



A Discussion Paper

By

The Alliance for Global Business

On

Trade-Related Aspects of Electronic Commerce

In Response to

The WTO's E-Commerce Work Programme

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The Alliance for Global Business (AGB) ¹ is a coordinating mechanism of leading international trade associations created to provide business leadership on information society issues and electronic commerce. Jointly, these organizations represent the bulk of electronic commerce in almost all countries in the world. The coalition represents a diverse cross section of business in over 140 countries. Membership includes providers and users of information technology, large multinational enterprises and small start-ups, and companies in developing as well as developed economies.

Executive Summary

This discussion paper provides a consensus view from the membership of the Alliance for Global Business (AGB). It addresses some of the most important questions raised by each of the WTO bodies in their work programs relating to electronic commerce. Since many of these questions are strongly interrelated, this paper may in some places reiterate recommendations that are also made in other sections of the paper. However, we have chosen to present a comprehensive set of recommendations geared to addressing the questions posed by each of the four councils in each of the four substantive parts of an integrated paper, rather than to adopt a system of cross-references.

Appendices 1 through 4 are included at the end of the report showing examples of the economic and social benefits which can be derived through the application of electronic commerce. These appendices relate to the questions posed by the Trade and Development Council. The information in them may be useful to other councils as well.

This paper contains recommendations (1) for governments in general, and (2) for WTO members, and (3) for the WTO as an institution. The following brief summary lists the key recommendations and main findings of the report from the Alliance for Global Business (AGB) which we feel are of direct relevance to the WTO work program on electronic commerce.

¹ Appendix 5 provides a detailed description of the AGB and its founding members.

Our major recommendations are:

1. Electronic commerce is not a new form of trade but rather a new medium/ mode for conducting trade in goods and services. All forms of electronic commerce, as traditional commerce, can be categorized into either the goods or services category and therefore specific agreements governing trade in goods, trade in services, or trade-related intellectual property apply.
2. However, some issues need to be resolved to properly categorize various forms of electronic commerce. This has been properly identified by the WTO Secretariat as a critical path issue and should be addressed further in the WTO forum.
3. The one-year moratorium on the current practice of not imposing custom duties on electronic transmissions should be made permanent.
4. The establishment of a truly global information infrastructure is a critical path item for realizing the benefits to be derived from global electronic commerce. Efforts should therefore continue to increase the number of signatories and ratifications of the WTO agreement on basic telecommunications services. The scheduling of market opening commitments in basic telecommunication services should include: (a) specifying a date certain for full liberalization, (b) progressively removing foreign ownership restrictions, and (c) adopting the reference paper in its entirety. Such commitments should be a priority consideration in negotiations for accession to the WTO by new member countries.
5. Global electronic commerce can create new opportunities for developing countries to take advantage of the benefits of an open world trading system thus furthering the goals of economic development. The WTO should cooperate with international development organizations such as the World Bank to study the potential impact of electronic commerce on emerging economies in an effort to assist in the economic development process in those nations.
6. The WTO should increase cooperative efforts with existing international organizations to promote coordination and transparency of their respective work programs.

1. Background, Definitions, and Structure of the Discussion Paper

The WTO Work Program on Global Electronic Commerce

The Alliance for Global Business (AGB) recognizes that the September 25, 1998 WTO Declaration on Global Electronic Commerce adopted by Ministers urged the General Council to establish a comprehensive work program to examine all trade-related issues relating to global electronic commerce, taking into account the economic, financial, and development needs of developing countries, and to report on the progress of the work program, with any recommendations for action.

- According to the Declaration, the General Council shall play a central role in the whole process and keep the work program under continuous review through a standing item on its agenda. In addition, the General Council shall take up consideration of any trade-related issue of a crosscutting nature. All aspects of the work program concerning the imposition of customs duties on electronic transmission shall be examined in the General Council. The General Council conducted an interim review of progress in the implementation of the work program on March 31, 1999. The WTO bodies shall report or provide information to the General Council by July 30, 1999.
- The Declaration states that the term "electronic commerce" is understood to mean the production, distribution, marketing, sale, or delivery of goods and services by electronic means. The work program will also include consideration of issues relating to the development of the infrastructure for electronic commerce.
- The Declaration also advises that WTO bodies in the course of this review should take into account the work of other intergovernmental organizations and obtain information from relevant non-governmental organizations.

The AGB Definition of Electronic Commerce

For the AGB, electronic commerce -- very broadly defined -- incorporates all value transactions involving the transfer of information, products, services or payments via electronic networks. This includes the use of electronic communication as the medium through which goods and services of economic value are designed, produced, advertised, catalogued, inventoried, purchased or delivered.

The Discussion Paper

The AGB's four-part Statement is designed to provide certain background materials and the views of international business on the trade-related issues of electronic commerce now being reviewed by four WTO bodies.

Part I provides commentary for the work of the Committee on Trade and Development in its review of the development implications of electronic commerce. The AGB views electronic commerce as an innovative approach to ensuring future sustainable economic growth. Throughout the world, the profound impact of electronic commerce on the economies of the globe will undoubtedly improve economic efficiency, competitiveness and profitability.

Part II provides commentary for the work of the Council for Trade-Related Aspect of Intellectual Property Rights (TRIPS) in its review of intellectual property issues arising concerning electronic commerce. The AGB believes that adequate protection of intellectual property rights in intangible assets in cyberspace is a top priority. Such an approach will also promote the use of electronic commerce. Protection of intellectual property rights should be built upon the existing regime of copyright and other intellectual property rights, and carefully tailored balances under the current intellectual property rights system should not be inadvertently jeopardized. Intellectual property laws differ in many countries, which may impede the full exploitation of electronic commerce worldwide. Therefore, international harmonization is indispensable for resolving such issues.

Part III provides commentary for the work of the Council for Trade in Goods in its review of aspects of electronic commerce relevant to the GATT 1994 and other multilateral trade agreements covered by the WTO and approved work programs.

To ensure that the WTO's multilateral framework of rules is kept up-to-date with and relevant to the evolving requirements of international commercial transactions in a global economy, the AGB believes that for goods ordered electronically, but delivered physically, current WTO rules should apply so that there is no distinction between cross-border global electronic commerce and traditional international commerce.

Of the seven issues identified by the Council on Trade in Goods for its review of electronic commerce, the AGB wishes to comment in some detail on three issues (classification, standards, and customs) that are particularly relevant to global electronic commerce. We also provide more general comments on the other issues under review.

Part IV provides commentary for the work of the Council for Trade in Services in its review of the treatment of electronic commerce in the General Agreement on Trade in Services (GATS) legal framework. Trade in services represents a larger portion of international transactions each year. The Agreement defines trade in services as the supply of a service through any of four modes: cross border supply, consumption abroad, commercial presence, and presence of natural persons.

Under the GATS, the four modes of supply are not limited by means of delivery, thus the GATS also covers the supply of services that incorporates elements of electronic commerce to support their delivery.

Of the twelve issues identified by the Council on Trade in Services for its review of electronic commerce, the AGB wishes to comment in some detail on six issues: **1) classification issues; 2) domestic regulation, standards, and recognition; 3) customs duties; 4) access to and use of public telecommunications transport networks and services; 5) increasing participation of developing countries; 6) protection of privacy and public morals and the prevention of fraud.** These issues are particularly relevant to global electronic commerce. We also provide more general comments on the other issues under review.

2. The Global Action Plan for Electronic Commerce

Rules-Based Commerce in a Dynamic Electronic Environment

The Global Action Plan² states that business would like to see governments concentrate on providing a minimalist and predictable legal framework in specific areas of government competence such as intellectual property protection, taxation, and the removal of barriers to competition in providing the underlying infrastructure. The document provides ample evidence that comprehensive business self-regulation of electronic commerce is well on its way and is being updated to show the continued growth of business progress in self-regulation. The Action Plan begins to clarify the respective roles and responsibilities of government and business. Furthermore, international organizations must ensure that their initiatives do not duplicate or contradict each other.

Background

The emergence of global networks has already begun to influence the way individuals interact with each other, businesses conduct their affairs, and governments provide services to their citizens.

As with traditional commerce, electronic commerce requires trust across the whole spectrum of users and providers of services and goods. The radical changes brought about by the emergence of open networks will, in some instances, require modifications to the existing framework of rules to assure this trust. In some cases, new rules will be needed.

Today's commercial transactions are governed by a mix of laws enacted by government and of business self-regulatory mechanisms. Governments have long acknowledged the fact that a dynamic trading environment requires a cautious approach to regulation. They have traditionally welcomed business self-regulatory initiatives as the foundation of the rules governing commerce.

Self-regulation is not a new phenomenon. Throughout history, business has set its own standard rules and practices through a variety of organizations to lower transaction costs, to avoid and resolve conflicts, and to create consumer confidence.

² The Global Business Action Plan can be found at <http://www.biac.org/framepos.htm>.

The pace of change and emerging state of electronic commerce have heightened the risks associated with premature or unnecessary government regulation. This has increased the responsibility of business to promote a trustworthy environment through self-regulation and technological innovation. Business has a strong market incentive to foster the empowerment of users, but can only make the necessary infrastructure investments if it can trust that governments will recognize and reinforce the leadership of business in responding to the highly dynamic nature of electronic commerce.

Whereas today's framework of rules has been developed and refined over many decades in an organic fashion, the consensus for global rules for electronic commerce is to move quickly in reviewing how, where and when new rules are necessary. Any changes needed should be implemented only after a thorough discussion with all parties involved. As these rules must take into account the constantly evolving and inherently international nature of electronic commerce, governments should support business-led rules development where possible. Business is working through its organizations to modify existing rules to ensure an efficient transition from paper-based to electronic commerce.

Where government regulation is necessary, it should be internationally coordinated, as internationally incompatible national laws create a fragmented global market with significant uncertainty as to what rules apply. In addition, extraterritorial application of a country's laws - and claims for far reaching application of a country's regulatory schemes - poses a significant problem to business, users and consumers and is a threat to electronic commerce. Therefore, non-discriminatory treatment of regulatory schemes affecting electronic commerce (e.g., financial industry including capital and securities markets, financial services, insurance and banking, transport, advertising, consumer protection schemes, taxes) is crucial. Jurisdiction, choice of law agreements, and enforcement issues must be dealt with in a responsible manner and with full involvement of commercial actors.

Fundamental principles

Business believes that a number of fundamental principles should shape the policies that govern electronic commerce, if the promises of electronic commerce are to be fulfilled. In this context, we provide the following Policy Principles for Global Electronic Commerce. These Principles may be extended as additional knowledge and insights are gained.

- The development of electronic commerce should be led primarily by the private sector in response to market forces.
- Government intervention, when required, should promote a stable, international legal environment, allow a rational allocation of scarce resources and protect general interest. Such intervention should be no more than is essential and should be clear, transparent, objective, non-discriminatory, proportional, flexible, and technologically neutral.

- Mechanisms for private sector input and involvement in policy making should be promoted and widely used in all countries and international fora.
- In recognition of the global nature of electronic commerce, government policies that affect it should be internationally coordinated and compatible, and those policies should facilitate interoperability within an international, voluntary and consensus-based environment for standards setting.
- Transactions conducted using electronic commerce should receive neutral tax treatment in comparison to transactions using non-electronic means. Taxation of electronic commerce should be consistent with established, internationally accepted practices, and administered in the least burdensome manner.
- Regulation of the underlying telecommunications infrastructure, when necessary, should reduce impediments to competition, enabling new services and new entrants to compete, globally, in an open and fair market.
- Participation in electronic commerce should be pursued through an open and competitive market.
- The protection of users, in particular concerning privacy, confidentiality, anonymity and content control should be pursued through policies driven by choice, individual empowerment, industry-led solutions, and should be in accordance with law where applicable.
- Business should make available to users the means to exercise choice with respect to privacy, confidentiality, content control, and, under appropriate circumstances, anonymity.
- A high level of trust in the Global Information Infrastructure-Global Information Society (GII-GIS) should be pursued by mutual agreement, education, further technological innovations to enhance security and reliability, adoption of adequate dispute resolution mechanisms, and private sector self-regulation.

PART I - Maximizing the Benefits of Electronic Commerce for Trade and Development

Committee for Trade and Development

The AGB notes that the Committee for Trade and Development is examining and will report on the development implications of electronic commerce, taking into account the economic, financial and development needs of developing countries.

The issues to be examined shall include:

- *effects of electronic commerce on the trade and economic prospects of developing countries, notably of their small- and medium-sized enterprises (SMEs), and means of maximizing possible benefits accruing to them;*
- *challenges to and ways of enhancing the participation of developing countries in electronic commerce, in particular as exporters of electronically delivered products: role of improved access to infrastructure and transfer of technology, and of movement of natural persons;*
- *use of information technology in the integration of developing countries in the multilateral trading system;*
- *implications for developing countries of the possible impact of electronic commerce on the traditional means of distribution of physical goods; and*
- *financial implications of electronic commerce for developing countries.*

Introduction

The AGB recognizes the WTO as the international body dealing with the rules of trade between nations. WTO agreements provide the legal ground-rules for international commerce and for trade policy. These multilateral agreements have three main objectives: to help trade flow as freely as possible, to achieve further liberalization gradually through negotiation, and to set up an impartial means of settling disputes. A number of simple, fundamental principles run throughout all the WTO agreements: non-discrimination ("most-favored-nation" treatment and "national" treatment), freer trade, predictable policies, and encouraging fair competition. With stability and predictability, the multilateral trading system should encourage trade and investment flows, create jobs, and provide consumers the benefits of competition - expanded choice and lower prices.

To ensure that the WTO's multilateral framework of rules is kept up-to-date with and relevant to the evolving requirements of international commercial transactions in a global economy, the AGB believes that for goods ordered electronically, but delivered physically, current WTO rules should apply so that there is no distinction between cross-border global electronic commerce and traditional international commerce.

Private and public enterprises, citizens, companies, entrepreneurs, public institutions and government organizations, all types of social organizations and corporations will be able to participate in global electronic commercial activities. Electronic commerce will allow products to be marketed worldwide, while providing a wide array of options to the consumer.

Economic and Social Benefits

The AGB views electronic commerce as an innovative approach to ensuring future sustainable economic growth. Throughout the world, the profound impact of electronic commerce on the economies of the globe will undoubtedly improve economic efficiency, competitiveness and profitability. Within such an environment, countries in all stages of development will have the opportunity to benefit by:

1. increasing internal organizational and management efficiency of enterprises;
2. increasing transaction efficiency and reducing transaction costs for both suppliers and buyers;
3. extending market reach of suppliers and increasing choice for both suppliers and consumers;
4. providing accurate information to improve service delivery such as in health provision or the provision of information to consumers.

Electronic commerce facilitates established business-to-business commercial relations, sales by companies to consumers, and exchanges between consumers. It affects the business environment at national, regional and global levels, and generates major opportunities, and new challenges, for market growth and development of jobs, industries and services. Consequently, internationally coordinated efforts are essential in order to secure the economic benefits of electronic commerce for both the information “rich” and the information “poor”.

Electronic commerce will have a number of positive impacts, including:

1. Shrinking the production and distribution chain by improving the efficiency of intermediation and maximizing the value it adds to the entire process. In addition, using networks to integrate markets directly with suppliers and inventory-tracking procedures can help reduce costs and allow more flexible production methods.
2. Providing virtual shopping facilities that will change concepts of retailing for a number of goods and services and enhancing the ability of customers to browse and choose new products and services irrespective of location.
3. Increasing market competition as costs for consumers are reduced and as market entry costs for suppliers are lowered.

4. Raising productivity growth and the development of new products and/or services will lead to new job creation, but will also result in the demand for new skills.

Measuring electronic commerce as accurately as conventional commerce is not easy given the difficulty of defining it and adequately capturing the value associated with it. Nevertheless, for policy purposes such data are needed to focus the policy debate so that action is directed towards activities that accurately reflect electronic commerce and its contributions to economic growth and development.

Business organizations continue to support studies and analyses of the impact of electronic commerce and share these findings with governments and international organizations. Appendices 1 through 4 are included at the end of the report showing examples of the economic and social benefits which can be derived through the application of electronic commerce.

The AGB recommends that:

- Governments continue to educate and raise awareness both to individual consumers and businesses, about the potentials of electronic commerce and its impact on social and economic structures.
- Governments and international organizations, notably the OECD and the World Bank, collect and analyze data relevant to the study of electronic commerce in order to effectively measure its economic and social impact.
- WTO Members should cooperate with international development organizations such as the World Bank to study the potential impact of electronic commerce on emerging economies in an effort to assist in the economic development process in those nations.

Small-and Medium-Sized Enterprises (SMEs)

Small-and Medium-Sized Enterprises (SMEs) represent an increasingly important dimension of the global economy. Particular efforts should be made to promote SME involvement in electronic commerce to ensure that they can take maximum advantage of the ability of telecommunications and information technologies to deliver cost efficiencies, quality control and competitiveness in manufacturing and service industries. As one of the most dynamic features of a growing economy, SMEs play a critical role in creating employment and enhancing GDP. Electronic commerce provides SMEs with lower market entry costs and the ability to extend geographic reach to a much larger market.

Business organizations will promote marketing and technology support for SMEs through business organizations and chambers of commerce. Business will encourage greater interaction between large corporations and SMEs to provide access to electronic commerce networks for supplier and contracting opportunities.

The AGB recommends that:

- Governments provide SMEs with information and education relevant to market entry opportunities provided by global electronic commerce.

Skill Development

Electronic commerce is changing the way we do business. We have moved from an industrial economy where machines dominated productivity, to an information-based economy where intellectual content is the dominant source of value added and which knows no geographic boundaries. In this new environment, education and lifelong learning will be essential not only for workers, but also for all in society. As industry, commerce, and services are transformed by technology, many skills, not only of employees but also of managers and the self-employed, need to be improved or acquired.

Future education will occur through formal and non-formal learning arrangements, making it available to a much wider range of people, including adults returning to learn. New information technology tools and methods, such as interactive media and distance learning, will offer wider access and innovative approaches to education. As future economic prosperity and social and political cohesion depend on a well-educated population, lifelong learning will be essential for everyone as we move into the 21st Century.

Business is committed to continue working with government to promote technical training and life-long learning for all in society.

The AGB recommends that:

- Governments review labor laws to remove existing barriers for workers to be able to share in the new and different employment generated by electronic commerce.
- Governments continue to promote both formal and non-formal skills development programs.

Ensuring Global Participation

It is important to recognize the need for global cooperation by both business and governments to facilitate electronic commerce. Otherwise, there is a risk that a large segment of the world's population may not be able to participate in the economic and social benefits that can arise from electronic commerce.

Existing business organizations will work to expand the participation from business in developing countries in promoting the uses and benefits of electronic commerce. In addition, business will expand its advisory role with international organizations dealing with electronic commerce issues.

The AGB recommends that:

- The WTO Members continue to expand information exchange and cooperation with existing international organizations, in order to promote coordination and transparency of their respective work programs.
- Governments ensure open and competitive electronic commerce markets to secure their participation in the benefits of the information society.
- Governments expand opportunities for active business participation in policy development relating to electronic commerce matters.

Infrastructure

Telecommunication services are critical to the development of a global information infrastructure. Like traditional commerce, electronic commerce requires a substantial infrastructure. Telecommunication liberalization creates the necessary conditions to attract capital, technology and expertise needed to promote economic and social growth in developing and developed countries while providing the necessary infrastructure for electronic commerce.

The World Bank for example has recently estimated that an investment of \$300 billion over the next five years will be required to upgrade the telecommunications infrastructure in developing and emerging economies. According to the World Bank, 55 percent of this investment will need to come from private capital, since public sources of funds are diminishing. Therefore, these countries need to take measures to promote competition and to ensure an appropriate investment climate.

Business will remain the most important driver in the development of the information infrastructure because it mobilizes the private capital needed to build the global information infrastructure and to develop the technological innovations that enhance communications.

The AGB recommends that:

- As telecommunications evolve from a monopoly to competitive environment, a crucial role for WTO Member Governments is to strengthen their role as a neutral force in the economy that ensures pro-competitive behavior and transparent, non-discriminatory rules.
- The WTO and other international organizations should provide a forum for coordinated government action and international cooperation on matters relating to global development. Agreements drawn up by multilateral organizations should offer the private sector and governments the necessary legal and regulatory certainty for investment.

- In regard to the WTO Agreement on Basic Telecommunications Services:
 1. WTO Members that scheduled commitments should ratify the Agreement, and effectively implement their commitments as soon as possible;
 2. WTO Members that scheduled commitments but did not sign-on to the Reference Paper should do so;
 3. WTO Members that did not schedule commitments should schedule meaningful market-opening commitments which at a minimum would include: 1) specifying a date certain for full market liberalization; 2) progressively removing foreign ownership restrictions; and 3) adopting the Reference Paper in its entirety;
 4. WTO Members should include as one of the highest negotiating priorities in any accession protocol the scheduling of meaningful market opening commitments in basic telecommunications services.

Government as Model User

Countries around the world should use electronic means of communications to deliver public services and to make public procurement procedures more efficient. This area requires increased attention to ensure that these processes and services keep pace with global norms. The benefits are government efficiencies, equalization of service provision to all citizens, and the demonstration of government leadership in the use of electronic commerce technology and services.

Business will work with governments to offer cost-effective electronic delivery systems for the public sector.

The AGB recommends that:

- Governments encourage the use of new electronic delivery systems to provide the means to significantly enhance the internal efficiency and productivity of public administrations;
- Governments promote electronic commerce through its public procurement system, done in a fully open and competitive environment, based on cost-efficient, market-based solutions that are technology neutral;
- Governments, where appropriate, use new electronic means to deliver core public services. In particular this would concern public information and cultural resources, databases for health services, web sites at local, regional and national levels and public libraries and databases, where appropriate.

PART II - Trade-Related Intellectual Property Rights

Council for Trade-Related Aspect of Intellectual Property Rights (TRIPS)

The AGB notes that the Council for TRIPS shall examine and report on the intellectual property issues arising concerning electronic commerce. The issues to be examined shall include the implications of electronic commerce for:

- *protection and enforcement of copyright and related rights;*
- *protection and enforcement of trademarks;*
- *new technologies and access to technology.*

Introduction

An important part of electronic commerce will involve trade in intangible assets. The AGB believes that creating an environment to allow such assets to be traded in a secure legal framework, through the adequate protection of intellectual property rights, is a top priority. Protection of intellectual property rights should be built upon existing intellectual property rights regimes, and carefully tailored balances under the current intellectual property rights system should not be inadvertently jeopardized.

The discordance between the territorial nature of intellectual property rights and the borderless world of electronic commerce is exacerbated by differences in intellectual property laws worldwide. In order to fully exploit the global potential of electronic commerce, governments should work towards international harmonization of intellectual property laws. Related issues which become more acute in the electronic commerce context include the exhaustion of rights, and the determination of the law and jurisdiction applicable to intellectual property conflicts.

In recognition of the importance of this rapidly evolving area of intellectual property law and policy, the World Intellectual Property Organization (WIPO) has initiated a number of activities to raise awareness of the impact of electronic commerce issues on the international intellectual property system, including a series of regional consultation meetings culminating in a major international conference which will be held in Geneva in September 1999. WIPO is also planning to release an issues paper which will define more clearly the perceived impact of electronic commerce on the intellectual property system.

- ***Protection and enforcement of copyright and related rights***

Copyright will be the major form of intellectual property protection for many of the products and services delivered over the Internet e.g. software, audiovisual products. Information technologies have allowed the development of new forms of distribution, but have also made the risk of infringement more acute. Business is tackling these problems on several fronts: by developing technology to better track and protect copyrighted materials, and manage rights, and through dialogue with governments to ensure that copyright (including neighboring rights) regimes are applied to the digital environment in a manner that promotes electronic commerce while protecting intellectual property rights.

Business will continue to advise WTO, WIPO, and other international organizations on the intellectual property implications of new technologies and resulting commercial developments.

- ***Protection and enforcement of trademarks***

Business has highlighted the problems raised by the discrepancy between the national scope of trademark laws and the international nature of electronic commerce and will work with WIPO to examine possible solutions.

A more specific issue rising from this is that of domain names, which play an important role in helping consumers and businesses locate, identify and communicate with correspondents. Companies therefore often use their established brand or corporate names as domain names to lead consumers or business partners to their home page, equivalent to their electronic commerce 'shop front'. Conflicts have arisen between the use and allocation of domain names and trademark rights partly because trademark rights have not been taken into account in determining how domain names should be allocated, thereby facilitating disputes. Conflicts have also arisen between different owners of the same name because of the discordance between the domain name and trademark systems. While different trademark holders can legitimately use the same name in different countries and for different categories of products or services, only one person or entity can use the name as a domain name.

To foster confidence in electronic transactions through a secure infrastructure and the ability to rely on established brand identities, trademarks, trade names and corporate reputations as guideposts of trust and reliability, it is important that these are protected in the electronic commerce context.

- ***New technologies and access to technology***

Information technology and electronic networks provide a new communications infrastructure which will give more people access to scientific and technical information worldwide, for instance, in the form of patent application and abstracts. The exploitation of information technology for access to technology should benefit not only developed countries but also, increasingly, developing countries. While certain developing countries may be sufficiently equipped to benefit from accessing technology in this way, others may need to improve telecommunication infrastructures and to strengthen their human resource base. Cooperation in this area could be considered in the context of assistance to least developed countries under Article 66 of TRIPS.

The AGB recommends that:

- Governments move promptly to ratify and implement two International treaties that were adopted by the World Intellectual Property Organization (WIPO) in December 1996 concerning copyright protection issues within an emerging digital age. Governments should also:
 - review the applicability of copyright infringement liability rules and to examine carefully how these rules apply to all stakeholders in the digital networked environment. The goal must be the establishment of a balanced and realistic framework of accountability that respects international norms; provides incentives for increased inter-industry cooperation to deter and respond to infringements; promotes responsible business practices; does not impose economically unreasonable or technically infeasible/unpracticable burdens on intermediaries that neither generate, select nor control content; and preserves an appropriate role for courts.
 - consider further measures to secure property rights in the digital networked environment, including filling the gaps in protection for producers and performers of sound recordings left by the Performances and Phonograms Treaty.
- Governments work together at the international level, in particular with the WIPO efforts in this area, to ensure that national differences in trademark law and policy do not impede the trademark owner's ability to exploit and protect their trademarks in cyberspace. The protection of trademarks is an important element of *the* continued stability of the Internet, which is business' primary goal.

PART III - TRADE IN GOODS

Council for Trade in Goods

The AGB notes that the Council for Trade in Goods shall examine and report on aspects of electronic commerce relevant to the provisions of GATT 1994, the multilateral trade agreements covered under Annex I A of the WTO Agreement, and the approved work program. The issues to be examined shall include:

- *market access for and access to products related to electronic commerce;*
- *valuation issues arising from the application of the Agreement on Implementation of Article VII of the GATT 1994;*
- *issues arising from the application of the Agreement on Import Licensing Procedures;*
- *customs duties and other duties and charges as defined under Article II of GATT 1994;*
- *standards in relation to electronic commerce;*
- *rules of origin issues; and*
- *classification issues.*

Electronic Commerce Under The GATT

For the AGB, electronic commerce, very broadly defined, incorporates all value transactions involving the transfer of information, products, services or payments via electronic networks. This includes the use of electronic communication as the medium through which goods and services of economic value are designed, produced, advertised, catalogued, inventoried, purchased or delivered.

The GATT applies to international commerce in goods. Notably, the GATT calls for signatory nations to extend most-favored nation treatment and national treatment, in their application of customs duties, taxes and other charges and regulations, to products and product suppliers of other signatories. The GATT also requires that charges and regulations affecting the importation of goods shall be published, impartially and reasonably administered, and subject to judicial or other independent review. The GATT contains anti-dumping provisions, a requirement that quantitative import quotas be administered in nondiscriminatory fashion, and restrictions on subsidization of domestic industries. The principles of the GATT become enforceable when signatory countries make specific commitments in particular sectors of commerce.

The AGB views the GATT as affecting global electronic commerce in at least three ways:

- Transactions over the Internet and other electronic networks resulting in cross-border trade in tangible goods clearly are covered by the GATT.

- Certain digital products that can be delivered both in electronic and physical form, such as books, music and software, may be classified as goods rather than services and therefore subject to the GATT rules. However, more study is needed on a rational and practical method of classification for certain digital products before such a determination can be made.
- The GATT and negotiations pursuant to the GATT affect the cost of transnational sales of equipment used in electronic commerce. In this connection, the most important development is the 1997 Information Technology Agreement, which will largely eliminate tariffs on information industry products by the year 2000.

The AGB recommends that:

- WTO Members confirm that Agreement and Ministerial Decisions relating to trade in tangible goods also apply to global electronic commerce.

Issues Under Review With Particular Relevance To Global Electronic Commerce

Of the seven issues identified by the Council on Trade in Goods for its review of electronic commerce, the AGB wishes to comment in some detail on three issues (classification, standards, and customs) that are particularly relevant to global electronic commerce. We also provide more general comments on the other issues under review.

- ***Classification issues***

Consumer interests are best served when businesses choose the most efficient methods of delivering their products and services. Accordingly, governments should avoid distorting the delivery choices of businesses by implementing regulations based on a premature classification of "downloadable" products. In order to achieve this goal, classifications of information-based products must, to the extent possible, have neutral effects on a business' choice to offer a product in tangible or online form.

For global electronic commerce, trade classification issues will require careful study, and it may not be possible at this early stage in the development of electronic commerce to make specific recommendations with confidence that we can predict all of the implications of those recommendations. It has been suggested, for example, that the online supply of digitized products should always be treated as a service. Others contend that digital products, such as books, music and software, that substitute for or can readily be converted to tangible goods should be treated as goods in order not to give an advantage to certain products based on the method of delivery. Any choices of this nature -- whether to treat certain online commercial transfers of information as services and others as goods or all online transfers as either goods or services -- will have

consequences that must be identified and evaluated closely before such decisions are made.

At the same time, a scheme that seeks to achieve neutrality by treating some information transfers as goods, and other transfers as services, will encounter particular peculiarities. Notably, digitized information will sometimes be delivered in a form that is not a precise analog to a familiar "good" such as a book or compact music disk. If a customer downloads a song that is not available on CD, should that transaction be classified as the sale of a good or the provision of a service? Defining a downloadable product as a good or a service will have consequences for the product supplier, revenue authorities, and consumers. The AGB believes it is premature to create distinctions for downloadable products without a thorough investigation of possible consequences.

Governments already have dealt with the classification problem in some contexts. For example, revenue authorities in OECD countries were confronted with a classification problem in the consumption tax area. The OECD revenue authorities have concluded that for the purpose of consumption taxes, the supply of digitized products should be treated as a supply of services and not as a supply of goods. The reason given was:

- Services and intangible property can be received on-line in digitized form. They are received by customers directly from the supplier. They are not subject to customs control nor handled in the traditional sense by an intermediary. They are not tangible products when received initially by customers. The consumer/customer may create a tangible product thereafter but that is a matter of choice.³

In short, because of the capability of electronic transmission, certain digital products may not fall clearly within traditional distinctions between "goods" or "services", although they will fall into one category or the other. While it is tempting to draw a clear distinction, such a line drawing exercise at this point may be unwise. First, drawing lines may distort the mode of distribution chosen by an industry still in its infancy. The preferred mode of distribution should be determined by technological and market factors, not regulation. Second, the lines drawn in this context may affect how distinctions are made in other areas, such as sale and use of intellectual property.

Finding a practical and rational method of defining certain online transactions as transactions concerning goods (and subject to the GATT) or service (and subject to the GATS) will become a major future goal for the WTO as global electronic commerce grows and develops. Additional study and thoughtful analysis will be required on this issue.

³ Organization for Economic Cooperation and Development, "Electronic Commerce: Discussion Paper on Taxation Issues" ¶ 43(a) (Aug. 20, 1998).

The AGB recommends that:

- WTO Members should be cognizant of the possible trade and market distortions resulting from implementation of regulations based on premature classification of products that are in their infancy.
- WTO Members agree to a work program to determine the appropriate classification of certain digital products delivered both electronically and physically.

- *Standards in relation to electronic commerce*

There is widespread recognition in government and industry of the importance of interoperability to the emergence of the national and global information infrastructures. Without interoperability, the components within each network cannot communicate effectively with one another, nor can information move seamlessly from one network to another. Further, both government and industry concur that interoperability can occur only where there are standards -- where the hardware and software that make up the information infrastructure all speak the same language.

Less understood is the threat to competition in the information infrastructure posed by certain types of standards. Historically, standards in many industries have been set by organizations. These standard setting organizations typically have pro-competitive policies: all firms in the industry can participate in the deliberations; a firm must disclose any proprietary technology it has in the standard under consideration; and the adopted standard must be made available to all organization members on reasonable and non-discriminatory terms. Without such a disclosure requirement, a firm could manipulate the standard setting process to its unfair advantage. Similarly, if the owner of technology adopted as a standard did not have to make it available to all firms on reasonable and non-discriminatory terms, the owner of the technology could eliminate competitors by refusing to license the technology.

Governments also impede competition and impose needless costs on trade when they use their regulatory authority or procurement choices to mandate or favor particular technical standards or impose excessive compliance costs. Where governments impose higher testing and certification standards for imports, costly and discriminatory product labeling rules and other obstacles, they may impede competition and violate MFN principles and market access commitments. Where governments endorse standards that are proprietary to particular vendors, that are not market-based, or that limit interoperability with standards in use in other countries, they may limit market access or violate MFN or national treatment principles. Accordingly, it is critical that industry and the marketplace continue to drive the development of technical standards for electronic commerce.

The "Agreement on Technical Barriers to Trade" tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles. The

agreement says the procedures used to decide whether a product conforms to national standards must be fair and equitable. It discourages any methods that would give domestically produced goods an unfair advantage. The agreement also encourages countries to recognize each other's testing procedures. That way, a product can be assessed to see if it meets the importing country's standards through testing in the country where it is made.

The AGB believes that electronic commerce offers great economic efficiencies, linking all parts of a transaction into one integrated end-to-end chain. Policies should facilitate interoperability within an international, voluntary and consensus-based environment for standards setting. The market needs a fully interoperable architecture, which is being developed within existing standards-setting institutions or by market forces. Standards for electronic commerce should continue to be market driven. Business will continue to work with all relevant international standards-making bodies to develop international standards.

The AGB recommends that:

- Standards should be market-driven, international, consensus based, and voluntary.
- Governments should avoid mandating unnecessary standards that could be led by business.
- Governments should refrain from developing competing standards through procurement mechanisms.

- ***Customs duties and other duties and charges as defined under Article II of GATT 1994***

Customs Duties

An important goal of the business community is to promote the expansion of electronic commerce and to prevent the creation of trade barriers in the form of customs duties or tariffs on products associated with electronic commerce. Such issues raised by electronic commerce should be viewed through the lenses of these important and fundamental policy principles: neutrality, efficiency, certainty, simplicity, effectiveness, fairness and flexibility as applicable to electronic commerce.

Lowering trade barriers, including tariffs, is one of the most obvious means of encouraging trade as well as global electronic commerce. Commitments in this area make the business environment stable and predictable and give business a clearer view of their future trade opportunities. With stability and predictability as part of the multilateral trading system, trade increases, investment is encouraged, jobs are created, and consumers can enjoy the benefits of competition -- choice and lower prices.

WTO Members have committed to cut and "bind" their customs duty rates on imports of goods. In some cases, tariffs are being cut to zero - with zero rates also committed in 1997 on information technology products. There is also a significant increase in the number of "bound" tariffs - duty rates that are committed in the WTO and are difficult to raise. The result, again, is to ensure a high degree of market certainty for both physical and electronic traders.

In the area of electronic transmission, business applauds the temporary commitment by WTO Members not to impose custom duties on such activities. This sends a strong message to the international business community that the WTO wishes to facilitate the global expansion of electronic commerce by not imposing new barriers to trade in this area. For stability and predictability in international trade in the 21st Century, WTO Members should move beyond a temporary commitment to a permanent one.

The AGB recommends that:

- Recognizing that global electronic commerce is growing and creating new opportunities for trade and the difficulty of stopping electronic transmissions at the border for duties assessment, WTO Members should make permanent their current practice of not imposing customs duties on electronic transactions.

Trade Facilitation and Customs Modernization

Further to the April 1998 WTO Symposium on Trade Facilitation, business will continue to cooperate with governments within the World Customs Organization (WCO) and WTO on issues relating to customs modernization. Business will continue to work with and advise customs authorities on issues relating to electronic commerce.

For business to use fully the benefits of electronic commerce, documentation in electronic form should not be denied legal acceptability solely on the grounds that it is in digital form. The handling of customs documentation, for example, will be both faster and more cost effective if it can be made in electronic form. The legal acceptability of auditing records and receipts from electronic commerce transactions in electronic form are other examples that can substantially reduce costs, facilitate, and promote electronic trade.

The AGB recommends that:

- Governments should work through the WCO and WTO to enhance the efficiency and transparency of customs procedures using information technologies so that businesses and consumers can reap the benefits of electronic commerce.
- Governments have an important role to play in addressing questions of trade policy and assuring the legal validity of documents in digital form.

General Issues Under Review

For the other issues under review, we provide a brief commentary because the work in these areas will continue under the Council for Trade in Goods.

- ***Market access for and access to products related to electronic commerce***

Lowering trade barriers is one of the basic means of encouraging both traditional and electronic commerce. Barriers concerned include customs duties (or tariffs) and non-tariff measures. Under current GATT rules, countries cannot normally discriminate between their trading partners. Thus, most-favored-nation (MFN) treatment is an important principle governing trade in goods for both traditional and electronic commerce. Equally important is the principle of national treatment (giving others the same treatment as one's own nationals) governing trade in goods and should be applied with respect to global electronic commerce.

- ***Valuation issues arising from the application of the Agreement on Implementation of Article VII of GATT 1994***

For business, the process of estimating the value of a product at customs presents problems that can be just as serious as the actual duty rate charged. A fair, uniform and neutral system for the valuation of goods for customs purposes is a necessity. The "Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994" and related ministerial decisions -- "Decision Regarding Cases Where Customs Administrations Have Reasons to Doubt the Truth or Accuracy of the Declared Value" and Decisions on Texts Relating to Minimum Values and Imports by Sole Agents, Sole Distributors and Sole Concessionaires" -- aim at such a system that conforms to commercial realities, and which outlaws the use of arbitrary or fictitious customs values.

- ***Issues arising from the application of the Agreement on Import Licensing Procedures***

Import licensing procedures should minimize the importers' burden in applying for licenses, so that the administrative work does not in itself restrict or distort imports. The "Agreement on Import Licensing Procedures" says import licensing should be simple, transparent and predictable. For example, the agreement requires governments to publish

sufficient information for traders to know how and why the licenses are granted. It also describes how countries should notify the WTO when they introduce new import licensing procedures or change existing procedures. The agreement offers guidance on how governments should assess applications for licenses.

- ***Rules of origin issues***

The rules of origin should be clear, predictable, and applied in an impartial, transparent and consistent manner in order to facilitate international commerce. The "Agreement on Rules of Origin" requires WTO members to ensure that their rules of origin are transparent; that they do not have restricting, distorting or disruptive effects on international trade; that they are administered in a consistent, uniform, impartial and reasonable manner; and that they are based on a positive standard.

The Committee on Rules of Origin in the WTO and a Technical Committee under the auspices of the World Customs Organization (WCO) in Brussels expect to complete the work on the harmonization of non-preferential rules of origin by November 1999. These rules must be simplified and harmonized to ensure that they do not create unnecessary obstacles to trade.

PART IV - TRADE IN SERVICES

Council for Trade in Services

The AGB notes that the Council for Trade in Services shall examine and report on the treatment of electronic commerce in the GATS legal framework. The issues to be examined shall include:

- *scope (including modes of supply) (Article I),*
- *MFN (Article II);*
- *transparency (Article III);*
- *increasing participation of developing countries (Article IV);*
- *domestic regulation, standards, and recognition (Articles VI and VII);*
- *competition (Articles VIII and IX);*
- *protection of privacy and public morals and the prevention of fraud (Article XIV);*
- *market-access commitments on electronic supply of service (including commitments on basic and value added telecommunications services and on distribution services) (Article XVI);*
- *national treatment (Article XVII);*
- *access to and use of public telecommunications transport networks and services (Annex on Telecommunications);*
- *customs duties; and*
- *classification issues.*

Electronic Commerce Under The GATS

Trade in services represents a larger portion of international transactions each year. Examples of services trade include distribution services, wherein merchandise proceeds from producers through wholesalers to retailers and ultimately to consumers; education services, which include formal academic instruction in primary, secondary, and higher education institutions; professional services such as accounting, management consulting, architecture, engineering, construction, computer and data processing, and maintenance and repair services. Services trade is conducted, or supported, to a large and increasing extent through electronic means.

The GATS is a multilateral, enforceable framework with specific provisions to liberalize trade and investment in services. The GATS sets out a statement of guiding principles for WTO members, including such fundamental principles as most-favored nation treatment, national treatment, transparency, and reasonable, objective and impartial domestic regulation. These principles, in turn, are implemented through specific commitments made in foreign investment and market access in cross-border, consumption abroad, commercial presence, and movement of natural persons modes of supply.

Under the GATS, four modes of supply are not limited by means of delivery, thus the GATS also covers the supply of services which incorporate elements of electronic commerce to support their delivery.

Issues Under Review With Particular Relevance To Global Electronic Commerce

Of the twelve issues identified by the Council on Trade in Services for its review of electronic commerce, the AGB wishes to comment in some detail on six issues (classification issues; domestic regulation, standards, and recognition; customs duties; access to and use of public telecommunications transport networks and services; increasing participation of developing countries; protection of privacy and public morals and the prevention of fraud) that are particularly relevant to global electronic commerce. We also provide more general comments on the other issues under review.

- ***Classification issues***

Consumer interests are best served when businesses choose the most efficient methods of delivering their products and services. Accordingly, governments should avoid distorting the delivery choices of businesses by implementing regulations based on a premature classification of "downloadable" products. In order to achieve this goal, classifications of information-based products must, to the extent possible, have neutral effects on a business' choice to offer a product in tangible or online form.

For global electronic commerce, trade classification issues will require careful study, and it may not be possible at this early stage in the development of electronic commerce to make specific recommendations with confidence that we can predict all of the implications of those recommendations. It has been suggested, for example, that the online supply of digitized products should always be treated as a service. Others contend that digital products, such as books, music and software, that substitute for or can readily be converted to tangible goods should be treated as goods in order not to give an advantage to certain products based on the method of delivery. Any choices of this nature -- whether to treat certain online commercial transfers of information as services and others as goods or all online transfers as either goods or services -- will have consequences that must be identified and evaluated closely before such decisions are made.

At the same time, a scheme that seeks to achieve neutrality by treating some information transfers as goods, and other transfers as services, will encounter particular peculiarities. Notably, digitized information will sometimes be delivered in a form that is not a precise analog to a familiar "good" such as a book or compact music disk. If a customer downloads a song that is not available on CD, should that transaction be classified as the sale of a good or the provision of a service? Defining a downloadable product as a good or a service will have consequences for the product supplier, revenue authorities, and

consumers. The AGB believes it is premature to create distinctions for downloadable products without a thorough investigation of possible consequences.

Governments already have dealt with the classification problem in some contexts. For example, revenue authorities in OECD countries were confronted with a classification problem in the consumption tax area. The OECD revenue authorities have concluded that for the purpose of consumption taxes, the supply of digitized products should be treated as a supply of services and not as a supply of goods. The reason given was:

- Services and intangible property can be received on-line in digitized form. They are received by customers directly from the supplier. They are not subject to customs control nor handled in the traditional sense by an intermediary. They are not tangible products when received initially by customers. The consumer/customer may create a tangible product thereafter but that is a matter of choice.⁴

In short, because of the capability of electronic transmission, certain digital products may not fall clearly within traditional distinctions between "goods" or "services", although they will fall into one category or the other. While it is tempting to draw a clear distinction, such a line drawing exercise at this point may be unwise. First, drawing lines may distort the mode of distribution chosen by an industry still in its infancy. The preferred mode of distribution should be determined by technological and market factors, not regulation. Second, the lines drawn in this context may affect how distinctions are made in other areas, such as sale and use of intellectual property.

Finding a practical and rational method of defining certain online transactions as transactions concerning goods (and subject to the GATT) or service (and subject to the GATS) will become a major future goal for the WTO as global electronic commerce grows and develops. Additional study and thoughtful analysis will be required on this issue.

The AGB recommends that:

- WTO Members should be cognizant of the possible trade and market distortions resulting from implementation of regulations based on premature classification of products that are in their infancy.
- WTO Members agree to a work program to determine the appropriate classification of certain digital products delivered both electronically and physically.

⁴ Organization for Economic Cooperation and Development, "Electronic Commerce: Discussion Paper on Taxation Issues" ¶ 43(a) (Aug. 20, 1998).

- ***Domestic regulation, standards, and recognition
(Articles VI and VII)***

Domestic regulation

Under Article VI of GATS, in any sector where a WTO member country has undertaken specific market-opening commitments, that country must ensure that all measures of general application affecting trade in services are administered in a reasonable, objective and impartial manner. In order to meet this standard, member nations must ensure prompt review of administrative decisions affecting trade in services and must ensure that any qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services. Specifically, WTO member nations should base standards, licensing and other regulations on objective and transparent criteria and should ensure that those requirements are no more burdensome than necessary to ensure the quality of the service.

The domestic regulation principles of GATS are relevant to a number of electronic commerce issues. Notably, tax treatment of electronic transactions, content considerations, data protection, telecommunications and ISP access rates, consumer protection, fraud prevention, infrastructure financing, data transmission standards, and encryption may all be targeted by domestic measures. Regulation of such electronic commerce issues should adhere to GATS Article VI which requires regulations be objective, transparent and not excessively burdensome.

In assessing a domestic regulation, however, the “General Exceptions” of Article XIV of the GATS also will apply. Pursuant to Article XIV, any measure may be adopted and enforced that is necessary to serve legitimate purposes such as protection of public health or morals, prevention of deceptive practices, enforcement of contracts, and protection of the privacy of individual information. However, the general exceptions do not include measures that discriminate arbitrarily between countries or that are disguised restrictions on trade in services.

Standards

There is widespread recognition in government and industry of the importance of interoperability to the emergence of the national and global information infrastructures. Without interoperability, the components within each network cannot communicate effectively with one another, nor can information move seamlessly from one network to another. Further, both government and industry concur that interoperability can occur only where there are standards -- where the hardware and software that make up the information infrastructure all speak the same language.

Less understood is the threat to competition in the information infrastructure posed by certain types of standards. Historically, standards in many industries have been set by

organizations. These standard setting organizations typically have pro-competitive policies: all firms in the industry can participate in the deliberations; a firm must disclose any proprietary technology it has in the standard under consideration; and the adopted standard must be made available to all organization members on a reasonable and non-discriminatory terms. Without such a disclosure requirement, a firm could manipulate the standard setting process to its unfair advantage. Similarly, if the owner of technology adopted as a standard did not have to make it available to all firms on reasonable and non-discriminatory terms, the owner of the technology could eliminate competitors by refusing to license the technology.

Governments also impede competition and impose needless costs on trade when they use their regulatory authority or procurement choices to mandate or favor particular technical standards or impose excessive compliance costs. Where governments impose higher testing and certification standards for imports, costly and discriminatory product labeling rules and other obstacles, they may impede competition and violate MFN principles and market access commitments. Where governments endorse standards that are proprietary to particular vendors, that are not market-based, or that limit interoperability with standards in use in other countries, they may limit market access or violate MFN or national treatment principles. Accordingly, it is critical that industry and the marketplace continue to drive the development of technical standards for electronic commerce.

The "Agreement on Technical Barriers to Trade" tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles. The agreement says the procedures used to decide whether a product conforms to national standards must be fair and equitable. It discourages any methods that would give domestically produced goods an unfair advantage. The agreement also encourages countries to recognize each other's testing procedures. That way, a product can be assessed to see if it meets the importing country's standards through testing in the country where it is made.

The AGB believes that electronic commerce offers great economic efficiencies, linking all parts of a transaction into one integrated end-to-end chain. Policies should facilitate interoperability within an international, voluntary and consensus-based environment for standards setting. The market needs a fully interoperable architecture, which is being developed within existing standards-setting institutions or by market forces. Standards for electronic commerce should continue to be market driven. Business will continue to work with all relevant international standards-making bodies to develop international standards.

The AGB recommends that:

- Standards should be market-driven, international, consensus based, and voluntary.
- Governments should avoid mandating unnecessary standards that could be led by business.

- Governments should refrain from developing competing standards through procurement mechanisms.

Recognition

When two or more governments have agreements recognizing each other's qualifications (for example, the licensing or certification of service suppliers), GATS provides that other members must also be given a chance to negotiate comparable pacts. The recognition of other countries' qualifications must not be discriminatory, and it must not amount to protectionism in disguise. These recognition agreements have to be notified to the WTO.

- *Customs duties*

An important goal of the business community is to promote the expansion of electronic commerce and to prevent the creation of trade barriers in the form of customs duties or tariffs on products associated with electronic commerce. Such issues raised by electronic commerce should be viewed through the lenses of these important and fundamental policy principles: neutrality, efficiency, certainty, simplicity, effectiveness, fairness and flexibility as applicable to electronic commerce.

Lowering trade barriers, including tariffs, is one of the most obvious means of encouraging trade as well as global electronic commerce. Commitments in this area make the business environment stable and predictable and give business a clearer view of their future trade opportunities. With stability and predictability as part of the multilateral trading system, trade increases, investment is encouraged, jobs are created, and consumers can enjoy the benefits of competition -- choice and lower prices.

The WTO Moratorium on Customs Duties on Electronic Transmissions recognizes that internationally, electronic transmissions are not now considered importations subject to customs duties. There are no customs duties on telephone calls across borders; there are no customs duties on fax messages; and, there are no customs duties when computers access databases. The WTO's Moratorium on Customs Duties on Electronic Transmissions reflects this status quo and promotes the expansion of electronic commerce.

The WTO's Moratorium should be made permanent to codify the duty free treatment of electronic transmissions. This sends a strong message to the international business community that the WTO wishes to facilitate the global expansion of electronic commerce by not imposing new barriers to trade in this area. For stability and predictability in international trade in the 21st Century, WTO Members should move beyond a temporary commitment to a permanent one.

The AGB recommends that:

- Recognizing that global electronic commerce is growing and creating new opportunities for trade and the difficulty of stopping electronic transmissions at the border for duties assessment, WTO Members should make permanent their current practice of not imposing customs duties on electronic transactions.

Trade Facilitation and Customs Modernization

Further to the April 1998 WTO Symposium on Trade Facilitation, business is willing to cooperate with governments within the World Customs Organization (WCO) and WTO on issues relating to customs modernization. Business will continue to work with and advise customs authorities on issues relating to electronic commerce.

For business to fully use the benefits of electronic commerce, documentation in electronic form should not be denied legal acceptability solely on the grounds that it is in digital form. The handling of customs documentation, for example, will be both faster and more cost effective if it can be made in electronic form. The legal acceptability of auditing records and receipts from electronic commerce transactions in electronic form are other examples that can substantially reduce costs, facilitate, and promote electronic trade.

The AGB recommends that:

- Governments should work through the WCO and WTO to enhance the efficiency and transparency of customs procedures using information technologies so that businesses and consumers can reap the benefits of electronic commerce.
- Governments have an important role to play in addressing questions of trade policy and assuring the legal validity of documents in digital form.

- ***Access to and use of public telecommunications transport networks and services (Annex on Telecommunications)***

Telecommunication services are critical to the development of a global information infrastructure. Like traditional commerce, electronic commerce requires a substantial infrastructure. Telecommunication liberalization creates the necessary conditions to attract capital, technology and expertise needed to promote economic and social growth in developing and developed countries while providing the necessary infrastructure for electronic commerce.

Business will remain the most important driver in the development of the information infrastructure because it mobilises the private capital needed to build the global

information infrastructure and to develop the technological innovations that enhance communications.

The most important multinational initiative for liberalization of the telecommunications infrastructure is the WTO basic telecom agreement, which became effective on January 1, 1998. Under that agreement, 44 WTO members have made commitments to permit foreign ownership and control of all telecommunications facilities, and 52 WTO members have made commitments to open their markets for international telecommunications services. In addition, 55 WTO members have agreed to adopt the reference paper, which sets out a liberalized regulatory policy including nondiscriminatory access for competing carriers to the networks of incumbent telephone companies. Ten other WTO members have adopted the reference paper in part or have committed to adopt the reference paper at a future date.

The AGB recommends that:

- WTO Members that scheduled commitments under the basis telecom agreement should ratify the agreement, and effectively implement their commitments as soon as possible;
 - WTO Members that scheduled commitments but did not sign-on to the Reference Paper should do so;
 - WTO Members that did not schedule commitments should schedule meaningful market-opening commitments which at a minimum would include: 1) specifying a date certain for full market liberalization; 2) progressively removing foreign ownership restrictions; and 3) adopting the Reference Paper in its entirety;
 - WTO Members should include as one of the highest negotiating priorities in any accession protocol the scheduling of meaningful market opening commitments in basic telecommunications services.
- ***Increasing participation of developing countries (Article IV)***

It is important to recognize the need for global cooperation by both business and governments to facilitate electronic commerce. Otherwise, there is a risk that a large segment of the world's population may not be able to participate in the economic and social benefits that can arise from electronic commerce.

Existing business organizations will work to expand the participation from business in developing countries in promoting the uses and benefits of electronic commerce. In

addition, business will expand its advisory role with international organizations dealing with electronic commerce issues.

The AGB recommends that:

- The WTO increase cooperation with existing international organizations, as well as coordination and transparency of their respective work programs.
 - Governments ensure open and competitive electronic commerce markets to secure their participation in the benefits of the information society.
 - Governments expand opportunities for active business participation in electronic commerce matters.
-
- ***Protection of privacy and public morals and the prevention of fraud (Article XIV);***

The GATS expressly provides that governments are entitled to adopt regulations that protect the welfare of their citizens, subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in service.

The AGB believes that the protection of users, in particular concerning privacy, confidentiality, anonymity and content control should be pursued through policies driven by choice, individual empowerment, industry-led solutions, and should be in accordance with law where applicable. Business will make available to users the means to exercise choice with respect to privacy, confidentiality and content control.

Privacy

Business endorses the principles set out in the OECD 1980 Guidelines for the protection of Privacy and Transborder Flows of Personal Data, and is committed to implementing fair information practices and transparent procedures consistent with these Guidelines. It does so through self-regulation, voluntary codes and by making commercially available technologies, which enable a high level of privacy protection tailored to user needs and preferences.

Business uses model contracts and internal control procedures to satisfy the requirements of legislation restricting export of data to third countries that may not provide "adequate protection". Business has published several new model contracts and has presented them for endorsement to relevant authorities at the end of 1998.

Business is committed to working with governments to foster mutual recognition of culturally different but adequate regimes for protection of personal information in the digital environment.

In some countries, authentication of compliance to these industry policies for privacy protection is already provided by numerous consumer interest and security assurance institutions.

Business is reviewing existing self-regulation to ensure that it takes into account new technologies and provide effective and credible privacy protection.

The AGB recommends that:

- Governments should adopt a flexible and responsive approach to the protection of personal information, including the acceptance of self-regulatory solutions and technological innovations that empower the user. In particular:
 - Different approaches to the protection of personal information should not prevent transborder data flows. In assessing the level of protection provided to personal information in other jurisdictions, the criterion should be the objective level of protection.
 - Non-discriminatory treatment should be given to such approaches.
- Governments should:
 - work with the private sector to adopt a flexible interpretation of existing regulatory solutions;
 - recognize the validity and adequacy of effective self-regulation augmented by the use of privacy-enhancing technologies; and
 - educate the public to use such privacy-enhancing technologies properly.

Content Regulation

Content regulations, like both consumer protection and marketing and advertising are based on different legal and cultural traditions. Nevertheless, content regulations should be kept to a minimum as they, in essence, constitute censorship of the Internet, thereby restricting the free flow of information into the marketplace of ideas. Where content regulations exist, it is the role of the appropriate law enforcement authority to enforce the law. In the context of potentially inappropriate, but otherwise legal content, business encourages the use of market-driven solutions, including the numerous filtering and blocking technologies, many of which are based on the Platform for Internet Content Selection (PICS), rather than restricting access to such content through regulation. Such

technologies empower the user to make informed decisions about the types of content he/she wants and does not want to access.

Fraud and other commercial crime

Business will continue to advise governments on appropriate action to combat electronic commerce fraud and to provide information on fraud and fraudsters to the business community.

Criminal laws, courts and enforcement agencies should develop more expertise to deal with electronic commerce fraud and computer crime. Close cooperation with business is vital in this process. Digital signatures and other authentication technologies are important for users to protect themselves against fraud. Their legal validity should be addressed as soon as possible.

General Issues Under Review

For the other issues under review, we provide a brief commentary, as the work in these areas will continue under the Council for Trade in Services.

- ***Scope (including modes of supply) (Article I)***

International trade in services is conducted to a large and increasing extent through electronic means. The GATS framework defines four modes by which the supply of services can take place:

- services supplied from one country to another (e.g., international telephone calls), officially known as "cross-border supply";
- consumers or firms making use of a service in another country (e.g., tourism), officially known as "consumption abroad";
- a foreign company setting up subsidiaries or branches to provide services in another country (e.g., foreign banks setting up operations in a country), officially termed "commercial presence";
- individuals travelling from their own country to supply services in another (e.g., fashion models or consultants), officially termed "presence of natural persons".

All the services that can be supplied physically in these four modes can also be supplied electronically (although the mode classification does not translate perfectly). Accordingly, the supply of services by electronic means is covered by the GATS along with other means of delivery. The ability to provide services across borders in specific industry sectors is a prerequisite for the robust development and growth of electronic commerce. If service provision across borders is not permitted, then the ability to deliver those services electronically will be constrained and fragmented in national markets.

- ***MFN (Article II)***

Set out in Article II of the GATS, most-favored-nation (“MFN”) status requires each member nation to “accord . . . to services and service suppliers of any other Member treatment no less favorable than it accords to like services and service suppliers of any other country.”

The MFN principle clearly applies to regulations that discriminate against other WTO countries arbitrarily or for purely political reasons. The harder questions, however, are presented by regulations that are neutral on their face but nonetheless affect some countries more than others. So, for example, a WTO member nation might decide to recognize a certain digital signature or encryption technology or implementation and not others, thereby favoring contracts for services provided from countries that also recognize that technology or implementation.

Member countries generally defend regulations of this kind as legitimate domestic enactments designed to protect the welfare of the regulating country’s population; and in fact such regulations are permissible under GATS so long as they are administered in a reasonable, objective and impartial manner. If the regulation does not meet this standard and has the effect of treating a WTO member country less favorably than another country, however, then the regulation may violate the MFN principle.

- ***Transparency (Article III)***

GATS requires governments to publish all relevant laws and regulations. By the end of 1997, they had to have set up inquiry points within their bureaucracies. Foreign companies and governments can then use these inquiry points to obtain information about regulations in any service sector. Moreover, they have to notify the WTO of any changes in regulations that apply to the services that come under specific commitments.

- ***Competition (Articles VIII and IX)***

Article VIII of the GATS addresses the persistence, in many WTO countries, of monopoly suppliers of transportation, telecommunications and other services. Article IX recognizes that certain business practices of service suppliers, other than those falling under Article VIII, may restrain competition and thereby restrict trade in services.

Under Article VIII, members must ensure that monopoly suppliers do not act in such a way as to violate the member nation’s MFN obligations or abuse their monopoly position to violate any market-access commitments of the member nation.

For businesses engaged in electronic commerce, Article VIII has particular application to the monopoly telecommunications carriers that still provide the only ubiquitous electronic commerce infrastructure in many countries. The WTO Basic Telecom

Agreement provides a framework under which many WTO countries have agreed to introduce competition and require their dominant carriers to interconnect on a nondiscriminatory basis with their competitors. It is vitally important to the future of electronic commerce that nations which have made such commitments implement them in a timely fashion, and that nations which have not made such commitments do so.

- ***National treatment (Article XVII)***

Article XVII of the GATS requires each member nation to accord to services and service suppliers of any other member nation treatment no less favorable than it accords to its own like services and service suppliers. This principle is most readily violated by domestic regulations that limit market access by foreign suppliers, impose taxes and license fees on foreign service providers that are not imposed on domestic suppliers, or that control the content of information supplied from another member country on cultural grounds. Domestic regulation of electronic commerce can present a number of national treatment issues, and governments should adhere to the principles of Article XVII in the electronic commerce context, just as they comply with those principles in the context of trade in tangible services.

APPENDIX I

PRELIMINARY RESEARCH IDENTIFIES THE ECONOMIC AND SOCIAL IMPACT OF ELECTRONIC COMMERCE

Electronic commerce has the potential to radically alter some economic activities and the surrounding social environment. It emerged in the wake of a powerful "virtuous circle" of regulatory reform and various technological innovations. As a result, barriers to engage in electronic commerce have progressively fallen for both buyers and sellers. Earlier forms of e-commerce were mostly custom-made, complex, expensive and the province of large firms. Today, for a few thousand dollars, anyone can become a merchant and reach millions of consumers worldwide. What used to be business-to-business transactions between known parties has become a complex Web of commercial activities that can involve vast numbers of individuals who may never meet. In this sense, the Internet and electronic commerce have converted a luxury for the few into a relatively simple and inexpensive device for the many in both developed and developing countries.

Even if electronic commerce is still quantitatively "small", it is very likely to grow in the future. It implies the seamless application of information and communication technology along the entire value chain of a business process that is conducted electronically. It favors the introduction of new business models, entails organizational changes at firm level and profoundly affects the way users and suppliers interact with one another. It also facilitates international trade and is a means of supplying goods and services across borders (e.g. transmission of digital products over the Internet). Moreover, it affects product markets by increasing the efficiency of transactions, by affecting market structure, and by providing more quality and variety. Information and communication technologies (ICTs), organizational change, international trade, and product market competition all have an impact on the labor market, either directly, by acting on skills, wages, and on work organization, or indirectly, through the effects of productivity and demand on employment. The impact of electronic commerce is thus the result of a complex balance and many interactions cannot easily be quantified.

The AGB encourages national and international research focused on the economic and social impact of electronic commerce as well as the trade and development effects. We point to two recent studies in this area that may also provide insights into the trade and development impact of global electronic commerce.

It is worth noting some of the preliminary findings of the Organization for Economic Cooperation and Development (OECD)'s study, entitled, "The Economic and Social Impacts of Electronic Commerce: Preliminary Findings and Research Agenda." We cite some of its findings in our report.

“The Economic and Social Impacts of Electronic Commerce: Preliminary Findings and Research Agenda” by the Organization for Economic Cooperation and Development (OECD, 1998).

What E-commerce is likely to change

E-commerce changes the business environment, accelerates changes underway...

E-commerce changes the business environment. It leads to different intermediaries, new products, new markets, and new business-consumer relationships as well as new channels for diffusing knowledge and for interaction in the workplace. More flexibility and adaptability will be needed as e-commerce develops, and workers' functions and skills will have to be redefined. E-commerce also accelerates changes already under way: regulatory reform, the globalization of economic activity, and the demand for higher-skilled workers. The use of e-commerce in sectors such as banking, ticketing, and one-to-one marketing will continue to grow.

... increases interactivity, encourages openness...

There will be more economic interactivity as small businesses and households start doing business on the Internet. Access will shift from relatively expensive personal computers to cheap and easy-to-use TVs, telephones and yet-to-be-invented devices that allow people to communicate and transact business anywhere, anytime. Openness is, and will continue to be, a business strategy. Already, many successful e-commerce ventures grant business partners and consumers access to their databases and personnel, and consumers are increasingly implicated as partners in product design and creation.

... and alters the notion of time.

Electronic-commerce alters the relative importance of time by speeding up production cycles, allowing firms to operate in close co-ordination and enabling consumers to conduct transactions around the clock. As the role of time changes, so will the structure of business and social activities.

E-commerce and economic efficiency

Strong growth in business-to-business e-commerce is likely to be fuelled by the impacts on the costs of owning and operating a "store", carrying inventory, conducting sales, placing and processing orders, customer support and product distribution.

E-commerce, especially business-to-business, is growing quickly because of its impact on business costs and productivity:

- It is generally less expensive to maintain a "cyber" storefront than a physical one because it is always "open" and has a global market and fewer variable costs. Duplicate inventory costs are eliminated by maintaining one "store" instead of many.
- Better demand forecasting and stock replenishment can mean an overall inventory reduction of \$250-\$350 billion (or about a 20 to 25% reduction in current US inventory levels). While this may be optimistic, pilot studies on the US auto market obtained a 20% savings, and even a 5% reduction would have a significant economic impact.
- Electronic commerce may lead to productivity gains. An OECD estimate of the potential impact of cost reductions generated by retail (business-to-consumer) e-commerce in five OECD countries is of the order of one-half to two-thirds of a percentage point. This is a considerable gain, as it is a rough proxy for productivity gains, which have only averaged 0.8% a year across the G7 economies in recent years. Given that the cost savings from business-to-business e-commerce are significant and that the business-to-business segment represents a much larger portion of the overall total, these estimates can be considered conservative.

E-commerce is expected to result in productivity gains and growth and to spur the development of many new products.

Electronic commerce can improve the productivity of sales by a factor of ten. Even if customers complete a transaction over the telephone or in a showroom, they frequently arrive knowing which product they want and are ready to buy. Internet-based e-commerce procedures make it possible to reduce errors dramatically, ensure compliance

with organizational norms, and speed processing. Savings are estimated to range from 10 to 50%, but time reductions are often as important as monetary savings: firms report cutting the time needed to process purchase orders by 50 to 96%.

As e-commerce evolves, process efficiency gains are likely to be followed by quality improvements to existing products and the creation of new products. Typically, it is in this stage that significant economic growth occurs. E-commerce has the potential to be a platform for significant new products, many of which will be digital and delivered online, which will then beget more new products and processes.

- With today's sophisticated products, customer and after-sales service is a major cost for many firms, accounting for more than 10% of operating costs. E-commerce allows firms to provide after-sales services with much of this support online so that customers can access databases or "smart" manuals directly. This cuts costs while generally improving the quality of service.
- Shipping can increase the cost of many products purchased via electronic commerce and add substantially to the price, but distribution costs are significantly reduced (by 50 to 90%) for electronically delivered products such as financial services, software, and travel.

Electronic commerce will change the structure, if not the level, of pricing. This will affect the ability to measure accurately changes in prices and inflation.

A competitive market is essential if cost reductions are to translate into price reductions. Currently, price reductions attributable to e-commerce are only evident in sectors such as retail stock trading. Lower costs should lead to greater product, market and international competition, especially in services, and thus to greater price competition.

More and more products will be subject to the differential pricing associated with customized products, fine market segmentation and auctions, and as it becomes easier to change prices. While this will generally improve economic efficiency, it may raise consumer concerns. Consumers may be less comfortable with differentiated pricing for smaller, common purchases than for larger purchases, such as cars. In addition, the more widespread use of variable pricing, the advent of greater price competition, and the ability to change prices quickly may affect expectations about price movements. In particular, changes in the structure of price setting will affect the ability to measure changes in prices and inflation accurately.

Competition is needed if cost reductions are to translate into price reductions.

Electronic commerce allows for "boundary crossing" as new entrants, business models, and changes in technology erode barriers that separate one industry from another. This leads to increased competition and innovation, which are likely to boost overall economic efficiency. Even if the growth of markets for services on electronic networks increases competition, it is not clear that there is a direct relation between the adoption of open links and open market structures. A number of factors could have a negative impact on competition in electronic markets, notably sector-specific transaction structures, first-mover advantages or differences in regulatory environments. However, e-commerce is unlikely to provide a "friction free" environment. While the role of intermediaries is likely to be restructured and redefined, widespread "disintermediation" (producers selling directly to consumers) is unlikely. New costs associated with establishing trust, and new intermediaries will appear. However, it may be easier to obtain information that has been held by intermediaries such as travel and insurance agents, stockbrokers and real estate agents.

Intermediaries, and their roles, are likely to change.

New business models, sectoral organization and market structure

E-commerce favors flatter organizational forms and a flexible work force.

E-commerce encourages streamlined business processes, flatter organizational hierarchies, continuous training, and inter-firm collaboration. Firms' ability to reorganize in the new electronic environment will crucially depend on the flexibility and adaptability of workers and on firms' continuing efforts to innovate.

With e-commerce, the notion of competition changes.

The Internet opens up certain proprietary relationships, extends relations between sectors, and makes the electronic market accessible to smaller businesses, allowing them to address international markets. The nature of competition as well as firms' strategies and competitive advantages, also changes. Increasingly, new entrants compete to set standards and provide the interface, and Web-based alliances will play a strategic role in the emerging standard. Online firms also compete to capture customer information, and virtual communities could play a role in striking the balance of market power among consumers and suppliers. Work can be performed from a variety of locations and firms are increasingly exposed to global competition.

In some respects, smaller firms may have an advantage.

Smaller firms may in fact benefit from the opportunities offered by electronic commerce as they are unencumbered by existing relationships with traditional retail outlets or a large sales force. They may adopt a business model that forces larger, established competitors to restructure their existing relationships or be seen as non-competitive. It is also possible that conditions of access to networks and connectivity, technical standards, institutional arrangements and the market power of well-known brands could pose barriers to entry that might impede SME involvement.

Jobs and skills

Indirect, long-term employment effects due to demand for new or existing products are likely to offset shorter-term adjustments, although effects are likely to differ across countries.

There is concern that some of the efficiencies associated with electronic commerce will result in widespread dislocation of employment. Preliminary analysis conducted for this report, studies by other researchers and an examination of somewhat analogous activities (such as France's Minitel) does not support this concern. It seems more likely that there will be net employment creation in the short term as firms experiment with both modes of commerce. In the medium term, there may be some losses in certain sectors. The combination of new products, extended market reach, and income gains and lower prices will lead to net employment gains in the long term. Increased sales of software, online services, audio-visual, music, publishing and yet-to-be invented products should offset losses due to displacement of other products. These effects are likely to differ across countries, depending on the size and structure of e-commerce. These observations are speculative considering that e-commerce is currently very small and its potential has not been fully realised.

E-commerce is likely to accelerate upskilling/multi-skilling trends in the OECD area work force.

What is clearer is that electronic commerce will cause changes in the mix of skills required, driving demand for information technology (IT) professionals. This may exacerbate a supply shortage, which has received great attention in the United States, although it is not peculiar to that country. For electronic commerce, IT expertise also needs to be coupled with strong business applications skills, and therefore requires a flexible, multi-skilled work force. Apart from contingent skills needed to support electronic commerce transactions and applications, there will be a more structural and long-term shift in the skills required to perform economic activities online.

These requirements place new demands on schools and training facilities.

These skill requirements place new demands on schools and vocational training facilities. Familiarizing young students with the technology of the Internet can greatly reduce skills acquisition costs and decrease differences in participation rates in electronic commerce in various population segments. Work will be needed to measure and identify specific skill needs for e-commerce and opportunities for worker (re) qualification. It will be important for data to capture these changes in order to guide policy makers.

APPENDIX II

PRELIMINARY RESEARCH IDENTIFIES THE ECONOMIC IMPORTANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

As firms become linked across industries, electronic commerce offers the potential for technology and innovation policies that could foster system-wide gains in efficiency. While technology diffusion programs tend to focus on manufacturing, the largest contributions to system-wide gains may now come from services: wholesale trade, transportation and retail trade. The notion of "innovation", usually associated with high technology in manufacturing, should be expanded to include consumer goods and services and to take a more systemic perspective. In this regard, a recent study by the World Information Technology and Services Association (WITSA) indicates the economic importance of ICT.

The following is taken from the Executive Summary of the Digital Planet: The Global Information Economy, October 1998, a study presented by the World Information Technology and Services Alliance (WITSA) and conducted by International Data Corporation (IDC).

THE ECONOMIC IMPORTANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

How big is the worldwide Information and Communications Technology (ICT) market, and how fast is it growing? Which country markets and which specific technology segments show the largest net increase in ICT spending and usage? How does spending on ICT affect companies, individuals — and beyond that — economies, employment, creation of wealth, and knowledge?

Economists, ICT vendors, and policy makers have been trying to answer these and related questions for years. This study represents the first truly global analysis of these complex issues. The World Information Technology and Services Alliance (WITSA) commissioned International Data Corporation (IDC) to compile and analyze statistics that put the single, most significant technology-based social transformation of the late 20th century — the emergence of the information society — into perspective.

To obtain the broadest, most comprehensive view of the market, IDC studied the ICT industries in each of the 50 largest country markets around the globe (as well as four

“rest of world” regions), representing 98% of the world’s spending on ICT and 97% of the world’s aggregate Gross Domestic Product (GDP). The study also evaluated several social variables to measure the impact of ICT beyond business and into schools, homes, and everyday lives. The data were gathered and evaluated using consistent methodologies and definitions.

The answers are clear. Spending on information and communications technology is a critically important element of the worldwide economy. The ICT industry is among the most significant contributors to the overall economic health of the global economy. The sheer bulk of its contribution is enormous

- ICT is responsible for \$1.8 trillion in spending in 1997, approximately 6% of aggregate global GDP. This is greater than the GDP of France and almost twice the size of the GDP of the state of California.

- In 1997, ICT spending was nearly 40% larger than in 1992. It is growing 27% faster than the overall worldwide GDP, which has grown by an average of 5.5% annually for the past five years.

- The explosion in worldwide ICT cuts across traditional barriers — ICT spending has grown in every economy worldwide over the past five years, regardless of GDP or population growth rates.
- During 1992–1997, Asia/Pacific, Latin America, and Eastern Europe demonstrated the fastest growing ICT spending markets with 5-year average annual growth rates of 14.5%, 13.6%, and 9.5% respectively. The fact that Microsoft has recently replaced General Electric at the very top of the market capitalization tables (The Wall Street Journal, September 15, 1998) is further proof of the prominence of the ICT sector in the global economy.

As enormous as these contributions to worldwide economic growth and development may seem, the downstream effects on wealth building are actually the industry's greatest contribution. The simple description of raw size or barely bridled growth does not begin to measure the far-reaching effect of ICT throughout society. And it does not address a host of far more interesting questions that cut to the heart of issues important to technologists, managers, sociologists, legislators, and others, including:

Does ICT spending growth affect overall economic growth, or vice versa? Does ICT spending create jobs — good, high-paying career opportunities that drive per-capita wealth? Does ICT translate to increased productivity for businesses and other organizations? Can ICT really provide a level playing field for all citizens anywhere in the world?

Several clear patterns emerge from the data. Spending on information and communications technology is a key accelerator, catalyst, and multiplier of a wide variety of social and economic measures. It drives company growth and job growth. It increases access to information across geographical (north/south) and economic (rich/poor) boundaries.

The Web has the potential to create a level playing field if two challenges are addressed: establishing an extensive telecommunications backbone and satisfying the increased demands of the rapidly increasing user base. Analysis of the data reveals a series of beneficial effects of ICT spending on national economies and the world economy.

The study's data demonstrate that spending on ICT rebounds quickly in developing economies undergoing transitions. Mexico, for example, was able to recover from the 1994 peso crisis quickly and resume its investment in ICT. In keeping with this trend, IDC expects ICT spending in most Asia/Pacific countries to fully rebound following the economic crisis.

As overall demand increases with the creation of new wealth in the ICT market, a cycle occurs. Greater productivity creates new wealth for further investment. The implementation of more advanced IT strategies in businesses takes the cycle to another level, further improving productivity, increasing output, and, by extension, sales, revenues, and profits.

ICT spending favors improvement in global economic health and eases the inevitable ups and downs of economic cycles by creating companies and jobs, by improving efficiency and productivity, and by jump-starting economic recoveries.

Yet, spending on ICT carries another entire set of benefits — this time for individuals. Spending on ICT improves the quality of life by easing access to information and promoting a freer exchange of ideas in developing and developed economies alike:

- Over 118 million PCs are now installed in homes and schools worldwide, over three times the 36 million installed five years previously. Collectively, these PCs form a base comparable to the population of Japan.
- More than 50 million people are added to the global communications network every year as a result of investments in telecommunications infrastructures. Thus, the number of people with household connections increased more than 30% since 1992, growing to over 800 million connected individuals in 1997.
- Internet growth is exploding everywhere. The availability of Internet hosts has increased twenty-fold over 1992 to 25 million in 1997. In contrast to the print- and broadcast-dominated past, the proliferation of electronic information access provides incomparable breadth and depth of information for rich and poor nations and individuals alike — in many cases, life-enriching information.

The Internet and the availability of affordable computing solutions have lowered many of the geographical boundaries that hindered ICT development. This is enabling the creation of a global market for technology products and services. The last five years have witnessed the beginning of a shift in the traditional north/south divide separating the “haves” and “have-nots”.

Formerly thought of as “emerging markets,” Brazil and the People’s Republic of China (PRC) now rank among the 10 predominant ICT markets in the world as of 1997. This demonstrates ICT beneficiaries are no longer confined to the most developed and wealthiest nations in the world.

While the increases in ICT spending are visible in all countries, the technology focus of these investment efforts differs from region to region. Advanced markets (United States, Canada, Japan, and many Western European countries) are focusing on maintaining their existing ICT infrastructures and increasing efficiency by investing in software and IT services. Emerging markets, on the other hand, are now concentrating their efforts on building basic telecommunications and computer infrastructure. These markets are now more inviting to ICT vendors because they have the knowledge and desire to absorb the vendors’ products.

APPENDIX III

PEOPLink: A Global Electronic Commerce Model Working for Developing Countries

The AGB would like to point out a good example of how electronic commerce is already working for certain artisans in developing countries. While there are many national, regional, or international projects using electronic commerce, we wanted to highlight a global network of artisans that uses electronic commerce to expand their share of world trade.

PEOPLink is a non-profit organization that was created in 1994 by Dr. Daniel Salcedo, a long-time community organizer in Central America and the U.S., with assistance from the MacArthur Foundation and the InfoDev group at the World Bank. Its mission is to help allow artisans from developing countries to access global markets through electronic commerce. Toward that end, it has focused on creating a global network of artisans that uses the Internet and electronic commerce to expand their share of world trade.

PEOPLink's mission has special relevance for development because these artisans are usually drawn from the very poorest sectors of society. Most of them are women who live in remote rural settings. They use local materials to create products that are often a source of great pride and ethnic identity.

PEOPLink focuses on developing "Trading Partners" in each country where it operates. Each of these organizations, in turn, represents

thousands of local artisans. Currently there are Trading Partners in 14 countries, with 16 more expected to join this year. Each one gets a standard "toolkit" of digital and computer equipment, software and training procedures, permitting them to participate directly in electronic commerce, right from their home countries.

The toolkit fits in a backpack and costs about \$2500. The training required to set up the connections has been specially designed to the needs of the users. Most of the training is also available on-line at www.peophnk.org/training, and is supported by e-mail-based counselors. Each Trading Partners develops the whole gamut of skills that are essential for Web marketing, beginning with simple computer emails and the use of digital cameras. In just a few months, they are able to prepare their own simple Web pages and upload them directly to their portion of the PEOPLink Web site, where their information is assembled into catalogues geared to both wholesale and retail distribution.

Overall, this electronic commerce model appears to be working quite well - more than 300 products are offered by Trading Partners at the PEOPLink site, and sales are taking off. Customers are also enriched not only by the amazing variety of new goods they can find, but also by the fact that they now have access to a great deal of cultural information about the origins of the products they purchase. PEOPLink is just one example of how global electronic commerce can increase trade and promote economic and social development in developing countries.

APPENDIX IV

World Chamber Network

World Chambers Network (WCN) is designed to connect thousands of chambers of commerce around the world and their participating business-to-business member companies.

Most of WCN business opportunities are from small to medium sized companies. WCN offers companies new business opportunities, opening up for any company, new inquiries, new customers, new suppliers and new vendors in markets all around the world.

WCN provides trust. It is the only instrument of its kind that requires its members to adhere to the high business standards established by the chambers of commerce network. Over 80% of members of Chambers are classified as SME's. WCN creates new business development in all parts of the world.

WCN receives nearly 2 million visitors per year. Chambers of commerce from all around the world publish the WCN business and trade opportunities in local newsletters and journals.

WCN's main visitors come from countries with a high Internet penetration, like the USA, Europe, Israel, Singapore, Japan, Brazil, India, South Africa and Australia.

However, companies and chambers of commerce from all markets are utilizing the services of WCN. One of the WCN Consortium partners focuses on assisting Chambers and SME's in emerging economies to take advantage of the WCN services. Recently, a special

arrangement with the Eritrea National Chamber of Commerce was made to assist their member companies access new markets. With the internet still not legalized in this African nation, the services of WCN are now available. In addition, a special session of the G77 Chambers of Commerce regional meeting in Kampala presented WCN to over 50 chambers of commerce from the emerging nations, chambers of commerce which have as their core, the need to service SME's.

WCN Business Opportunities have proven successful in opening up new business leads in a variety of markets. Some examples include:

- Swedish seller of telephone accessories – buyers from Ghana and USA;
- Seller of bodycare and cosmetic products – contacts from Ireland, Italy, Ivory Coast, Tunisia, and Norway
- Company selling soya beans – answers from France, Germany, Croatia and Georgia
- Importer of dental equipment opened up an excellent contact in China and have been trading with each other for some time
- A company wishing to act as a local partner for technical industrial products received responses from Mexico, China, Croatia, Pakistan and Spain.

Appendix V

Alliance for Global Business

The Alliance for Global Business (AGB) is a coordinating mechanism of leading international trade associations created to provide business leadership on information society issues and electronic commerce. Jointly, these organizations represent the bulk of commercial parties involved in both electronic and traditional commerce in almost all countries in the world. The coalition represents a diverse cross section of business in over 140 countries.

The founding members of the Alliance are the:

- Business and Industry Advisory Committee to the OECD (BIAC),
- Global Information Infrastructure Commission (GIIC),
- International Chamber of Commerce (ICC),
- International Telecommunications Users Group (INTUG), and,
- World Information Technology and Services Alliance (WITSA).

The Alliance has issued the Global Action Plan for Electronic Commerce, a living and evolving document, calls for minimal government regulation and emphasizes business self-regulation as the most effective way of building confidence in marketing and transactions over open networks. The initial version of the plan was officially submitted to the OECD governments at the October 1998 OECD Ministerial Conference on Electronic Commerce. It sets out industry's views on the full range of e-commerce issues, including privacy, cryptography, consumer protection in the online environment, taxation of e-commerce, intellectual property protection, standards, and competition and Internet governance.

It describes in detail business initiatives in all these fields so that governments are informed of the extent to which self-regulation is already operating and what further initiatives are under development. The plan's stated aim is to create trust in e-commerce across the whole spectrum of providers of services and goods.

In addition to describing specific business actions and commitments in the field of e-commerce, the plan identifies business expectations concerning government action. Business would like to see governments concentrate on providing a minimalist and predictable legal framework in specific areas of government competence such as intellectual property protection, taxation, and the removal of barriers to competition in providing the underlying infrastructure. An annex to the action plan contained summaries of various business initiatives. The Action Plan has been well received. It has provided a useful starting point in clarifying the roles and responsibilities of both governments and business. The Action Plan is meant to be a living document and will provide an updated report on the status of business efforts to effectively develop self-regulatory solutions in the electronic environment. Furthermore, international organizations must ensure that their initiatives do not duplicate or contradict each other.

The global business action plan will be used by the coalition to convey industry's views on electronic commerce both to national governments and to intergovernmental organizations addressing issues relevant to electronic commerce. Currently, the coalition is using the document in discussions with several other international organizations including the World Trade Organization, the Asia Pacific Economic Cooperation (APEC) forum, The UN Commission on international trade and Development (UNCTAD), the European Commission, the UN Economic Commission for Africa, the Free Trade Area of the Americas, and others.

BIAC - The Business and Industry Advisory Committee to the OECD

The Business and Industry Advisory Committee to the OECD (BIAC) is the voice of business from the economically advanced democratic nations of the world. Recognized by the OECD since 1962 as its business advisory counterpart, BIAC has the mission of ensuring that the OECD hears a broad-based, considered business advice on all sectors of activity that it embarks upon. BIAC's membership consists of the principal industrial and employers' organizations of the OECD Member countries. These represent the majority in terms of employment, output, assets and investment by the private sector in the advanced market economies. Over the years BIAC, its member organizations, and their member companies have been deeply involved in the work of OECD on information and communications and electronic commerce, through direct participation in OECD committees as observer and by providing technical and policy advice to various processes that develop OECD instruments such as the 1980 "Privacy Guidelines" or more recent work on cryptography policy.

GIIC - Forum for the Global Information Infrastructure

Launched in 1995, the Forum for the Global Information Infrastructure (GIIC) is a private sector advocacy group bringing together 50+ CEOs and Presidents of major international corporations with a stake in the development of the GII. GIIC members are from both developed and developing countries. The GIIC serves as a bridge between diverse players and business communities around the world, thus fostering the global dialogue necessary to address critical issues in building the global information infrastructure. The GIIC has established on-going policy dialogues with governments and international organizations, providing them with pragmatic advice and input as they transition to the new body of policies and laws needed to support a secure, seamless global communications environment and marketplace. Four main thrusts of GIIC activity are: 1) facilitating the creation of harmonized rules to support global electronic commerce; 2) bringing developing countries into the process of building the global information economy; 3) spurring the

reform of education systems to prepare for the Information Age; and 4) fostering an open environment for the development of information infrastructure and services. GIIC membership is representative of all the major elements of the information technology sector, including telecommunications hardware and services providers, computer hardware and software companies, cable, broadcast, and publishing companies, new satellite companies, international organizations, governments, and academics. The GIIC's regional co-chairs are H. Brian Thompson, (chairman and CEO of Universal Telecommunications), Volker Jung, (executive vice president, member of the managing board, Siemens), and Michio Naruto (vice chairman, Fujitsu). W. Bowman Cutter (managing director of E.M. Warburg Pincus) acts as the GIIC managing director.

ICC - International Chamber of Commerce

ICC is the world business organization. With corporate and business organization membership in more than 130 countries, it is the only representative body that speaks with authority on behalf of enterprises from all sectors in every part of the world. Founded in 1919, ICC's purpose is to promote an open international trade and investment system and the market economy worldwide. Its rules for international trade transactions and trade finance are accepted globally by traders, governments and judges. The ICC International Court of Arbitration is the world's leading institution of its kind. ICC brings together executives and experts from all sectors of business to establish the business stance on broad issues of trade and investment policy as well as on vital technical or legal subjects. The ICC's broad framework of rules for international trade and commerce evolves continuously to take into account changes in business practice. ICC has issued best practice rules for electronic commerce since the 1980s and continues to harmonize business rules and practices to meet the needs of the information society.

INTUG - International Telecommunication Users Group

INTUG is an international association of users of communications technology and applications. It has an extremely wide constituency. Founded in 1974, it has its Secretariat in Brussels where it is registered as an international non-profit organization. It meets in plenary session four times a year. Members include national users groups which represent the interests of users in Europe, the Americas, Asia-Pacific and Africa. Associate and individual members come from major multinational enterprises, academia, law and other relevant industry sectors. Many of INTUG's member groups have been particularly successful in their interaction with national government policy makers; also in regional economic policy forums. INTUG itself promotes the interests of all users at the international level and ensures that the voice of the user is clearly heard whenever communications policy issues are addressed. Its Special Interest Group on Y2K issues has been extremely active and was a specific focus of the INTUG meeting in Brussels in June 1998.

WITSA - World Information Technology and Services Alliance

The World Information Technology and Services Alliance (WITSA) is a consortium of information technology industry associations from economies around the world. Serving as the global voice of the information technology industry, WITSA is dedicated to:

- advocating policies that advance the industry's growth and development;
- facilitating international trade and investment in information technology products and services; and
- providing members with a vast network of contacts in nearly every geographic region of the world.

WITSA:

- serves as a forum for the identification of common issues and views;
- formulates positions on information technology issues, including the recently concluded World Trade Organization (WTO) Agreement on Basic Telecommunications Services;
- voices the concerns of the international information technology community at

multilateral organizations including the WTO, the World Intellectual Property Organization (WIPO), the G-7 and other international fora where policies affecting industry interests are developed;

- provides information on international marketing and business development;
- promotes information sharing on information technology policy developments throughout the world; and
- hosts the biannual World Congress on Information Technology.