

107TH CONGRESS
1ST SESSION

H. R. 524

To require the Director of the National Institute of Standards and Technology to assist small and medium-sized manufacturers and other such businesses to successfully integrate and utilize electronic commerce technologies and business practices, and to authorize the National Institute of Standards and Technology to assess critical enterprise integration standards and implementation activities for major manufacturing industries and to develop a plan for enterprise integration for each major manufacturing industry.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 8, 2001

Mr. BARCIA (for himself, Mr. BOEHLERT, Mr. HALL of Texas, Mr. EHLERS, Mr. UDALL of Colorado, Ms. RIVERS, Mr. GORDON, and Mr. CALVERT) introduced the following bill; which was referred to the Committee on Science

A BILL

To require the Director of the National Institute of Standards and Technology to assist small and medium-sized manufacturers and other such businesses to successfully integrate and utilize electronic commerce technologies and business practices, and to authorize the National Institute of Standards and Technology to assess critical enterprise integration standards and implementation activities for major manufacturing industries and to develop a plan for enterprise integration for each major manufacturing industry.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Electronic Commerce
5 Enhancement Act of 2001”.

6 **TITLE I—ELECTRONIC**
7 **COMMERCE**

8 **SEC. 101. FINDINGS.**

9 The Congress finds the following:

10 (1) Commercial transactions on the Internet,
11 whether retail business-to-customer or business-to-
12 business, are commonly called electronic commerce.

13 (2) In the United States, business-to-business
14 transactions between small and medium-sized manu-
15 facturers and other such businesses and their sup-
16 pliers is rapidly growing, as many of these busi-
17 nesses begin to use Internet connections for supply-
18 chain management, after-sales support, and pay-
19 ments.

20 (3) Small and medium-sized manufacturers and
21 other such businesses play a critical role in the
22 United States economy.

23 (4) Electronic commerce can help small and
24 medium-sized manufacturers and other such busi-
25 nesses develop new products and markets, interact

1 more quickly and efficiently with suppliers and cus-
2 tomers, and improve productivity by increasing effi-
3 ciency and reducing transaction costs and paper-
4 work. Small and medium-sized manufacturers and
5 other such businesses who fully exploit the potential
6 of electronic commerce activities can use it to inter-
7 act with customers, suppliers, and the public, and
8 for external support functions such as personnel
9 services and employee training.

10 (5) The National Institute of Standards and
11 Technology's Manufacturing Extension Partnership
12 program has a successful record of assisting small
13 and medium-sized manufacturers and other such
14 businesses. In addition, the Manufacturing Exten-
15 sion Partnership program, working with the Small
16 Business Administration, successfully assisted
17 United States small enterprises in remediating their
18 Y2K computer problems.

19 (6) A critical element of electronic commerce is
20 the ability of different electronic commerce systems
21 to exchange information. The continued growth of
22 electronic commerce will be enhanced by the develop-
23 ment of private voluntary interoperability standards
24 and testbeds to ensure the compatibility of different
25 systems.

1 **SEC. 102. REPORT ON THE UTILIZATION OF ELECTRONIC**
2 **COMMERCE.**

3 (a) ADVISORY PANEL.—The Director of the National
4 Institute of Standards and Technology (in this title re-
5 ferred to as the “Director”) shall establish an Advisory
6 Panel to report on the challenges facing small and me-
7 dium-sized manufacturers and other such businesses in in-
8 tegrating and utilizing electronic commerce technologies
9 and business practices. The Advisory Panel shall be com-
10 prised of representatives of the Technology Administra-
11 tion, the National Institute of Standards and Technology’s
12 Manufacturing Extension Partnership program estab-
13 lished under sections 25 and 26 of the National Institute
14 of Standards and Technology Act (15 U.S.C. 278k and
15 278l), the Small Business Administration, and other rel-
16 evant parties as identified by the Director.

17 (b) INITIAL REPORT.—Within 12 months after the
18 date of the enactment of this Act, the Advisory Panel shall
19 report to the Director and to the Committee on Science
20 of the House of Representatives and the Committee on
21 Commerce, Science, and Transportation of the Senate on
22 the immediate requirements of small and medium-sized
23 manufacturers and other such businesses to integrate and
24 utilize electronic commerce technologies and business
25 practices. The report shall—

1 (1) describe the current utilization of electronic
2 commerce practices by small and medium-sized man-
3 ufacturers and other such businesses, detailing the
4 different levels between business-to-retail customer
5 and business-to-business transactions;

6 (2) describe and assess the utilization and need
7 for encryption and electronic authentication compo-
8 nents and electronically stored data security in elec-
9 tronic commerce for small and medium-sized manu-
10 facturers and other such businesses;

11 (3) identify the impact and problems of inter-
12 operability to electronic commerce, and include an
13 economic assessment; and

14 (4) include a preliminary assessment of the ap-
15 propriate role of, and recommendations for, the
16 Manufacturing Extension Partnership program to
17 assist small and medium-sized manufacturers and
18 other such businesses to integrate and utilize elec-
19 tronic commerce technologies and business practices.

20 (c) FINAL REPORT.—Within 18 months after the
21 date of the enactment of this Act, the Advisory Panel shall
22 report to the Director and to the Committee on Science
23 of the House of Representatives and the Committee on
24 Commerce, Science, and Transportation of the Senate a
25 3-year assessment of the needs of small and medium-sized

1 manufacturers and other such businesses to integrate and
2 utilize electronic commerce technologies and business
3 practices. The report shall include—

4 (1) a 3-year planning document for the Manu-
5 facturing Extension Partnership program in the
6 field of electronic commerce; and

7 (2) recommendations, if necessary, for the Na-
8 tional Institute of Standards and Technology to ad-
9 dress interoperability issues in the field of electronic
10 commerce.

11 **SEC. 103. ELECTRONIC COMMERCE PILOT PROGRAM.**

12 The National Institute of Standards and Tech-
13 nology's Manufacturing Extension Partnership program,
14 in consultation with the Small Business Administration,
15 shall establish a pilot program to assist small and me-
16 dium-sized manufacturers and other such businesses in in-
17 tegrating and utilizing electronic commerce technologies
18 and business practices. The goal of the pilot program shall
19 be to provide small and medium-sized manufacturers and
20 other such businesses with the information they need to
21 make informed decisions in utilizing electronic commerce-
22 related goods and services. Such program shall be imple-
23 mented through a competitive grants program for existing
24 Regional Centers for the Transfer of Manufacturing Tech-
25 nology established under section 25 of the National Insti-

1 tute of Standards and Technology Act (15 U.S.C. 278k).
2 In carrying out this section, the Manufacturing Extension
3 Partnership program shall consult with the Advisory
4 Panel and utilize the Advisory Panel's reports.

5 **TITLE II—ENTERPRISE** 6 **INTEGRATION**

7 **SEC. 201. ENTERPRISE INTEGRATION ASSESSMENT AND** 8 **PLAN.**

9 (a) ASSESSMENT.—The Director shall work to iden-
10 tify critical enterprise integration standards and imple-
11 mentation activities for major manufacturing industries
12 underway in the United States. For each major manufac-
13 turing industry, the Director shall work with industry rep-
14 resentatives and organizations currently engaged in enter-
15 prise integration activities and other appropriate rep-
16 resentatives as necessary. They shall assess the current
17 state of enterprise integration within the industry, identify
18 the remaining steps in achieving enterprise integration,
19 and work toward agreement on the roles of the National
20 Institute of Standards and Technology and of the private
21 sector in that process. Within 90 days after the date of
22 the enactment of this Act, the Director shall report to the
23 Congress on these matters and on anticipated related Na-
24 tional Institute of Standards and Technology activities for
25 the then current fiscal year.

1 (b) PLANS AND REPORTS.—Within 180 days after
2 the date of the enactment of this Act, the Director shall
3 submit to the Congress a plan for enterprise integration
4 for each major manufacturing industry, including mile-
5 stones for the National Institute of Standards and Tech-
6 nology portion of the plan, the dates of likely achievement
7 of those milestones, and anticipated costs to the Govern-
8 ment and industry by fiscal year. Updates of the plans
9 and a progress report for the past year shall be submitted
10 annually until for a given industry, in the opinion of the
11 Director, enterprise integration has been achieved.

12 **SEC. 202. DEFINITIONS.**

13 For purposes of this title—

14 (1) the term “Director” means the Director of
15 the National Institute of Standards and Technology;

16 (2) the term “enterprise integration” means the
17 electronic linkage of manufacturers, assemblers, and
18 suppliers to enable the electronic exchange of prod-
19 uct, manufacturing, and other business data among
20 all businesses in a product supply chain, and such
21 term includes related application protocols and other
22 related standards; and

23 (3) the term “major manufacturing industry”
24 includes the aerospace, automotive, electronics, ship-
25 building, construction, home building, furniture, tex-

- 1 tile, and apparel industries and such other industries
- 2 as the Director designates.

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