINATION  
ACT**

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R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND  
TRANSPORTATION

on

S. 2107



SEPTEMBER 17, 1998.—Ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

59-010

WASHINGTON : 1998

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FIFTH CONGRESS

SECOND SESSION

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### GOVERNMENT PAPERWORK ELIMINATION ACT

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SEPTEMBER 17, 1998.—Ordered to be printed

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Mr. MCCAIN, from the Committee on Commerce, Science, and  
Transportation, submitted the following

### REPORT

[To accompany S. 2107]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 2107), “A bill to enhance electronic commerce by promoting the reliability and integrity of commercial transactions through establishing authentication standards for electronic communication, and for other purposes”, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill as amended do pass.

#### PURPOSE OF THE BILL

S. 2107, as reported, would require Federal agencies to make electronic versions of their forms available online and would allow individuals and businesses to use electronic signatures to file these forms electronically. The intent of the bill is to provide a framework for reliable and secure electronic transactions with the Federal government, while remaining “technology neutral” and not inappropriately favoring one industry over another.

#### BACKGROUND AND NEEDS

The widespread use and world-wide accessibility of the Internet provides the opportunity for enhanced electronic commerce and substantial paperwork reduction. State governments, industry, and private citizens have already embraced the electronic medium to conduct public and private business. Allowing businesses and individuals to conduct their affairs with the Federal government within a stable legal framework would save financial resources by eliminating burdensome paperwork and bureaucracy.

The widespread use of electronic forms can greatly improve the efficiency and speed of government services. Such efforts as people traveling to government offices for forms would no longer be required. If implemented, the bill would save the government millions of dollars in costs associated with such things as copying, mailing, filing and storing forms.

Electronic signatures can offer greater assurances that documents are authentic and unaltered. They minimize the chances of forgeries or people claiming to have had their signatures forged.

An electronic signature is a method of indicating that a particular person has originated and approved the contents of an electronic document. There is a wide array of electronic signature technologies currently available, which range from simply typing one's name on an electronic document or e-mail, to scanning a handwritten signature as a bitmap and copying it onto an electronic document. More technologically complex versions of electronic signatures involve the analysis of physical characteristics (biometrics) such as fingerprints, retina scans, and the biometrics of an actual signature to digitally verify the signer's identity. The widely referred-to "digital signature" is slightly different, and is merely one type of electronic signature which often, although not always, involves the use of trusted third parties.

Security levels for all electronic signatures vary according to the technology used. Simply typing a name on a document offers no security protection, and cannot be verified as unique to the originator. Bitmaps, which are digital versions of handwritten signatures, require large amounts of memory, are vulnerable to copying or pasting, and cannot be used to accurately tie the document to the signature. Electronic signature technologies which use biometric analysis offer a higher level of security. Digital signatures and the use of licensed third parties also yield a higher degree of security.

Several states have enacted electronic signature legislation with varying scopes and legal requirements. Some states have chosen to limit the scope of the law to transactions with state or public entities, or even to more specific purposes such as court documents, medical records, and state treasurer checks and drafts. Other states have applied their statutes to private, as well as public, transactions. State statutes also have varying technology requirements which highlight the potential for future compatibility and interoperability problems.

#### SUMMARY OF MAJOR PROVISIONS

As reported, S. 2107 would provide a legal framework and time line for electronic transactions between individuals and businesses and the Federal government. Major provisions of S. 2107, as reported, include:

1. Each Federal agency would be required to make electronic versions of their forms available for electronic submission. Such electronic submission would be supported by guidelines issued by the Director of Office of Management and Budget (OMB) and the Secretary of Commerce. Forms submitted electronically would have the same legal force as a written document, and any payments submitted electronically would be no higher than if submitted in paper form.

2. The bill establishes the following time lines:

(1) Within 18 months after the date of enactment, the Secretary of Commerce is to report on the bill's effect on electronic commerce and individual privacy, agencies are to make electronic forms available for downloading and printing, agencies are to permit employers to store Federal forms electronically, and agencies are to establish policies and procedures for implementation of this bill.

(2) Within 21 months after the date of enactment, GAO is to report on the policies, procedures and timeliness for agency implementation of this bill.

(3) Within 60 months after the date of enactment, final implementation of the bill is to be complete.

3. The bill provides definitions of key terms, and specifies under what circumstances, and in what special cases, an agency is not required to provide for the electronic submission of forms.

#### LEGISLATIVE HISTORY

The Government Paperwork Elimination Act was introduced by Senator Abraham on May 21, 1998. The bill was co-sponsored by Senator McCain, Senator Wyden, and Senator Reed. In June 1998, Senator Lott, Senator Cochran, and Senator Burns were added as co-sponsors to the bill. On July 15, 1998 the Commerce Committee held a hearing on digital signatures at which time testimony was heard from Mr. Andrew Pincus, General Counsel, Department of Commerce; Mr. Scott Cooper, Manager, Technology Policy, Hewlett Packard; Mr. Kirk LeCompte, Vice President, Product Marketing, PenOp Inc.; and Mr. Dan Greenwood, Deputy General Counsel, Information Technology Division, the Commonwealth of Massachusetts.

On July 29, 1998 the Committee met in open executive session and, by a voice vote, ordered the bill, as amended, to be reported.

#### ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, September 1, 1998.*

Hon. JOHN MCCAIN,  
*Chairman, Committee on Commerce, Science, and Transportation,  
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed estimate for S. 2107, the Government Paperwork Elimination Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is John R. Righter.

Sincerely,

JUNE E. O'NEILL, *Director.*

Enclosure.

## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

*S. 2107—Government Paperwork Elimination Act*

S. 2107 would require federal agencies to make certain forms available on-line and would allow individuals and businesses to submit these forms electronically with authenticated signatures. Specifically, to the extent practicable and feasible, the bill would require agencies to make most forms available on the Internet within 18 months of enactment and allow for the electronic filing of forms within five years of enactment. S. 2107 would require agencies to establish policies and procedures to implement the bill's provisions and the Office of Management and Budget to develop guidelines for agencies in using and accepting electronic signatures. The bill would require the Department of Commerce to study the impact of these legislative changes on electronic commerce and on individual privacy and to report its findings to the Congress within 18 months of enactment.

CBO estimates that implementing S. 2107 would increase administrative costs by a total of less than \$1 million over fiscal years 1999 and 2000 for the Department of Commerce to complete its report and for agencies to adopt new policies and procedures. S. 2107 also could affect direct spending; therefore, pay-as-you-go procedures would apply. CBO estimates, however, that any increase in direct spending would not be significant. S. 2107 contains no inter-governmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

The Department of Commerce is currently studying the efforts of private industry to protect the privacy of users of on-line resources, and much of that information could be used to complete the report required by S. 2107. Also, according to the Office of Management and Budget, some agencies already have procedures in place regarding the use of electronic technologies. Thus, CBO estimates that implementing these provisions would increase discretionary costs by less than \$1 million.

Because the remaining provisions of S. 2107 would codify current policy, CBO estimates that they would have no significant impact. For instance, agencies already make many forms available on-line, including receiving some forms electronically. Also, the National Institute of Standards and Technology has issued standards on, and agencies are conducting pilot projects involving the use and acceptance of, electronic signatures. In addition, the Administration has submitted to the Congress a strategic plan for agencies to provide full-service electronic commerce to federal customers by 2001. Thus, while S. 2107 could accelerate the implementation of information technologies at a few agencies, CBO estimates that there would probably be no significant change in federal spending on such technologies. Because receiving and processing forms electronically should generally reduce administrative costs at federal agencies, enacting S. 2107 could result in savings if it were to increase the number of forms filed electronically. CBO, however, has no basis for estimating any such potential savings.

For most agencies, any impact on spending would be subject to the availability of appropriated funds; however, the bill could also

affect direct spending by agencies not funded through annual appropriations, such as the Tennessee Valley Authority and the Bonneville Power Administration. CBO estimates, however, that any increase in spending by these agencies would not be significant.

The CBO staff contact is John R. Righter. This estimate was approved by Paul N. Van de Water, Assistant Director for Budget Analysis.

#### REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

##### NUMBER OF PERSONS COVERED

The Committee believes that the bill will not subject any individuals or businesses affected by the bill to any additional regulation.

##### ECONOMIC IMPACT

After full implementation of the bill, individuals and businesses will benefit from potential cost savings by having the opportunity to conduct transactions electronically with the Federal government.

##### PRIVACY

This legislation will not have an adverse impact on the privacy of individuals. The Secretary of Commerce will conduct an ongoing study of the bill's impact on individual privacy.

##### PAPERWORK

This legislation will not increase the paperwork requirement for private individuals or businesses. The legislation would require two reports: (1) the Secretary of Commerce would be required to submit to Congress a report on the bill's effect on electronic commerce and individual privacy; and (2) the General Accounting Office would be required to submit to Congress a report on agencies' policies, procedures, and timeliness for the implementation of the bill.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1. Short title*

This section would permit the bill to be cited as the "Government Paperwork Elimination Act."

##### *Section 2. Studies on use of electronic signatures to enhance electronic commerce*

This section would require the Secretary of Commerce to conduct an ongoing study on how this bill affects electronic commerce and individual privacy. A report would be made to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Commerce no later than 18 months from enactment.

### *Section 3. Electronic availability of forms*

Subsection (a) would immediately require Federal agencies to make virtually all new forms, questionnaires, and surveys created after enactment available electronically for downloading or printing through the Internet or other suitable electronic medium.

Subsection (b) would require this to be accomplished for all existing forms, questionnaires and surveys no later than 18 months from enactment. These existing forms, questionnaires and surveys are required to be made available to the affected public for downloading or printing through the Internet or other suitable electronic medium.

Subsections (a) and (b) would apply only to forms, questionnaires, and surveys that are expected to be submitted to an agency by more than 1000 non-governmental persons or entities per year. An agency must comply with these requirements unless it is determined by the head of the agency or operating unit that doing so for particular documents would be impracticable or otherwise unreasonable.

Subsection (c) would exempt from this section surveys that are both distributed and collected one-time only or that are provided directly to respondents by an agency.

Subsection (d) would require that forms subject to this section be available for electronic submission (with an electronic signature when necessary) under the provisions of Section 8. They are also required to be available for electronic storage by employers as described in Section 7.

Subsection (e) would require each agency and operating unit to continue to make forms, questionnaires, and surveys available in paper form.

### *Section 4. Payments*

Paragraph (1) would direct agencies to seek to develop or otherwise provide means for individuals and businesses that submit documents electronically to submit any associated payments electronically as well. The electronic payment option would be provided by agencies when deemed appropriate and practicable, and in accordance with Department of Treasury guidance.

Paragraph (2) would ensure that payments associated with forms, applications or similar documents submitted electronically would be no higher than payments submitted in paper form. Specific charges for costs associated with electronic transmission, such as those made by merchants in connection with credit card transactions, however, could be imposed without violating this provision.

### *Section 5. Use of electronic signatures by Federal agencies*

Subsection (a) would require agency heads to issue guidelines for the use of electronic signatures by agency employees in conjunction with their Federal employment.

Subsection (b) would permit agencies to provide a person entitled to receive written notice, with the opportunity to receive electronic notice instead.

Subsection (c) would require the Director of the Office of Management and Budget, in consultation with the Secretary of Commerce, to develop guidelines for agency use and acceptance of electronic



signatures. Each federal agency should determine when an electronic form, questionnaire, or survey available for electronic submission under the bill requires a legally binding electronic signature. A legally binding electronic signature means an electronic signature of a person used to show approval of or assent to be bound to the content of the message as opposed to use of an electronic signature to provide a mere indication of the identity of the signer. Paragraph (1) would ensure that these procedures would be compatible with those used in the commercial and State government sectors. Paragraph (2) would require that these procedures not inappropriately favor one industry or technology. The intent of the bill is for the government to remain “technology neutral.” The intent of the bill is not to mandate the use of a particular technology. Rather, the bill is intended to be technology neutral leaving open the possibility that a wide variety of existing technologies or technologies that will be developed in the future may be used by the Federal government in satisfying the requirements of this bill. And, so as not to prescribe one electronic signature security level for all documents, paragraph (3) would allow the security level to be commensurate with the document’s sensitivity. Paragraph (4) would require agencies to electronically acknowledge the submission of electronic forms. Further, once an agency receives 50,000 electronic submittals of a particular form, paragraph (5) would require the agency to make multiple electronic signature formats available for submitting the forms. To further ensure technology neutrality, “multiple formats” are required when a form is submitted in substantial enough volume so that the government does not favor a particular technology provider by accepting only one electronic signature technology.

#### *Section 6. Enforceability and legal effect of electronic records*

This section stipulates that electronic records, or electronic signatures or other forms of electronic authentication, submitted in accordance with agency procedures, will not be denied legal effect, validity or enforceability because they are in electronic form. This provision is intended to preclude agencies or courts from systematically treating electronic documents and signatures less favorably than their paper counterparts.

#### *Section 7. Employer electronic storage of forms*

After 18 months from enactment, employers that are required by law to collect, file and store Federal forms concerning their employees, would be permitted to collect, file and store the same forms electronically. If an agency determines that the electronic storage of a particular form is inconsistent with security or the proper administration of an agency program, and publishes written finding to that effect, electronic storage would not be permitted.

#### *Section 8. Implementation by agencies*

Subsections (a) and (b) direct Federal agencies, within 18 months of enactment, to establish policies and procedures to authorize electronic submission and storage of their forms, applications and similar documents or records, and to establish timelines for full implementation of these electronic commerce measures. These agencies’

policies and procedures shall be consistent with the Privacy Protection Act of 1980 (42 U.S.C. 2000aa), in consultation with the Attorney General, and subject to applicable laws and regulations pertaining to the Department of the Treasury concerning Federal payments and collection and the National Archives and Records Administration concerning the proper maintenance and preservation of agency records. Agency guidelines should also be consistent with the above provisions.

Subsection (c) would direct the General Accounting Office (GAO) to provide a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Commerce, within 21 months from enactment, on the Federal agencies' proposed policies, procedures, and timeliness.

Subsection (d) requires that all Federal forms must be available for electronic submission within 60 months after enactment, except when an agency makes a written finding that the electronic filing of a form is either technically infeasible or economically unreasonable, or may compromise national security. The Committee anticipates that the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Commerce will be notified whenever such a written finding is made. In addition, the Committee notes that the bill is not intended to create private rights of action, or to invalidate agency actions, in the event of non-compliance with one of the bill's provisions.

#### *Section 9. Sense of the Congress*

This section expresses the sense of the Congress that under Federal and State law, electronic transactions be treated similarly to those conducted in written form.

#### *Section 10. Application with other laws*

This section would exempt the Internal Revenue Service (IRS) and the Department of the Treasury from the provisions in the bill, when in conflict with the administration of internal revenue laws or conflicts with the Internal Revenue Service Restructuring and Reform Act of 1998 or the Internal Revenue Code of 1986. The IRS collection process should also be exempted from the bill.

#### *Section 11. Definitions*

This section would provide the definitions of several key terms used throughout this bill.

For purposes of the public and confidential financial disclosure forms required or authorized to be filed in the executive branch by the Ethics in Government Act, the Office of Government Ethics should be deemed to be an "agency" as that term is used in this bill.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.

