U.S. Government Working Group on Electronic Commerce

First Annual Report

November 1998

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Introduction

November 30, 1998

This report continues the work initiated last year with the release in July of 1997 of the Administration's *A Framework for Global Electronic Commerce*. The *Framework* established a set of principles and policies that together provide a new vision for commerce in the digital age—guidelines that strive to protect the public interest while liberating private enterprise from unnecessary regulations that would stifle innovation.

New technologies are dramatically changing the way we live, the way we learn and the way we work. Today, more Americans make computers than make cars. More Americans build semiconductors than construction machinery. More Americans spend their days processing data than refining petroleum. In fact, over a third of real gross domestic product growth in the past three years came from information technology industries.

At the heart of this economic transformation is the Internet. When the President first asked me to oversee the Administration's efforts in communications and technology, the Internet was primarily a tool for researchers and scientists. Now more than 140 million people around the world use the Internet to stay in touch with distant friends and family, research important topics, follow the news, or explore new places.

Even so, the Internet's most lasting impact is just emerging. The information superhighway promises to transform commercial transactions—fundamentally changing how we buy and sell the goods and services that we use everyday. Already, thousands of new businesses are setting up shop on the Internet. Soon, you'll be able to buy almost anything online. You'll be able to search for the best price in the world almost instantly from your home computer. And you'll be able to do it in a virtual shopping mall that is open all day, all night, across the world.

In this emerging digital marketplace, anyone with a good idea and a little software can set up shop, and become the corner store for the entire planet. This capability promises to unleash a revolution in entrepreneurship and innovation—a cascade of new products and services that today we can scarcely imagine. Many now estimate that by the beginning of the new century, electronic commerce will grow to account for hundreds of billions of dollars a year in sales. And there is no end in sight—traffic on the Internet is more than doubling each year.

That is why we must redouble our efforts to remove barriers that can stifle the growth of the Internet and of electronic commerce. This new report lays out the progress we have already made and the policy challenges that lay ahead. Taken together with the original *Framework* report, we are opening up a new era of economic possibility and progress by helping to ensure that commerce goes digital, that business goes global, and that innovation goes wild.

Al Gore

Executive Summary

On July 1, 1997, President Clinton issued *A Framework for Global Electronic Commerce*, which presented the U.S. Government's strategy to facilitate the growth of electronic commerce. The announcement of the strategy inspired a worldwide discussion on policymaking suited to the information age. This report describes the Administration's progress in implementing the strategy and presents five new areas of focus for the future.

Since the strategy's release, the number of Internet users has more than doubled to over 140 million people worldwide, information technology industries are now directly responsible for over one-third of the real growth of the U.S. economy, and electronic commerce is spreading rapidly, driving productivity improvements in virtually every sector of the economy.

Electronic commerce has become a major issue on economic policy agendas around the world and the market-driven principles espoused by President Clinton are now widely accepted. We have achieved the major goals set for the first year in the President's electronic commerce directive that accompanied the strategy *(the Directive)*.

Congress has enacted legislation that accomplishes four of the President's main electronic commerce legislative objectives:

- The *Internet Tax Freedom Act* places a three-year moratorium on new and discriminatory taxes on Internet commerce and creates a commission to develop a uniform system for the application of existing taxation of remote sales.

- The *Digital Millennium Copyright Act* ratifies and implements the World Intellectual Property Organization (WIPO) Copyright Treaty and the WIPO Performances and Phonograms Treaty, protecting copyrighted material online.

- The *Government Paperwork Elimination Act* encourages prompt implementation of electronic filing and record keeping systems by the Federal government, including the recognition of electronic means for authentication.

- The *Children's Online Privacy Protection Act* protects the privacy of young children online.

Major international agreements have been reached in multilateral fora that further the President's goals:

- The World Trade Organization (WTO), at its May 1998 meeting attended by Ministers from all 132 member countries, reached agreement for members to continue the practice of not imposing customs duties on electronic commerce transmissions.

- The Organization for Economic Cooperation and Development (OECD) and industry groups issued a joint declaration at the OECD's October 1998 Ministerial meeting on Global Electronic Commerce (the Ottawa Conference) supporting the tax principles outlined in the President's strategy and opposing discriminatory taxation imposed on the Internet and electronic commerce.

- The 29 OECD Ministers attending the Ottawa Conference affirmed the key principles of the U.S. proposed

International Convention on Electronic Transactions, calling on governments to remove paper-based obstacles to electronic transactions and to ensure that private parties select the technology and business methods used for authenticating their transactions. The Ottawa Ministerial declaration also recognized the importance of implementing policies that are technology-neutral, non-discriminatory, and based on market-driven approaches to authentication.

- The Basle Committee on Banking Supervision, with the support of the leading central banks, issued a report in March 1998 supporting the non-regulatory approach to electronic payment systems presented in the *Framework*.

- The Global Standards Conference, held in Brussels in October 1997, affirmed the U.S. position that the private sector should lead Internet technical standards development.

- A number of international business groups, including the Transatlantic Business Dialogue, the U.S./Japan Business Council, the International Chamber of Commerce, the Global Information Infrastructure Council, and the World Information Technology and Services Alliance have issued resolutions supporting the U.S. policy approach to electronic commerce.

In addition, we have negotiated a number of bilateral agreements that have accomplished important electronic commerce goals:

- In May 1998, President Clinton and Prime Minister Hashimoto of Japan committed the U.S. and Japanese Governments to keeping electronic commerce essentially free from regulation and cooperating at an international level to remove barriers to electronic commerce.

- In June 1998, Vice President Gore and Prime Minister Jospin of France committed the U.S. and French Governments to the principles of open access to information and the free flow of culturally and linguistically diverse content.

- In December 1997, President Clinton and European Union (EU) President Santer committed the EU and the U.S. Governments to following principles similar to those in the *Framework* and pursuing regular discussions on electronic commerce, including through the newly created Transatlantic Economic Partnership (TEP).

- In September 1998, President Clinton and Taioseach Ahern of Ireland made history by signing the first inter-governmental agreement that employed digital signatures.

The United States has made substantial progress on the President's proposals for private sector leadership and self-regulation of the Internet:

- In July 1998, a group of companies responsible for a large share of all Internet communications committed to implement online privacy protections that meet the President's guidelines by the first quarter of 1999. Third-party enforcement organizations have been established to achieve this goal.

- The U.S. Government has recognized a new private, not-for-profit, stake-holder based organization that will take over the technical management of the Internet Domain Name System (DNS).

- Private sector groups have made considerable progress in developing filtering and rating systems to empower parents, schools and libraries to screen out objectionable content. There has also been significant progress in creating websites with high-quality content for children.

Finally, we have gained additional understanding about the economic significance of the revolution in electronic commerce and information technology now underway:

- The Department of Commerce issued *The Emerging Digital Economy* in April 1998, the first comprehensive report on the economic impact of the information technology industries and electronic commerce on the United States.

During the coming year, the Electronic Commerce Working Group (the Working Group) will continue to carry out the President's Directive. In addition, the Working Group will focus on five new issues that have emerged over the past year:

- increasing the availability of bandwidth and Internet access in the U.S.;

- ensuring effective consumer protection in the online environment;

- expanding Internet availability and use of electronic commerce in developing countries;

- understanding better the economic impacts of the Internet and electronic commerce; and

- facilitating small business and entrepreneurial use of the Internet and electronic commerce.

It is increasingly clear that the Internet and electronic commerce will be a major force driving economic growth over the next few decades. The Administration will continue to implement market-driven policies that encourage the development of this new digital economy in an environment that respects the concerns of individuals and families.

Progress on the implementation of *A Framework for Global Electronic Commerce* has been more rapid than we initially anticipated. Governments and private sectors around the world now recognize the importance of the Internet and electronic commerce to future economic success. The principles espoused in the Framework have gained worldwide support. The specific policies outlined in the *Framework* are being implemented through private sector initiatives, domestic legislation and international agreements at a faster pace than we expected.

We are optimistic that the progress realized to date will be continued during the next year so that the benefits of the Internet and electronic commerce can be realized around the world.

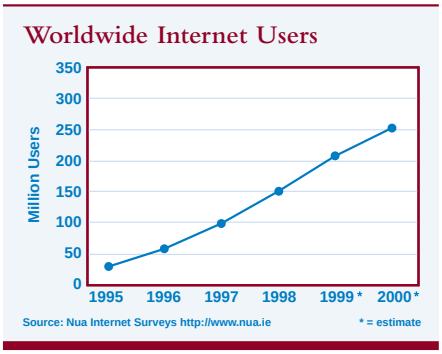
Working Group on Electronic Commerce

First Annual Report

On July 1, 1997, President Clinton presented the U.S. Government's strategy to promote the growth of electronic commerce. He charged various Cabinet Secretaries to implement elements of the strategy and directed the Electronic Commerce Working Group, which had developed the strategy, to coordinate the overall effort, periodically reporting on its progress. This is the first annual report of the Working Group.

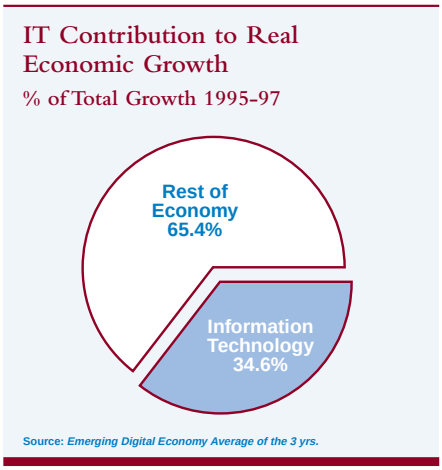
THE EMERGING DIGITAL ECONOMY

When the U.S. Government's Electronic Commerce Working Group first convened in December 1995, fewer than 10 million people were using the Internet. Commerce on the Internet was just beginning and its potential was not widely recognized.



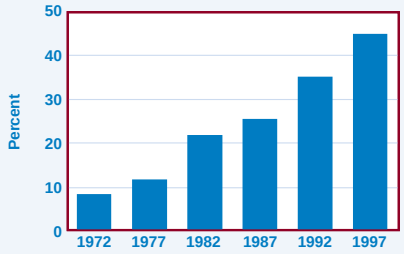
Nineteen months later, in July 1997, the Administration released *A Framework For Global Electronic Commerce* (the *Framework*), placing electronic commerce on the global economic agenda. By that time, over 50 million people were connected to the Internet and many private sources predicted that commerce on the Internet would total tens of billions of dollars by the turn of the century.

Today, there are over 140 million people linked to the Internet. Its economic impact is already significant in the United States. Internet commerce is now commonly projected to be hundreds of billions of dollars by the beginning of the new century.



In April 1998, the U.S. Department of Commerce, in cooperation with the Electronic Commerce Working Group, issued the first comprehensive report on the economic impact of information technology (IT) industries and electronic commerce, *The Emerging Digital Economy*. Due in part to the growth of the Internet, IT industries have accounted for over

Information Technology Spending as a Share of Business Equipment Spending

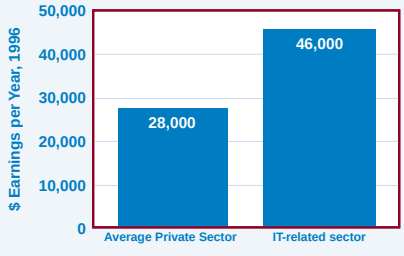


Source: U.S. Department of Commerce, Bureau of Economic Analysis

* Inflation-adjusted investment in information processing equipment (office computing, and accounting machinery, communications equipment, instruments, and photocopying equipment) as a share of total private equipment investment.

one-third of the real growth in U.S. gross domestic product over the past three years. More than 7 million people work in IT industries and occupations and earn wages that are almost two-thirds higher than the average for all private sector jobs. Price declines in information technology reduced overall inflation by one-third, from 3.1 percent to 2.0 percent in 1997. Investments in computers, communications and other information processing equipment now account for over 45 percent of total real business equipment investment.

IT Supports High-Paying Jobs

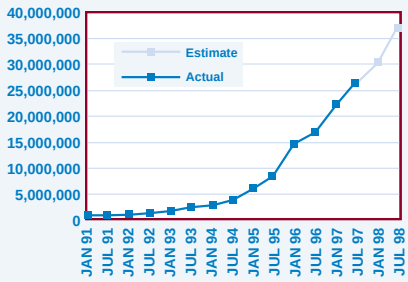


Source: *The Emerging Digital Economy Report*

During the first decade of the next century, over a billion people will be using the Internet worldwide. This growth in Internet usage will further increase the importance of IT industries to the world economy and will create significant opportunities for the growth of commerce using the Internet.

Businesses of all sizes use the Internet to create, buy, sell and distribute products and services. Many are realizing substantial productivity improvements as a result, and have been increasing their Internet business activities at dramatic rates. Four companies alone—General Electric, Cisco, Intel, and Dell—were responsible for about $3 billion in Internet commerce in 1997. They plan to exceed $35 billion in online transactions by the year 2000. Instead of Internet commerce totaling "tens of billions of dollars," it now appears that electronic commerce among businesses alone will total well over $300 billion by early in the next decade.

Internet Host Count



Source: Network Wizards; http://www.nw.com

Virtually all sectors of the economy are being affected. By 2000, nearly 7 percent of all airline tickets purchased in the United States are likely to be sold online. As many as 16 million households may do their banking via the Internet, and over $1 billion of insurance premiums are expected to be generated online. Increasingly, consumers are using the Internet to buy books, music, clothing, electronic goods, and other household items. High-priced items such as automobiles are also being marketed and sold via the Internet—at least 1 out of 5 people will use it to shop for a new car or truck by the turn of the century.

While most successful examples of electronic commerce are still found in the

United States, Internet use and electronic commerce are spreading rapidly around the world.

As Vice President Al Gore predicted in a speech in 1994 before the first World Telecommunications Development Conference, building an international network of networks—a Global Information Infrastructure (GII)—is enabling us to share information, to connect, to communicate and to do business as a global community.

In his speech on July 1, 1997 introducing *A Framework for Global Electronic Commerce*, President Clinton likened the emergence of the new digital economy to the Industrial Revolution in its potential impact on the world economy. The events of the past year demonstrate the accuracy of that comparison.

"The invention of the steam engine two centuries ago and the subsequent harnessing of electricity for communications ushered in an industrial revolution . . . Today we are on the verge of another revolution. Inventions like the integrated circuit, the computer, fiber optic cable, and the Internet are changing the way we work, learn and communicate with each other."

President Clinton,
July 1997

PRINCIPLES TO GUIDE THE DIGITAL ECONOMY

With the creation of the Electronic Commerce Working Group in December 1995, President Clinton became the first world leader to give the Internet and electronic commerce a central role in his policy agenda.

The President's *Framework* proposed a series of principles to guide the development of the new digital economy: an emphasis on private sector leadership; reliance on market forces instead of government regulation; minimal government intervention to provide a predictable legal framework for electronic commerce; a decentralized, technology-neutral approach to policy; and the need for international agreements to create a seamless global marketplace. In the fast-paced digital economy, policies need to be flexible, decentralized and responsive. The *Framework* calls for governments to refrain from imposing unnecessary regulatory actions that could stifle the growth of the Internet and electronic commerce. Competition and consumer choice should be the guiding principles for the new digital economy.

The preparation and release of the Administration's *Framework* has fundamentally changed economic agendas around the world. Since July 1997, more than a dozen other governments have issued electronic commerce strategies and set up working groups to guide their governments' policies. Multilateral and regional organizations including the Organization for Economic Cooperation and Development (OECD), the World Trade Organization (WTO), the United Nations (UN), particularly the UN Committee on Trade and Development (UNCTAD), the Transatlantic Economic Partnership (TEP), the Asia-Pacific Economic Cooperation forum (APEC), and the Free Trade Area of the Americas (FTAA) have made electronic commerce a top priority. The Transatlantic Business Dialogue (TABD), the International Chamber of Commerce (ICC), the U.S. Japan Business Council (USJBC) and the newly formed Global Business Dialogue (GBD), among other private sector organizations, have done so as well.

The principles defined in the *Framework* are now accepted by several governments and private sector organizations as appropriate for the new digital economy. They are reflected, in whole or in part, in a series of bilateral and multilateral agreements on electronic commerce issued this past year. They include: the *U.S./Korean Joint Statement on Electronic*

A Framework for Global Electronic Commerce

- The private sector should lead.
- Electronic commerce should be a market driven arena not a regulated one.
- Where governmental involvement is needed, it should support and enforce a predictable, minimalist, consistent, and simple legal environment for commerce.
- Governments should follow a decentralized, technology-neutral approach to policy.
- Electronic commerce should be a seamless global marketplace.

Formation of President's Electronic Commerce Strategy and Major International Agreements Flowing From It

December, 1995.	President Clinton announces creation of Electronic Commerce Working Group
December, 1996.	First draft of electronic commerce strategy posted on the Internet for public comment; the first use of the Internet to help shape White House policy
December, 1996.	WIPO agreement protecting copyrights online
July, 1997.	President Clinton issues *A Framework for Global Electronic Commerce* and the Presidential *Directive on Electronic Commerce*
July, 1997.	Global Information Networks Ministerial Conference in Bonn issues Declaration on Electronic Commerce
October, 1997.	U.S./Netherlands sign *Joint Statement on the Development of the Internet and Electronic Commerce*
November, 1997.	TABD issues Communique at Rome Meeting regarding electronic commerce
November, 1997.	The APEC Economic Leaders issue declaration on electronic commerce
December, 1997.	The U.S./EU Statement on Electronic Commerce is issued
March, 1998.	FTAA issues Ministerial Declaration on electronic commerce
May, 1998.	WTO issues *Declaration on Global Electronic Commerce*
May, 1998.	U.S/Japan sign *Joint Statement of Electronic Commerce*
June, 1998.	U.S./France collaborate to issue *French-American Background Paper on the Challenges of the Information Society and the Digital Economy*
September, 1998.	U.S./Ireland sign *Joint Communique on Electronic Commerce* using digital signatures
October, 1998.	The OECD issues the Ministerial declaration on authentication for electronic commerce and on taxation
November, 1998.	U.S./Korea sign *Joint Statement on Electronic Commerce*

Commerce issued in November 1998, the *U.S./Ireland Communique on Electronic Commerce* issued in September 1998, the *French-American Background Paper on the Challenges of the Information Society and the Digital Economy* issued in June 1998, the *U.S./Japan Joint Statement on Electronic Commerce* issued in May 1998, the *U.S./EU Statement on Electronic Commerce* issued in December 1997, the *APEC Economic Leaders' Declaration and the Ninth APEC Ministerial Meeting Joint Statement* issued in November 1997, the *U.S./Dutch Joint Statement on the Development of the Internet and the Promotion of Global Electronic Commerce* issued in October 1997, and the *Bonn Declaration on Electronic Commerce* issued in July 1997.

This contrasts sharply with global attitudes regarding electronic commerce as recently as two years ago, when the first draft of the *Framework* was posted on the Internet for comment. At that time, governments were reacting in an *ad hoc* fashion to the growth of the Internet and its first commercial uses. These governmental actions, often provoked by fears of lost tax revenues or possible abusive use of the Internet, were often highly intrusive and regulatory. Since its release, the *Framework* has stimulated a major change in philosophy about electronic commerce and the Internet.

Two years ago, in developing its Internet strategy, the U.S. Government used the Internet for the first time to solicit public comments on its proposal.

Now, governments around the world recognize the unique qualities of the Internet for involving the public in policy debates.

Two years ago, a number of nations were considering imposing customs duties on digital information sold and delivered via the Internet, and a number of states and cities were looking to impose new Internet access and electronic commerce taxes. The idea of imposing a tax on every bit of information transmitted electronically was gaining momentum.

Today, there is an agreement in the WTO to refrain from putting customs duties on electronic transmissions, the *Internet Tax Freedom Act* establishes a moratorium on Internet access taxation and on all discriminatory or multiple taxation of the Internet and electronic commerce in the U.S., and governments around the world uniformly oppose a "bit," or information volume based, tax.

Two years ago, many countries were willing to censor the Internet, either by imposing cultural or linguistic restrictions or limiting pornography or other objectionable content.

Today, while governments continue to express concerns about illegal or harmful content, most follow a policy that allows individuals the freedom to choose what lawful information they access on the Internet. Governments are encouraging the development and use of tools, such as rating systems and filtering technology, that empower individuals to select and control the information they receive in their homes and workplaces and provide a means for meeting concerns about the special needs of children.

Two years ago, many countries were considering omnibus laws to regulate electronic commerce, with detailed rules governing the use of digital signatures, government direction in the setting of technical standards, and significant restrictions on the issuance of electronic money.

Today, there is much greater willingness to allow markets to drive the development of authentication technologies and business models. There is widespread agreement, as demonstrated at the Global Standards Conference in Brussels last fall, that standards should be set by the market instead of governments. The large industrialized countries have agreed not to implement policies that unnecessarily hamper innovation or the development of electronic payment technologies.

Two years ago, there was widespread disagreement on how the Internet's domain name system should be coordinated, with governments, commercial interests and the technical community of the Internet often at odds with each other.

Today, there is consensus on the creation of a private, not-for-profit corporation with an internationally representative board of directors to oversee the technical management of the Internet's domain name system.

Although the *Framework* proposed that consumer choice and competition should drive the digital economy, it recognized that in some instances rules would have to be set for the effective functioning of the new economy. The U.S. Government

proposed that, where possible, these rules should be developed in the private sector so that they would be less bureaucratic, more flexible, and readily adaptable to rapid technological and market changes.

There is growing acceptance of this principle in the world community, though there is still substantial debate on how active the government role should be in areas such as privacy.

The U.S. Government continues to believe that governments have an important role to play in setting the goals of self-regulation, in working with industry to help make self-regulation effective, and in legislating in certain limited areas. However, we also continue to believe that privately enforced codes of conduct should be a central instrument for protection of online privacy and for other areas where coordination is necessary.

Recently, private sector groups in the United States including companies, industry associations, and advocacy groups came together to form a privacy alliance that will develop tools to protect consumers against invasions of their personal privacy. The work that the alliance began this past year, while promising, must be fully implemented and extended to more companies in the coming year.

Self-regulation in the digital age will require the private sector to engage in much greater collective action to set and enforce rules than was characteristic of the Industrial Age. These rules should operate globally, requiring heightened international cooperation among companies and between industry and advocacy groups. The U.S. Government remains convinced that these new forms of international coordination represent the most effective way to create a seamless global marketplace and still address problems which may arise in the digital age.

PROGRESS ON THE PRESIDENTIAL DIRECTIVE

The *Presidential Directive on Electronic Commerce* (the *Directive*), issued July 1, 1997, was designed to implement the strategy laid out in the *Framework*. The President assigned thirteen specific tasks to various Cabinet agencies, some to be achieved within a year and some by January 1, 2000. The progress made on each directive is discussed below.

1. I direct the U.S. Trade Representative to work with foreign governments to secure agreement within the next 12 months that all products and services delivered across the Internet will not be subject to tariffs and that all equipment from which the Internet is built will also not be subject to tariffs.

> *"We also declare that Members will continue their current practice of not imposing customs duties on electronic transmissions."*
>
> World Trade Organization Declaration, May 1998

In May 1998, the World Trade Organization's Ministerial Conference adopted a declaration committing all 132 member governments to refrain from imposing customs duties on electronic commerce when information and services are delivered electronically.

At the next Ministerial session to be held in the United States in late 1999, Ministers will consider extending this declaration indefinitely. Over the next year, the United States will urge countries to make this declaration permanent and legally binding by including it in the appropriate schedules of their WTO commitments.

Under the Information Technology Agreement (ITA), which entered into force on July 1, 1997, 44 countries—representing nearly 95 percent of the world trade in IT products—will reduce tariffs on IT products to zero, generally by the year 2000. This agreement covers the core of IT products that comprise the Internet's hardware infrastructure, such as semiconductors and printed circuit boards, computers, telecommunications apparatus, and computer networking equipment.

Since January 1998, the United States has led efforts to extend the scope of the ITA to include products that are driven by information technology, such as satellite communications systems, computer-driven navigational systems, process control devices and manufacturing equipment for information technology products, such as printed circuit boards. We hope to successfully conclude these negotiations in 1998, with implementation to begin in 1999.

2. I direct the U.S. Trade Representative to work with foreign governments to enforce existing agreements and secure new agreements to make electronic commerce a seamless global marketplace. This will include enforcing provisions of the recently concluded WTO Telecommunications Services Agreement; ensuring that product testing, certification, and approval processes do not unnecessarily restrict trade; ensuring that service providers have nondiscriminatory access to customers worldwide; and other measures that ensure a free flow of commerce.

In February 1998, the WTO Telecommunications Services Agreement

went into force and 70 countries began to implement commitments to provide market access, national treatment and a pro-competitive regulatory environment for basic telecommunications services. The U.S. Government is providing technical assistance to telecommunications regulators to help them implement this agreement and is monitoring compliance. These commitments, already encouraging private sector investment and competition in telecommunications, will help ensure Internet interconnection at reasonable, cost-based, and non-discriminatory prices.

WTO Basic Telecommunications Service Agreement

Signed: **February 15, 1997**

Entered into Force: **February 5, 1998**

Number of Signatories: **70 Economies**

Global Telecommunications Market: **>$600 billion**

Percentage of Global Market Represented: **>95%**

The U.S. Government has also raised telecommunications liberalization and competition issues in a variety of bilateral and multilateral fora. These discussions have focused on ensuring that incumbent telecommunications suppliers are open to competition and that they offer fair prices for the use of leased lines, local loops, interconnection, and equipment connection.

In June 1998, APEC economies endorsed a *Mutual Recognition Agreement* (MRA) regarding telecommunications equipment. The countries of the Americas will begin discussions on a similar MRA later this year. During the OECD Ottawa Conference, participating Ministers and industry representatives highlighted telecommunications liberalization as essential to the further expansion of electronic commerce.

The U.S. Government has also used bilateral and regional discussions to ensure that Internet service providers and content producers are able to reach their customers anywhere in the world. While recognizing the importance of promoting cultural diversity, the U.S. Government has advocated open access by consumers to content regardless of its language or country of origin. At the bilateral level, this goal has been achieved in agreements reached with the Japanese Government in May 1998 and the French Government in June 1998.

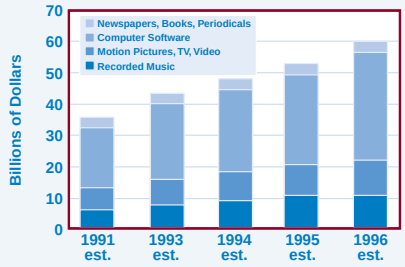
The May 1998 WTO Ministerial meeting established a work program, to be concluded in 1999, to examine a wide range of trade issues related to electronic commerce. The U.S. Trade Representative will work in this venue to advocate the creation of a seamless global marketplace for the conduct of electronic commerce with an aim of assuring the removal of all non-tariff trade barriers to electronic commerce.

3. I direct the Secretary of Commerce to seek the protection of copyright in the digital environment by working to achieve ratification in the United States and overseas within the next 12 months of the World Intellectual Property Organization (WIPO) Copyright Treaty and the WIPO Performances and Phonograms Treaty.

Two WIPO treaties were negotiated by the Administration and adopted at the WIPO Diplomatic Conference in December 1996. The treaties are designed to ensure that international copyright rules keep pace with technological change by setting new international standards for protection of digital content, including copyrighted works, musical performances, and sound recordings. They also afford important protection against piracy for U.S. rights holders in the areas of music, film, computer, books, software, and other information and entertainment products. Given the central importance of intellectual property in the digital economy, adoption of these treaties will contribute significantly to economic vitality.

The President transmitted the treaties to the Senate for advice and consent in July 1998

1991 - 1996 Estimated Revenues Generated by Foreign Sales of Selected U.S. Core Copyright Industries



Source: 1) International Intellectual Property Alliance
2) Copyright Industries in the U.S.: 1998 Report
3) http://www.iipa.com

and sent a legislative proposal to Congress to implement the treaties. Congress recently enacted the *Digital Millennium Copyright Act*, which the President signed into law on October 28, 1998, modifying U.S. copyright law to conform to the new WIPO treaties. The law also includes provisions that limit the liability of telecommunications companies and Internet service providers. The legislation will promote electronic commerce over the Internet and other networking environments by ensuring accountability and enforcement of copyright law without imposing excessive or unforeseeable liability for intellectual property infringement.

"Through enactment of the Digital Millenium Copyright Act, we have done our best to protect from digital piracy the copyright industries that comprise the leading export of the United States."

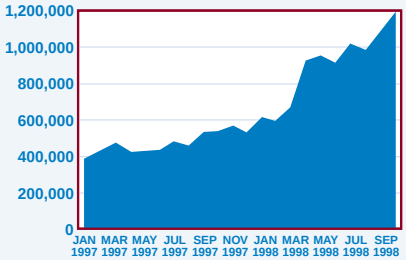
President Clinton,
October 1998

The United States' implementation of the WIPO treaties comes at a time when countries are examining how best to update their copyright laws to meet the challenges of the digital age. In the *U.S./EU Statement on Electronic Commerce* of December 1997, the European Union member states agreed to ratify these treaties in the near future. The Japanese government has made a similar commitment as part of the *U.S./Japan Joint Statement on Electronic Commerce* of May 1998.

4. I direct the Secretary of Commerce to update and make more efficient our system for protecting patentable innovations to meet the needs of the fast-moving electronic age and to seek agreements with other governments to protect patentable innovations worldwide.

In order to make the U.S. patent system more straightforward and efficient, the U.S. Patent and Trademark Office (USPTO) in the Department of Commerce is assembling a complete and comprehensive collection of information concerning the development of computer-related technologies. In this way, the USPTO will be better able to educate its examiners and expand its efforts to classify computer-related "prior art." Applicants for patents for computer-related inventions will thereby receive a more thorough examination.

Public Patent Searches on the PTO Web



Source: Information Dissemination Organizations,
U.S. Patent and Trademark Office

The USPTO is also taking significant steps to improve data access in the electronic age, posting much of its patent search information, which includes over 30 million documents, onto its website. Already, online users can access, free of charge, the Patent Bibliographic Database and the AIDS Patents Database from the USPTO website. This year, the USPTO plans to

add to its website the full text of all patents issued since 1976. By March of 1999, the related graphics will be added to the text, creating one of the largest public online databases in the world.

At the urging of the Administration, the World Intellectual Property Organization has agreed to establish a global information network in order to expand use of information technologies within its member states by electronically linking WIPO's international bureaus. This project will enable member nations to exchange patent documents electronically and will support the secure transmission of confidential information relating to patent applications. WIPO has already designated funds to increase connectivity among its offices which will facilitate a global process of patent examination and grants.

5. I direct the Secretary of Commerce to support efforts to make the governance of the domain name system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis.

The Department of Commerce first issued a Request for Comments on the administration of the domain name system (DNS) in July 1997. Since then it has released two additional papers on the subject generating more than 1,200 public comments from around the world, amounting to some 4,000 pages.

In June 1998, the Department of Commerce issued a Statement of Policy titled *Management of Internet Names and Addresses* (the *White Paper*) inviting the international community of private sector Internet stakeholders to work together to form a new, private, not-for-profit corporation to undertake technical management of Internet domain name system functions.

On October 20, the Department of Commerce signaled its intention to enter into an agreement with a new organization named the Internet Corporation for Assigned Names and Numbers (ICANN), which was formed by private sector members of the global Internet community. The Department raised a number of issues including accountability and transparency and invited ICANN to seek greater consensus in the Internet community on these and other important issues.

ICANN responded, and on November 25 the Department of Commerce entered into an agreement with this new corporation designed to initiate an implementation plan under which the private sector will undertake the management of DNS functions now performed by, or on behalf of, the U.S. Government. To ensure the stability of Internet functions, the U.S. Government will transition technical management functions to the private sector gradually, with September, 2000 as an outside date for completion.

To facilitate this transition and bring competition into domain name registration the U.S. Government has also taken the following actions:

- The Department of Commerce, in coordination with other Federal agencies, negotiated an amendment to the cooperative agreement with Network Solutions, Inc. (NSI), the company that currently manages certain aspects of the domain name system. The amendment secured NSI's commitment to take specific actions designed to permit the development of competition in domain name registrations and to recognize the role of the new corporation in establishing and implementing DNS policy. It also requires NSI to make available all relevant information and materials necessary for the new corporation to carry out its functions.

- At the Administration's request, the World Intellectual Property Organization (WIPO) convened an international process to develop recommendations for the resolution of trademark/domain name

disputes and other issues pertaining to trademark and domain name conflicts according to principles laid down in the White Paper. WIPO expects to report its findings to the new corporation early next year.

- The Administration has consulted, and will continue to consult, with the international community, including other interested governments, as it makes decisions on the transition of DNS management functions to the private sector.

- The Administration has initiated a review of the Internet root server system to determine how to increase security.

This process now enjoys broad-based support from Internet stakeholders and other governments around the world and we are optimistic about the successful conclusion of this effort.

6. I direct the Secretary of the Treasury to work with State and local governments and with foreign governments to achieve agreements that will ensure that no new taxes are imposed that discriminate against Internet commerce; that existing taxes should be applied in ways that avoid inconsistent national tax jurisdictions and double taxation; and that tax systems treat economically similar transactions equally, regardless of whether such transactions occur through electronic means or through more conventional channels of commerce.

Electronic commerce deserves the same tax treatment as traditional commerce, no more no less. In 1996, the Department of the Treasury published a paper, *Selected Tax Implications of Global Electronic Commerce*, setting forth the principle of neutrality between taxation of traditional and electronic commerce. Since then, to ensure that growth of this promising medium is not stunted by duplicative or discriminatory taxation, the Administration has worked domestically and internationally to ensure fair tax treatment of transactions using the Internet or other electronic means. The Administration both helped shape and supported the *Internet Tax Freedom Act,* which was signed into law on October 21, 1998. The Act places a three-year moratorium on state and local government taxation of Internet access and multiple or discriminatory taxation of electronic commerce while the complex issues associated with state and local taxation of remote sales are analyzed. In addition, the Act creates a federal commission to work toward ensuring that no discriminatory taxes are levied on the Internet or electronic commerce, that existing taxation is applied in a consistent and non-discriminatory fashion, and to consider the taxation issues surrounding remote sales, however they are made. The Departments of Treasury and Commerce, and the USTR will be represented on this commission along with state and local government and private sector representatives. This commission is to issue a report in the spring of 2000.

In addition to working with this newly-created commission, Treasury representatives will continue to meet with representatives of state and local government organizations, business, and taxpayer groups to advocate a rational tax policy with respect to the Internet and electronic commerce. Treasury will continue its active participation in the National Tax Association-sponsored Communications and Electronic Commerce Tax Project, which is a forum for state and local government organizations, business, taxpayer groups and academics to consider state and local taxation with respect to new technologies.

Internationally, the Administration has worked to ensure that any taxation of the Internet or electronic commerce should be clear, consistent, neutral and non-discriminatory. As part of those efforts, the United States successfully opposed the imposition of a “bit” tax

based on information volume, which would have discriminated against the Internet and electronic commerce and hampered their development.

Treasury has also been working within the OECD to achieve an international consensus on taxation of global electronic commerce. A full day of tax discussions among OECD member countries, non-member countries and private sector representatives took place in conjunction with the OECD's Ottawa Ministerial conference. At the conclusion of the tax talks, participants issued a joint government/business declaration affirming the principle that the same general approach to taxation of conventional commerce should guide governments with respect to electronic commerce taxation.

In addition, the OECD's Committee on Fiscal Affairs presented a report to Ministers articulating taxation principles consistent with those outlined in the *Framework* and establishing a work plan on electronic commerce taxation. Discussions will now proceed within the OECD, in conjunction with business and non-OECD member countries, on developing a means to implement those principles.

"We cannot allow 30,000 state and local tax jurisdictions to stifle the Internet, nor can we allow the erosion of the revenue that state and local governments need to fight crime and invest in education.

President Clinton, October 1998

Treasury has also advocated the Administration's approach to the taxation of electronic commerce with our current and prospective tax treaty partners. At the Ottawa conference, the OECD released a proposed clarification for tax treaty purposes of the treatment payments for software that is consistent with Treasury's recently-released regulations regarding the tax characterization of cross-border software transactions.

7. I direct the Secretary of Commerce to work with the private sector, state and local governments, and foreign governments to support the development, both domestically and internationally, of a uniform commercial legal framework that recognizes, facilitates, and enforces electronic transactions worldwide. I further direct the Secretary of Commerce within the next twelve months to seek to gain agreement with the private sector, State and local governments and foreign governments on common approaches for authentication of electronic transactions through technologies such as digital signatures.

The market is very much in the early stages of experimentation with respect to the business models for electronic commerce. The United States believes it is not wise at this time to attempt to identify a single model that these transactions will use or to develop a legal environment using a single model. Indeed, such an approach would prevent the market from testing different possible approaches and prematurely impose a particular model on all electronic commerce, inevitably limiting its growth. Therefore, at the current stage of development, the legal framework should support a variety of business models so that the market is able to experiment and select the models that best fit particular types of electronic commerce.

To facilitate necessary experimentation and innovation, the Administration has identified two basic legal issues that must be addressed. First, paper-based barriers to electronic transactions, including laws that require paper contracts or the retention of paper records, should be eliminated or appropriately modified to allow the free flow of electronic transactions. This step can be implemented by adopting relevant provisions of the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Commerce, developed in 1996. While a number of countries and most U.S. states are using the Model Law as a basis for updating their commercial laws, many countries are not yet doing so.

Second, innovation and experimentation in electronic authentication methods (that would allow parties to know with certainty the identity of a sender of an electronic message, or to verify that an electronic message has not been altered during its transmission) should be promoted. A few governments, however, are establishing detailed rules for electronic authentication, which the United States considers to be premature, burdensome or unnecessary. These legal rules may also disrupt the market and stifle innovation by raising questions about the validity of authentication technologies and methods that are not specifically sanctioned or licensed.

The U.S. Government has asked UNCITRAL to consider an International Convention on Electronic Transactions that would accomplish both goals: (1) eliminate paper-based legal barriers to electronic transactions by implementing relevant provisions of the 1996 UNCITRAL Model Law on Electronic Commerce, and (2) provide an effective approach to authentication, assuming that there may be differences in private preferences and in national laws.

The proposed Convention's authentication principles are designed to accommodate a variety of national approaches while providing transacting parties with assurance that their transactions will be recognized and enforced worldwide. The proposed Convention includes provisions that: (1) reaffirm the rights of parties to a transaction to determine the appropriate technological means of authenticating their agreements; (2) provide that parties to a transaction should have the opportunity to prove in court that the authentication technique used in the transaction is valid; and (3) state that governments should treat providers and users of authentication services from other countries in a non-discriminatory manner.

The OECD Ministers meeting in Ottawa approved a Declaration on Authentication for Electronic Commerce that affirms the key principles of the U.S.-proposed International Convention on Electronic Transactions. The U.S. Government has negotiated bilateral agreements with France and Japan that support the development of a global framework that will recognize, facilitate, and enforce electronic transactions worldwide and endorse the principles underlying the proposed Convention.

Domestically, there is also support for these principles. The National Association of State Information Resource Executives, the National Association of State Purchasing Officers, and the National Association of State Comptrollers have signed a joint resolution supporting the principles contained in the Convention. In addition, the National Conference on Commissioners on Uniform State Laws (NCCUSL) has several projects under way to update the *Uniform Commercial Code* to accommodate electronic transactions and to develop new uniform rules such as a *Uniform Electronic Transactions Act*. The draft provisions are consistent with the principles contained in the Convention, as is the legislation passed in a number of states.

The Congress recently enacted legislation, supported by the Administration, intended to remove barriers to the ability of citizens to interact with the federal government electronically. The *Government Paperwork Elimination Act* provides for Federal agencies to implement electronic filing systems, to eliminate wherever practical the need to retain paper records, and to use electronic authentication methods to verify the identity of the sender and the integrity of electronic content. The Act specifically provides that electronic records and their related electronic signatures are not to be denied legal effect, validity, or enforceability merely because they are in electronic form.

8. I direct the Secretary of Commerce and the Director of the Office of Management and Budget to encourage private industry and privacy advocacy groups to develop and adopt within the next 12 months effective codes of conduct, industry developed rules, and technological solutions to protect privacy on the Internet consistent with the Privacy Principles

issued by the Information Infrastructure Task Force (IITF) Privacy Working Group. I further direct the Director of the OMB to develop recommendations on the appropriate role of government consistent with *A Framework For Global Electronic Commerce*. I further direct the Secretary and the Director to ensure that means are developed to protect the privacy of children.

According to a recent poll, 81 percent of American Internet users have significant concerns about threats to their personal privacy while online. Of computer users who say they are not likely to access the Internet in the next year, greater privacy protection is the factor that would most likely convince them to do so.

The U.S. government believes that private sector-developed and enforced codes of conduct are an effective way to protect privacy online without creating a bureaucracy which could stifle the growth of electronic commerce.

Seriousness of Privacy Issues to Net Users

Source: *Privacy and American Business* Price Waterhouse Coopers LLP

Industry was slow to respond to the President's call in the *Framework* for the development of effective self-regulation. A study published in June 1998 by the Federal Trade Commission (FTC) titled *Privacy Online: A Report to Congress,* found that only a small percentage of companies provided any notice of their information collection practices on the Internet and few websites had notices of policies to limit collection of personally identifiable data from children who visited those sites.

Since that time, in response to mounting evidence that privacy concerns were delaying the growth of electronic commerce and government calls for industry action, serious efforts to create effective privacy protection via self-regulation have begun.

Over 50 of the largest companies doing business on the Internet and 15 business organizations that represent thousands of other companies have formed an alliance to promote privacy online. The Online Privacy Alliance (OPA) members have committed to implement fair information practices described in the Framework involving notice, choice, access, and enforcement. The Better Business Bureau and TRUSTe are developing independent third party enforcement regimes that will promote compliance with information practice codes. These enforcement regimes will include the display of a seal or trust mark to notify consumers that a website follows fair information practices. Companies that violate their stated information practice codes are also subject to FTC enforcement under Section 5 of the FTC Act.

The OPA has indicated that it will conduct consumer and business education campaigns and will actively recruit new companies to subscribe to its privacy principles and enforcement organizations. The OPA will also seek cooperative agreements with industry organizations abroad to create an international system of seals or trust marks that could be used globally to communicate meaningful assurances to consumers around the world, regardless of the location of the website.

The Internet technical community has completed work on the specifications for a number of technologies to empower consumers to protect privacy online. These technologies allow consumers to

determine their privacy preferences and have them automatically communicated to web site operators. It will take additional time to bring applications based on these specifications to the market, but they will assist individuals, companies and self-regulatory organizations in the protection of privacy.

To enforce privacy protections effectively, a company must install systems to notify customers of their privacy policies, process customer privacy preferences, protect customer data, and handle inquiries and complaints. By committing to follow privacy principles with third party enforcement, a company incurs a legal obligation to follow these policies. It therefore must also ensure that auditing systems are in place and that all of its employees understand the company's privacy policy. For electronic commerce to succeed, commitments to such actions must be undertaken and implemented expeditiously.

The Department of Commerce will monitor the implementation of commitments made by the OPA and other groups which have signed up to apply privacy principles and will also monitor the spread of effective self-regulation to additional companies doing business online. While the private sector approaches now being implemented are promising, commitments to efficient and effective self-regulation must result in action. Moreover, if self regulation is to work, these efforts must expand over the next year.

The Administration believes that government does have a role in privacy protection. Government must assure that its own practices protect the privacy of persons about whom the government holds information, consistent with the *Privacy Act* and other laws. Government should work to increase public awareness of privacy issues, and identify and encourage the adoption of best practices in implementing privacy programs. Finally, government should act in certain areas, through law or regulation, to protect the privacy of especially sensitive information and to prevent predatory practices.

In light of the special concerns highlighted by the FTC on collection of personal data from young children (those under 13 years of age), and the need to promote rapid, ubiquitous adoption of standards to protect children, the Administration supported legislation giving the FTC authority to promulgate enforceable rules to prevent collection of data from children under age 13 without prior parental permission. The *Children's Online Privacy Protection Act* has now passed the Congress and been signed into law by the President.

The Administration also supports legislation to enforce privacy protection for medical records whether held electronically or in paper form. Medical records contain particularly sensitive information. Because there are a limited number of places— doctors' offices, hospitals, insurance companies—where this information is created, collected and stored, enforcement of a legislated approach is possible.

Electronic Bill of Rights

1. The right to choose whether one's personal information is disclosed
2. The right to know how, when and how much of that information is being used
3. The right to see that information themselves
4. The right to know if information is accurate and correct it if it is not

Vice President Gore,
July 1998

The Administration also supported legislation to prevent identity theft. According to law enforcement officials, the incidence of "identity theft," the fraudulent use of another person's identity to facilitate the commission of a crime such as credit card fraud, has been increasing rapidly. In July 1998, Vice President Gore urged the Congress

"Tens of thousands of Americans have been victims of identity theft. This legislation will enable the United States Secret Service, the Federal Bureau of Investigation, and other law enforcement agencies to combat this type of crime, which can devastate its victims."

President Clinton, October 1998

to pass legislation to halt these abuses. On October 14, the Congress passed the *Identity Theft and Assumption Deterrence Act*, which has been signed into law by the President.

Internationally, the U.S. Government has secured an agreement with Japan on a private sector led approach to online privacy protection which is also supported by the U.S.-Japan Business Dialogue. The Transatlantic Business Dialogue favors this approach and industry groups in Europe and Japan have expressed interest in working with U.S. industry to implement common approaches to privacy self-regulation.

The U.S. Government has also worked actively at the OECD on formulating privacy policy. The Department of Commerce has helped to ensure, both in the February 1998 Privacy Workshop and in the Ottawa Ministerial Declaration on Privacy, that the OECD include an emphasis on a multiplicity of privacy approaches, including private-sector-led approaches, and on the continued need for bridges between the different privacy approaches.

The European Union takes a broad, centralized, top-down approach to privacy protection in its own privacy directive issued in October 1995. This approach is quite different from the U.S. self-regulatory approach and could disrupt personal information flows between the U.S. and EU member countries. The Administration has been meeting regularly with the EU to bridge these differences in a way that enhances privacy while maintaining the free flow of information.

We are hopeful of achieving a satisfactory resolution of this matter. During the past year, the European Commission acknowledged, in part, the validity of self-regulatory approaches to privacy protection such as those now being implemented in the United States. On October 26, the EU member states endorsed Commission efforts to reach an understanding with the United States concerning data transfers from the European Union to the U.S. They also recognized the importance of avoiding data flow disruptions to the U.S. while those discussions take place.

9. I direct the Secretary of Commerce to encourage the development and adoption within the next 12 months by industry of easy-to-use and effective rating systems and filtering technologies that empower parents, teachers, and other Internet users to block content that is inappropriate for children.

The Administration supports the broadest possible free flow of information, both within our nation and internationally. However, many people have raised valid concerns about children's access to pornography and other types of material that their parents may deem undesirable.

Over the past year, we have made progress in three areas. First, private industry and nonprofit organizations are developing technology tools that make the Internet more family-friendly by allowing parents and guardians to protect children from material they consider inappropriate. Second, the Administration is working with private industry and nonprofit organizations to develop and make easily accessible family-friendly content and consumer education on the World Wide Web. Third, the Administration is working with the private sector and other governments to persuade other nations of the benefits of an approach which empowers users to control the content to which they have access as opposed to government attempts at censorship.

Many new tools are now available to parents to assist them in blocking, filtering

and monitoring Internet exploration. At the Internet Online Summit: *Focus On Children* in December 1997, industry groups presented, to the President and Vice President, an inventory of the digital devices available to parents. At the Summit, the private sector also announced several public-private partnerships with law enforcement agencies, including a cyber-tip line, as well as a new public education campaign designed to encourage responsible and safe use of the Internet. This campaign was launched at a "National Teach-In" event during "Kids Online Week" in September 1998.

"The Internet will never be a fixture in every home until parents have the tools they need to make it safe for their children's explorations."

Vice President Gore, December 1997

While some modest progress has been made, industry must redouble its efforts over the next year to follow through on the commitments made at the December Summit. The quality of blocking, filtering and rating software has improved dramatically, and its use is spreading, but it still can be difficult for some parents to use.

Recently, the Congress passed legislation that restricts the commercial distribution of material on the World Wide Web that is "harmful to minors." This legislation, the *Child Online Protection Act*, has been challenged in Federal court. The Administration shares Congress's concern about protecting children from inappropriate material on the Internet. However, the Administration did not support this legislation. When it became clear that Congress was going to pass the bill, the Administration sought changes that would focus the priority of Federal law enforcement officials on hard-core child pornography and sexual exploitation cases, and to increase the chances that the legislation could be implemented and enforced consistent with the First Amendment. The Administration felt that these changes were important, given that the Supreme Court had struck down portions of the *Communications Decency Act*, an earlier attempt by the Congress to legislate in this area. Congress did not, however, accept all of the changes recommended by the Administration.

New market research reveals that as of June 1998, 53 percent of parents were willing to pay for child-friendly online services now being introduced that monitor content. These services are useful but can be improved. The Department of Commerce will continue to work with the private sector to monitor developments in this area and to make parents and others more aware of these options.

The Administration supports the availability of high-quality children's content, and the Department of Commerce co-hosted a conference in Los Angeles in June 1998 focused on the creation of quality online content for children and teens. The conference also addressed issues of online marketing and advertising to children. At the conference, private sector participants agreed to explore development of "greenspaces" or areas of quality children's content.

The U.S. has been successful in spreading its consumer empowerment approach internationally. Agreements with the EU and with Japan have emphasized the advantages of filtering technologies as opposed to government censorship. Bilateral agreements with Japan and France also stressed the importance of the free flow of information.

The Administration has worked at the OECD to develop an inventory of policies, laws and practices among OECD member countries affecting Internet content. The inventory has facilitated very productive discussions of the different approaches toward content self-regulation that member countries are adopting, and provided a better basis for international discussions about Internet content.

Working closely with U.S. industry, the Department of Commerce helped organize an OECD forum on content

self-regulation in March 1998. The forum demonstrated the range and scope of self-regulatory initiatives being undertaken by industry representatives.

Consensus has now been reached among OECD countries on the practical merits and value of self-regulation and consumer empowerment.

10. I direct the Secretary of Commerce to support private sector development of technical standards for the Internet and the U.S. Trade Representative to oppose efforts by foreign governments to impose standards or to use standards for electronic commerce as non-tariff trade barriers.

The U.S. Government recognizes that timely and appropriate standards are critical to the long-term commercial success of the Internet, as they allow products and services from different vendors to work together, facilitate robust competition, and reduce uncertainty in the global marketplace. Standard setting activities must, however, be guided by the basic principle that the marketplace, not governments, should set technical standards. Governments should refrain from issuing technical regulations and instead should rely, to the maximum extent possible, on standards developed by voluntary, industry-led, consensus-based organizations (at both the national and international levels).

The U.S. Trade Representative has supported this approach in bilateral, regional, and multilateral fora. The Department of Commerce has also actively advanced private sector leadership in the development of voluntary, market-driven, consensus-based standards in bilateral and multilateral fora. Working together, the U.S. Government and U.S. industry converted a proposed Government Global Standards Conference into a private-sector organized conference, held in Brussels in October 1997. U.S. industry took the lead on electronic commerce standards at this meeting. This conference, attended by representatives from industry, technical organizations and governments from around the world endorsed private sector leadership in standards development.

As indicated in the *Framework*, the government can play a useful, supportive role to private sector standard setting processes. The Department of Commerce's National Institute of Standards and Technology (NIST) has been active in providing technical support for industry-led standards development efforts. These activities include: 1) building standards road-maps with industry; 2) providing technical assistance to industry in the development and harmonization of open standards; 3) establishing neutral test-beds and developing trial reference implementations with industry; 4) developing the test methods and infrastructures for testing; and 5) contributing to implementation guidelines.

11. I direct the Secretary of the Treasury to cooperate with foreign governments to monitor newly developing experiments in electronic payment systems; to oppose attempts by governments to establish inflexible and highly prescriptive regulations and rules that might inhibit the development of new systems for electronic payment; and as electronic payment systems develop, to work closely with the private sector in order to keep apprised about policy development and ensure that governmental activities flexibly accommodate the needs of the emerging marketplace.

Over the last year, an interagency task force chaired by the Comptroller of the Currency has worked to identify, in partnership with industry and the public, consumer issues raised by emerging electronic money technologies and possible solutions to these concerns. The task force solicited public comment during the summer of 1997 and issued its report in April 1998.

The report identifies four key areas of consumer concern: access, privacy, financial condition of issuers, and consumer protection and disclosures. The task force concluded that existing laws and regulations and market incentives have the potential to address consumer

concerns at this time. The task force urged industry to address concerns through self-regulation and innovative product design. For example, groups of electronic money issuers could create a best practices collection of disclosures to consumers, addressing such issues as applicable fees, deposit insurance coverage, error resolution procedures, and liability for lost or stolen electronic money.

The Financial Management Service (FMS) at the Department of the Treasury has established a number of electronic commerce pilot programs testing Federal Government payments and collection cash management options. Recent pilot programs include the use of smart cards, electronic checks, and Internet credit card transactions featuring various security technologies. FMS is implementing stored-value card pilot projects across the United States on several Air Force and Army training installations and at selected Veterans hospitals. FMS has also sponsored the first fully digitized electronic check pilot project utilizing the Financial Services Technology Consortium's e-check technology to pay Department of Defense vendors. The Treasury is also working with its bureaus to promote government Internet sales of savings bonds, coins, and other currency-related collectibles using the Visa and MasterCard Secure Electronic Transaction (SET) standard.

The Internal Revenue Service (IRS) has also been moving online. During the past several years significant progress has been made in revolutionizing how both individual and business taxpayers interact with the IRS. During the last filing season 1 out of every 5 individuals filed their tax returns electronically. In addition, a growing number of taxpayers are getting the tax information they need from the IRS website where over 5,000 tax products are available including IRS forms, instructions, and publications.

Businesses also benefit from electronic transactions with the IRS. In 1998 more than $1 trillion in tax deposits were made through the Electronic Federal Tax Payment System (EFTPS), accounting for over 80 percent of all tax deposits. Businesses can also file tax returns electronically. Nearly 880,000 quarterly tax returns are expected to be filed over the telephone by small businesses during 1998; another one million Form 941's will be filed electronically by payroll service providers on behalf of their clients.

Treasury also has worked successfully in international fora to encourage governments to avoid undue regulation. The Comptroller of the Currency worked as part of the Basle Committee on Banking Supervision that, on March 20, 1998, issued *Risk Management for Electronic Banking and Electronic Money Activities*. This paper forged a common understanding among bank supervisors and central bankers of the major industrialized countries of the key questions posed by emerging electronic money and banking technologies and of the desirability of avoiding policies that unnecessarily hamper innovation and the development of new markets.

In the wake of this effort and the work by a Treasury-led G-10 Working Party on Electronic Money, the focus of discussion internationally on regulation of electronic money issuers has shifted. Discussion within the EU, for example, which initially focused on permitting only banks to issue electronic money, now includes a proposal to permit non-banks to issue electronic money without their meeting the full panoply of banking regulations.

Treasury law enforcement authorities also have monitored electronic money developments and have worked with industry and other governments to understand the vulnerabilities of these emerging technologies to criminal activity. Much of this work has taken place under the leadership of Financial Crimes Enforcement Network (Fin-CEN) working through the Financial Action Task Force, a 26-nation organization created by the G-7 countries to develop and promote policies to combat money laundering.

12. I direct all executive departments and agencies to promote efforts domestically

and internationally to make the Internet a secure environment for commerce. This includes ensuring secure and reliable telecommunications networks; ensuring an effective means for protecting the information systems attached to those networks; ensuring an effective means for authenticating and guaranteeing confidentiality of electronic information to protect data from unauthorized use; and providing information so that Internet users become well-trained and understand how to protect their systems and their data.

Assuring the safety of the Internet and the information accessible through it is an increasingly important global priority. Service interruptions or corruption of data, whether the product of natural causes, accident, or willful mischief, are not acceptable given the growing economic importance of the Internet. The United States is working to assure global Internet security by looking first at its own critical communications infrastructure.

On May 22, 1998, President Clinton issued a Presidential Decision Directive 63 (PDD-63), *Protecting America's Critical Infrastructures*. The Directive sets a goal of a reliable, interconnected, and secure information system infrastructure by 2003. It seeks the voluntary participation of private industry to meet common goals for protecting our critical systems through public-private partnerships, and requires the Federal government to serve as a model for how infrastructure protection is to be attained. The private sector is encouraged to create information sharing and analysis centers to gather, analyze, appropriately sanitize and disseminate private sector information to both industry and the government.

At the same time, the Federal Bureau of Investigation (FBI) has established the National Infrastructure Protection Center (NIPC), bringing together representatives from the FBI, the Departments of Defense, Treasury, Energy, and Transportation, the intelligence community, and the private sector in an unprecedented attempt to facilitate information sharing among agencies in collaboration with the private sector. The NIPC will also coordinate the Federal Government's response to information security incidents, mitigating attacks, investigating threats and monitoring reconstitution efforts. Finally, a National Infrastructure Assurance Council drawn from private sector leaders and state/local officials will provide policy in the guidance formulation of a national protection plan.

Because the electronic environment of the Internet is global and borderless, the Directive also requires the development of a plan to expand international cooperation on critical infrastructure protection with like-minded and friendly nations, international organizations and multinational corporations. The Administration has already made significant progress in this area, fostering cooperative information exchanges.

Equally important to security is the ability to protect information on networks from unauthorized access. Cryptography is an essential tool to protect the authenticity and confidentiality of electronic information. U.S. businesses and individuals need encryption to secure sensitive commercial information and to protect the privacy of their communications. Private sector demand for such security will facilitate the spread of encryption. Recognizing these needs, the Administration continues to support the use of strong encryption products in the United States.

The Administration acknowledges the risks to public safety and national security that unlimited access to strong encryption products by terrorists, criminals, and other enemies may pose, however. Therefore, the Administration continues to promote a balanced approach to encryption export that fully takes into account the concerns of the national security and law enforcement community.

As a result of several months of intensive dialogue among the U. S. Government, industry, and privacy groups, Vice President

Gore recently announced an update to the Administration's encryption policy, issuing new export guidelines that allow the export of the strongest data encryption products in many circumstances to support electronic commerce around the world. Strong encryption products may now be exported to protect sensitive financial, health, medical, and business proprietary information in electronic form. U.S. companies will be able to export very strong encryption for use between their headquarters and their foreign subsidiaries to protect proprietary information. Online merchants in 45 countries will be able to use robust U.S. encryption products to protect their online electronic commerce transactions with their customers over the Internet. The new guidelines also allow encryption hardware and software products with encryption strength up to 56-bit DES, or its equivalent, to be exported without an export license. Finally, products that allow for the recovery of plain text by a system or network administrator and that can also assist law enforcement access, (subject to strict procedures), will be permitted for wide export. Limits on exports to certain nations will remain.

These strong encryption products will form the basis for a robust security infrastructure for electronic commerce information. They will permit users from homes and businesses to perform electronic commerce activities securely, ranging from home banking and managing investment accounts to using credit cards to purchase goods, services, and digital information over the Internet.

The Administration welcomes a continued dialogue with U.S. industry and intends to review its policy in one year to determine if additional updates are necessary to maintain a balanced approach that ensures privacy, enables continued technology leadership by U.S. industry, and promotes electronic commerce, while also protecting the public safety and national security. The Administration is also directing substantial effort to solve a crucial short-term security problem, the Year 2000 (Y2K) computer problem, which threatens to undermine the efficacy of digital networks. In February 1998, President Clinton formed a Council on Year 2000 Conversion to address the issues. In addition to focusing on government computer systems, the Council is working with various industry sectors, international organizations, and countries around the world to ensure that Y2K problems do not threaten the vital telecommunications and information processing systems upon which electronic commerce depends.

13. I direct the Administrator of General Services to move the Federal Government into the age of electronic commerce by expanding "GSA Advantage," its online shopping service for the Federal community to cover four million items by 12 months from now.

GSA is making significant progress towards its goal of having four million items purchased by the U.S. Government on GSA Advantage, its online shopping service for the Federal community. GSA is firmly commited to using GSA Advantage and expects the goal to be met within the next 12 months.

Under GSA's purchasing model, vendors electronically update key product information (e.g., description, price, delivery conditions) and agencies make buying decisions based on that current information. Unfortunately, many vendors have been slow to update information electronically as they are reluctant to let their competitors see their current pricing information.

The Federal marketplace will drive vendors to change as more agencies make electronic purchasing capability a requirement for doing business with them. GSA will also help stimulate the change by giving vendors start-up kits that are easy to use. GSA is also exploring a variety of other incentives to encourage full participation. By the dawn of the next century, Federal agencies will be able to shop electronically for the products and services they procure.

NEW INITIATIVES

The Working Group will continue to carry out the electronic commerce strategy outlined in the President's Directive of July 1, 1997 in order to complete implementation by January 1, 2000. In addition, there are several new areas that have emerged during the past year as deserving priority attention from the Working Group. These will be added to the initial work plan and pursued during the coming year.

Ensuring Adequate Bandwidth and Access

Over the last four years, the U.S., working in conjunction with its global partners, has established telecommunications policies that have enabled the creation of a global information infrastructure upon which the Internet and electronic commerce depend. These policies have followed the five fundamental principles articulated by Vice President Gore in 1994: encouraging private investment, promoting competition, creating a flexible regulatory framework, providing open entry to the network, and working to ensure universal access to the network. Following these principles has led to the opening of markets around the world, the acceleration of competition, the flourishing of innovation, and helped provide communications access to more people around the world.

The *Telecommunications Act* of 1996 established a pro-competitive, deregulatory national policy framework for telecommunications in the United States, designed to open all telecommunications markets to competition. The Act charged the Federal Communications Commission (FCC) with encouraging the rapid deployment of advanced telecommunications capabilities for all Americans.

Time to Download 3.5-Minute Video Clip Using Different Technologies

	Transfer Time
28.8 Kbps modem	46 minutes
128 Kbps ISDN	10 minutes
4 Mbps cable modem	20 seconds
8 Mbps ADSL	10 seconds
10 Mbps cable modem	8 seconds

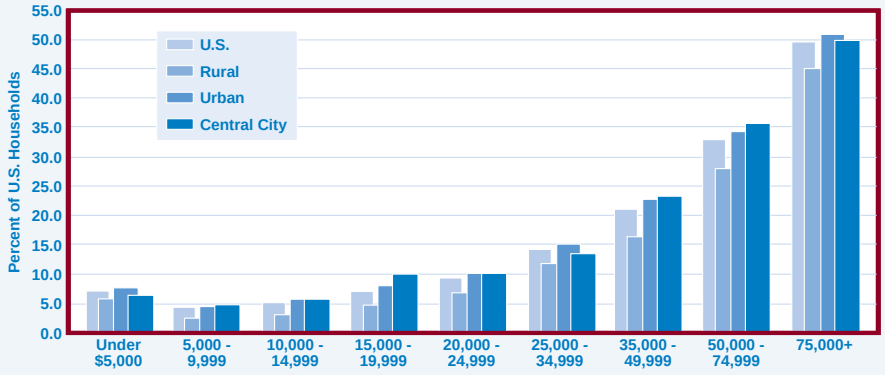
Source: FCC, CS Docket No. 96-496; 1997; ADSL from Werbach 1997, p. 75.

The Emerging Digital Economy Report

The Administration believes that deployment of the advanced broadband networks of the future is critical for our nation's economic prosperity. We support open and vigorous competition as the principal means of developing the infrastructure necessary for electronic commerce utilizing all the available telecommunications technologies – wireline, cable, wireless terrestrial and satellite. The Administration does not favor any particular technology or industry segment over others; rather, we seek to encourage competition among various technologies and industry segments in the development and deployment of advanced services.

In the existing wireline market, the government's role is to ensure that all

Percent of U.S. Households with On-line Service By Income By U.S., Rural, Urban and Central City Areas 1997



Source: U.S. Department of Commerce, NTIA. *Falling Through the Net II.*

participants have access to the facilities that are critical to the deployment of high bandwidth technology to homes and offices, and that competing networks can interconnect with one another. Once barriers to competition are removed, other government regulation should be minimized, so that the market can determine the most successful participants. The Administration will advocate these principles as the FCC implements Section 706 of the *Telecommunications Act* of 1996.

In a series of studies, including *Falling Through the Net II* published in July of 1998, the Department of Commerce's National Telecommunications and Information Administration (NTIA) has documented the unequal access to the Internet faced by underserved communities in our society. The Administration strongly supported the provisions of the Telecommunications Act that ensure that low-income consumers, and those who live in high-cost areas, have access to telecommunications services at affordable rates. The Administration has a long-standing commitment to connect every classroom, library and public rural health care center to the Internet and supports the provisions of the *Telecommunications Act* that expand universal service support to these entities. By providing Internet access to every classroom and library, we can ensure that no community is left out of the digital economy and that every individual has an opportunity to gain the skills he or she needs to participate. On November 23, 1998, Vice President Gore announced a major step in this program with $1.9 billion in E-rate discounts that will enable up to 40,000 public schools and 7,000 libraries to connect to the Internet.

"This bill authorizes an ambitious new research program in advanced communication technologies that will be critical for assuring American prosperity, national and economic security, and international competitiveness in the 21st century."

President Clinton, October 1998

The Administration is committed to the preservation of the vibrant and competitive free market that presently exists for Internet and other interactive computer services. Regulation to encourage competition and facilitate consumer choice is most appropriately directed to tele- communications facilities over which services run and should not be extended to competitive Internet-based services. On the contrary, there should be

the strongest presumption against any regulation of new, Internet based services. The Administration will continue to examine existing regulations so that new services based on Internet technologies will not be burdened by outdated forms of regulation.

Finally, the Administration has undertaken initiatives intended to ensure the Internet itself will continue to evolve. The Next Generation Internet program, now authorized in the *Next Generation Internet Research Act* of 1998, continues positive governmental participation in the Internet by supporting research that will expand the capabilities and capacity of the Internet.

Consumer Protection

Internet consumers must have confidence that the goods, services, and digitized information offered online are fairly represented, that they will get what they pay for, and that recourse will be available if they do not.

The FTC has taken the offensive against misleading and deceptive practices online by bringing 40 enforcement actions to date. The FTC strategy has also promoted consumer and business education efforts and has clarified the application of existing regulations to online conduct. For the most part, the FTC has uncovered old-fashioned scams dressed up in high-tech garb and has generally found that it has adequate statutory authority to investigate and prosecute defendants engaged in illegal practices online.

In an environment where most of the buyers and sellers on the Internet reside in the United States, it is a relatively straightforward exercise to determine what consumer protection (or other) laws apply to a given transaction. Given the absence of national borders on the Internet, however, the focus of consumer protection is necessarily shifting to the global arena. The OECD, with the participation of international business representatives, is currently discussing global guidelines related to consumer protection online. Private sector organizations such as the Transatlantic Business Dialogue, the Transatlantic Consumer Dialogue, and the U.S.-Japan Business Council have identified consumer protection issues for priority attention in the coming year.

Over the next year, Federal agencies will aggressively explore opportunities for global cooperation to protect consumers, and will engage in bilateral and multilateral discussions on this issue, involving consumer advocates and industry as well as government representatives. These discussions are intended to promote truthful and accurate advertisements as the cornerstone of commerce on the Internet, to bolster and extend existing advertising industry self-regulation, and to ensure that mechanisms are in place to protect consumers from false, deceptive, or fraudulent practices online.

In order to protect consumers online, the global community must address complex issues involving choice of law and jurisdiction—how to decide where a virtual transaction takes place and what consumer protection laws apply.

We will continue to favor industry leadership to promote consumer protection and international cooperation among private sector groups to set common global rules and enforcement mechanisms for consumer protection. These private sector efforts can be backed up by appropriate, and in most cases, existing legal protections for consumers. In seeking to protect consumers online, we will keep in mind the distinctions between business-to-business and business-to-consumer transactions in discussions at both domestic and international levels.

By placing an emphasis on consumer protection for the coming year, the U.S. hopes to promote global understanding

of the issues at stake and develop a thoughtful, pro-active approach to pave the way for Internet retailing to reach its full potential.

The Internet and Developing Countries

The Internet can be a great force for economic development, the spread of democracy and for promoting international communication and understanding. Yet large populations of the developing world are at risk of being bypassed by the information revolution.

In the developing world, as in the United States, a vigorous private sector has the talent and resources to bring the benefits of the information revolution to consumers. However, experience shows that in many developing countries, private sector action alone may not achieve widespread access to these benefits without policy reform and some initial public investment.

In his October 12 address to the International Telecommunication Union Plenipotentiary Conference in Minneapolis, Vice President Gore issued five great challenges to industry, government and non-governmental organizations to help bring the benefits of the Information Revolution to all parts of the world. Among the challenges he issued were placing voice and data communication services within reach of every person on the planet. He also challenged the group to dramatically increase the number of people on the planet who can participate in the digital economy, tripling by the year 2010, the number of people who are able to support themselves and their families because they are able to reach world markets through the Internet.

In his address, Vice President Gore announced a new commitment by the Peace Corps to use information technology and communications as important tools to help communities in developing countries improve education and enhance economic development. He also announced a strategic effort, "The Internet Economic Development Initiative," led by the State Department and the Agency for International Development (USAID) that will work toward increasing the availability and use of emerging information technologies by people throughout the developing world. Other agencies including the Department of Commerce, the Office of the U.S. Trade Representative, the Federal Communications Commission, the Overseas Private Investment Corporation, and the National Science Foundation will participate in this initiative.

In order to make electronic commerce truly global, the initiative will seek to create incentives for public-private sector partnerships that serve as a catalyst to spur successful and sustainable investments from the private sector, host countries, and other donors. Although activities are likely to vary with the unique needs of specific countries or regions, seed efforts could include such activities as extending the reach of Internet service providers to rural areas, promoting the use of electronic commerce between businesses and between businesses and consumers, linking universities in participating countries to the Internet, and providing the training necessary for the adoption of new digital technologies.

This initiative will seek to assist in policy reform in host countries aimed at liberalization, open competition, and universal access. A liberalized regulatory regime which encourages private investment and competition, together with an independent regulator using fair and transparent processes, are critical for sustaining long- term economic and social benefits from telecommunications and information technologies. Experience with the USAID Leland Initiative, the five-year $20 million program for connecting selected African countries to the Internet, has shown that financing modest infrastructure investments can promote pro-competitive policy reforms and pave the way for extensive private investment.

Initially, the initiative will seek to demonstrate successful models for development in a small number of countries or clusters of countries in Africa, Asia, and the Americas, and then to apply those successful models to other countries. The Internet Economic Development Initiative will be further defined over the next four months and implementation will begin in 1999.

Funding options under consideration include use of already programmed resources, cooperation with international development banks and bilateral donors, and public-private partnerships.

Understanding the Digital Economy

We have begun to assemble a coherent picture of the economic impact of the Internet and electronic commerce in the United States today. In April 1998, the Department of Commerce issued a groundbreaking report, *The Emerging Digital Economy*. In June 1998, the National Science Foundation included a section on the *Economic and Social Significance of Information Technologies* as part of its *Science And Engineering Indicators 1998*. The OECD, at its Ottawa Conference, released a preliminary assessment of the social and economic effects of electronic commerce drawn, in part, from observations of electronic commerce in the U.S. market.

The economic and social influence of electronic commerce and information technology is complex, broad, and likely to expand in the future. But the full economic and social implications are presently not well understood. Government data in this area tend to be incomplete, and analytical tools suitable for earlier times need to be updated for a useful analysis of the impact of the new digital economy.

The Working Group has initiated an interagency Digital Economy Working Group led by the National Economic Council and consisting of representatives from the Department of Commerce, the Department of Treasury, the Department of Labor, the National Science Foundation, the White House Office of Science and Technology Policy and the Council of Economic Advisers to coordinate economic analysis of the new digital economy within the government. The working group will consult with experts in industry, academia, research firms, associations, and non-profit organizations to stimulate research and encourage the development of better data and analysis to track how information technology and electronic commerce are affecting particular industries and the economy as a whole.

The interagency group will emphasize analysis to better determine:

- the shape and size of the evolving digital economy, both overall and at aggregated industry levels;
- the processes through which firms develop and apply the new technologies;
- the processes through which the new technologies are transforming markets;
- the social and economic factors influencing the economic returns to electronic commerce, such as the effects of investment in IT capital on productivity;
- demographic characteristics of user populations;
- the implications of electronic commerce for international trade and competitiveness; and
- the influence of electronic commerce on labor markets and the workplace and how these may differ at the sectoral and firm level.

To this end, the interagency group will sponsor a conference that engages a broad range of experts from the public and private sectors. The conference will

review new research on the impact of investments in information technology and the influence of electronic commerce on the economy and assess the need for additional data and analytic tools. The results of the conference will help develop recommendations on new indicators for the information economy, new types of data collection, and new research that could be undertaken by organizations in the public and private sectors. In addition the Commerce Department will be issuing a follow-up document to *The Emerging Digital Economy*.

Small Business and the Internet

Many small businesses today are using the Internet to attract new customers, build relationships with suppliers, and cut the costs of serving established clients. With the Internet, small businesses have an efficient means to match the global reach of larger firms.
Nevertheless, many small businesses do not take advantage of the opportunities that the Internet presents. They lack an understanding of its potential benefits, of how to develop electronic commerce profitably or how to cope with the complexity of rules affecting electronic commerce. In addition, many lack the technical personnel that could assist them in implementing a business model for electronic commerce.

Many of these small companies currently receive assistance from government-sponsored programs in the Department of Commerce and the Small Business Administration (SBA). In order to make government assistance more effective and relevant to the emerging digital economy, and to help small businesses overcome these barriers, the Secretary of Commerce and the SBA Administrator will develop an electronic commerce small business strategy. The initiative will cover six areas:

- training of government employees who have contact with small businesses on the use of the Internet and electronic commerce;
- continuing to move commonly used government products and forms to the Internet, so that small business will be able to use the Internet to interact with the government as much as possible;
- working with the Digital Economy Working Group to develop better measures of the economic impact of the Internet on the small business;
- developing an outreach plan that includes partnering with the private sector to inform small businesses on how to profitably use the Internet and electronic commerce;
- highlighting successful small business use of electronic commerce and the Internet; and
- establishing an Internet-based program to match exporters with export finance providers, and to allow instant exchanges of information and access to export financing for small business.

CONCLUSION

The Internet and electronic commerce have the potential to drive world economic growth for many decades. The U.S. Government will continue to pursue the creation of a market-driven policy architecture for this new digital economy that will allow it to flourish while at the same time protecting citizens from potential negative side effects.

Progress on the implementation of *A Framework for Global Electronic Commerce* has been significant. Governments and private sectors around the world now recognize the importance of these new activities to future economic success. We are optimistic that the progress realized to date will be continued during the next year so that the benefit of electronic commerce can be realized around the world.