
Government in the International Arena

As jurisdictions increasingly overlap, electronic commerce changes the relationships among governments, businesses, and citizens of different countries. The global reach of the Internet makes it virtually impossible for governments to effectively control policies and activities within national borders.

Thus, the public policy challenges posed by electronic commerce defy unilateral approaches. Even if a national consensus can be reached, the policies that result are likely to be, at best, ineffective without multilateral understandings, and at worst, conflict with other countries. Moreover, conflicting national approaches can undermine benefits of electronic commerce by Balkanizing the Internet. Multilateral approaches, therefore, are critical—and widely seen as such by most countries, with a few exceptions.

While no single international body has addressed the full range of electronic commerce issues, many organizations have devoted considerable effort to defining the challenges, crafting solutions, and working cooperatively on specific issues (see table 8.1). As national governments work through existing international bodies, nongovernmental organizations (NGOs) and other groups are also addressing the international issues raised by electronic commerce. At the heart of this effort is the increasingly important and growing role being played by the private sector, especially the work of businesses to ensure technical interoperability. Businesses are also assuming functions that traditionally belonged to governments.

Multilateral efforts to deal with electronic commerce, involving both the public and the private sectors, are taking place in three organizationally distinct ways:

Table 8.1 International organizations addressing e-commerce issues

	Aid	Trade	Tax	Electronic signatures	IPR	Standards	Security	Privacy	Consumer protection	Content	Education
WTO		▪									
ITU						▪	▪				
UNCITRAL				▪							
UNCTAD											▪
UNESCO							▪		▪		▪
World Bank	▪										▪
WIPO					▪						
OECD			▪	▪			▪	▪	▪		▪
APEC											▪
FTAA				▪							▪
EU				▪		▪	▪	▪	▪	▪	▪
ICANN					▪	▪					
W3C						▪		▪		▪	
IETF						▪					

- International organizations, or functional institutions such as the WTO, ITU, UNCITRAL, and WIPO seek to adapt existing policies to the electronic world.
- Regional organizations and international coordinating bodies—the OECD, UNCTAD, European Union, Asia-Pacific Economic Cooperation (APEC), and Free Trade Area of the Americas (FTAA)—address various e-commerce issues.
- New groups that are collaborative partnerships of government, companies, and nonprofit organizations. Among these are GBDe, ICANN, and W3C.

Some of these groups have parallel concerns that have resulted in converging views and possible approaches, despite the lack of formal coordination. This is especially true of many issues associated with a trusted environment and a legal framework. Other issues have not been so fortuitously handled, among them privacy and the protection of personal data, in part because these bring to the fore differences in societal values and governmental approaches to policymaking.

Is the international framework for addressing e-commerce issues too fragmented and ad hoc, dispersed across too many national and international, formal and informal, and official and private bodies? Or is this fluid, evolving approach appropriate to the pace of change of the Internet and electronic commerce? In particular, for issues that do not yet enjoy international consensus, will the current international discussions help formulate interoperable yet national approaches, and thereby forestall the potential that national conflicts will limit the full realization of network benefits?

Functional Institutions

The first group of specialized institutions are working to adapt existing rules and policies to the electronic world. It includes, among others, the ITU, UNCITRAL, and WIPO (see boxes 8.1 and 8.2). Since most legal and commercial codes governing how businesses interact with each other and consumers were established before the Internet, these frameworks may need to be adjusted to meet the new realities. The objective of these institutions is to ensure that rules that apply to the digital world are, if not the same as, at least equivalent to those of the physical world. For the most part, existing principles and disciplines remain valid.

On the other hand, as in the case of tax regimes, there can be tensions over whether the economic and social benefits of the Internet and electronic commerce are maximized using the existing frameworks. One organization where this tension is particularly clear is the WTO.

Box 8.1 United Nations-related organizations dealing with electronic commerce

International Telecommunications Union (<http://www.itu.org>)

As the international organization within which governments and the private sector coordinate global telecommunications networks and services, the International Telecommunications Union (ITU) has led in setting standards on the overall architecture of the global information infrastructure, including integration of public switched telephone networks and Internet Protocol (IP) networks. The ITU has emphasized development of standards for electronic commerce and communication system security for multimedia terminals; standards for electronic commerce related to infrastructure and security; educational materials to raise the awareness of the role of telecom reform and regulation in electronic commerce; and technical assistance to facilitate electronic commerce infrastructure and service in developing countries.

UNCITRAL (<http://www.uncitral.org>)

One of the first international organizations to undertake work on electronic commerce was the United Nations Commission on International Trade Law (UNCITRAL). In 1996, UNCITRAL adopted a Model Law on Electronic Commerce to assist states in devising domestic legislation to govern the use of alternatives to paper-based methods of communication and storage of information.¹ The model law has had a significant influence on national laws; it generally provides a framework to minimize legal obstacles and establish a more secure legal environment for electronic commerce. Numerous countries, including the United States in the Millennium Digital Commerce Act passed by Congress in 1999, have adopted or incorporated principles from the UNCITRAL Model Law to domestic legislation.²

In addition, UNCITRAL's Working Group on Electronic Commerce is addressing the issue of electronic signatures and certification authorities. Draft Uniform Rules on Electronic Signatures are being drafted to promote the use of electronic signatures through a set of standards on the basis of which digital signatures and other electronic signatures may be legally recognized.³ The draft rules also address standards to be met by certification authorities in issuing certificates for legal recognition, and the need for mutual recognition of "trusted" certificates on a global basis.

UNCTAD (<http://www.unctad.org>)

As the principal United Nations agency concerned with trade and development, the UN Conference on Trade and Development (UNCTAD) has concentrated its efforts on stimulating interest and awareness of the economic and social benefits of electronic commerce in developing countries. Through a series of "E-Commerce and Development" workshops and regional meetings in 1998 and 1999, UNCTAD has promoted both the exchange of experiences among entities involved in electronic commerce and cooperation among governments and business to encourage infrastructure development. Ongoing activities include dissemination of electronic commerce-related information to developing countries, training activities, and analytical studies on the economic, social, and legal implications of electronic commerce for developing nations.⁴

(continued next page)

Box 8.1 (continued)

UNESCO (<http://www.unesco.org>)

The UN Educational, Scientific, and Cultural Organization (UNESCO) has underway a project to examine the legal, ethical, and societal aspects of cyberspace in order to establish a “universal framework for cyberspace.” It has adopted a series of principles and has organized several international conferences on cyberspace law and ethics issues, such as privacy and encryption. Its agenda includes joint initiatives with the OECD on international approaches to the protection of privacy and encryption, establishment of a Web site to protect children from illegality on the Internet, and educational initiatives. UNESCO also provides technical and financial assistance to developing countries for hardware and software to facilitate education and science, as well as training electronic network managers.

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1. The text of the UNCITRAL Model Law on Electronic Commerce is available at <http://www.un.or.at/uncitral/english/texts/electcom/ml-ec.htm>.
 2. See <http://www.uncitral.org/en-index.htm> for a copy of the Draft Uniform Rules on Electronic Signatures.
 3. See UNCTAD, February 2000.

World Trade Organization (WTO)

The WTO¹ has done a substantial amount of work on electronic commerce, both directly on its trade-related aspects and more generally on the infrastructures necessary to the development of global as well as domestic electronic commerce (see Mann and Knight 2000, WTO 1998).

However, the cross-cutting and rapidly evolving environment of electronic commerce challenges both the organizing structure of the WTO (GATT and GATS, and the role of subcommittees) and how its members operate (request-offer negotiations and negative vs. positive commitments). As the body that addresses global trade issues, the WTO is ideal for the exchange of information and insights on how countries approach both domestic and cross-border aspects of electronic commerce. But to the extent that the WTO is a negotiating body, which balances requests and offers as the way to implement trade liberalization, it may need to change its strategy to get superior outcomes, both global and local.

What Governments Have Accomplished in the WTO

Because electronic commerce was evolving so quickly, the 1998 Geneva Ministerial agreement imposed a temporary moratorium on customs duties for all products delivered over the Internet. It also commenced a

1. See Catherine L. Mann and Sarah Cleeland Knight, “Electronic Commerce in the World Trade Organization” in *The WTO after Seattle*, edited by Jeffrey Schott, Institute for International Economics, July 2000.

Box 8.2 Other functional institutions

World Intellectual Property Organization

The World Intellectual Property Organization (WIPO)¹ has been the forum for the negotiation of treaties requiring adequate and effective protection of copyrighted works and sound recordings, including the communication, reproduction, and distribution of electronically transmitted data in cyberspace. (See chapter 7 for a more detailed discussion of intellectual property protection on the Internet.)

Bringing existing treaties into force has been a priority for WIPO, and a significant effort has been aimed at developing countries. A series of regional meetings were held in 1999, out of which grew WIPO's Digital Agenda, to promote the adjustment of the international framework to facilitate electronic commerce through ratification of the WCT and WPPT; extension of principles to audiovisual performances, broadcasters rights, and a possible international instrument on the protection of databases; and establishment of rules to govern disputes between the domain names system and intellectual property rights. WIPONET, an information network to promote the greater use and exchange of information technologies among member states and to create a global process of patent examination and grants activities, will provide greater access to developing countries to use IP assets in electronic commerce.

The World Bank

The World Bank has focused on opportunities represented by the Internet and information age for developing countries and economies in transition.² Specifically, the World Bank Group supports the efforts of governments to develop information-based activities and the required information infrastructure by providing resources and expertise, primarily from the private sector for information (especially telecommunications) infrastructure, and helping to provide access to information and communications to those living in poor and rural areas.

The Information for Development Program (*InfoDev*) of the World Bank provides grants and loans to assist countries in taking advantage of economic development opportunities provided by electronic commerce. The World Bank provides extensive technical assistance, training, and funding to countries for the development of communications and information networks and on the use of the Internet. Conference and workshops have focused on legal and regulatory reforms, including best practices regarding liberalization of markets, global connectivity, and convergence, to promote the growth of electronic commerce. Programs are intended to help establish the ground rules for the digital marketplace in developing countries. For further discussion of World Bank programs, see Chapter 9.

1. See <http://www.wipo.org>.

2. See <http://www.worldbank.org/infodev/projects/faq.htm>.

comprehensive work program to examine the trade-related aspects of electronic commerce. Four separate working groups—the Goods Council, the Services Council, the TRIPs Council, and the Trade and Development Committee—were coordinated by the General Council.

A key motivation for the moratorium was the difficulty of distinguishing between physical and electronic delivery of products bought over the

Internet and the blurring of the traditional distinction between goods and services. Existing WTO rules on trade in goods would seem to apply to products bought electronically but distributed physically (like vitamins from drugstore.com that arrive via DHL). On the other hand, an architectural blueprint delivered electronically would likely be a kind of service. But what about music downloaded from the Internet but not on a hard medium like a CD). Is this a good or a service? Should these products fall under the purview of GATS, GATT, or neither?

The General Council's work program on electronic commerce highlighted a number of issues that warranted further review. The November 1999 Seattle Ministerial failed to launch a new round of trade talks, leaving unresolved an agenda on a range of trade issues, including electronic commerce. At that time, there was a general convergence of views that WTO members should not impose new barriers to electronic commerce. A new round would likely have continued the moratorium on duties, reinforcing the principle of forbearance regarding electronic commerce as well as showing a commitment to the main tenant of the WTO—liberalization.

More broadly, the WTO has helped to liberalize or at least address the service-sector infrastructures that are a prerequisite for growth of electronic commerce. Tariffs and restrictions on computers and other IT products were set at zero under Information Technology Agreement (ITA) I, and the range of products is likely to be broadened in ITA II. The Basic Telecommunications Agreement covers commitments for telecommunications liberalization. Financial services are addressed in the Financial Services Agreement. Distribution systems may be discussed under Trade-Related Measures (TRIMs) and delivery services will be considered in GATS2000. Electronic commerce depends on the synergies among service sectors for maximum economic benefit.

In the absence of agreement to launch a new round of trade negotiations, it is not clear how the WTO will address e-commerce issues. Though it is unclear whether the moratorium has expired, the important point is that no country has acted yet to impose new duties.²

What Future Negotiations Should Accomplish

Because of the economic and social importance and the global reach of electronic commerce and the infrastructures on which it depends, it is essential that WTO members commit to the maximum possible liberalization of electronic commerce. WTO members should agree to continue the electronic commerce work program in their mandate for new negotiations

2. The US has taken the position that the moratorium is still in effect since the Ministerial did not end, but was suspended; the European Union and others believe that the moratorium was in effect only until Seattle, and there has been no agreement to extend the moratorium.

so as to continue the process of education and shared experiences. This approach can pave the way for a comprehensive treatment of electronic commerce—and its infrastructures—which will encourage growth and benefit all WTO members.

1. *Reaffirm that existing WTO principles and disciplines apply to electronic commerce.*

While the electronic world poses certain challenges to the current trade policy framework, traditional WTO principles of nondiscrimination, transparency, and market openness remain valid for electronic commerce. New rules are not necessary if the principle of liberalization fundamental to the WTO is honored.

With electronic commerce still in its infancy, it is too early to determine how digitized products delivered over the Internet should be classified. Premature classification could have a profound impact on the future growth of electronic commerce, given the differences in how GATT and GATS approach liberalization. Moreover, given the pace of change, extensive resources and efforts are probably misguided toward this activity.

Where the application of these agreements to electronic commerce is not clear, the most liberalizing approach should prevail. This might mean that electronic delivery of goods and services would be treated more favorably than other forms of delivery. For example, insurance products could be sold over the Internet even though the physical presence of foreign insurance firms had not yet been scheduled for liberalization under GATS. The bias toward liberalization engendered by electronic commerce can stimulate the further development of electronic commerce, as well as encourage liberalization and deregulation throughout the economy.

2. *Extend the moratorium on customs duties on electronic transmissions.*

Ideally, WTO members will make permanent and binding the practice of not imposing customs duties on digitized products. The longer countries keep electronic commerce duty-free, the more these activities will flourish and clarify the benefits of a more liberal domestic and international trade environment. If WTO members allow the moratorium to expire, they will encourage fragmentation by different taxes and tariff types and rates. Businesses will waste time and energy “forum-shopping,” which will discourage technological growth in countries where seamless markets are most important.

3. *Negotiating methods need greater creativity and leadership.*

The debate on whether to classify electronic transactions as GATT or GATS reveals how country delegations approach negotiating methodology. The US proposal on services in mid-summer 1999 argued for the

“use of all appropriate negotiating modalities, including request-offer, horizontal, and sectoral approaches.”³

In the *horizontal* approach, negotiators seek to apply liberalizing measures like transparency and good governance in regulations, as well as consistency of ownership across sectors to a broad range of services. They might seek to eliminate any discrimination across a particular mode of delivery (like electronic commerce or rights of establishment) or a range of services (like financial services and small package delivery) (Esserman 1999).

Horizontal negotiations recognize that service sectors are interconnected and that for maximum economic benefits liberalization must proceed on several fronts at once. Otherwise the benefits from liberalizing one sector (say, lower telecommunications costs) are simply absorbed into a protected sector (such as higher air cargo costs). The horizontal approach to liberalization is particularly valuable for electronic commerce, where the synergies between services sectors are especially apparent.

That said, request-offer negotiations will likely still be important, and will require industrial countries to have clearer vision. Specifically, industrial and developing countries need to negotiate across manufacturing and services sectors. Businesses and workers in the high-tech and services sectors in industrial countries stand to benefit from the liberalization of electronic commerce and its infrastructures. Developing countries stand to benefit through the new opportunities created by electronic commerce, as well as through the increased efficiencies of electronic commerce in traditional sectors. This is a clear win-win proposition.

The overall benefits could be reduced, however, if markets are not open for those more efficiently produced goods and services. Developing countries, for example, face barriers in textiles and apparel and some elements of data processing, communications, and software programming—precisely those areas in which electronic commerce can enhance the competitiveness of developing-country producers.

Trade negotiations often have political as well as economic aspects. Regardless of the benefits of unilateral liberalization or horizontal negotiations, if negotiators in industrial countries fail to acknowledge the need to lower barriers to products from developing countries, those countries may limit their commitments to liberalize electronic commerce. This would reduce benefits for all countries. Trading off an extension of the moratorium for reduced barriers in other sectors, while politically difficult, would nonetheless be the most liberalizing and beneficial outcome of future negotiations.

3. Preparations for the 1999 Ministerial conference; communication from the United States, Further Negotiations As Mandated by the General Agreement on Trade in Services (GATS), as replicated in *Inside U.S. Trade*, 30 July 1999.

4. *Extend the electronic commerce work program, but avoid linkages to technical assistance.*

WTO members must foster an environment that allows consideration of how electronic commerce issues are unique, even while falling under the WTO principle of liberalization. The current WTO work program has provided only a shallow understanding of how electronic commerce is changing the global economy. For example, should the Basic Telecom Agreement be expanded to embrace broadband infrastructure and services, or should technology products for the Internet qualify for tariff reduction under ITA II? Should interoperability, standards, and universal access be addressed? Such questions could be addressed through the WTO work program, with special attention to developing-country concerns.

A future WTO work program on electronic commerce should have the following two features:

1. The work program should be subject to the General Council rather than fragmented throughout the WTO, or put under the Services Council.⁴ While input from councils and committees is important, the cross-cutting nature of electronic commerce means that the General Council must lead. Close coordination of the work program under the General Council will also help developing countries with their smaller negotiating staff participate more fully. Certainly, too, this work program should be a non-negotiating forum.
2. The private sector is leading the way in setting global technological standards for electronic commerce; it can also help resolve policymaking concerns such as tax administration and privacy protection. Private-sector participation has been the hallmark of all the regional trade forums' discussions of electronic commerce (including those proceeding under APEC and FTAA). The contribution the sector can make to the WTO work program is vital.

Several developing countries are concerned about how any WTO e-commerce commitments will affect them. Their concerns include infrastructure, equitable access, and technological and human capacity for e-commerce growth. A few of these countries, including the Southern African nations, have gone so far as to propose that an extension of the moratorium be tied to "technical assistance for the building of telecommunication infrastructure" for developing countries (see Southern African Development Community 1999).

While WTO negotiators should be prepared to negotiate across industrial and services sectors, they need to be wary of responding to such

4. This was suggested by the European Union, in keeping with the view that all electronic commerce transactions should be classified as services.

developing-country demands. The WTO has neither the people nor the funds to meet them. Other organizations—perhaps UNCTAD, World Bank, and the ITU—are better suited to provide technical training, and the World Bank and regional development banks can offer funding for infrastructure investment as can the private sector. These organizations can help ensure that the benefits from electronic commerce accrue equitably among countries at different stages of development.

Conclusion

To establish a predictable environment in which electronic commerce can thrive, the WTO must ensure that the benefits of this new form of international trade will be realized by consumers in all countries. To do so, the WTO must make sure that electronic commerce remains free from international trade barriers and continues to drive domestic and global growth.

The stakes are enormous. In the United States, where electronic commerce has its strongest hold, the IT sector contributes approximately 8 percent of the economy. The remarkable growth in IT-related industries, especially those directly linked to electronic commerce, has helped to create the longest period of peacetime economic growth (with low inflation) in US history. Over the last four years, IT-related industries have contributed to more than one-third of the growth of real output for the US economy (US Department of Commerce 1999).

Such gains are available to all countries, not just first-users like the United States and Europe; liberalization via electronic commerce is not a zero-sum game. Indeed, the importance of network benefits means that second movers can gain more faster. Electronic commerce offers particular promise to developing countries. Market innovations and improved market efficiencies gained through electronic commerce and its prerequisite infrastructures will most affect those sectors and countries where coordination and transactions costs are highest.

For all countries, failure to acknowledge how electronic commerce fully integrates both services and goods sectors, to treat it as a separate sector, or to tax it as a service will undermine the WTO objective of liberalization. It will impede the exploration into new processes, products, and markets and squander the opportunity to leap forward to the next stage of economic development.

Coordinating and Regional Institutions

The second category of international activity has been among multilateral and regional entities attempting to coordinate separate aspects of electronic commerce. This category includes the OECD, UNCTAD, APEC, FTAA, and the European Union.

Box 8.3 OECD research and activities

In the area of privacy and security, the Directorate for Science, Technology, and Industry developed the 1980 OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, 1992 OECD Guidelines for the Security of Information Systems, 1997 OECD Guidelines on Cryptography Policy, 1998 Inventory of Approaches to Authentication and Certification in a Global Networked Society, and 1999 Inventory of Controls on Cryptography Technologies. In addition, the OECD Committee on Fiscal Affairs addressed the issue of electronic commerce and taxation in the 1997 OECD Tax Framework Conditions. In 1999, the OECD Council approved Guidelines for Consumer Protection in the Context of Electronic Commerce. In addition, the OECD has conducted statistical work on Internet and electronic commerce indicators, as well as reports on the economic and social impact of electronic commerce.¹

The conferences sponsored by the OECD — The Forum on Electronic Commerce (Paris, October 1999); the Ministerial Conference—A Borderless World: Realizing the Potential of Global Electronic Commerce (Ottawa, October 1998); and Dismantling the Barriers to Global Electronic Commerce (Turku, Finland, November 1997) have resulted in a comprehensive set of measures to promote electronic commerce on a global basis. The OECD's stated objective is to carry out its work in a manner cooperative, and complementary with efforts underway in other international organizations.²

1. See <http://www.oecd.org/dsti/sti/it/ec/index.htm> for OECD reports and policy analysis documents.

2. See http://www.oecd.org/dsti/sti/it/ec/act/paris_ec/paris-ec_about.htm for a description of the purpose of the OECD Forum on Electronic Commerce, held in Paris, 12-13 October, 1999.

These coordinating and regional forums have been useful in helping members find common ground and share experiences. They have helped countries find a common voice and increased their ability to participate in higher-level multilateral forums like the WTO. The need for this will only increase. Members need, and should demand more of, their coordinating and regional institutions.

Organization for Economic Cooperation and Development

The OECD has been at the forefront in examining how electronic commerce affects business activity and public policy, conducting extensive research and analysis on a broad range of issues.⁵ Moreover, through major international meetings and conferences, the OECD has established itself as a forum for dialogue among stakeholders—national governments, international organizations, the private sector, and representatives of civil society—on aspects of electronic commerce (see box 8.3). While the OECD

5. See <http://www.oecd.org/dsti/sti/it/ec/index.htm/>.

does not make laws, it has established useful baseline principles to guide work in areas where it has clear competency, among them privacy and authentication, taxation, and consumer protection.

In 1998, the OECD adopted the *Action Plan for Electronic Commerce*, which was further updated at the 1999 Forum.⁶ It outlines activities and recommendations responding to four themes: (a) building trust for users and consumers; (b) establishing ground rules for the digital marketplace; (c) enhancing the information infrastructure for electronic commerce; and (d) maximizing the benefit of electronic commerce.

Private-sector groups have played a significant role in the OECD's work on electronic commerce. Under the umbrella of the Alliance for Global Business, a broad range of businesses constructed a framework for e-commerce policymaking with detailed recommendations in *A Global Action Plan for Electronic Commerce prepared by Business with Recommendations to Governments*.⁷ The OECD has thus facilitated an active role for the private sector in addressing e-commerce issues. Supplementing this dialogue with labor and business organizations, the 1999 Forum included for the first time, a "public voice" meeting to address the societal dimensions of electronic commerce. This was cosponsored by the Electronic Privacy Information Center and Imaginons un Réseau Internet Solidaire (IRIS). Moreover, the OECD has now identified outreach to and dialogue with nonmember countries as a new objective.

While the OECD is often viewed as addressing only the needs of rich nations, it has taken the lead on several issues for which it has competence and which will affect all countries—primarily taxation, privacy, and consumer protection. In each of these areas, the OECD has established itself as the principal international organization addressing the subject, served as a productive forum for discussion and consensus building, and published guidelines that have become internationally accepted principles.

Recognizing the risk for duplication of effort, the OECD has generally concentrated on issues that are not being addressed by functional institutions or for which there is no appropriate international body. At times, however, some members have been critical of OECD involvement in especially sensitive issues, such as encryption.

The OECD has been useful in analyzing and making available information on e-commerce issues. This type of information is especially helpful to smaller, nonmember countries trying to keep abreast of the flood of e-commerce initiatives.⁸

6. See http://www.oecd.org/dsti/sti/it/ec/act/paris_ec/pdf/forum_report.pdf.

7. See http://www.oecd.org/dsti/sti/it/ec/act/paris_ec/pdf/bizac_e.pdf.

8. The OECD has prepared a particularly helpful document, the Report on International and Regional Bodies: Activities and Initiatives in Electronic Commerce, produced for the 1998 Ottawa Ministerial Conference. The report is organized by issue and is kept current. It can be found at http://www.oecd.org/dsti/sti/it/ec/act/paris_ec/pdf/intbod_e.pdf.

Some observers have suggested that given its past work on e-commerce issues and its considerable resources, the OECD could do more to help coordinate national policies and international forums addressing e-commerce questions. In particular, because its members include the major players in electronic commerce, the OECD could help bridge the gap between differing country approaches to issues like privacy—should members be willing.

Can the OECD broaden its role? First, several issues must be addressed:

- OECD is limited by its membership to industrialized countries. Effective international discussion and coordination requires broader participation of developing countries. While the OECD has outreach programs, a more comprehensive and regularized way for developing countries to contribute would be necessary. A more active role for the Development Center is one avenue.
- Because OECD decisions are not binding, they are useful only to the extent members reach consensus. Still, to the extent that these discussions yield principles, they do help guide national decision-makers.
- OECD members generally do not view it as a forum for resolution or negotiation of disputes.

European Union

The European Union⁹ has responded to a broad range of electronic commerce concerns, including privacy, electronic signatures, and consumer protection. It also sponsors research and technology programs.

In 1997, the European Union released a comprehensive set of proposals for advancing electronic commerce. *A European Initiative in Electronic Commerce* (COM[97]0157) addressed three areas—access to the global marketplace, legal and regulatory issues, and a favorable business environment. Building on this framework, in December 1999, the European Commission launched the *eEurope Initiative: An Information Society for All*, which proposes ambitious targets for all Europeans to realize the benefits of the Information Society. This political initiative is intended to bring every citizen, school, and business into the digital age, create a digitally literate Europe, and accelerate the growth of electronic commerce especially for small- and medium-sized enterprises.¹⁰

Beyond providing information and coordinating electronic commerce activities among its 15 members, the European Union has adopted a series of directives (some already mentioned) that in effect govern how European

9. See <http://www.ispo.cec.be/Ecommerce/>.

10. See http://europa.eu.int/comm/information_society/index_en.htm.

countries address issues like data privacy, electronic signatures, and consumer protection. But business has criticized the EU regulatory approach as “an unclear mix of overlapping, contradictory, and ill-suited laws that stall e-commerce initiatives” (Lewell 1999).

In 1998, the European Union called for greater worldwide coordination of policies affecting electronic commerce. The Communication on Globalization and the Information Society: The Need for Strengthened International Coordination advocated an international enabling framework for the emerging global electronic marketplace. Noting that development of the Internet depends partly on the extent to which international rules are consistent, the commission discussed shortcomings of the current ad hoc system of international initiatives, specifying the lack of general oversight and of a predictable way to address issues, lack of coordination between groups addressing similar issues, and no systematic involvement by user and consumer groups.¹¹

Commissioner Martin Bangemann proposed an Internet Charter that would establish “a set of internationally agreed, legally nonbinding objectives and principles encouraging a simplified regulatory governance of the Internet, consistent with *inter alia* security, safety and soundness, privacy, jurisdiction, liability, taxation, copyright and data protection considerations, pursuing the greatest interoperability across borders” (European Parliament 1998). The proposal never advanced due, in part to the negative reaction from the business community.

Asia-Pacific Economic Cooperation

Through the Telecommunications Working Group, APEC members have worked over the past five years to liberalize and expand the telecommunications and information sectors—the basic infrastructure for electronic commerce.¹² In the final declaration of their November 1997 meeting, APEC leaders stressed the importance of electronic commerce and directed ministers to undertake a work program in the region. They declared, “This initiative should recognize the leading role of the business sector and promote a predictable and consistent legal and regulatory environment that enables all APEC economies to reap the benefits of electronic commerce.”

In 1998, APEC ministers endorsed the Blueprint for Electronic Commerce and its principles for promoting the use of electronic commerce in the region, and promulgated an APEC-wide electronic commerce work program. The Electronic Commerce Steering Group was established in

11 Introductory Note from the Committee of Permanent Representatives to the Telecommunications Council, dated 13 May 1998.

12. See <http://www.ecommerce.gov/apec/>.

1999 to implement the blueprint and coordinate electronic commerce activities within APEC. It has already produced a study of the legal foundations for electronic commerce, a legal guide for online contracting, and an e-commerce readiness assessment tool to help countries gauge their openness to electronic commerce and identify areas where reforms are necessary. Current goals include paperless trading by 2005, a virtual multimedia resource center, and initiatives to ensure consumer protection.

Free Trade Area of the Americas

Another regional body that is primarily a coordinating group is the Free Trade Area of the Americas (FTAA).¹³ In 1997, the Second Summit of the Americas Plan of Action called for (a) strengthening the capacity of countries in the hemisphere to benefit from the knowledge-based global economy and (b) promoting the growth of the communications and information industries as part of national and regional integration. In 1998 the ministers established the FTAA Joint Government-Private Sector Committee of Experts on Electronic Commerce, a non-negotiating group of public officials and private-sector experts, to make recommendations on ways to broaden the benefits of electronic commerce in the region.

A detailed report with recommendations for strengthening the infrastructure, increasing participation, clarifying the rules of the market, increasing consumer confidence, and dealing with electronic commerce in FTAA negotiations was submitted to the ministers in September 1999.¹⁴

New Collaborative Groups

New bodies have formed to deal with challenges specific to the Internet. These are private sector groups concerned primarily with standards development and fostering interoperable e-commerce policies. The private sector is thus leading the way in setting global technology standards for the Internet. In one case, government helped establish a new international entity, but most were initiated by the private sector. Despite their informality, these entities nonetheless constitute a new type of international coordination to address technical, and in some cases, policy issues.

Internet Corporation for Assigned Names and Numbers

The Internet Corporation for Assigned Names and Numbers (ICANN)¹⁵ is an example of the private sector assuming responsibilities previously

13. See <http://www.ftaa-alca.org/>.

14. See <http://www.ecommerce.gov/>.

15. See <http://www.icann.org/>.

handled by government. For more than 25 years, the US government, mostly through contractors like the Internet Assigned Numbers Authority (IANA) and Network Solutions Inc. (NSI), managed informally many of the technical aspects of the Internet, including the maintenance of the list of assigned Internet numbers and names.¹⁶ The explosive growth of the Internet in recent years, however, necessitated the creation of a more formal technical management and policy body. In its June 1998 Statement of Policy on the Management of Internet Names and Addresses (the White Paper), the US government called on the Internet community to create a new not-for-profit organization of stakeholders to administer the Internet domain name and address system.¹⁷

Formed in October 1998, ICANN is a nonprofit corporation created by a global coalition of Internet businesses and technical and academic communities. The US government designated ICANN as the coordinator of four Internet functions: management of the domain name systems, allocation of Internet Protocol (IP) address space, assignment of protocol parameters, and management of the root server system.

ICANN's board is composed of 19 volunteer directors, including the president, who on an interim basis is Esther Dyson, the renowned publisher of the Internet newsletter *Release 1.0*. Nine interim members were appointed in October 1998, and an additional nine were elected in fall 1999 by ICANN's three supporting organizations.¹⁸ The original nine members are due to be replaced in 2000-01 by new directors elected at large by the Internet community. The process of transitioning responsibilities from the US government is scheduled to be completed in September 2000.

ICANN's charter is *not* to "run the Internet" but rather to facilitate coordination and management of key technical tasks (referred to by Dyson as "managing the Internet's plumbing" [1999]). It is an unprecedented effort to build a global private governing body representative of Internet users. Nonetheless, the potential scope of ICANN's charter, as well as its

16. Domain names are the common names (e.g., <http://www.iie.com>—the system of suffixes such as .com, .org, .edu associated with email or Web site addresses) that correspond to unique Internet Protocol (IP) numbers that serve as addresses on the Internet for the routing of information.

17. The White Paper can be found at http://www.ntia.doc.gov/ntiahome/domainname/6_5_98dns.htm.

18. ICANN's bylaws provide for three supporting organizations to provide substantive policy recommendations and serve as formal institutional forums for business, technical and noncommercial communities to participate in ICANN. The Address Supporting Organization reviews the system of IP addresses; the Domain Name Supporting Organization is concerned with the domain name system; and the Protocol Supporting Organization addresses technical standards that allow computers to communicate over the Internet. Each names three directors to the ICANN board. See <http://www.icann.org/support-orgs.htm> for more information on the role of the supporting organizations.

recent activities, have been criticized by governments and groups the world over.

Challenges Facing ICANN

It is not surprising that ICANN has been surrounded by controversy almost since its creation. Notwithstanding ICANN's mandate to oversee technical functions of the Internet, these functions often cannot be isolated from broader policy issues (Clausing 2000c), so questions arise about the scope of ICANN's authority. The process of trying to forge consensus among both the current and the *potential* Internet community worldwide is made even more difficult by the fact that the organization is trying to get itself up and running as it also transitions the domain name registry system from a monopoly to a competitive environment—a messy task under any circumstances (Clausing 2000c).

The major criticisms of ICANN fall into three categories—lack of transparency and accountability in decision-making, including selection of board members; the breadth of ICANN's authority, and the potential it offers for both undue influence of special interests wanting to “regulate” the Internet and under-representation of current non-users; and the aim of introducing competition into domain name registration.

Initially ICANN meetings were not open to the public, fueling the fears of some critics that ICANN was a conspiracy of big business to control the Internet. In response, the board opened meetings and now posts agendas in advance, making inputs and outputs of its decision-making process more transparent.

The major challenge, however, is how ICANN can fairly represent the diverse interests of the global Internet community.¹⁹ This question has arisen most markedly with regard to the process for selecting the At-Large members of the board. ICANN's original plan allowed any Internet user over the age of 16 with e-mail and postal addresses to become a member and therefore eligible to participate in the international elections.²⁰ The plan, however, generated significant opposition from public interest groups.

19. The issue of Internet governance is one that has been actively promoted by the Markle Foundation, which announced its plan to dedicate \$100 million over five years to ensure that the public's needs are served. The foundation provided \$200,000 to ICANN to increase public accountability, which enabled ICANN to begin outreach and education and to build its at-large membership so Internet users worldwide can vote. See <http://www.markle.org/program/pit/index.html>.

20. Originally ICANN's plan required a quorum of at least 5,000 registered members, and permitted members to vote electronically using PIN numbers received in the mail. The indirect election would vote on an 18-person At-Large Council, which would in turn elect nine At-Large Board Members. The election was to have been completed by 30 September 2000.

The Center for Democracy and Technology (CDT) and Common Cause released a report in March 2000 criticizing ICANN's proposal for at-large elections (Common Cause nd). The report concluded that the plan was flawed, in part because the millions of Internet users worldwide have little understanding of ICANN and its mission, and therefore cannot knowledgeably select technically capable board members. The groups urged changes to more broadly engage the Internet community so as to minimize the opportunity for organized minorities to capture the election; permit direct elections of the nine board members; and establish a clear nominating process and election rules. Although not reflected in the report, others were concerned about the under-representation of developing countries and regions, especially Asia and Africa, in ICANN's structure.

Under pressure to complete the election by the September 2000 transition deadline, during a rancorous March 2000 meeting in Cairo ICANN's board resisted the recommendation to postpone elections and revamp the process. But ultimately, the board agreed to revise the plan and hold direct elections for five new members by 1 November 2000, while studying the at-large membership process to determine how the final four board members should be chosen. Under the new process, each new director will represent a geographic region: Africa, Asia/Pacific, Europe, Latin America/Caribbean, and North America. ICANN also launched at-large membership and educational programs, as well as designed new election procedures and named a nominating committee.²¹ While public interest representatives heralded ICANN's decision to change the process as a defining moment for the Internet, a truly representative election process is far from assured. Engaging the millions of Internet users worldwide, let alone assuring their participation in elections, is an unprecedented experiment in global democracy.

Other critics have expressed concern about the scope of ICANN's authority, fearing that its mission is too broad and that limitations on its authority have not been stated clearly. This has led to repeated calls for ICANN to assure the Internet community, even via contractual provisions with registrars, that it will restrict its policy activities to those spelled out in the charter agreements with the US government. ICANN believes its authority is sufficiently delimited by its bylaws and the terms of the White Paper, but has been willing to adopt the desired language.

A significant issue is that ICANN does not have a stable source of funding. When the US Government devolved its responsibilities to ICANN, it did not provide funding. Until recently, ICANN relied on voluntary donations, including contributions from some Internet-related

21. For more details, see <http://www.icann.org/nomcom/call.htm>, and the site maintained by ICANN Watch, a watchdog group assembling information on ICANN's activities, at <http://www.icannwatch.org>.

corporations. This raised questions of inappropriate influence by special interests. In order to finance its operations on a sustainable basis, ICANN suggested a permanent cost-recovery structure of a \$1 annual fee on registered addresses. Characterized by opponents as a “domain name tax” (Dyson 1999) the fee was deferred while a task force studied funding options and recommended ways to cover ICANN’s costs (Hillebrand 1999c).²²

In the meantime, the current agreement to collect dues from the more than 200 country-specific Internet registries has run into problems (Bridis 2000). Generic-top-level domain registries (.com, .org, .net) already account for most of ICANN’s income, but country-code-top-level domain operators (.uk, .fr, etc.) agreed last winter to pay 35 percent of ICANN’s annual operating expenses (or about \$1.5 million). Fees based on the number of addresses registered in each domain, ranging from \$500,000 for Germany to \$500 for Zimbabwe were assessed but have been challenged. ICANN officials have denied that failure to collect the fees jeopardizes ICANN, but it is clear that secure funding is critically important to the long-term viability of the organization (King 2000).

The third significant challenge for ICANN is how to manage the process of introducing competition into the domain name registration system. While there is broad support for privatization of the function generally, the method has been attacked. In accordance with its charter to facilitate fair and open competition, ICANN has established a system to accredit new registrars and create operational guidelines. Unfortunately, ICANN’s authority was bitterly contested by NSI, which had held the government-authorized monopoly on domain name registrations. This resulted in protracted negotiations and a complicated process for new registrars.

The parties finally agreed in November 1999 on many outstanding issues, but other questions, such as the administration and delegation of top level domain names, remain (Hillebrand 1999b). More than 70 new domain name registrars have been accredited worldwide to provide competitive services for registration of .com, .net, and .org domains. In addition, ICANN has endorsed the recommendation of an advisory group to create more top-level domains (such as .law, .med, etc.) although who will run the registry and whether or not trademark holders will receive preferred treatment for widely recognized marks have not been settled.²³

A new procedure adopted by ICANN for arbitrating domain name disputes—the Uniform Dispute Resolution Policy (UDRP)—represents

22. Some in Congress have been critical of the fact that the Clinton administration even established ICANN, as suggested by the title of a 1999 oversight hearing: “Is ICANN Out of Control?”

23. Proposals for ICANN to expand Internet addresses have been criticized by several companies as exacerbating problems with cybersquatting. See *USA Today*, 6 March 2000.

Box 8.4 What's in a name? Cybersquatting and intellectual property protection for domain names

Amazon.com filed a suit in US federal court and in Greece against Amazon.gr, in part because the Greek company was using the Amazon name, and in part because the Greek owner was "willing" to sell the name for \$1.6 million. The Greek company was cybersquatting, but to what extent is a company's domain name intellectual property, protected by trademark law?

The WIPO began in 1998 a consultation process on the links between protection of IP and Internet domain names and submitted the final report to ICANN in April 1999.¹ ICANN adopted in October the Uniform Domain Name Dispute Resolution Policy, which took effect on January 1, 2000. WIPO has created an online dispute resolution site, and has established a "domain name resolution service" to handle cybersquatting. In less than 2 months, 89 cases have been filed and several have been resolved.² In the United States, several pieces of legislation have also addressed cybersquatting, including the 1999 Anti-cybersquatting Consumer Protection Act, which extends the Lanham Act to the Internet, in which federal court is the avenue for remedy.³

But, when domestic and international jurisdictions overlap, where is the "high-ground"? In Taiwan, for example, registering a domain name is quick, easy, and cheap. But, if the company wants trademark protection, it must apply a different registry with a longer wait and higher price.

Moreover, surprisingly, numerous internationally active businesses have not trademarked their domain names, and have not even registered the names in many of the domestic markets in which they operate. Is this because the geography of the Internet is not bounded by the domestic moniker that is represented by .fr or .uk? Or do these firms figure that they can get any future disputes resolved through ICANN?

Finally, how extensive should trademark protection of domain names be? In some sense, this is a question similar to the patent protection of business-method software. Can the obvious be trademarked around the world?

1. Available at WIPO, Pub. No 439, 30 April 1999. See <http://www.wipo2.wipo.int>.

2. David McQuire, "WIPO, ICANN Happy with Cybersquatting Decision," *Newsbytes*, 28 February 2000. See www.emarketer.com/enews/022800_cybersquat.html.

3. For more details, see Gilbert, Robert D., "Cybersquatters Beware: There Are Two Ways To Get You," *New York Law Journal*, 24 January 2000.

the first globally enforceable anti-cybersquatting remedy. It designates WIPO as the body to handle violation of trademark rights for registers of generic top-level domain names that require arbitration before registration. The UDRP is the Internet's first mandatory deliberation mechanism to help decide complicated questions of when owning a domain name is legitimate and when it constitutes "cybersquatting" (see box 8.4).

Assessment

Predictably, the privatization of the domain name system has run into some difficulties; as the organization evolves, problems associated with the transition to private management and open consensus-based gover-

nance are likely to continue. Important progress has been made, however, in part due to ICANN's willingness to respond to concerns raised by the Internet community. It is not a perfect organization—nor can it be expected to be so with its challenging and unprecedented mandate and numerous stakeholders—but critics have unfairly maligned ICANN, without offering viable alternatives (Miller 1999).

If ICANN were to fail, as some critics predict, options would include creation of a new organization or return to governmental administration—both near-impossible at this point. It is not likely that any new organization would stand a better chance of succeeding, as ICANN opponents contest any central control of the Internet. And the time is past when the US government can or should perform ICANN's functions.

ICANN is a truly novel experiment in a private-sector-led approach to electronic commerce. The Internet community generally, and private industry in particular, have a tremendous stake in seeing that the experiment thrives. ICANN needs time to continue to evolve in a transparent manner. Elections in 2000 will be an important test of whether ICANN can institute representative procedures, and gain the confidence of Internet users and governments alike.

Secure funding that does not raise conflict-of-interest concerns is essential. The magnitude of ICANN's tasks seems overwhelming. The board has done a reasonable job against great odds in getting the organization up and running, but more dialogue with the Internet community and governments will help build the consensus it needs.

Expanding Role of the Private Sector

A clear trend, discernible in all international efforts, is the increase of private-sector participation in e-commerce policy issues. Multilateral bodies, once the sole domain of government, now routinely include private-sector representatives in deliberations. Businesses have risen to the challenge, taking on new responsibilities in establishing and enforcing "rules of the road" for electronic commerce (US Government Working Group on Electronic Commerce 1999).

The increase in private-sector leadership is both appropriate and necessary, given the pace of change and how little governments know about e-commerce developments. If the principle of private sector leadership is to have meaning, business must thus be encouraged to establish its own rules and enforcement system to deal with privacy protection, objectionable content, and other challenges.

New formal and informal international advisory groups have formed to advise governments and international institutions, including the GBDe

Box 8.5 Global Business Dialogue on Electronic Commerce (GBDe)

One example of a private sector group that formed specifically to address the policy challenges presented by the online economy is the Global Business Dialogue on Electronic Commerce (GBDe). The group originated from a 1998 meeting of the Business Roundtable with European Commissioner Martin Bangemann, to discuss the need for strengthened international coordination of Internet-related issues. Faced with conflicting policies, rules, and regional regulations that pose obstacles to the emerging online economy, business CEOs formed the GBDe to provide input to governments and international organizations concerning the regulation of electronic commerce. It represents an unprecedented collaboration of senior business leaders from more than 60 companies from countries as diverse as South Africa, Venezuela, and South Korea, along with the US, Europe, and Japan.¹ Its credo is to improve business coordination at the global level, suggest ways to avoid conflicting policies and patchwork legislation and, where regulation cannot be avoided, work with governments develop business-led, self-regulatory systems.²

GBDe's first major meeting took place in September 1999, where consensus recommendations were presented for a future policy framework for electronic commerce. Fundamental to the group is the belief that inconsistent local, national and international regulatory constraints will result in the failure of many economic benefits to be realized by consumers and businesses to be realized. Accordingly, GBDe developed principles and recommendations to address critical issues of authentication and security, consumer confidence, content, information infrastructure, intellectual property rights, jurisdiction, liability, protection of personal data and tax/tariffs. After establishing itself as an influential voice for industry in discussing e-commerce issues with governments during its first year, GBDe's 2000 workplan includes additional work on privacy, dispute resolution, and trust-marks, as well as enhancing its advocacy and educational efforts.

In a short time, GBDe has become an influential and effective vehicle to communicate industry perspectives, as well as to promote public-private sector cooperation and dialogue on regulatory issues that could impede the dynamic growth of electronic commerce.

1. The companies comprising GBDe represent some of the most influential information technology companies from around the world. See <http://www.gbde.org/structure/bsc/global.html>.

2. See <http://www.gbde.org/>.

(see box 8.5 on GBDe),²⁴ the Alliance for Global Business (1999), and the Internet Alliance.²⁵

Traditional industry advocacy groups have also engaged in e-commerce issues. The Transatlantic Business Dialogue and the International Chamber of Commerce are two examples of business groups adopting new

24. See <http://www.gbde.org> for the Workplan of the Global Business Dialogue on Electronic Commerce.

25. The Internet Alliance is an association of policy professionals representing the online industry on the state, federal, and international levels. See <http://www.Internetalliance.org>.

initiatives to address e-commerce issues.²⁶ Private-sector groups, especially in the United States, have also actively engaged in efforts to develop self-regulatory mechanisms.

There has been a significant increase in the number of private-sector non profit groups addressing aspects of electronic commerce as well. The Internet Society, a professional membership society with more than 150 organizational and 6,000 individual members in over 100 countries, is concerned with the growth and evolution of the Internet.²⁷ It is the organizational home for groups responsible for Internet infrastructure standards, including the IETF (see box 8.6).

With over 500 members worldwide, CommerceNet operates as a virtual organization whose members fight efforts that inhibit the growth of electronic commerce.²⁸ The International Law and Policy Forum (ILPF) was started by a group of Americans concerned about keeping legal and technical standards up to speed with Internet developments. The ILPF has matured into an international group of legal and policy experts dealing with cross-border aspects of the electronic medium.²⁹

There are countless other interest groups concerned with specific Internet issues. The Transatlantic Consumers Dialogue and Consumers International advocates on behalf of consumers; the Center for Democracy and Technology, Privacy International, and the American Civil Liberties Union address privacy protection and individual rights; and the Children's Partnership and other groups engage on issues of content.

Improving the International Environment for Electronic Commerce

Are current ad hoc multilateral efforts to deal with e-commerce issues adequate? How can national policies be made more interoperable? If coordination must be enhanced to achieve policy interoperability, what form should it take? Is there a need for principles and policies to help guide governments and international entities that deal with electronic commerce?

To date there have actually been few major conflicts among the countries and international bodies addressing e-commerce issues. A convergence

26. The International Chamber of Commerce (ICC) has concentrated on trust, publishing a draft Uniform International Authentication and Certification Practices and issued General Usage in International Digitally Ensured Commerce (GUIDEC) to ensure trustworthy digital transactions the Internet.

27. See <http://www.isoc.org>.

28. See <http://www.commerce.net>.

29. See <http://www.ilpf.org>.

Box 8.6 Major standards and technology bodies

W3C (<http://www.w3.org/>)

An example of the formation of an industry group to deal with specific Internet-related issues is World Wide Web Consortium (W3C). Founded in 1994 and led by Tim Berners-Lee, creator of the World Wide Web, W3C develops common protocols to ensure interoperability of the Internet. It is an international industry consortium jointly hosted by the Massachusetts Institute of Technology Laboratory for Computer Science (MIT/LCS) in the United States; the Institut National de Recherche en Informatique et en Automatique (NRIA) in Europe; and the Keio University Shonan Fujisawa Campus in Japan. Services provided by the Consortium include: a repository of information about the World Wide Web for developers and users; reference code implementations to embody and promote standards; and various prototype and sample applications to demonstrate use of new technology. For example, Platform for Internet Content Selection (PICS) was developed by W3C to deal with the issue of content on the Internet. Another specification, P3P, will translate privacy statements on Web sites into machine readable form, allowing individuals to decide how much personal information to divulge to Web sites. Specifications and reference software are made freely available throughout the world.

IETF (<http://www.ietf.org/>)

Another technical body formed to deal with specialized aspects of EC such as standards is the Internet Engineering Task Force (IETF). IETF is one of a number of loosely organized international groups of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet. IETF is the principle body engaged in development of new Internet standards specifications. IETF's mission includes identifying and proposing solutions to pressing operational and technical problems in the Internet; specifying the development or usage of protocols and the near-term architecture to solve technical problems; making recommendations regarding the standardization of protocols and protocol usage in the Internet; and providing a forum for the exchange of information within the Internet community between vendors, users, researchers, agency contractors and network managers. While it is not a traditional standards organization, many of the specifications produced become de facto standards.

has emerged on many e-commerce policy principles, including legal codes and intellectual property.

Electronic commerce is just getting started. As it grows, will the challenges for policymakers grow with it? Or have we already glimpsed the most fundamental of them? Already there are serious philosophical differences in approaches, as evidenced by the United States and the Europeans, with the United States generally favoring market-oriented self-regulatory solutions, and the European Union preferring more comprehensive mandated approaches.

On the one hand, the private sector is concerned that electronic commerce may be stifled by conflicting national approaches to policy issues, with the potential for overlapping and contradictory approaches likely

to increase as electronic commerce takes hold.³⁰ On the other hand, as electronic commerce grows, domestic political opponents of globalization and liberalization are likely to pressure their own governments in ways that undermine electronic commerce.

At a minimum, therefore, national, regional, and international approaches must be coordinated, especially on such complex cross-border issues as Internet taxation, payment systems, electronic authentication, and security. On other issues, such as privacy, content, and consumer protection, national approaches will differ, and coordinated international approaches are unlikely. Interoperable policy solutions *are* possible; they need to be pursued promptly before differences in national approaches become barriers to the growth of electronic commerce.

How can governments best promote interoperable e-commerce policies? Multilateral efforts to date have resulted in consensus on some important aspects of electronic commerce, including:

- agreement by a number of countries and international organizations on general principles, such as that the private sector should lead;
- broad acceptance of certain rules and agreements, such as the WIPO's treaties on intellectual property rights, the ITU's technical standards, the WTO moratorium on duties, and the ICANN mandate on domain names;
- consultation, in numerous forms and forums, among them the WTO, OECD, APEC, and FTAA; and
- information sharing, through the UNCITRAL model law, APEC's efforts to help countries gauge their openness to electronic commerce and identify areas where reforms are necessary, the OECD's forums on a broad range of e-commerce issues, and UNCTAD's roundtables of shared experiences.³¹

30. See box 8.5 and the statement of the Global Business Policy Dialogue, <http://www.gbde.org>.

31. The current ad hoc framework of international entities—formal and informal, official and non-governmental—addressing aspects of electronic commerce, in essence, constitutes a regime. International regimes are “sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge on a given issue area” (Krasner 1983, 2). International regimes are usually, but not always, characterized by the presence of international organizations. For example, while there is an international environmental regime in the form of agreements and protocols, there is no formal international organization embodying the regime.

According to Joseph S. Nye, one of the founders of modernist international relations theory, a regime can: (1) facilitate diplomacy, coordination of national policies, and identification of shared interests; (2) provide information; (3) promote greater discipline by states and other participants toward compliance with the rules, principles and expectations; and (4) facilitate burden-sharing when necessary (Nye 1990, 255-57).

Among the options to promote multilateral policy interoperability are:

- creating an international institution to develop, coordinate, and enforce policies,
- formalizing and broadening consensus through a treaty or convention,
- promoting universal acceptance of principles and policies, and
- enhance discussion and information sharing.

Creating a formal international organization for electronic commerce is neither necessary nor desirable. On the one hand, electronic commerce pervades so many broad issue areas—taxation, privacy, security, and others—that it is impractical for a single international body to address the vast range.³² On the other hand, e-commerce-specific issues, such as standards and intellectual property, can best be dealt with by existing international organizations. Thus, the creation of a new overarching international institution “to handle” e-commerce issues, even if it were politically possible, would likely create more problems than it would solve. There cannot nor should there be a global Internet government.

For the same reasons, a formal Internet treaty or convention would be too complicated an effort for the likely minimal practical benefit. In fact, the widespread perception of serious risks associated with greater structural formalization—the tendency toward regulatory and institutional creep—appear (appropriately) to have doomed proposals for an Internet Charter to address the future organization and management of the Internet.³³

More modest steps to promote an international environment conducive to the growth of electronic commerce are warranted. Universal acceptance of common principles and policies to underpin national and international actions would be helpful. An international framework of principles could help reduce the potential for conflicting approaches and shape national policies before barriers are erected, inform the work of international bodies, and encourage greater dialogue on complex issues. Put in other terms, widespread agreement on basic principles could aid coordination and promote international policy interoperability. It would also help govern-

32. The only existing international organization that could potentially do that is the OECD, which has already addressed numerous electronic commerce-related issues. With membership limited to 29 industrialized countries, even with inclusion of observer countries including some developing nations, the OECD would appear to be too narrow for global discussions.

33. See *Communication to the Council from the Commission*, 28 February 1998 at <http://www.ispo.cec.be/eif/policy/governance.html>, and the Report on the Communication from the Commission on Globalisation and the Information Society: The Need for Strengthened International Coordination (COM[98]0050—C4-0153/98).

Box 8.7 Government-endorsed principles to support electronic commerce

Since 1997, Australia, Canada, Chile, China, Columbia, Egypt, the European Union, France, Ireland, Korea, Japan, the Netherlands, the United Kingdom, and the United States have signed bilateral statements, endorsing a shared vision and policy principles to foster the growth of global electronic commerce. In addition, international groups such as APEC, FTAA, and WTO have also adopted statements endorsing various e-commerce principles.

The joint statements include fundamental principles and policies that governments agree should guide the development of electronic commerce. General principles include:

- the private sector should lead;
- governments should avoid unnecessary restrictions on electronic commerce and foster its development through a clear, consistent, and predictable legal framework;
- industry self regulation should be encouraged through codes of conduct, guidelines, and technological solutions to meet public interest goals; and
- international cooperation is important in promoting the development of electronic commerce.

Beyond these principles, some statements outline an agenda of ongoing cooperation and dialogue in key areas. Among these are:¹

- continuation of the duty-free status of the Internet;
- ratification of the WIPO Copyright Treaty and Performances and Phonograms Treaty;
- clear, consistent, neutral and non-discriminatory taxation of electronic commerce;
- removal of barriers to electronic transactions, including support for interoperable and technologically neutral global approaches to authentication;
- support for effective means of protecting privacy;
- support for effective protection of consumers online;
- access to encryption technology that meet business, consumer, and government needs;
- commitment to extend the benefits of electronic commerce to all parts of society (overcome the digital divide); and
- the right and ability of individuals to control access to content sent over the Internet through filtering and other technologies.

1. Statements vary, with some being more specific and others only addressing some of the policies noted.

ments fend off domestic political opponents of the liberalization needed to support domestic electronic commerce.

Some countries have already articulated principles and signed agreements endorsing a shared vision to foster the growth of electronic commerce; these represent a good starting point (see box 8.7). To multilateralize the process begun by Australia, the UK, the United States, and others

would help solidify what appears to be a fairly strong global consensus on certain policies to guide electronic commerce. The effort could also promote discussion of issues on which there is not yet international consensus, such as privacy, consumer protection, and security. Securing widespread acceptance of common principles could be accomplished in a number of ways: through bilateral or regional initiatives, existing international bodies, or a targeted multilateral initiative.

Going beyond principles, actions to promote greater information access and sharing could also help to facilitate policy interoperability. By its nature, the speed of e-commerce developments is hard to keep up with, even for larger countries with ample resources. For example, even the United States, with its significant government resources devoted to electronic commerce fails to maintain a comprehensive, up-to-date official government Web site on the subject.³⁴ Links to other governments' e-commerce Web sites are not current, nor is there systematic tracking of developments internationally. Developing countries, with fewer human and financial resources to devote to e-commerce policy issues in international forums, have an even more difficult time keeping pace.

Greater information sharing could take several forms. Regional groups like APEC, FTAA, and the European Union and the coordinating bodies of the OECD and UNCTAD already provide some information to members, but these secretariats should be more active. Greater links among international bodies as well as information about developments in individual countries would be helpful. Countries could learn of new technologies for electronic authentication; multilateral bodies or companies could track World Bank grants or loans for specific projects; and developing countries, in particular, could share best practices and solutions to common concerns.

A web of dynamic sources of information about publications and activities worldwide, including links to the international bodies that address aspects of electronic commerce, would be of significant assistance. The Internet is perfectly set up to do this. Multilateral, regional, and functional bodies must now recognize that they do not have the corner on knowledge or information, and that when members get information from or about other groups it is an indication of the strength and value of their home organization, not evidence of its weakness. Organizations need to see the value of network benefits.

Adopting common principles and sharing more information should result in greater coordination among countries, and less conflict of national policies. Where national approaches differ, enhanced dialogue can help promote interoperable policies. Such efforts would benefit countries and other stakeholders interested in maximizing the network benefits of electronic commerce. Moreover, multilateral commitments to the principles

34. See <http://www.ecommerce.gov>.

and policies of the e-commerce regime would help governments resist political opponents of globalization when they zero in on electronic commerce.

The public policy challenges posed by electronic commerce defy unilateral approaches. It is not enough, however, to take a multilateral approach. Effective coordination and policy interoperability are needed. The current international environment for electronic commerce can and should be improved.