swim. As usual, the boys tested themselves to see how long they could hold their breath under water. Kyle, 13 years old, told Santiago he was going to get his towel and suggested a breather. When Kyle returned from the family spot on the beach, about five yards away, he saw that Santiago was still at the game, and underwater.

A poolside bystander made the observation to Kyle that his friend was now pretending to be an underwater crab.

As Kyle watched, Santiago turned over, still at the bottom of the pool, in five feet of water. ''His arm was twitching and his mouth was open,'' said Kyle, who realized at that moment that something was terribly wrong.

''I jumped in, swam to the bottom, put my arm under his and pulled him to the top,'' he said.

As Kyle brought Santiago to the side of the pool, bystanders helped pull him out. Someone went to call for an ambulance, while others asked if anyone knew CPR. While Kyle does know how to administer CPR, an Emergency Medical Technician was staying at the resort, and stepped in to help.

According to Dan, the wait for the ambulance was about a half-an-hour. ''The ambulance went to the wrong place and had to be redirected,'' he said.

''As the EMT performed CPR, Santiago was convulsing, and it was necessary, to hold his body down,'' said Dan. Kyle said that initially there was no pulse, but as soon as the CPR started, Santiago began breathing again. It was several hours later, accompanied by much medication, that the boy's body relaxed, and it was several more hours before anyone knew what shape Santiago was in.

''No one knows just exactly how long Santiago was under water,'' said Dan, who said the doctors at the Nevis Hospital were most concerned about possible brain damage.

''We went to visit him that evening, but the next morning, he had no recollection of our visit,'' said Dan.

On successive visits to the hospital, Kyle asked questions of Santiago, assuring, from his answers, that all was well.

Santiago was in the hospital for five days. His aunt, Maria, Kyle's stepmother, stayed with him throughout the days to help with feeding and necessary exercises, essential to restore lung capacity and breathing.

Kyle said that a doctor at the hospital told him that if he had gone to get help instead of pulling Santiago out himself, the boy would not have survived, as his lungs would have been completely filled with water.

As it was, according to Dan, it was almost 24 hours before anyone knew what the prognosis was going to be. Santiago has since been seen by his own physician and a neurologist, and been given a clean bill of health.

Mary Mangini, Kyle's mother, is proud of her son because just as Kyle was so quick to react to the situation, he is quite a bit lighter than his cousin.

Santiago, at 16 years old, weighs 180 pounds, and is about five feet 9 inches. ''He's very big,'' said Kyle, who weighs 85 pounds and measures five feet tall.

Kyle attributes his ability to act quickly to his knowledge of lifesaving acquired as part of his merit badge work while taking lifesaving at the Moses Boy Scout Camp in Russell.

''. . . and that's how I knew what to do,'' Kyle said.

Kyle's scout leader, David Olzewski, said that Kyle has been participating in the scouting program since he was Cub Scout age, about nine-years-old. ''He's a good kid, and one of the oldest scouts in the troop,'' he said, adding that Kyle is the troop guide.

This is not Kyle's first successful rescue. A few years ago, he and neighbor John Mulligan came upon a Herrick Road neighbor, Harold Wyman, who had fallen in his icy walkway and was not able to get up. Kyle reacted in the same, quick, responsive manner, by sending John to the telephone and dialing 911, while he found blankets for Mr. Wyman, and comforted him until help arrived.

Kyle is an eighth grade student at Gateway Regional Middle School and next year will attend Pioneer Valley School of Performing Arts, in Hadley, a charter school. He plays the guitar and enjoys acting and was most recently seen as Will Scarlett in the middle school production of the musical, Robin Hood.

MILLENNIUM DIGITAL COMMERCE ACT—S. 761

Statements on the bill, S. 761, introduced on March 25, 1999, did not appear in the RECORD. The material follows:

By Mr. ABRAHAM (for himself, Mr. MCCAIN, Mr. WYDEN, and Mr. BURNS):

S. 761. A bill to regulate interstate commerce by electronic means by permitting and encouraging the continued expansion of electronic commerce through the operation of free market forces, and for other purposes; to the Committee on Commerce, Science, and Transportation.

MILLENNIUM DIGITAL COMMERCE ACT

• Mr. ABRAHAM. Mr. President, I rise to introduce the Millennium Digital Commerce Act, a bill to promote the use of electronic authentication technologies and enhance the Internet's capacity to serve as a business tool. I am joined in introducing this bill by Senator JOHN MCCAIN, the chairman of the Senate Commerce Committee, Senator RON WYDEN, and Senator CONRAD BURNS. This legislation builds on the Government Paperwork Elimination Act, a bill I sponsored to promote the use of electronic signatures by the Federal Government, which was signed into law by the President as part of the Omnibus Appropriations Act.

The Internet has experienced almost exponential growth since its inception. Where once the Internet was a medium limited to the sharing of ideas between scientists and educators, it is now a tool which allows every person with a computer to access more information than is contained in any single library, communicate with friends for a fraction of the cost of phone service, or purchase goods from retailers located all over the world. Electronic commerce is clearly booming. But in order to realize its full potential, we must enact Federal and State legislation to enable, enhance, and protect the next generation of Internet usage.

The Internet is poised to serve as an efficient new tool for companies to transact business as never before. The development of electronic signature technologies now allow organizations to enter into contractual arrangements without ever having to drive across town or fly thousands of miles to personally meet with a client or potential business partner. The Internet is prepared to go far beyond the ability to buy a book or order apparel on-line. It is ready to lead a revolution in the execution of business transactions which may involve thousands or millions of dollars in products or services; transactions so important they require that both parties enter into a legally binding contract.

This capability is provided by the development of secure electronic authentication methods and technologies. These technologies permit an individual to positively identify the person with whom they are transacting business and to ensure that information being shared by the parties has not been tampered with or modified without the knowledge of both parties. While such technologies are seeing limited use today, the growth of the application has out-paced government's ability to appropriately modify the legal framework governing the use of electronic signatures and other authentication methods.

Mr. President, the Millennium Digital Commerce Act is designed to promote the use of electronic signatures in business transactions and contracts. At present, the greatest barrier to such transactions is the lack of a consistent and predictable national framework of rules governing the use of electronic signatures. Over forty States have enacted electronic authentication laws, and no two laws are the same. This inconsistency deters businesses from fully utilizing electronic signature technologies for contracts and other business transactions. The differences in our State laws create uncertainty about the effectiveness or legality of an electronic contract signed with an electronic signature. Of course, certainty is the basis for commerce, and contracts provide that certainty. Parties enter into contracts understanding that they will be bound by the terms of the agreement. However, the fear is that a business located in a State with different electronic authentication rules may be able to escape contractual obligations agreed to through electronic signatures. This legal uncertainty limits the potential of electronic commerce, and, thus, our nation's economic growth.

The needs for uniformity in electronic authentication rules is not only recognized by the business community,

but by the States as well. For the past two years, the National Conference of Commissioners on Uniform State Law, an organization comprised of e-commerce experts form the States, has been working to develop a uniform system for the use of electronic signatures for all fifty States. Their product, the Uniform Electronic Transactions Act, or UETA, is in the final stages of review and the drafters expect to have the Act completed by October. Assuming the UETA is finished as scheduled, and I believe it will be, it will then fall on each State legislature to enact the legislation and establish the uniformity necessary for the interstate use of electronic signatures.

But agreement on the final language of the UETA proposal is not the same as enactment. Uniformity will not occur until all fifty States actually enact the UETA. Because some State legislatures are not in session next year and other States have more pressing legislative items, it could take three to four years for forty-five or fifty States to enact the UETA. With the rapid State of development in the high-technology sector, four years is an eternity.

The Digital Millennium Commerce Act is an interim measure to provide relief until the States adopt the provisions of the UETA. It will provide companies the baseline they need until a national baseline governing the use of electronic authentication exists at the State level.

First, the legislation provides that the electronic records produced in the execution of a digital contract shall not be denied legal effect solely because they are electronic in nature. This provision assures that a company will be able to rely on an electronic contract and that another party will not be able to escape their contractual obligations simply because the contract was entered into the Internet or any other computer network. By granting such certainty, this bill will reduce the likelihood of dissatisfied parties attempting to escape electronic contractual agreements and transactions.

Mr. President, let me stress that this Federal preemption of State law is designed to be an interim measure. It provides relief until the States enact uniform standards which are consistent with those contained in the Uniform Electronic Transactions Act and this legislation. Simply put, once States enact the UETA or other legislation governing the use of electronic signatures which is consistent to the UETA, the Federal preemption is lifted.

I consider myself a Federalist. I believe strongly in States rights and view with great caution proposals which call for the preemption of State law. After considerable study, it is my option that the need for a national baseline for the use of electronic signatures justifies a temporary, Federal action until such time as the States can enact a uniform standard.

Second, the bill grants parties to a transaction the freedom to determine the technologies and business methods to be used in the execution of an electronic contract. In essence, this assures that the Federal baseline will extend to the various aspects of State law governing authentication including such matters as registration and certification requirements, liability allocations, maintenance of revocation lists, payment of fees and other legal and regulatory concerns.

Third, this legislation sets forth the principles for the international use of electronic signatures. In the last year, U.S. negotiators have been meeting with the European Commissioners to discuss electronic signatures in international commerce. In these negotiations, the U.S. Department of Commerce and the States Department have worked in support of an open system governing the use of authentication technologies. Some European nations oppose this concept. For example, Germany insists that electronic transactions involving a German company must utilize a German electronic signature application. I applaud the Administration for their steadfast opposition to that approach. In an effort to bolster and strengthen the U.S. position in these international negotiations, this legislation lays out a serious of principles to govern the use of electronic signatures in international transactions. These principles included the following:

One, paper-based obstacles to electronic transactions must be eliminated.

Two, parties to an electronic transaction should choose the electronic authentication technology.

Third, parties to a transaction should have the opportunity to prove in court that their authentication approach and transactions are valid.

Fourth, the international approach to electronic signatures should take a nondiscriminatory approach to electronic signature. This will allow the free market—not a government—to determine the type of authentication technologies used in international commerce.

Mr. President, these principles will bolster the U.S. convention that the Departments of State and Commerce are advocating abroad, and, hopefully, increase the likelihood of an open, market-based international framework to electronic commerce.

Finally, the bill directs the Department of Commerce and Office of Management and Budget to report on Federal laws and regulations that might pose barriers to e-commerce and report back to Congress on the impact of such provisions and provide suggestions for reform.

Mr. President, as with any legislation seeking to affect both Federal and State law, drafting this bill has been a challenging balancing act. During the drafting process, my office has received invaluable support from the Technology Division of the State of Massachusetts. Governor Paul Cellucci's staff have provided indispensable counsel on existing State law governing the use of electronic signatures and the manner in which Federal law can bolster or hamstring State contract law. Of course, the business and technology sectors have also been crucial in helping to craft this bill. Representatives from the Information Technology Association of America, the U.S. Chamber of Commerce, Microsoft, Hewlett-Packard and the National Association of Manufacturers have each lent their time and expertise to this effort. I appreciate their contributions and look forward to continuing this effort to ensure that we develop the best approach possible to promote use of electronic signatures in business transactions.

I urge my colleagues to support the Millennium Digital Commerce Act. Mr. President, I ask that the text of this legislation be placed in the RECORD.

The fill follows:

S. 761

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 ''Millennium Digital Commerce Act''.

SEC. 2. FINDINGS.

The Congress makes the following findings:

(1) The growth of electronic commerce and electronic government transactions represent a powerful force for economic growth, consumer choice, improved civic participation and wealth creation.

(2) The promotion of growth in private sector electronic commerce through federal legislation is in the national interest because that market is globally important to the United States.

(3) A consistent legal foundation, across multiple jurisdictions, for electronic commerce will promote the growth of such transaction, and that such a foundation should be based upon a simple, technology neutral, non-regulatory, and market-based approach.

(4) The nation and the worked stand at the beginning of a large scale transition to an information society which will require innovative legal and policy approaches, and therefore, States can serve the national interest by continuing their proven role as laboratories of innovation for quickly evolving areas of public policy, provided that States also adopt a consistent, reasonable national baseline to eliminate obsolete barriers to electronic commerce such as undue paper and pen requirements, and further, that any such innovation should not unduly burden inter-jurisdictional commerce.

(5) To the extent State laws or regulations do not currently provide a consistent, reasonable national baseline or in fact create an undue burden to interstate commerce in the important burgeoning area of electronic commerce, the national interest is best served by Federal preemption to the extent necessary to provide such consistent national baseline and eliminate said burden, but that absent such lack of a consistent, reasonable national baseline or such undue burdens, the best legal system for electronic commerce will result from continuing experimentation by individual jurisdictions.

(6) With due regard to the fundamental need for a consistent national baseline, each jurisdiction that enacts such laws should have the right to determine the need for any exceptions to protect consumers and maintain consistency with existing related bodies of law within a particular jurisdiction.

(7) Industry has developed several electronic signature technologies for use in electronic transactions, and the public policies of the United States should serve to promote a dynamic marketplace within which these technologies can compete. Consistent with this Act, States should permit the use and development of any authentication technologies that are appropriate as practicable as between private parties and in use with State agencies.

SEC. 3. PURPOSE.

The purposes of this Act are—

(1) to permit and encourage the continued exepansion of electronic commerce through the operation of free market forces rather than proscriptive governmental mandates and regulations;

(2) to promote public confidence in the validity, integrity and reliability of electronic commerce and online government under Federal law;

(3) to facilitate and promote electronic commerce by clarifying the legal status of electronic records and electronic signatures in the context of writing and signing requirements imposed by law;

(4) to facilitate the ability of private parties engaged in interstate transactions to agree among themselves on the terms and conditions on which they use and accept electronic signatures and electronic records; and

(5) to promote the development of a consistent national legal infrastructure necessary to support of electronic commerce at the Federal and state levels within existing areas of jurisdiction.

SEC. 4. DEFINITIONS.

In this Act:

(1) ELECTRONIC.—The term ''electronic'' means of or relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities.

(2) ELECTRONIC RECORD.—The term ''electronic record'' means a record created, stored, generated, received, or communicated by electronic means.

(3) ELECTRONIC SIGNATURE.—The term ''electronic signature'' means a signature in electronic form, attached to or logically associated with an electronic record.

(4) GOVERNMENTAL AGENCY.—The term ''governmental agency'' means an executive, legislative, or judicial agency, department, board, commission, authority, institution, or instrumentaility of the Federal government or of a State or of any country, municipality, or other political subdivision of a state.

(5) RECORD.—The term ''record'' means information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

(6) SIGN.—The term ''sign'' means to execute or adopt a signature.

(7) SIGNATURE.—The term ''signature'' means any symbol, sound, or process executed or adopted by a person or entiry, with intent to authenticate or accept a record.

(8) TRANSACTION.—The term ''transaction'' means an action or set of actions occurring between 2 or more persons relating to the conduct of commerce.

SEC. 5. PRINCIPLES GOVERNING THE USE OF ELECTRONIC SIGNATURES IN INTERNATIONAL TRANSACTIONS.

(a) IN GENERAL.—To the extent practicable, the Federal Government shall observe the following principles in an international context to enable commercial electronic transaction:

(1) Remove paper-based obstacles to electronic transactions by adopting relevant principles from the Model Law on Electronic Commerce adopted in 1996 by the United Nations Commission on International Trade Law (UNCITRAL).

(2) Permit parties to a transaction to determine the appropriate authentication technologies and implementation models for their transactions, with assurance that those technologies and implementation models will be recognized and enforced.

(3) Permit parties to a transaction to have the opportunity to prove in court or other proceedings that their authentication approaches and their transactions are valid.

(4) Take a nondiscriminatory approach to electronic signatures and authentication methods from other jurisdictions.

SEC. 6. INTERSTATE CONTRACT CERTAINTY.

(a) INTERSTATE COMMERCIAL CONTRACTS.—A contract relating to an interstate transaction shall not be denied legal effect solely because an electronic signature or electronic record was used in its formation.

(b) METHODS.—Notwithstanding any rule of law that specifies one or more acceptable or required technologies or business models, including legal or other procedures, necessary to create, use, receive, validate, or invalidate electronic signatures or electronic records, the parties to an interstate transaction may establish by contract, electronically or otherwise, such technologies or business models, including legal or other procedures, to create, use, receive, validate, or invalidate electronic signatures and electronic records.

(c) NOT PREEMPT STATE LAW.—Nothing in this section shall be construed to preempt the law of a State that enacts legislation governing electronic transactions that is consistent with subsections (a) and (b). A State that enacts, or has in effect, uniform electronic transactions legislation substantially as reported to State legislatures by the National Conference of Commissioners on Uniform State Law shall be deemed to have satisfied this criterion, provided such legislation as enacted is not inconsistent with subsections (a) and (b).

(d) INTENT.—The intent of a person to execute or adopt an electronic signature shall be determined from the context and surrounding circumstances, which may include accepted commercial practices.

SEC. 7. STUDY OF LEGAL AND REGULATORY BARRIERS TO ELECTRONIC COMMERCE.

(a) BARRIERS.—Each Federal agency shall, not later than 6 months after the date of enactment of this Act, provide a report to the Director of the Office of Management and Budget and the Secretary of Commerce identifying any provision of law administered by such agency, or any regulations issued by such agency and in effect on the date of enactment of this Act, that may impose a barrier to electronic transactions, or otherwise to the conduct of commerce online or be electronic means. Such barriers include, but are not limited to, barriers imposed by a law or regulation directly or indirectly requiring that signatures, or records of transactions, be accomplished or retained in other than electronic form. In its report, each agency shall identify the barriers among those identified whose removal would require legislative action, and shall indicate agency to plans to undertake regulatory action to remove such barriers among those identified as are caused by regulations issued by the agency.

(b) REPORT TO CONGRESS.—The Secretary of Commerce, in consultation with the Director of the Office of Management and Budget, shall, within 18 months after the date of enactment of this Act, and after the consultation required by subsection (c) of this section, report to the Congress concerning—

(1) legislation needed to remove any existing barriers to electronic transactions or otherwise to the conduct of commerce online or by electronic means; and

(2) actions being taken by the Executive Branch and individual Federal agencies to remove such barriers as are caused by agency regulations or policies.

(c) CONSULTATION.—In preparing the report required by this section, the Secretary of Commerce shall consult with the General Services Administration, the National Archives and Records Administration, and the Attorney General concerning matters involving the authenticity of records, their storage and retention, and their usability for law enforcement purposes.

(d) INCLUDE FINDINGS IF NO RECOMMENDATIONS.—If the report required by this section omits recommendations for actions needed to fully remove identified barriers to electronic transactions or to online or electronic commerce, it shall include a finding or findings, including substantial reasons therefor, that such removal is impracticable or would be inconsistent with the implementation or enforcement of applicable laws.●

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Mr. Thomas, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

MESSAGES FROM THE HOUSE RECEIVED DURING ADJOURNMENT

ENROLLED BILLS SIGNED

Under the authority of the order of the Senate of January 7, 1997, the Secretary of the Senate, on March 31, 1999, during the adjournment of the Senate, received a message from the House of Representatives announcing that the Speaker has signed the following enrolled bills:

H.R. 193. An act to designate a portion of the Sudbury, Assabet, and Concord Rivers as a component of the National Wild and Scenic Rivers System.

H.R. 171. An act to authorize appropriations for the Coastal Heritage Trail Route in New Jersey, and for other purposes.

H.R. 705. An act to make technical corrections with respect to the monthly reports submitted by the Postmaster General on official mail of the House of Representatives.

H.R. 1212. An act to protect producers of agricultural commodities who applied for a Crop Revenue Coverage PLUS supplemental endorsement for the 1999 crop year.

Under the authority of the order of the Senate of January 7, 1997, the enrolled bills were signed on March 31, 1999, during the adjournment of the Senate, by the President pro tempore (Mr. THURMOND).

MEASURES PLACED ON THE CALENDAR

The following bills were read the second time and placed on the calendar: