

One Hundred Seventh Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Wednesday,
the twenty-third day of January, two thousand and two*

An Act

To authorize the National Institute of Standards and Technology to work with major manufacturing industries on an initiative of standards development and implementation for electronic enterprise integration.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the “Enterprise Integration Act of 2002”.

SEC. 2. FINDINGS.

The Congress makes the following findings:

(1) Over 90 percent of United States companies engaged in manufacturing are small- and medium-sized businesses.

(2) Most of these manufacturers produce goods for assemblage into products of large companies.

(3) The emergence of the World Wide Web and the promulgation of international standards for product data exchange greatly accelerated the movement toward electronically integrated supply chains during the last half of the 1990’s.

(4) European and Asian countries are investing heavily in electronic enterprise standards development, and in preparing their smaller manufacturers to do business in the new environment. European efforts are well advanced in the aerospace, automotive, and shipbuilding industries and are beginning in other industries including home building, furniture manufacturing, textiles, and apparel. This investment could give overseas companies a major competitive advantage.

(5) The National Institute of Standards and Technology, because of the electronic commerce expertise in its laboratories and quality program, its long history of working cooperatively with manufacturers, and the nationwide reach of its manufacturing extension program, is in a unique position to help United States large and smaller manufacturers alike in their responses to this challenge.

(6) It is, therefore, in the national interest for the National Institute of Standards and Technology to accelerate its efforts in helping industry develop standards and enterprise integration processes that are necessary to increase efficiency and lower costs.

SEC. 3. ENTERPRISE INTEGRATION INITIATIVE.

(a) ESTABLISHMENT.—The Director shall establish an initiative for advancing enterprise integration within the United States. In

carrying out this section, the Director shall involve, as appropriate, the various units of the National Institute of Standards and Technology, including the National Institute of Standards and Technology laboratories (including the Building and Fire Research Laboratory), the Manufacturing Extension Partnership program established under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l), and the Malcolm Baldrige National Quality Program. This initiative shall build upon ongoing efforts of the National Institute of Standards and Technology and of the private sector, shall involve consortia that include government and industry, and shall address the enterprise integration needs of each United States major manufacturing industry at the earliest possible date.

(b) **ASSESSMENT.**—For each major manufacturing industry, the Director may work with industry, trade associations, professional societies, and others as appropriate, to identify enterprise integration standardization and implementation activities underway in the United States and abroad that affect that industry and to assess the current state of enterprise integration within that industry. The Director may assist in the development of roadmaps to permit supply chains within the industry to operate as an integrated electronic enterprise. The roadmaps shall be based on voluntary consensus standards.

(c) **REPORTS.**—Within 180 days after the date of the enactment of this Act, and annually thereafter, the Director shall submit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the National Institute of Standards and Technology's activities under subsection (b).

(d) **AUTHORIZED ACTIVITIES.**—In order to carry out this Act, the Director may work with industry, trade associations, professional societies, and others as appropriate—

(1) to raise awareness in the United States, including awareness by businesses that are majority owned by women, minorities, or both, of enterprise integration activities in the United States and abroad, including by the convening of conferences;

(2) on the development of enterprise integration roadmaps;

(3) to support the development, testing, promulgation, integration, adoption, and upgrading of standards related to enterprise integration including application protocols; and

(4) to provide technical assistance and, if necessary, financial support to small- and medium-sized businesses that set up pilot projects in enterprise integration.

(e) **MANUFACTURING EXTENSION PROGRAM.**—The Director shall ensure that the Manufacturing Extension Program is prepared to advise small- and medium-sized businesses on how to acquire the expertise, equipment, and training necessary to participate fully in supply chains using enterprise integration.

SEC. 4. DEFINITIONS.

For purposes of this Act—

(1) the term “automotive” means land-based engine-powered vehicles including automobiles, trucks, busses, trains, defense vehicles, farm equipment, and motorcycles;

(2) the term “Director” means the Director of the National Institute of Standards and Technology;

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(3) the term “enterprise integration” means the electronic linkage of manufacturers, assemblers, suppliers, and customers to enable the electronic exchange of product, manufacturing, and other business data among all partners in a product supply chain, and such term includes related application protocols and other related standards;

(4) the term “major manufacturing industry” includes the aerospace, automotive, electronics, shipbuilding, construction, home building, furniture, textile, and apparel industries and such other industries as the Director designates; and

(5) the term “roadmap” means an assessment of manufacturing interoperability requirements developed by an industry describing that industry’s goals related to enterprise integration, the knowledge and standards including application protocols necessary to achieve those goals, and the necessary steps, timetable, and assignment of responsibilities for acquiring the knowledge and developing the standards and protocols.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Director to carry out functions under this Act—

- (1) \$2,000,000 for fiscal year 2002;
- (2) \$10,000,000 for fiscal year 2003;
- (3) \$15,000,000 for fiscal year 2004; and
- (4) \$20,000,000 for fiscal year 2005.

Speaker of the House of Representatives.

*Vice President of the United States and
President of the Senate.*