GOVERNANCE ISSUES IN THE DIGITAL ECONOMY
Preparing for the Next Wave

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Tokyo Club Foundation for Global Studies
The development of the Internet marks one of the more important economic, social and political developments of the past several decades as one major building block of the digital economy. This global network combines with the diffusion of digitalization to offer its users the ability to communicate on a decentralized basis and to disseminate information throughout the world. In particular, the Internet provides a powerful tool for facilitating the work of researchers around the globe, increasing productivity and innovation in the process. For developing countries, the Internet has the potential to improve their access to distant markets, business partners and research networks, which will speed up the transfer of knowledge and skills important to their growth process.

Like other paradigm-shifting innovations before it — in transportation, electric power and communications — the Internet will realize its full potential over time. It has been open to industrial and commercial applications only since the mid-1990s; yet at this writing, nearly half a billion people around the world are using or have used the Internet, a figure that easily should double in just a few years. Equally important, the Internet is becoming embedded in a wide range of activities and has become a central feature of the emerging digital economy. This evolution will be stimulated by ongoing technological change. Internet-related activities and infrastructures are still in their infancy and technological developments are rapid. The Internet is becoming the locus of convergence of different technologies and services. As a result, in the near future we will enter the age of ubiquitous networks, which will connect many more people and versatile non-PCs as well as PC equipment through the Internet to broadband, mobile and always-on networks in a pervasive and efficient way.

In its early years, the Internet was the product of public research, both in the United States and at the European Organization for Nuclear Research (CERN); its growth had been a persistent goal of government policy. The process of change accelerated when the Internet opened to commercial use.
in the early 1990s, and since then the network has been allowed to expand and innovate within an environment that has been largely free of direct government regulation, like a new virtual frontier. However, notwithstanding its broadly beneficial impact, the growing use of the Internet has spawned a series of challenges for public policy that revolve around the general question of governance.

The Internet bubble burst in 2000, which has led to a reappraisal of the economic and social meaning of this revolutionary network. Early Internet-based business models may have been flawed, but the Internet is proving an enduring innovation, the importance of which will be yet enhanced by digital convergence and ubiquitous networks. It is thus timely to examine the governance issues that emerged during the first stage of the Internet revolution and try to draw policy recommendations to prepare for this next wave.

The representatives of the five Tokyo Club Foundation (T5) member institutions, which include research organizations from Europe, Japan and the United States, with the support of the Tokyo Club Foundation for Global Studies, have examined certain policy issues and have prepared this statement with the aim of affecting the debate on these issues, not just in members’ countries but throughout the world.1 The statement is based, in part, on a series of research papers prepared for the T-5 conference held in Paris in January 2002 and on discussions among T-5 researchers during and after that conference.2

The objective of the group’s discussion was to agree on some general guidelines for policy rather than to reach agreement on a set of precise policy recommendations. That choice is related both to the subject matter, which is rapidly evolving, and to the international nature of the group and the issues under discussion.

Basic Principles

Before examining a range of specific policy issues, the T-5 group wants to emphasize three broad principles that might usefully guide future policy.

First, the Internet is becoming a “global public good,” suggesting that certain policy questions relating to its impacts ideally should be resolved at the global, or at least the multinational level. Just as nations in the past have cooperated in an official way to combat health problems and have recently endeavored to do so with respect to environmental dangers that cross national boundaries, governments will find it in their interest to do the same with respect to the Internet.

Second, there is some conflict between (1) a goal of minimizing the degree of government regulation on the basis that an open system is more adaptable and

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1 The T5 member institutions include The Brookings Institution (United States), IFO (Germany), IFRI (France), Nomura Research Institute (Japan) and The Royal Institute of International Affairs (United Kingdom). The researchers who prepared this Statement are listed at the conclusion of the document. Financial support is provided by the Tokyo Club Foundation for Global Studies.

2 The papers will be published in 2002 in the Tokyo Club Papers Series and abstracts are available at http://www.tcf.or.jp.
accepting of new technologies, and (2) a concern that private governance can lead to the formation of monopolies and the exclusion of vulnerable groups. We have no definitive answer to the issue, but project that because of the growth of the Internet and the depth of its integration into the social and economic system, governments eventually will have to play a more active role in its governance. However, the technical complexities make it even more important that governments consult in detail with all of the relevant stakeholders.

Third, strong efforts should be made to incorporate the Internet within the existing institutional framework as much as possible. Some of the initial discussion of governance issues suggested that such an approach was impossible and that the Internet would require its own specific rules. However, its growth since the mid-1990s suggests that such a set of specific "virtual regulations" is not necessary. In particular, competition policy, tax laws and rules governing intellectual property rights have all proved quite adaptable for most of the issues raised by the existence of the Internet. Of course, this experience does not mean that the existing set of regulations is sufficient to deal with all the new issues that arise in relation with the Internet but also because of broader trends such as the emergence of the knowledge-based economy and globalization. There are some significant differences among national legal systems that might result in legal uncertainties that would impede future developments. The advent of ever more ubiquitous networks in the digital economy is also bound to drive important evolutions in the existing regulatory and governance frameworks. Fitting the Internet within a broader framework reduces the risks of distortions and inequities associated with special treatment, but the framework will need to leave room for legitimate differences in national preferences.

Specific Policy Issues

We believe that the growth of the Internet raises important policy issues in seven major areas: (1) governance of the Internet, (2) competition policy, (3) intellectual property rights, (4) taxation of e-commerce, (5) consumer protection, (6) privacy, and (7) broadband and digital convergence.

1. Governance of the Internet

An increasingly controversial issue over time has been and will continue to be who governs the Internet. The issue arises with respect to both governance of the Internet as a single global communication network and governance of the Internet economy. And so far, the question has been answered in roughly two ways: "self regulation" and government regulation.

The technical standards of the Internet, including the widely used computer language HTML used to communicate on the Net, have been "governed" by a
multinational non-governmental organization, the Worldwide Web Consortium. The WWC is made up of technical professionals from around the world and is independent of government.

Similarly, the system for assigning addresses on the Internet, or "domain names," is now managed by another non-profit organization, the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN, which is governed by an international board, establishes rules for registration of domain names and a system for mandatory arbitration of trademark claims.

At the same time, government regulation exerts a strong influence on the technical infrastructure, network-related information, and network. These regulations vary significantly among countries: even in the EU, where an effort has been made to harmonize the regulations, they differ in the details.

Given the increasing importance of the Internet for communication and commerce around the world, the natural question is how it will be governed in the future. We believe that the private sector should continue to have a primary role in the development of technical standards. Ideally, governmental involvement would be limited to ensuring competition and the security of the network. Should governments become involved in these matters, we believe they should do so cooperatively, perhaps through existing institutions such as the World Intellectual Property Organization (WIPO) and the WTO. It is important to maintain the global character of the Internet.

We recognize that many governments already have exerted, or have attempted to exert, some control over the content delivered on the Internet — or at the very least to monitor certain users or websites. Various motives may exist for such efforts: to combat crime and terrorism, to control pornography, or to limit "hate speech," for example. Individual countries can be expected to have differences in views on the nature and extent of such content control or monitoring. It is our general view that, while some governmental involvement relating to Internet content is likely to be inevitable, we believe it should be kept to a minimum. We are especially opposed to governmental efforts to limit content aimed at promoting the wide expression of ideas, which is a value shared among all of our countries, and a driving force behind the Internet revolution worldwide.

2. Promotion of Competition

There are important features of the "Internet economy" that have implications for competition. Most important are the network effects associated with some high-technology markets, which promote the emergence of a single standard. Network effects arise when the value to any particular user increases with the number of other users. For example, the value of telephone service increases with the number of other users hooked up to the network. Similarly, the users of software find it easier if they can exchange their results or the developers of applications programs prefer to write programs for only a single operating system. This may help to explain the dominance of Microsoft in that market. What are competition authorities to do in markets subject to monopoly? If the
monopoly is combined with the ownership of a de facto standard, can this standard remain private property?

A further complication arises in markets characterized by rapid technological change. The prosecution and adjudication of antitrust offenses inevitably involves delay, often more time than is involved in a new product cycle. By the time antitrust authorities may be able to punish a firm in a high-tech market for an antitrust offense, the market may have changed so much that any penalty can do little to undo the adverse impact of the offense.

These are all difficult issues to resolve and we do not pretend to have the perfect solution. Nonetheless, it is possible to apply certain lessons from past antitrust enforcement and the accumulated knowledge of economists who study industrial organization to provide some useful general guides for antitrust authorities.

First, in markets that may be subject to de facto monopoly, whether through economies of scale or demand-driven network effects, competition authorities should ensure that firms do not use illegitimate means — tactics that cannot be profitable without destroying competition — to entrench their positions. Examples include exclusive dealing (forcing consumers to buy only from the dominant vendor) or the tying of a monopoly product to a separate product.

Second, the fact that rapid technological change can make it difficult to undo monopolies if they have been unlawfully achieved or maintained underscores the importance of effective review of mergers between firms that threaten competition in a market, especially one which may be characterized by network effects. The defendant should continue to carry the burden of proof to show that competition would not be reduced. In this regard, we urge antitrust authorities to continue their efforts to coordinate their activities, and to develop common procedures for reviewing cross-border mergers.

Third, the Internet has raised at least one antitrust concern that requires a more specific solution: the development of various on-line exchanges owned or operated by competitors could facilitate price collusion, both in final goods markets and in markets for supplies. To the extent the exchanges become “essential facilities” for doing business, they also could boycott potential members and thereby artificially raise their costs of doing business. We therefore suggest the separation of exchange ownership and participation. Exchanges should not provide information on buyers, sellers, amounts or prices to participants or third parties and only “firm” prices should be quoted. The exchanges should also be prohibited from the bundling of products where the objective is to create a dominant position.

Finally, an important set of competition issues affecting the Internet relates to policies toward the telecommunications sector, since the telecommunications network provides both the backbone of the Internet and access to it. In this regard, it is particularly important to improve the access of competing telecommunications providers

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to the monopoly "local loop." Despite the difficulties that governments have encountered, we believe that the promotion of effective competition in local access continues to be an important objective, since more competition should lead to lower rates for Internet access and thus higher Internet penetration.

3. Intellectual Property Rights

Some degree of protection of intellectual property is considered necessary to create incentives to develop new products and services. If the gains from innovation are too easily appropriated, there will be less of it. On the other hand, intellectual property rights (IPRs) can be too strong if the monopoly power they confer is excessive in relation to the benefits of the innovation and the costs of restricting its use. These concerns are particularly strong in developing economies that are primarily users as opposed to producers of the new technologies.

The issue arises with particular force in the context of an expanding Internet. It is a highly effective means of disseminating information. But the provision of free information may not give adequate incentives for content producers to invest in new products and services. The threat of the Internet as a "giant copying machine" has thus led to an effort to reinforce existing IPRs and expand them globally. This evolution of the intellectual property institutions has been driven by the potent combination of globalization and innovation-driven competition, which the Internet has yet made more compelling.

Most recently, concerns have been expressed that the process has gone too far and the creation of monopolies is unduly restricting synergetic processes of innovation. Advocates of the free software movement, for example, argue that such an outcome would occur if software could be patented in Europe as it is in the United States. The European approach has been to favor copyright rather than patents as the legal means for protecting innovation in software (for inventions not involving technical effects). Likewise, many in the American scientific community object to the European practice of granting specific protection for databases. Furthermore, many observers are concerned that strong protection of both business methods through patents and entertainment through copyright might unduly restrict the development of content for broadband technologies.

We believe that government patent offices must upgrade their capability to deal with the new technologies, such as databases and software, in order to assess the significance of innovations and avoid the granting of excess rights. Second, the holders of IPRs should not be allowed to forbid access totally. Finally, we believe that IP policy more broadly — including both patent and copyright protection for software and related products suited for the Internet — should be developed only after broad consultations among stakeholders, including scientists, users, firms and governments. Such consultations are being conducted in the EU with regard to the granting of patents for software, in Japan for copyrights of digital content, and in the US with regard to patents for business methods. The consultations would lead to a more informed debate on these complex issues and a better assessment of the consequences of different options.
4. Taxation of E-commerce

Through a series of international consultations organized by the OECD, substantial progress has been made in integrating the economic activities surrounding the Internet into the existing tax system. It is becoming increasingly evident that e-commerce can be treated on a par with other forms of commerce. The object of equal treatment is important if countries are to avoid the distortions and economic waste that could result from the differential tax treatment of e-commerce.

For example, conventional rules governing consumption taxes can be applied to electronic transactions, but they highlight some of the prior concerns about the taxation of cross-border trade in services. For business-to-business transactions, countries with a value-added tax can rely on self-enforcement since purchasing firms can use the tax as a credit against the tax owed on their own sales. For the sale of goods to consumers, the issues are similar to those associated with mail order and taxes can be collected at the border as part of the customs process.

Significant problems do arise, however, for cross-border trade in services that involve electronic delivery, even though such sales are currently very small. Governments will need to establish a system of cross-jurisdictional cooperation to assist one another in requiring registration by outside suppliers; but that cooperation is also likely to require a greater uniformity of tax rates and administrative rules than presently exists. Thresholds would also need to be established for de minimus levels of total sales into various jurisdictions.

For business income taxation, much of the international controversy has surrounded two issues: (1) what constitutes a business presence in a country, and (2) how to determine the relevant portion of the business profit that is attributable to that presence. These are not new issues but they are made more difficult by the growth of e-commerce. For example, to the extent that the Internet allows sellers to substitute an Internet presence for local sales representatives, there would seem to be some inevitable curtailment of source-based taxation. Similarly, providers of many services, such as advice or training, could conduct their business without the need to travel to the recipient jurisdiction. Thus, the growth of the Internet has increased the importance of international consultation to adapt existing tax rules to the needs of an Internet-based economy.

5. Consumer Protection

Consumer protection issues, three of which are illegal advertising via the Internet, defamation cases, and the settlement of disputes that cross national borders, all raise the crucial question of whose law is applicable. As long as there is a physical establishment of the defendant in the country where the issue is raised, that nation’s law will probably be applied. A more serious problem arises, when there is no establishment of the defendant in the country where the legal challenge arises.
"Virtual" illegal commercial communication — the placement of ads or sales offers on the Internet which are legal in the country where they were created but illegal in some countries where they can be accessed — gained the widest coverage of the three issues through the Yahoo case. Several commentators saw the efforts to impose national regulations on the Internet as an unwarranted interference with freedom of speech, implying that the Internet is unregulated and world-wide. But there are generally accepted restrictions on other forms of communication, e.g., the transmission of child pornography.

The question of applicable jurisdiction has been addressed in several ways: a partial harmonisation of law was attempted in the European Union, whereas the US tried to solve the problem via case law and the development of *doctrines* — first based on *activity* of content, later on the effects. Both approaches have tried to reduce legal uncertainty. The difference of approaches, though, hints at the low probability of a global harmonisation. The idea of "targeting" as expressed in the "effects doctrine" of the US Supreme Court could be a common basis for the designation of venue. It is accepted by several international organisations that seek to develop global minimum legal standards. The OECD Consumer Protection Guidelines refer to this concept as well as the Hague Conference on Private International Law’s Draft Convention on Jurisdiction and Foreign Judgements.

Minimum basic standards, though, may still need considerable time to be established. We therefore propose international enforcement warranties, clear, transparent and standardised settlement procedures, possibly supported by a Cyber-"Ombudsman" (independent referee) system and specialised national courts for international settlements. Given the important differences in demanded damages, a limitation of claims to a uniform percentage might also be helpful.

### 6. Privacy

One prerequisite for consumers and businesses to use the Internet for commercial purposes is that they trust it. Hence, the importance of security and privacy.

Privacy has long been an issue of major concern in the United States and Europe, but it has received less emphasis in Japan. It is a significant issue for the Internet because of the ease with which large amounts of individual information can be collected and shared. However, in both the United States and Europe many of these concerns extend beyond the Internet and are the subject of legislation.

Prior to the concerns raised by the Internet, U.S. privacy law was very protective of individuals’ personal information from the government (a 1974 law prohibits government agencies from sharing information about individuals), but it was somewhat patchy when it came to personal information held by private sector organizations. With the rise of the Internet, legislative proposals have focused on requiring all sites to provide notice of their privacy policies and to offer consumers the ability to ‘opt out’ of having their information shared with third parties; or more restrictively, requiring affirmative or ‘opt in’ consent. Other proposals would require sites to provide users with access to data held about them.
In Japan the rapid penetration of the mobile Internet has brought about an explosion of unsolicited commercial electronic mail. The government has responded by preparing a law that ensures consumers are able to 'opt out.' Some providers of mobile telephone service have gone further with an 'opt in' service by which consumers choose to receive messages only from certain specific addresses.

The European Union implemented its Privacy Directive in 1998, which applies to both on- and off-line environments. Broadly speaking, the Directive imposes a notice and 'opt out' obligation on all businesses, and an 'opt in' requirement for especially sensitive data, such as financial and medical information, religion, and sexual preference. The Directive also threatens a data embargo against any country that does not have substantially equivalent protection. The EU provides stronger protection of personal information against access by private sector companies than against access by government, the opposite of the situation in the United States.

Privacy concerns have recently come into heightened conflict with US fears of terrorism. Prior to the September 11 attack, it is safe to say that the sentiment of US policy makers was moving in the EU's direction, but the political environment has since changed. The government has obtained more authority to wiretap and to allow the FBI to monitor the web browsing behavior of individuals suspected of being involved in terrorist activity. All political momentum for tightening US privacy law in the private-sector context, and specifically in the on-line environment, or for extending additional protections against the release of financial information to third parties, has since been halted.

Nonetheless, it is our belief that more privacy protection would enhance use of the Internet. Accordingly we urge all governments do their best to ensure that websites under their jurisdiction:

— provide notice to users of what the owners of the site will do with any personal information it collects;
— give users at least the ability to 'opt out' of having their personal information transmitted to third parties for marketing purposes (other uses, such as to help detect and prevent fraud, to facilitate information processing, and so forth would not be affected);
— guarantee not to transmit especially sensitive personal information to third parties unless such transmissions are essential to provide the service (such as medical information transmitted by providers to insurance companies) and unless consumers authorize such transmissions (a so-called 'opt-in' requirement); countries would define what is covered by sensitive information but examples include personal financial data and information relating to medical histories, sexual preference and religion.

7. Broadband and Digital Convergence

Broadband service, or the use of cable, upgraded telephone lines (DSL), and satellite services to connect users to the Internet at much higher speed than is possible
through conventional telephone circuits, is rapidly becoming the standard of the day. Broadband is now widely available to businesses in many countries through fiber optic cable hookups, and it is beginning to penetrate residential markets in most industrial countries.

Because there are network effects associated with broadband — in particular, the more people who have broadband connections the greater will be the incentives for content providers to produce such content — some have argued that it is appropriate for governments to subsidize broadband access. Others argue that if competition among broadband providers can be maintained or expanded, prices for broadband service will decline, and that is the most effective way to promote broadband use.

A key aspect of expanding competition will involve the resolution of the question of whether monopoly or dominant telecommunications providers should ensure "equal access" to other companies that want to provide Internet access and other telecommunications services. We recognize that the broadband market will evolve in different ways from country to country. However, we believe that strong competition among providers will be crucial to reducing costs and expanding the consumer market for broadband services. For this reason, until sufficient competition exists in broadband between all modes of delivery — wireless, DSL and cable — we believe that in countries where at least one of those modes is already subject to an equal access requirement (typically the telephone network), such regulation should continue.

We recognize that this situation will be temporary, a transition stage before the age of ubiquitous networks. Technology is moving beyond broadband to connect not only PCs and mobile phones, but also PDAs, car navigation systems, video game machines, and other future information devices. The spread of ubiquitous networks and the full development of the digital economy will deepen and complicate the governance issues in fields such as competition policy, intellectual property rights on digital content and network security. We can draw on the experience accumulated since the early stage of the Internet, but the emerging ICT environment may also present policy makers with new governance issues.

The issue of convergence of telecommunications and broadcasting media may be a case in point. The regulatory framework may have to transform the existing vertical structure into a horizontal structure, where content and infrastructure would be regulated separately and where competition policy would play a central role. Moreover, information and communication technologies will converge with other fields, such as finance, transportation, medicine, healthcare, and education. The regulatory and governance systems will have to adapt in order to address the needs of the activities which will emerge from this convergence.
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