# The Potential for Transatlantic Cooperation in Telecommunications Service Trade in Asia

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Building upon the progress made by the World Trade Organization (WTO) through the February 1997 Agreement on Basic Telecommunications Services, electronic commerce now appears poised to emerge as a central theme for international trade negotiations in the telecommunications arena. Indeed, electronic commerce is one of the most economically significant telecommunications application as it includes all commercial transactions that occur over networked digital media, ranging from stock trades, to manufacturing orders, to airline reservations. The WTO agreement represents significant progress in opening the underlying telecommunications infrastructure, the delivery mechanism for electronic commerce, to global competition.

The WTO agreement further reflects a fundamental transition in the international telecommunications policy regime, from the past juxtaposition of national monopolies towards increasing international competition between and among these and other players. Until now, international telecommunications were governed through a mix of national control and bilateral treaties, in addition to international tariffs and standards set by the International Telecommunications Union. The emerging regime is instead articulated around competition within increasingly open markets, where regulation focuses primarily upon the conduct of market-players. In short, the WTO agreement marks a crucial first step towards establishing an international competition policy for telecommunications.

The challenge today is to build upon that first step, not only to deepen but also to broaden the WTO gains. One promising avenue is to widen the scope of negotiating ground, from telecommunications *stricto sensu* to electronic commerce. Steps are already being taken in this direction. During the first half of 1997, Europe, Japan, and the United States each have issued position papers on electronic commerce. In April 1997, the European Commission (EC) released *A European Initiative in Electronic Commerce*; the Japanese Ministry of International Trade and Industry (MITI) issued *Towards the Age of the Digital Economy* in May 1997; and, in July 1997, the Clinton Administration released *A Framework for Global Electronic Commerce*.

These three documents can be read not only as domestic policy position statements but also, as the outlines of an agenda for international trade negotiation. Indeed, each stakes out the contours of the trade partners' negotiating positions. Their identification of electronic commerce as the new negotiating ground is noteworthy. While the negotiating positions outlined in these documents do include traditional telecommunications trade issues, such as telecommunications

infrastructure competition and interoperability, they also add new issues (squarely related to network-based services) and place them all within a broader and more compelling context. Indeed, the expanded agenda includes a variety of issues related to communications services and applications, such as electronic payments and intellectual property, all of which are key components of the emerging set of network-based activities, globally characterized as electronic commerce.

This paper examines the possible implications of such a shift in the negotiation agenda, from traditional telecommunications to the broader issue of electronic commerce. To clarify the emerging framework, we first examine the meaning of the underlying transition from network-aided markets to network-marketplaces. In the second section, we compare the three electronic commerce policy documents (U.S., EC, and Japan), highlighting common ground and divergence. We conclude in the third section that this transition opens new prospects for transatlantic cooperation in trade negotiations, especially as it allows the US and Europe to address jointly trade issues vis a vis Japan as well as the rest of Asia.

## I. ELECTRONIC COMMERCE: FROM NETWORK-AIDED MARKETS TO NETWORK-MARKETPLACES

Electronic commerce is nothing new: electronic transmission and processing technologies have long served to support and facilitate commercial activities. Well before the phrase "E-commerce" had even been coined, stock quotes and purchase orders were sent by fax or telephone, data communications networks carried electronic fund transfers or design specifications, electronic data interchange (EDI) services transmitted orders up and down the supply chain, software vendors sold update patches and device drivers which could be downloaded from their bulletin board system. Since their inception, electronic technologies have assisted in the entire range of commercial activities, from identifying possible commercial partners and obtaining product or pricing information, to negotiating the terms of a contract, to arranging the delivery of a product.

So why is electronic commerce capturing so much attention at this time, and why are the governments of the United States, Europe, and Japan focusing their efforts in this area now? The answer lies in the coming of age of the Internet, which has now become a mainstream network,

global in reach, universally accessible. In the past, different sets of commercial partners relied on different, incompatible networks. With the Internet, diverse commercial activities once confined to separate electronic networks can now, for the first time, take place over a single, integrated "network of networks".

The rapidly expanding availability of the Internet among commercial partners has brought into sharp focus the fundamental transition underway in the relationship between communication networks and commercial activities. While communication networks have always been an important ***aid*** to the market and to market activities, the network itself is now increasingly becoming a market***place,*** that is, the space where buyers meet sellers, negotiate prices and quantities, agree on delivery terms, and exchange goods and payments. Key elements of that transition are captured in Table 1. Traditional electronic commerce refers to transactions conducted primarily over private data networks. In contrast, Internet E-commerce employs a network of mostly public networks.

As it becomes mainstream, the Internet is turning into a global network marketplace for electronic commerce, creating electronic spaces where buyers and sellers interact on-line and conduct the full range of commercial activities which once took place in the physical world. This Internet marketplace transforms and expands commercial links as companies have direct access not only to other companies, but to consumers with specific preferences. For example, advertisements for discount airfares can be timed to appear when an Internet user searches for on-line travel information. Moreover, the scale of commerce over the Internet is now global, whereas previously private data networks tended to be industry specific (e.g., commerce among financial institutions over private data networks). Since Internet access becomes possible with the relatively small capital investment of a personal computer with a network connection and a subscription to an Internet service provider, start-up costs can be low. This means that the number of potential market-players is enormous, and not limited to traditional players. And, since Internet communication costs are indifferent to whether transactions are domestic or international, the Internet potentially offers even small and medium-size enterprises inexpensive access to global markets. While in the past, electronic commerce largely took place within private networks, where standards and access procedures created effective barriers to participation by outsiders, the Internet's open standards and public access points create the potential for much greater openness to new entrants.

**Table 1.**
**A Comparison of Traditional and Internet Electronic Commerce**

| | TRADITIONAL E-COMMERCE | INTERNET E-COMMERCE |
|---|---|---|
| **COMMERCIAL LINKS** | business-to-business only | business-to-consumers; business-to-business; business-to-public administration; user-to-user |
| **SCALE AND SCOPE** | often national, industry specific | global, cross-industry |
| **PARTICIPANTS** | closed "clubs" | open marketplace |
| **NUMBER OF PLAYERS** | limited | unlimited |
| **ATTRIBUTE OF NETWORK** | closed, proprietary | open, public, unprotected |
| **PARTNERS** | known | known and unknown |
| **SECURITY** | designed into the network from the start | absent initially, can be added later |
| **MARKET FOCUS** | market as a club | market as an network |

Source: Adapted from the European Commission, "A European Initiative in Electronic Commerce," April 1997.

The economic stakes are high. Many predict that the Internet will transform electronic commerce into an set of economic activities with extraordinary growth potential. The American Electronics Association estimates that electronic commerce over the Internet amounted to $200 million in 1995.[1] Forrester Research pegs the 1996 figure at $350 million and predicts that this number will grow to $6 billion by the year 2000.[2] Even more optimistic is the U.S. Treasury Secretary Lawrence Summers who, in testimony before the Senate Commerce Subcommittee on Communications forecasted that Internet commerce will account for "tens of billions of dollars" by the year 2000.[3]

[1] American Electronics Association as quoted in Magaziner, Ira, A Framework for Global Electronic Commerce. Washington, DC: The White House, Information Infrastructure Task Force, July 1997, footnote 4
[2] Jim Seymour, "Making On-Line Commerce Work," *PC Magazine*, June 10, 1997, p. 93.
[3] Testimony by Treasury Secretary Lawrence Summers on Internet taxation before the Senate Commerce Subcommittee on Communications, May 22, 1997.

This fundamental transition, from network-aided market to network-marketplace, raises a new set of policy issues: Can existing national and international policies aimed at creating fair and efficient markets be ported over to the emerging network-marketplaces? What new issues arise? These questions lie at the root of the newfound government concern with electronic commerce. To unravel these issues, it is useful to conceptualize three independent components of electronic commerce: infrastructure, network-marketplace, and transactions. Each raises distinct categories of policy concerns, each with different scope for transatlantic agreement.

First, electronic commerce ultimately rests upon a network infrastructure, composed of a variety of physical networks, built around many different technologies, increasingly interconnected. For example, where previously telephony, cable television, and satellite transmission were operated and regulated as distinct industries, they are converging. Together, they constitute the pathways along which messages corresponding to commercial activities travel. Widespread diffusion of electronic commerce requires an advanced network infrastructure that can be accessed equitably and on a technologically neutral basis. Without measures to ensure equitable access to the network, neither market-makers nor market-players would be able to compete on equal terms. Whole market segments will risk being underserved if not ignored. And, if different rules applied to network access for different technologies (e.g., guaranteeing open access only for wireline but not satellite communications), then whole industry segments would be disadvantaged. Ultimately, a technology neutral policy ensures a level-playing field for all potential network access providers, market-makers and market-players. In order to achieve the twin goals of equitable and technology neutral access to the network marketplace, governments must set the ground rules that guarantee infrastructure access, network interoperability, and technical standards.

Second, a network marketplace is created upon this infrastructure by defining, through software configuration, the rules under which commercial activities will take place. Which market-players will have access? What are the software defined processes for search and negotiation? What are the guarantees surrounding the privacy and solvency of electronic deals? Infinite variations of policy responses are possible, depending on the governance structure of each network-marketplace and resulting in various degrees of openness, structure, formality, permanence, or security. Some of today's network-marketplaces are quite loose and unstructured while others are formally structured. For example, anyone with basic on-line access can join the

Internet newsgroup "rec.antiques.marketplace" for free but to use the airline reservation systems SABRE or access the NASDAQ, users must register in advance and pay a fee. "Market-makers," those actors who define the key characteristics of the network-marketplaces through their control over network configurations, will emerge as an important category of players in electronic commerce.

The newfound possibility for actors who control aspects of network configuration to determine the terms of trade within specific network-marketplaces raises important issues of market fairness. Indeed, within the context of the transition from network-aided markets to network-marketplace, it becomes possible to leverage control over the network infrastructure into advantage in the network-marketplace. Neither of the three position papers directly confronts this issue, nor identifies "network-marketplaces" as emerging institutions. Yet many of the concerns expressed in these position papers directly bear upon these issues. Most obviously related perhaps is their call for the creation of a "Uniform Commercial Code" for electronic transactions. In addition, concerns with issues such as privacy or intellectual property protection relate to the definition of ground rules for conducting commerce within network-marketplaces.

The third component of electronic commerce are the electronic transactions that occur within the network-marketplaces. Those selling or buying goods and services will rely on a variety of electronic enablers and applications to transact their business, such as means of ensuring data security and user privacy as well as electronic payment schemes. They will also require a set of guarantees about intellectual property rights and content regulation. As currently stated, the three position papers are primarily focused at this level, aimed toward a global definition of the characteristics of electronic transactions.

While they each have their own structure and taxonomy for these issues, the three policy statements on electronic commerce by the U.S., Europe, and Japan, fundamentally address seven common issue areas: 1) infrastructure and interoperability, 2) legal framework, 3) taxation, 4) security/privacy, 5) electronic payments, 6) intellectual property rights, and 7) content regulation. These seven areas roughly map onto the three components of electronic commerce as depicted in Table 2.

**Table 2.**
**Key Policy Issues for Electronic Commerce**

| | **United States (Magaziner Report)** | **Europe (EC Report)** | **Japan (MITI Report)** |
|---|---|---|---|
| **Infrastructure** *Delivery mechanisms* | Telecommunications infrastructure and interoperability<br>Technical standards | Eliminating capacity bottlenecks<br>Interoperability/ standardization | Interoperability (open specifications) |
| **Network-Marketplace** *Generic ground rules for electronic commerce* | "Uniform Commercial Code" for Internet commerce | Legal framework | Rules for commercial transactions |
| **Transactions**<br><br>*Tools & safeguards for electronic transactions* | Electronic payment systems<br>Intellectual property protection<br>Privacy<br>Security<br>Content<br>Customs and taxation | Electronic money, payment systems<br>Intellectual property protection<br>Privacy<br>Data Security<br>Tax environment | Electronic data interchange<br>Intellectual property laws<br>Privacy<br>Security<br>Content<br>Consumer protection<br>Tax laws |

The next section will compare the three countries' proposals in these seven areas. These policy issues broaden the traditional negotiation agendas in both trade and telecommunications, expanding the stakes and involving additional stakeholders. An examination of the negotiating positions of the European Union, Japan and the U.S. across these new issues brings potential tensions and possible agreements into sharper focus, and helps identify issue areas where transatlantic cooperation would be promising. Before turning to that comparison however, two comments about our overall argument are in order.

First, our choice to place infrastructure at the top of the list when the topic comes later and, indeed, close to the end in the various policy proposal is intentional. The establishment of rules and standards guaranteeing open access to the underlying network infrastructure and interoperability among its various elements is, in our view, fundamental to the establishment of fair electronic markets. Differential access to the underlying infrastructure would directly translate into differential advantage in the network-marketplace built upon this infrastructure. Further, with a view towards the trade negotiation agenda suggested by this analysis, starting with the infrastructure issue area would allow the negotiating partners to build upon their success

in the WTO. Finally, more so than with any other of the seven areas, the US and Europe positions appear to be converging on infrastructure, highlighting a conspicuous lack of progress in Asian countries and Japan in particular. This would therefore constitute an excellent basis upon which to build transatlantic cooperation.

Second, our emphasis on network-marketplaces as a structuring theme for the argument is equally important. While the various concerns expressed in the three policy papers ultimately revolve around the definition of elements for the network-marketplaces, they never squarely address the emergence of this new economic institution, nor do they discuss its governance. Clearly identifying network-marketplaces as a policy focus would be analytically useful. But perhaps more importantly, it would set up a policy framework with expanded potential for transatlantic cooperation, aimed at the definition of a competition policy for electronic commerce. Given the global nature of electronic commerce, a coordinated competition policy is crucial to the continued viability and growth of electronic commerce. Indeed, while there are many divergent views about the practical implementation of individual transaction characteristics (encryption is a good example), we believe that the US and Europe could reach agreement more easily about what a networked marketplace should look like to be a fair, free-trade area. The US Uniform Commercial Code (UCC) and the European tradition of competition policy create the basis for such transatlantic cooperation.

## II. COMPARING THE THREE POLICY STATEMENTS

Initially, the policy statements of the U.S., Europe, and Japan appear largely similar because they address common issue areas, namely 1) infrastructure and interoperability , 2) legal framework , 3) taxation, 4) security/privacy, 5) electronic payments, 6) intellectual property rights, and 7) content regulation. All of these statements espouse similar beliefs about the importance of market competition and minimal government regulation. However, they reflect a fundamentally different assumption about the proper roles of the government and the private sector. Before comparing these policy positions in detail, it is important to first gain an understanding of this key assumption.

All three of the policy statements use terms indicating a belief in market-driven systems. The U.S. is the most explicit: "Innovation, expanded services, broader participation, and lower

prices will arise in a market-driven arena, not in an environment that operates as a regulated industry."[4] Europe refers to the importance of ensuring for electronic commerce the same freedoms offered by the European Union's "Single Market:" "free movement of goods, persons, services and capital together with the freedom of establishment."[5] In a shift from a tradition of concentrated industry regulation, Japan appears to embrace market forces: "If new problems should arise from the introduction of information technology for the digital economy...these matters should basically be solved by...competition in the marketplace."[6]

The U.S., Europe, and Japan also appear to agree on the importance of minimizing regulation where possible. Again, the U.S. is the most far-reaching, with a specific policy prescription to eliminate unnecessary government intervention: "Governments should refrain from imposing new and unnecessary regulations, bureaucratic procedures, or taxes and tariffs on commercial activities that take place via the Internet."[7] The European position, while not as specific, is in keeping with the U.S.: "Any legislative action should impose the fewest possible burdens on the market..."[8] And Japan echoes the stance: "Even if considering regulations should become unavoidable, they should be kept at a minimum..."[9]

Despite this pronouncement, however, both the Japanese Ministry of Posts and Telecommunications (MPT) and the Ministry of International Trade and Industry (MITI) have developed far-reaching strategic plans that require considerable government intervention and regulation so that advanced "info-communications" (MPT's term)/"information infrastructure" (MITI's term) towards meeting social goals,[10] It is important to note here that policy initiatives related to Internet commerce come from two sources, the Ministry of Post and Telecommunications (MPT) and the Ministry of International Trade and Industry (MITI). The basis for MPT jurisdiction is that the agency regulates telecommunications service providers whereas the rationale for MITI involvement is that the agency regulates the computer industry.

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4 Magaziner, p. 3.

5 European Commission, *A European Initiative in Electronic Commerce,* April 15, 1997, p. 12. Available Internet: http://www.ispo.cec.be/initiat.html.

6 MITI, *Towards the Age of the Digital Economy--For Rapid Progress in the Japanese Economy and World Economic Growth in the 21st* Century, May 1, 1997, p. 4. Available Internet: http://www.miti.go.jp.

7 Magaziner, p. 3.

8 European Commission, p. 12.

9 MITI, p. 4.

10 For MPT's strategic plan, see *Vision 21 for Info-Communications: Interim Report,"* April 17, 1997. For MITI's strategic plan, refer to *Program for Advanced Information Infrastructure,* May 1994. Available Internet: http://www.glocom.ac.jp/news/MITI-doc.html.

Because Internet commerce reflects the convergence of the telecommunications and computer industries, both agencies have vested, and often contentious, interests in the area. For purposes of this comparison, the focus will be on the MITI policy position.

Similarly, the seemingly shared belief in market-driven systems and minimal government intervention is not necessarily manifested in such pivotal areas as who should be responsible for developing and implementing information infrastructure. While the U.S. expects the private sector to take the lead, this role will be assumed by the governments in Europe through ambitious publicly-financed research and development programs such as Esprit for information technologies and Advance Communications Technologies & Services (ACTS).[11] As in Europe, the government in Japan has made the promotion of research and development a priority.[12] Further divergence will be revealed in the detailed analysis of the policy statements that follows.

## A. Infrastructure and Interoperability

### 1. Configuration and Operation

The way telecommunications markets are traditionally configured and the way they operate can form structural barriers to achieving unfettered electronic commerce. For the U.S., these barriers primarily take the form of anti-competitive behaviors demonstrated by incumbent telecommunications service providers.[13]In Europe, these barriers lie in capacity bottlenecks and the difficulty of achieving interoperability in the absence of standards.[14] Japan faces the need for market reforms, network infrastructure development, and standardization.[15]

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[11] A catalog of research and development projects sponsored by the European Community is available on the Internet at http://www.cordis.lu/cordis/euro_rd.html. See also the hompages for Esprit (http://www2.cordis.lu/esprit/src/intro.htm.) and ACTS (http://www.infowin.org/ACTS/).

[12] See MPT, *Vision 21 for Info-Communications: Interim Report,"* April 17, 1997 and MITI, *Program for Advanced Information Infrastructure,* May 1994.

[13] Until the 1982 court decision that forced AT&T to divest its local telephony operations, AT&T was the monopoly telecommunications service provider. Under this agreement, AT&T retained long distance operations, but was subject to competition. Regional Bell operating companies (RBOCs) were established to provide monopoly local services by region (e.g., NYNEX and Pacific Bell). "Incumbents" generally refer to AT&T in the long distance market and to the RBOCS in the local services market.

[14] Historically, the European telecommunications markets have been dominated by state-owned monopoly carriers who, in the absence of competition, have lagged in infrastructure investment and buildout. The Commission recognizes that capacity bottlenecks threaten the full development of electronic commerce. A lack of standards pose a similar threat: currently in Europe, none of over 20 types of "stored value" cards (pre-paid cash cards) use compatible technologies (European Commission, p. 9).

[15] Of these, market reforms is the most critical. While the Japanese government reconfigured the telecommunications market in 1985 to introduce competition, incumbent Nippon Telephone and Telegraph (NTT) continues to dominate the market with 93% market share of all telephone calls in 1996.

**U.S.**

The U.S. is primarily concerned about five areas in which monopolistic behaviors can stunt the growth of information infrastructure: 1) leased lines, 2) local loop pricing, 3) interconnection, 4) equipment attachments to the network, 5) Internet voice and multimedia.[16] Artificially high leased lines prices pose barriers for market entry of Internet service providers. Similarly inflated prices in the local loop result in high charges to subscribers. Incumbent operators are likely to offer interconnection on a limited and discriminatory basis, thereby distorting the market. The same incumbents can shape the market for equipment by dictating what are acceptable attachments and what are not. Finally, the emergence of telephony over the Internet raises important questions about whether traditional telephony regulations should be applied to the Internet.

**Europe**

A key objective of the Commission is eliminating capacity bottlenecks which, according to the initiative, fall squarely within the purview of member governments of the European Union (E.U.).[17] Interoperability is also a priority concern. In June 1997, the Commission plans to announce specific activities related to standardizing electronic commerce. In October 1997, the Commission will host a global conference on standardization in Brussels. Specific objectives for publicly-funded research and development programs include a high-speed network for research activities and testing facilities as well as education and training programs for small businesses, schools, and local governments.[18] Internationally, the Commission intends to pursue mutual recognition agreements that provide single market access for products that undergo certification procedures in their home countries.

**Japan**

Japan intends to achieve interoperability through industry-led efforts to ensure compatibility among different types of interfaces. The policy statement warns about the ability of

[16] Magaziner, p. 14.
[17] Specific measures are included in the European Union Fifth Framework Program and the Trans-European Networks research program. See http://www.cordis.lu/cordis/01.html.
[18] European Commission, p. 8.

technical standards to distort the market in favor of one system over another. Thus, while the government will encourage a public process for standardization, it will also safeguard the process to ensure market competition.[19]

A crucial area that the MITI initiative fails to address is market reform. While in the U.S., and to some degree in Europe as well, telecommunications markets are highly competitive, competition in the Japanese telecommunications market is severely hampered by the dominance of the Nippon Telephone and Telegraph Corporation (NTT), in which the government maintains majority ownership. While NTT is scheduled for reorganization, it is far from certain that this measure will result in new entrants to the market and lower price, given the many vested political and economic interests that have perpetuated NTT's influence over the market. While this issue is primarily the responsibility of the MPT, it may be the largest obstacle to infrastructure development for electronic commerce in Japan.

## B. Market Making: Ground Rules for Network-Marketplaces

### 1. Legal Framework

What constitutes a legal contract over the Internet? How can performance of electronic contracts be assessed? For legal disputes, should electronic communications be allowed as evidence in courts? For financial accountings, what measures are necessary to accommodate electronic records as a substitute for paper records? These are the types of issues that must be addressed in order to establish a legal framework for electronic commerce. Essentially, the U.S., Europe, and Japan all face the same critical question: to what extent can existing rules for commerce be extended to cover electronic commerce? The policy response has been similar for all: make revisions to the current framework.

**U.S.**

The U.S. proposes domestic revisions to the "Uniform Commercial Code" (UCC). Sponsored by the National Conference of Commissioners of Uniform State Law and the American Law Institute, this code is currently being revised to cover on-line transactions.[20] For international electronic commerce, the U.S. supports the model law developed by the United

[19] MITI (1997), p. 21.
[20] Magaziner, p. 7.

Nations Commission on International Trade Law (UNCITL). This model law addresses 1) the validity of electronic contracts, 2) standards for meeting electronic contract obligations, 3) the definition of electronic writing and what constitutes an original document, 4) standards for electronic signatures, and 5) the admission of computer evidence in legal proceedings.[21] The U.S. would like to see the development of a global "Uniform Commercial Code " based on the UNCITL model law.

In addition, the U.S. will pursue work in the following areas: 1) promoting government use of official electronic communications, 2) harmonizing domestic and international rules, 3) developing electronic registries, 4) establishing an international framework for dispute resolution, and 5) developing contract performance rules for transactions involving software and electronic data.[22]

**Europe**

The European Commission has already begun to develop a legal framework for Internet commerce. This framework is composed of a directive specific to on-line transactions, "horizontal" or cross-industry directives on consumer protection, and "sectoral" directives in industries that rely on electronic communications (i.e., consumer credit, travel, timeshares).[23] Yet the framework is far from complete. The European initiative identifies several important areas that must be updated to accommodate Internet commerce. These include document and signature authentication and the validity of electronic documents as legal evidence. Additionally, financial accounting and audit rules must be changed to allow for electronic billing.[24]

**Japan**

In comparison, Japan has yet to grapple concretely with the need for a legal framework to encompass electronic commerce. Instead, MITI urges that commercial practices be left for the private sector to decide. The initiative merely identifies such key issues as electronic data interchange, admissibility of electronically-generated evidence, and accounting laws as areas that may require government intervention once electronic commerce becomes widespread.

[21] Magaziner, p. 7
[22] Magaziner, p. 7.
[23] European Commission, p. 14.
[24] European Commission, p. 14.

## C. Transactions: Tools and Safeguards

### 1. Taxation

Internet commerce challenges the traditional implementation of taxation in at least two ways. First, the fact that the Internet facilitates transactions between buyers and sellers unconstrained by geography makes geography-dependent taxation (such as a state sales tax) unenforceable. Second, the traditional object of taxation has been material goods, not services. But the Internet has enabled the electronic delivery of products, including software and services. How should these products and services be taxed? The U.S. initiative proposes a radical solution: declare electronic commerce duty-free. In contrast, the European initiative is conservative; it proposes to extend existing tax regimes, specifically the value-added tax, to electronic commerce. The Japanese initiative mentions the issue only in passing.

**U.S.**

The U.S. initiative argues that, since World War II, the trend has been to reduce tariffs in order to capture the benefits of free trade. Burdening electronic commerce with taxation runs counter to this trend and would reduce the benefits of free trade. Moreover, given the characteristics of electronic commerce that make taxation problematic, the U.S. does not believe that the existing tax regime can be easily extended to accommodate on-line transactions. Specifically, the U.S. initiative proposes 1) that the Internet be declared a duty-free environment and 2) that no new taxes be imposed on electronic commerce.[25]

At the same time, should new taxes be imposed despite these recommendations, the U.S. advocates the following regulatory principles:

1. [Taxes] should neither distort nor hinder commerce.

2. The [tax] system should be simple and transparent.

3. The [tax] system should be able to accommodate tax systems used by the U.S. and our international partners.[26]

The U.S. position is strangely contradictory: the U.S. appears to be at once rejecting and accepting the notion that existing tax systems should be extended to cover electronic commerce.

[25] Magaziner, p. 4.
[26] Magaziner, p. 4.

This may reflect a tension between a policy ideal (no new taxes) and a policy reality (governments will always seek means of revenue).

**Europe**

Under the heading "Ensuring a clear and neutral tax environment," the European Commission's approach to taxation is composed of three goals: 1) legal certainty, 2) the avoidance of "undue revenue losses," and 3) tax neutrality."[27] According to the European initiative, legal certainty is achieved when tax rules are "clear, transparent, and predictable." Revenue losses can occur unless the government develops measures to counteract tax evasion for on-line transactions. Taxation should be neutral to whether commerce is conducted on-line or through traditional means.

Internet commerce is subject to the value-added tax (VAT) in Europe. Taking a conservative position, the Commission will be examining the extent to which current VAT legislation can be extended to cover Internet commerce.

**Japan**

Japan merely identifies the difficulties that electronic commerce poses to existing tax laws. That MITI is unwilling to comment further may be a reflection of the fact that taxation is solely the responsibility of the Ministry of Finance.

**2. Security/Privacy**

Without adequate levels of security and privacy, Internet commerce cannot grow. The U.S., Europe, and Japan have all turned to encryption as the primary means to ensure security, but they differ in their approaches. The U.S. insists on safeguards for national security reasons while the European Commission considers these safeguards to be trade barriers. Surprisingly, Japan argues against national standards for encryption, asserting that industry, responding to market forces, should be responsible for arriving at a technological solution to the problem. MITI also includes computer virus countermeasures as a means to ensure security.

Privacy can have many meanings, but in the context of Internet commerce, it generally refers to the user's ability to control access to personal data. Again, the approaches in the U.S.,

[27] European Commission, p. 16.

Europe, and Japan differ. The U.S. has developed "Privacy Principles" as part of a market-based approach to privacy. The European Commission prefers to handle the issue separately from Internet commerce. Rejecting mandatory regulations, Japan favors voluntary guidelines for personal data protection.

**U.S.**

Encryption technology has been a highly divisive issue for the Clinton Administration. The central paradox that makes the issue of cryptography so contentious is that while encryption affords increased protection of proprietary and sensitive information, including personal data, it is equally effective in concealing illegal activity such as drug trafficking and terrorism. Thus, while the U.S. software industry is anxious to exploit global markets for encryption products, if faces considerable opposition from federal law enforcement and national security agencies (i.e., the Department of Justice, the Department of Defense, and the National Security Agency).

The government has proposed dividing the market into products for export and products for domestic use only. For the next two years, companies would be permitted to export products that use a 56-bit data encryption standard or equivalent. In exchange, these companies must develop more powerful encryption products "that protect public safety and national security," and presumably fall under government control. The 56-bit standard ensures that the U.S. government is able to decode encrypted data if these are material to criminal investigation. No restrictions would apply to cryptography for domestic use.[28] However, this initiative would only be a short-term solution to the problem.

In order to safeguard long term national security concerns, the U.S. is pursuing a key recovery approach to cryptography. Keys that enable the decoding of encrypted data would be entrusted to either the government or private companies and be made available to law-enforcement agencies when necessary. However, the entrusting of keys to a third party reduces security by introducing the risk of the misuse of key information by the third party. This risk of misuse is one basis for steadfast industry and private citizen opposition to the key recovery system. Another complaint is that a key recovery system will disadvantage U.S. encryption products on the international market. The effectiveness of export controls on encryption technology is, nevertheless, unclear. Given the nature of the Internet as a highly decentralized

[28] Magaziner, p. 10.

and cross-border network, circumvention of controls is not difficult. The division between encryption products for export and for domestic-use only is easily eliminated through Internet-based transactions.

As for privacy, the primary objective of the U.S. initiative is to foster consumer control over the dissemination of personal information. A government-led working group has developed the following principles of notice and consent for the handling of personal information:

1. Data-gatherers should inform consumers what information they are collecting, and how they intend to use such data;
2. Data gatherers should provide consumers with a meaningful way to limit use and re-use of personal information.[29]

These principles form the basis for a market-based approach to privacy that the U.S. intends to encourage among its trading partners in bilateral and multilateral fora.

**Europe**

The European approach to security and privacy issues is stated in the context of "building trust and confidence" in Internet commerce among consumers and companies. This is the first objective in an ambitious plan to establish a regulatory framework for a single European market for electronic commerce by the year 2000.[30]

The European Commission views restrictions on the exportation, importation and use of encryption products as "substantial barriers" to the development of Internet commerce in Europe. The Commission's objective, then, is to remove these barriers: "The Commission will...develop a policy which will...guarantee the free movement of encryption technologies and products while safeguarding public security concerns."[31] There is no specific mention of the key recovery approach.

Instead, the European initiative focuses on "digital signatures" and "digital certificates" as technical solutions to security concerns.[32] A "digital signature" is a unique identifier of the

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[29] Magaziner, p. 9. For details, refer to the Information Infrastructure Task Force report *Privacy and the National Information Infrastructure: Principles for Providing and Using Personal Information*, June 1995 and the National Telecommunications and Infrastructure Administration's report *Privacy and the NII: Safeguarding Telecommunications-Related Personal Information*, October 1995.

[30] European Commission, p. 11.

[31] European Commission, p. 15.

[32] European Commission, p. 11.

sender and the message that establishes their authenticity. Similarly, for transactions, a sender and a receiver exchange a "digital certificate" that establishes their respective identities and the authenticity of the good or service. The EC maintains that these technologies are sufficient to satisfy security concerns, but that what is missing is the regulatory framework, especially between countries, to support these technologies.[33]

Other than the statement that policies related to privacy are especially important to electronic payments, taxation, and copyrights , privacy concerns do not receive much attention in the European initiative.. Privacy issues are addressed separately in the 1995 E.U. Framework Directive on the Protection of Personal Data and the 1997 Directive on Consumer Protection in Distance Contracts.[34] The Commission further intends to pursue a multilateral agreement that preserves privacy rights in the context of the World Trade Organization.

**Japan**

Japan has staked out an unusually industry-focused approach to both the issues of security and privacy. It is well known that MITI, through deft but often heavy handed regulation, was the primary engineer of Japan's postwar recovery.[35] That the agency is now relinquishing its regulatory influence in favor of industry solutions to the problems of security and privacy is surprising given policy directions as recent as three years ago.[36]

As of 1994, MITI had embarked on a much more activist approach to ensuring data security. This approach has involved three prongs: 1) devising measures to improve security, 2) developing computer virus countermeasures, and 3) supporting legislation on new criminal acts. Previously, MITI had focused its efforts on developing standards for security and system audits meant to serve as guidelines for users to adopt. MITI had also developed guidelines on what users could do to prevent or counteract computer viruses. The Information-Technology Promotion Agency, a government body, was charged with cataloging computer virus reports and

[33] European Commission, p. 11.
[34] The full text of the Directive on the Protection of Personal Data is located at http://www.ispo.cec.be/infosoc/legreg/docs/9546ec.html. The Directive on Consumer Protection in Distance Contracts is located at http://europa.eu.int/en/comm/spc/sub2.html.
[35] For an in-depth discussion of MITI, see Chalmers Johnson*, MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975*, Stanford: Stanford University Press, 1982.
to the Japan Computer Emergency Response Team/Coordination Center.
[36] A comparison between the 1994 *Program for Advanced Information Infrastructure* and the 1997 *Towards the Age of the Digital Economy* (both MITI documents) reveals a significant shift in the role of government. While the former is an explicit statement of an ambitious government program to promote information technology, the latter

providing assistance to users in computer virus prevention and damage recovery. The same agency continues to be heavily involved in research and development for virus detection and anti-viral protection. And, the government had revised laws designating as criminal such acts as the unauthorized creation or destruction of computer data by hackers and on-line fraud.[37]

In its most recent policy statement, MITI continues to emphasize the importance of industry-led development of user tools to ensure security. Given the difficulties of enforcing legal safeguards to protect electronic data, particularly data on the Internet, the agency is skeptical about the effectiveness of criminal prosecution to address security concerns.[38] And, in a significant departure from what might otherwise be expected from Japan, MITI argues against national regulations for data encryption: "It is not appropriate to establish national standards for encryption and authentication technology...It would be an obstacle for market competition."[39] The message is unmistakable: market forces should provide the solution. In comparison, the U.S. and the EC envision a greater role for government than Japan in safeguarding security of Internet transactions.

Separately, the MPT has identified four specific security risks to Internet commerce: 1) wire tapping, 2) message sender impersonation, 3) message tampering, and 4) message denial or rejection.[40] To counter these risks, the MPT has organized and funded a consortia of Japanese companies to evaluate the effectiveness of encryption and verification technologies. This consortia, the Cyber Business Association Japan, was formed in 1995 and is also involved in testing Internet commerce applications.

On privacy issues, MITI argues that these will vary across industries and that "uniform regulations based on the law would not necessarily be appropriate."[41] Earlier this year, MITI revised the 1989 Guidelines for the Protection of Personal Data. Echoing the industry-focused approach to security, the emphasis of the document is on voluntary guidelines for industry, although MITI reserves the option to impose mandatory regulation.

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[37] MITI (1994), p. 29.
[38] MITI (1997), p. 11. Security concerns are focused on computer viruses and unauthorized access. In 1996, over 750 incidents of computer viruses were reported to the Information-Technology Promotion Agency of Japan. This represents a 13% increase over 1995. In addition, over 140 incidents of unauthorized computer access were reported to the Japan Computer Emergency Response Team/Coordination Center
[39] MITI (1997), p. 11.
[40] MPT, p. 7.
[41] MITI (1997), p. 13.

### 3. Electronic Payments

Europe and Japan are much further along in establishing a framework for electronic payment systems than the U.S. The U.S. initiative offers no concrete plan for such a framework while the European initiative is the most ambitious, setting specific goals and timelines. In Japan, the MPT has taken the lead in this area with its Integrated Next Generation Electronic Commerce Environment Project. An MPT-funded pilot electronic payments system has raised important policy concerns.

#### U.S.

In the U.S., electronic payment systems are only just evolving. Thus, the U.S. initiative calls for a regulatory approach that is flexible and case-by-case. The U.S. warns against "premature" government involvement in this new area and instead favors industry self regulation.[42] The U.S. initiative offers no specific policy prescriptions.

#### Europe

In Europe, the issue has already been the focus of much attention. The European Commission is currently developing proposed rules for the issuance of electronic money to be announced at the end of 1997. By mid-year, the Commission will revise previous recommendations on payment systems to address liability, transparency, and redress procedures.[43] The Commission is also concerned about the potential for anti-competitive behavior among electronic payment system operators and intends to issue a competition notice in 1998.[44] Finally, the European initiative raises fraud and counterfeiting as additional policy concerns in the area of electronic payments. These will be handled in the context of improving security in Internet commerce.

#### Japan

The MITI policy statement mentions "electronic money" only in passing. Instead, the MPT is playing the lead role in promoting electronic payment systems in Japan. As part of the Integrated Next Generation Electronic Commerce Environment Project, The MPT is

[42] Magaziner, pp. 4-5.
[43] European Commission, p. 14.
[44] European Commission, p. 14.

underwriting a pilot electronic payment system operated by the Telecom Services Association, an industry consortium.[45] This pilot system is intended to connect electronic commerce testbeds in several countries.

Several policy concerns have emerged. First, the MPT identifies legal issues. Differences in policies and procedures at both the inter-national and inter-corporate levels must be harmonized. Second, there are technical issues. Standardization of technologies for electronic payment must be achieved among banks and between countries. Third, business issues must be addressed. The MPT is pursuing a model of electronic payment that is centered on a central certification authority that would serve as a clearinghouse for electronic payments. The MPT assumes that this model will be adopted by other countries, each with their own certification authority. The MPT calls for agreement on the responsibilities of such an authority and mutual recognition of authorities across borders. A final business issue is determining who should bear the costs of international electronic funds transfer.[46] The implied question is whether the government should assume these costs, at least initially. No doubt similar the U.S. and Europe will grapple with the same concerns.

**4. Intellectual Property Rights**

Establishing clear and protectible intellectual property rights is crucial to the efficient and equitable operation of an electronic marketplace. Yet the ease with which electronic information is reproducible and transmutable over the Internet challenges intellectual property rights in fundamental ways. Each time a user accesses an Internet home page, that information is, at least temporarily, transferred to the user's computer, ready to be copied and stored permanently or incorporated into other information to produce an offshoot product. Control over access to and the integrity of information that is posted on the Internet is virtually impossible.

Can existing copyright regimes that were developed primarily to protect intellectual property rights for literary works be extended meaningfully to cover electronic information? How can patent protection be enforced for electronic innovations? Trademarks pose a particular problem. While trademarks are employed transnationally, trademark laws apply on a country-by-country basis. That is, trademark guarantees in one country has have a limited bearing on

[45] MPT, *Integrated Next Generation Electronic Commerce Environment Project*, n.d., p. 2. Available Internet: http://www.mpt.go.jp/whatsnew/ingecep1.html.
[46] MPT (*INGECP*), p. 2.

guarantees in another. This has a major impact on Internet commerce given the fact that the use of domain names (e.g., "www.cfr.org"), the commercial or personal identifiers of actors on the Internet, defies national borders.

Again, the U.S., Europe, and Japan have differing policy responses to these questions. The U.S. initiative addresses all three primary types of intellectual property rights. The European initiative, although similar in approach, ignores patent protection. The Japanese initiative addresses the problems of protecting intellectual property rights related to digital information only generally. Elsewhere, however, both the MPT and MITI, have taken steps to strengthen the regulatory regime.

**U.S.**

The U.S. initiative addresses the three primary types of intellectual property rights: copyrights, patents, and trademarks. For copyrights, the initiative hails the two new World Intellectual Property Organization (WIPO) treaties that address 1) copyrights generally and 2) performances and phonograms.[47] These treaties represent important steps in augmenting existing copyright protections to encompass digital information. For patents, the U.S. is concerned about maintaining an environment for innovation in the global information infrastructure. The U.S. intends to pursue patent protections on a global basis in tri-lateral consultations with the European Union and Japan, as well as in the WIPO's Permanent Committee on Industrial Property Information. Finally, trademarks have become a major issue in Internet commerce. Some of the issues the U.S. intends to address, first in domestic and then in international fora, include the same trademark owned by different entities in different countries, differential standards for establishing trademark infringement, and preemptive ownership of Internet domain names.[48]

[47] The WIPO Copyright Treaty extends the Bern Convention for the Protection of Literary and Artistic Works to cover the reproduction and distribution of software, databases, and copyrighted works on the Internet (http://www.wipo.org/eng/diploconf/distrib/94dc.htm.) The WIPO Performances and Phonograms Treaty protects digitally transmitted sound recordings, motion pirctures, and literary works as well as the rights of performers and producers (http://www.wipo.org/eng/diplconf/distrib/95dc.htm).

[48] Magaziner, p. 8.

**Europe**

The European initiative identifies issues related to copyright and trademark protection. A discussion of patent protection is, curiously, missing. Regarding copyright protection, the Commission is working on legislation to address electronic communications, on-line reproduction and distribution of copyrighted material, and penalties for circumvention of protections for copyrighted on-line material. Like the U.S., the European initiative is concerned about the ability of trademark owners to prevent illegitimate uses of their trademarks, particular in the area of domain names. The Commission has joined its trading partners in looking into the feasibility of a variety of "on-line" panels (e.g., arbitration, mediation, and challenge) to address conflicts in this area.[49]

**Japan**

MITI's policy objective is to balance safeguards against the "free riders" who exploit intellectual property rights on-line with rules to ensure fair competition. To achieve this, the initiative recommends 1) revisions to the current intellectual property rights regime, 2) civil remedies for copyright infringement, and 3) technical solutions to prevent illegal reproduction of digital information.

The MPT and MITI have already taken some concrete steps towards building an improved framework for intellectual property rights protection. The MPT is in the process of creating a centralized database that will store information about intellectual property rights (e.g., the owner's name and rules for use).[50] MITI has called for the establishment of a joint council sponsored with the Ministry of Education in order to 1) specify the ownership of rights to existing works, 2) establish reuse rules, and 3) develop a centralized structure for managing these rights.[51] MITI has further identified the need to clarify the application of existing copyright laws to multimedia software. This has been referred to the government-sponsored Copyright Council. In an effort to enforce copyright laws against unlawful software duplication, MITI has proposed an education and awareness program for institutional software users.

[49] European Commission, p. 16.
[50] MPT (1997, Japanese version), p. 33.
[51] MITI (1994), p. 32.

## 5. Content

As the largest content provider for mass media (primarily television, radio, and film), the U.S. enjoys a hegemonic position in the global market for content. In response, a number of trading partners, with those in Europe being among the most vocal, have erected restrictions on imported content in order to protect cultural resources and domestic content providers. This conflict is likely to spill over to Internet commerce since mass media content is so easily transmitted electronically. Predictably, the U.S. initiative treats open markets for content as a key issue in electronic commerce. The European initiative is unexpectedly silent on the issue. The Japanese government has equated content issues with decency issues in its policy statement. , At the same time, content is associated with the need to jump-start a market for multimedia content production in Japan.[52] And Japanese government agencies plan to play a major role in developing this market.

### U.S.

The U.S. initiative identifies four priority areas related to content: 1) content regulation, 2) foreign content quotas, 3) advertising regulation, and 4) fraud prevention regulation.[53] In the first three areas, the U.S. is concerned about overly stringent regulation that can serve as non-tariff barriers to market entry. In the fourth area, the U.S. is working to see whether existing models of fraud prevention regulation can be extended to include Internet commerce. To address these issues, the U.S. will focus its efforts on developing a dialogue among its key trading partners.

### Europe

Surprisingly little mention is made in the European initiative about the regulation of foreign content, a hotly debated trade issue between the U.S. and Europe. The only reference to content issues is the need for harmonization of regulations concerning "commercial communications" or advertising.[54] Generally, the U.S. has opposed any form of content

[52] What emerges is yet another battleground for MITI and MPT, as both develop ambitious strategies to initiate and foster the market for multimedia content production.
[53] Magaziner, p. 16.
[54] European Commission, p. 13.

restrictions whereas European trading partners have urged limits to foreign (predominantly U.S.-originated) content to preserve cultural resources and protect domestic content providers.

**Japan**

MITI identifies the primary content-related problem to be the transmission of illegal and/or harmful material over the Internet. In response, MITI has begun development of the Platform for Internet Content Selection, a content filtering software system, together with industry consortia. Such joint efforts are characteristic of MITI projects.

Despite pronouncements about the importance of market forces, MITI has in fact put forward an ambitious strategic plan to transform segments of the Japanese economy to take full advantage of the digital age. MITI plans to stimulate activity in three key areas: multimedia, software, and databases. First, MITI intends to create a multimedia market: from providing production and editing facilities to training multimedia software developers at government-funded and government-operated Multimedia Centers. Second, MITI will focus its energies in strengthening the weak software industry in Japan. Specific measures include standardizing procedures for software development contracts, educating the industry on a uniform framework for software development, and revamping the training and examination requirements for information technology engineers. Finally, MITI has identified databases as an "underdeveloped" industry due to the reluctance of the government and the private sector to make information available to database compilers. MITI has proposed that the government conduct feasibility studies to argue for the profitability of database compilation and has already established tax incentives and low-interest loans to potential market entrants.[55]

Not to be left behind is the MPT who has equally ambitious plans to create an environment where content industries can grow. The MPT has laid out a four point program. First, the MPT will assess the current environment for content industries. The agency has further pledged support for technological development and training. Second, the MPT is prepared to provide financial assistance in the form of non-collateral loans and direct financial support to content providers. Third, to address the reuse of existing content, the MPT intends to create a centralized database, mentioned earlier, that will store information about intellectual property.

[55] MITI (1994), p. 37.

Fourth, the MPT will continue to support content designed for educational and research purposes (i.e., on-line art galleries, libraries, and museums).[56]

## III. POTENTIAL FOR TRANSATLANTIC COOPERATION

The expansion of the trade negotiation field beyond traditional telecommunications creates real potential for transatlantic cooperation. In particular, the preceding comparison of the three policy positions suggest important areas of convergence between Europe and the U.S. as these two trading partners begin to address electronic commerce. We first highlight three of these, then review the remaining obstacles and possible solutions.

### A. Common Ground

#### 1. New Focus

This year, the governments of the U.S., the European Union, and Japan have all issued position papers declaring their intention to confront the multitude of issues raised by electronic commerce. These documents clearly reflect a shared intention to address the various electronic commerce issues together, rather than individually, and within a global framework. This opens the potential for a positioning these trade negotiations across the broad agenda of electronic commerce. Defining an overall framework within which a number of related issues can be addressed provides important opportunities for cross-issue linkages. This new focus on inter-related issues that extend beyond domestic borders but lie within the general framework of global electronic commerce offers the U.S., the E.U., and Japan considerable opportunity for fruitful collaboration.

#### 2. Infrastracture as Key Area

Progress towards opening access to the underlying network infrastructures is prerequisite to any progress in electronic commerce. Indeed, without unfettered access to the basic delivery mechanisms for all electronic commerce activities, little significant progress can be expected on the other issues. A fundamental goal of U.S. trade policy should therefore be to build upon the success of this year's WTO agreement by deepening all members' commitments to the

[56] MPT (1997, Japanese version), p. 33.

unqualified opening of their telecommunications infrastructures beyond basic telecommunications to include electronic commerce delivery mechanisms based on all technologies. In particular, the disappointing participation by the WTO member countries of Asia has meant that the region continues to present significant challenges to achieving fully competitive global telecommunications markets.

U.S. and European policies are converging in significant ways. The passage of the 1996 Telecommunications Act in the U.S. and the impending opening of European telecommunications markets to competition by January 1998 constitute critical progress towards achieving a truly open and competitive network infrastructure that spans the globe. However, without fundamental market reform, Japan and other Asian countries will continue to have largely uncompetitive domestic networks that will slow progress towards efficient and low-cost use of global network infrastructure.

Although the MPT has successfully exacted an agreement from telecommunications giant NTT to reorganize into separate companies, this measure is not designed to result in the same level of competition that is expected in the U.S. and Europe. Since NTT is likely planning to maintain its stranglehold on access to underlying network infrastructure in basic telecommunications in the foreseeable future, there is no reason to believe that access to delivery mechanisms for electronic commerce will be freely available unless Japan is pressured to act. The reluctance of Japan and its Asian neighbors to institute fundamental market reform constitutes perhaps the most important area where a joint U.S.-European trade approach holds potential for gains in Asia.

### 3. Toward an International Competition Policy for Electronic Commerce

Implicit in all three policy agendas is the need to set up a framework for an international competition policy for electronic commerce. While the U.S. and Europe have achieved considerable progress towards achieving this goal, Japan lags behind. Here again is the opportunity for transatlantic cooperation. An extension of the U.S. "Uniform Commercial Code" that governs inter-state commerce combined with the European competition policy framework

outlined in Articles 85, 86, and 90 of the Treaty of Rome, could well provide the basis for the elaboration of an international competition policy for electronic commerce.[57]

A crucial component of any international competition policy will be taxation as it relates to electronic commerce. Tax policies will, to a large extent, determine the direction of growth for electronic commerce. Burdensome tax policies will dampen growth while a duty-free policy will stimulate market expansion. A major constraint on the U.S. goal of establishing the Internet as a duty free zone is time: it will be much easier to achieve now, before countries impose tariffs and before interest groups have time to form in the shadow of such tariffs. The European position is that any taxation on electronic commerce must not exceed that on traditional commerce. Given the willingness of European trading partners to join the U.S. in promoting free trade in such contexts as the World Trade Organization, the U.S. should seek European support for the goal of a tax-free environment for on-line transactions.

## B. Obstacles and Possible Solutions

Despite considerable common ground between the U.S. and Europe which could form the basis of a joint trade strategy to achieve greater market opening in Asia, significant obstacles remain in the way of full transatlantic agreement.

### 1. Does Europe Really Care?

To start with, it is not absolutely clear that the European Union cares as much as the U.S. government about opening the Asian markets. Indeed, throughout the WTO negotiations, E.U. representatives have shown much greater interest in maintaining access to the open, decentralized, and lucrative U.S. market than in opening the closed, incumbent-dominated, and high cost markets of Japan and Asia.[58]

At least two possible avenues are available to the U.S. government. First, the shift towards an electronic commerce-based negotiating framework provides an important mechanism for linking issues of interest to the U.S. to others of European interest. In particular, the U.S. could enlist Europe's support in pressing for the opening of Asian telecommunications markets,

[57] Holmes, Peter, Jeremy Kempton and Francis McGowan, "International competition policy and telecommunications. Lessons from the E.U. and prospects for the WTO" *Telecommunications Policy*, December 1996, Vol. 20, No 10, pp. 755-768.
[58] Interviews with U.S. negotiators to the WTO, June 1997.

with the understanding that this would facilitate the achievement of European goals vis a vis U.S. markets. Second, the European attitude toward Asia may be changing. Indeed, European officials have given indications that Europe is now increasingly aware of the importance of Asian markets to Europe's future. If confirmed and reinforced, this would create a solid transatlantic basis to press for greater openness in Asian markets, most importantly in basic telecommunications infrastructures, and in the range of markets emerging as a result of electronic commerce.

**2. Different Views of Government Roles**

An additional hurdle comes from the markedly different views of government role in the various policy positions. The U.S. advocates a hands-off approach and views government promotion of electronic commerce as the exception rather than the rule. By contrast, the European Commission has stated clear intentions to use government intervention, for example through research and development programs, to shape a European competitive advantage in a range of electronic commerce technologies and to bolster the international position of European actors. A compromise option would be to allow U.S. and other foreign participation in European research and development programs.

**3. Specific Disagreements**

Finally, as presented in Section II, there remain some significant differences in the U.S. and European positions on electronic commerce. For example, the E.U. is likely to promote a more restrictive approach to on-line content by imposing domestic content requirements. On the other hand, the U.S. government is imposing greater restriction than the European Union on encryption technologies.

These disagreements however do not always run in the same direction. As revealed above, the US sometimes takes the more restrictive stance, while in other cases more restrictions come from the EC. Here again, the re-positioning of the bargaining ground from telecommunications services as a single issue to a new broader framework--electronic commerce--creates opportunities for linkages across issues and opens the potential for quid pro quo exchanges towards achieving the overarching goal of fully competitive global electronic markets for goods and services.