Global Cyber Rules and Japanese e-ODA

Takeshi Shinohara,
Nomura Research Institute

This paper deals with two deeply interrelated topics. One is the cyber rules that regulate e-commerce and the other is e-ODA which is a proposal to reform ODA (Overseas Development Assistance) from Japan to bridge the digital divide between developed and developing countries.

Today, the importance of the rules for e-commerce transactions, such as tax jurisdiction, is growing, and the concern is global in scope because often the interests of different regions, of different industries, of the government and private sectors, and of developed and developing countries conflict. This paper examines the structure of rules governing e-commerce and proposes and analyzes various governance models. Whether cyber rules converge to a single model or to multiple models depends on the layer of cyberspace to which the rules apply. For instance, rules affecting pure telecommunication layer require a unified approach, while rules that concern a higher or culture layer need to be more diverse.

Digital bridge issues are also a topic of global concern. Although past liberalization and deregulation brought significant investment and growth in telecommunications around the world, there is concern that left unfettered the market mechanism could widen the digital gap. At the Okinawa G8 summit the Japanese government announced a timely and significant five-year package of ODA and non-ODA government funding for the Asia-Pacific region amounting to $15 billion. This paper describes a proposed new approach to reforming Japan's existing ODA mechanism which is aimed at bridging the digital divide and helping developing countries create knowledge-based economies that take into account their particular cultural characteristics.

Global Cyber Rules

As use of the Internet has expanded, so has the realization of the importance of cyber rules, rules to govern e-commerce. Existing rules designed for brick-and-mortar commerce do not anticipate problems that arise when commerce takes place in cyber space, and they may even impede the development of e-commerce. This paper discusses the need for cyber rules, various models of governance for e-commerce, and finally whether existing approaches to e-commerce governance will converge to a single, global set of cyber rules as globalization proceeds.

Governance of e-commerce: Cyber Rules

In the past, international concern over the rules for network exchanges involved a limited number of specific issues such as electronic funds transfers, electronic data interchange, and cross-border flows of information affecting privacy, security, and industrial policy. With the explosive growth of the Internet since 1995, the problem of governing network commerce has become more serious and more complex. With the mushrooming use of the Internet, problems of consumer protection, harmful content, security, dispute settlement have also mushroomed. The technical advances that expanded the usefulness of the Internet (increasing bandwidth that allows digital transmission of music and images, for example) brought the problem of protecting intellectual property rights to cyber space. The Internet has also spawned new resources, such as domain-names, and along with them, the problems of controlling them. Finally, the Internet has increased the influence of private citizens and global companies. All these changes point to the need for a system of cyber rules.

We can classify cyber rules along two dimensions: their technological and their social objectives. Along the first dimension cyber rules may apply to infrastructure or to content and applications of Internet transactions. Along the second dimension cyber rules may be aimed at maintaining the efficiency of business transactions or at preserving the norms of society. Figure 1 depicts the cyber rules currently being debated in terms of these two dimensions. The earliest cyber rule issues, such as electronic certification, concerned technology and business efficiency. As

e-commerce developed, the focus of cyber rule issues spread to applications and social protections, such as intellectual property rights and alternative dispute settlement.

In the next few years "convergence"–the disappearance of the distinction between communications, broadcasting, and the media and technological advances toward ubiquitous networking will generate new demands for cyber rules to guarantee universal service and international mobility, for example.

The Structure of Rule Governance

We can look at the structure of rule governance first from the perspective of approach: whether we should use the private sector, the government, or technology to regulate the Internet and e-commerce. These three approaches are not mutually exclusive. There is a consensus that the industry should be left to self-regulation as much as possible, but in matters such as privacy protection and harmful content the external, government approach often wins. Technological approaches to governance complement the other two. A technological approach, for example, developing a new information distribution platform that would permit protecting intellectual property rights, inevitably brings standardization that would affect e-commerce worldwide.

Another perspective on the structure of rule governance is to consider the roles of national governments, private enterprises, citizens, and international organizations. The role of international organizations in governance of e-commerce began with the telecom deregulation agreement reached in the WTO in 1997. Now international organizations involved with cyber rules include the World Intellectual Property Organization, the International Telecommunication Union, the International Court of Justice in the Hague, and the United Nations Commission on International Trade Law (UNCITRAL).

Senior managers of leading companies from around the world formed the Global Business Dialogue on Electronic Commerce (GBDe) in 1999 to foster the development of e-commerce and put forth proposals for cyber rules. Other private-sector business associations involved in governance of cyber space include the OECD's Business and Industry Advisory Committee (BIAC), the Global Information Infrastructure Commission (GIIC), the International Chamber of Commerce (ICC), and the APEC Business Advisory Council (ABAC). There is a growing tendency for private sector groups to take over functions such as dispute resolution that have traditionally been performed by the public sector. The role of the citizen sector in rule governance is becoming increasingly important, as witnessed by the demands of the NGOs at the World Trade Meeting in Seattle in 1999.

We can get a perspective on how domestic business practices influence rule-governance by comparing systems in the United States, Europe, and Japan. In the United States there is a tendency for rules to be based on self-regulation in line with the spirit of self-governance and private sector initiative that drove the information technology industry. At the same time, a need for government regulation is felt in some sectors. The private sector influences government policy-making through lobbyists, think tanks, and service in the executive branch. U.S. companies are among the most competitive in e-commerce and advocate global deregulation.

The government has taken a more active role in rule governance in Europe than in the United States, although the overall trend is towards liberalization and market development. The European Commission is establishing systems foster e-commerce and to support its EU-wide integration. For example, the e-Europe 2000 Action Plan calls for establishing regional telephone networks by the end of fiscal 2000. In this and such other areas as privacy protection and billing for digital content, the EU emphasis is on security and fairness as a counterbalance to the American emphasis on market forces. The European Commission calls on the expertise of private sector specialists and trade associations in deciding e-commerce policy.

In general, the public sector can be said to dominate rule governance in Japan. This has become a disadvantage in the age of e-commerce when developments in information technology are led by the private sector and rules must change quickly. In 2001 sensing a crisis, the private

sector stepped in with the Keidanren (Federation of Economic Organizations) and the IT Strategy Council making various pronouncements on e-commerce. The target set by the IT Strategy Council is for Japan to become the most powerful IT country in the world by 2005.

Convergence of Cyber Rules to a Single-rule Model?

In the future with the continued growth of e-commerce, will these various regional systems of cyber rules converge toward a single-rule model or will they interact as a multiple-rule model. Economies of scale may push governance to converge on the US model, although the rule-making efforts in the EU may result in interaction in a multiple-rule model.

A single-rule model may be a preferable structure for issues that involve primarily infrastructure and business efficiency, such as electronic certification and domain names. But for issues that involve privacy and customs duties a multiple-rule model that allows for cultural and political differences may be more appropriate.

Japan's e-ODA

On the one hand the global market created by the development of information technology (IT) provides new opportunities for developing countries, but on the other hand, technological competition inevitably shuts some countries, regions, and people out from development. The digital divide refers to such disparities in access to IT and to the opportunities it affords. Closing the digital divide is necessary for the sound development of the global economy and the stability of international society. The members of the G-8 economies adopted an IT Constitution at their summit meeting in July 2000 in which they called for government-private sector cooperation to bridge the digital divide.

At the same time, the government of Japan announced a comprehensive policy package aimed at narrowing the digital divide, primarily through ODA and non-ODA funding concentrated in the Asia-Pacific region. This paper examines what the shift in Japan's development assistance towards the IT field--what we call 'e-ODA'--means in practice.

Japan is the world's largest donor of overseas development assistance, but this important diplomatic channel is under severe pressure at the moment because of the weakened domestic fiscal situation. We consider five elements necessary to establish an effective e-ODA program.

e-ODA Indices

Two indices are needed to be able to evaluate an e-ODA program. The first is a measure of the IT-related share of ODA. To measure the achievement of IT-oriented efforts, it is important to be able to clearly define and identify the IT-related share of ODA. Present statistics do not show funds for IT as a separate item. They do show communications infrastructure, but IT is significantly wider in scope. Most machines have built-in IT devices and communications technology and personal computers are necessary equipment for many fields such as education and medicine. The second is a measure the value of the prosperity and diversity brought to developing countries by IT. Such an e-development index would have regional and country-specific focus such as indicating the development of Asian-style e-commerce and the provision of electronic information (e.g., Internet home pages) in the local language. It would serve as an indicator of where to direct Japan's policy efforts in developing countries.

Fields for e-ODA

e-Oda may go toward aid for, by, or with IT.

Two factors are important in determining budget allocations to direct *Aid for IT.* First is the rapid pace of innovation which may mean that certain items of hardware and infrastructure become obsolete in the time it takes to evaluate and approve specific expenditures. The second is that the software side of IT--applications and social systems--are crucial to successful utilization of IT hardware. Therefore, aid for IT may also be allocated to support national education systems and policymaking and to encourage cooperation with private sector personnel and NPOs.

Aid by IT means using IT to enhance development by improving administration, coordination, and integration of private sector activities. It also means applying IT to such social problems of developing countries as improving education or the environment.

Aid with IT means directing assistance to projects that use IT infrastructure to accomplish other social goals such developing an effective medical delivery system by helping a hospital facility project to install cellular telephone equipment. Promoting such projects that cut across several agencies requires changing the response to request-based aid.

e-ODA Platforms and Multilateral Projects

The economies of scale inherent in IT will become important in shifting the focus of ODA from hardware (dams and roads) to software and content (education and training). Once an IT system has been developed (a software program, for instance), the cost of making additional and distributing additional copies is extremely low. In this context, bilateral relationships such as request-based aid must give way to cooperative, multi-lateral frameworks for aid delivery. A single satellite in a suitable position could serve as a vital part of the wireless communications infrastructure covering a wide part of the region from East Asia to Central Asia. Such communications systems and data processing systems should be developed as common

platforms for e-ODA. These common platforms could serve multiple countries and multiple projects.

e-ODA Cooperation

In the IT age, individual knowledge and entrepreneurial spirit are important in the growth of information technology and the fall of communication costs is stimulating civic activity to influence large companies and governments. People in developed and developing countries are becoming more closely linked and development assistance must encourage civic participation. In Japan, that means that there must be greater accountability for the ODA budget and the public must become more internationally involved. Thought should be given to how to utilize the talents of the baby boom generation in the field of ODA when then begin retiring from the regular work-a-day world. At the same time, Japan must make an effort to support developing countries by purchasing goods and services, such as software from India.

Development of New e-ODA Technology

Japan is at the forefront of many new Internet developments such as the integration of cellular telephones with the Internet, convenience store-based e-commerce, and non-PC home data equipment. Many of these and as yet-to-be created technologies may be used to narrow the digital divide in developing countries. For example, the ITU Focus Group 7 has found that wireless local loop systems using satellites can be used to create an effective communication system for rural areas of developing countries. One of the targets of technology development in Japan should be to aim to create systems that will bridge the digital divide.