INTELLECTUAL PROPERTY, E-COMMERCE, COMPETITION POLICY, AND INTERNET GOVERNANCE

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The Working Group on Internet Governance (WGIG) devoted much of its attention to the identification of public policy issues that are potentially relevant to Internet governance, as called for in paragraph 13 (b) of the December 2003 World Summit on the Information Society (WSIS) Plan of Action. It agreed to take a broad approach and not exclude any potentially relevant issue. Based on this fact-finding work, the WGIG established four key public policy areas.

One such public policy area is identified at paragraph 13(c) of the report covers as:

Issues that are relevant to the Internet but have an impact much wider than the Internet and for which existing organizations are responsible, such as intellectual property rights (IPRs) or international trade.¹

This chapter seeks to extend the discussion on some of the public policy issues raised in this cluster in the Background Report, as they relate to Internet governance. It is recognized that even this extension of the discussion is not exhaustive. It however aims to widen the dialogue and embrace a more general purpose understanding and interest.

While the report introduces the issues from the view point of being "relevant to the Internet, but with impact much wider than the Internet", the approach here reverses the examination to reflect issues that are, and have been, relevant to the global economy for several years but which impacts Internet governance. This reverse examination is important because competition, trade and intellectual property issues have had a fundamental impact on public policy long before the commercialization of the Internet in the mid-1990's.

As we shall discuss, the later impact of the Internet is not without great significance. Even though the visionary Bill Gates predicted that the Internet would change everything, the evidence is showing that societal fundamentals are essentially remaining intact as corporate governance and the governance of international trade have both taken a quantum leap.

This chapter will argue that public policy shapes globalization, and globalization in turn is shaping governance – first at the corporate level and at the level of international trade and

Report of the Working Group on Internet Governance (Geneva: United Nations, 2005), p. 5. http://www.wgig.org/docs/WGIGREPORT.pdf

unavoidably next at the level of the global Internet. These are continuing processes evidenced in law, competition policy and regulation. As technology changes, the scale and nature of competition changes, the notion of globalization will also continue to change and give rise to new public policy issues which will eventually attract further considerations of governance. WSIS has correctly drawn the Internet into the debate in a timely manner.

Public Policy and the Internet

Thomas Dye describes public policy as simply "whatever Governments chooses to do or not to do." Public policy is therefore not only of interest to Governments but also to the public, the private sector and civil society as well. In international relations, Governments also submit to policies negotiated in the multilateral environment. Sometimes such policies come into conflict with strong domestic political preferences, as for example in some areas of World Trade Organization (WTO) trade rules. Nevertheless, international trade has certainly benefited from global governance² and there is no reason why the Internet, with similar necessary cooperation and negotiation would not also find benefit from similar public policy interventions coordinated globally.

As a public policy issue Internet governance has therefore become of major importance. With the Internet, public policy issues emerge from the management of infrastructure, core resources, services and content. In infrastructure, privatization, liberalization and competition in telecommunications evolved in response to trends in globalization. There is arguably little competition in the management of the core resources. New services and new ways of handling and distributing existing content material have given rise to public policy concerns in crime and security, taxation, privacy, censorship and freedom of speech among others. Some of these issues may require a different approach to governance in cyberspace or maybe just adaptations of traditional approaches. The adopted approaches must be guided by public debate in the interest of all.

But of course, there are the revolutionaries whose views generally reflect the values of the American male early adopters: that "cyberspace will be recognized ... as a sort of independent jurisdiction."3 This is unlikely to be realized as it seems that cyberspace is evolving as an integral part of the real globalized world with its increasing web of international organizations and international treaties - the result of international collaboration of public policies. As it did

¹ see http://www.encyclopedia.laborlawtalk.com/public_policy >

² The 148 member WTO develops, administers and enforces an increasing range of trade-related rules.

³ Jurgen Basedow and Toshiyuki Kono, eds., Legal Aspects of Globalization: Conflict of Laws, Internet, Capital Markets and Insolvency in a Global Economy (London: Kluwer Law International, 2000), p. 30.

in domestic and international law, the emerging custom in cyberspace will influence the evolving legal and regulatory framework, but should not be relied upon to become 'the law'. There can be no guarantee that the practices of the early adopters or the Internet community in general will meet the genuine needs of society at large – especially when that society is global.

We have seen that the Internet is an "electronic medium that disregards geographical boundaries and throws the law into disarray by creating entirely new phenomenon that need to become the subject of clear legal rules but that cannot be governed, satisfactorily, by any current territorially-based sovereign." ⁵ This points to a global solution that provides globally enforced governance rules managed by a global institution - similar to the WTO and its role in international trade. WSIS has drawn attention to the need for a solution that reflects certain key principles: transparency, inclusiveness and democracy.

Globalization

Globalization has been defined as "the process by which markets and production in different countries are becoming increasingly inter-dependent due to the dynamics of trade in goods and services and flows of capital and technology."6

Since the end of World War Two, it has progressively become more realistic to view the activities of mankind in a global context. While technologies such as steam engine, railways, ships, airplanes, printing press; and more recently telecommunications and computers have enabled the conditions for globalization to emerge, it is policy decisions at the political and corporate levels that have led to the pursuit of economic activities in ways that reflect the basis for globalization.

The impact of globalization on the world economy generally has been lauded. The benefits to most developing countries especially in Africa, Latin America and the Caribbean, however, have been marginal at best.4 Most developing countries are takers of technology, with weak economies, inadequate institutions and in some cases unstable political and undeveloped legal environments. Some are therefore exposed to suffer all of the unfortunate consequences of the new global trends.

Because of their vulnerability in a fast changing world economy dominated by multinational corporations, several developing states must rely on the support and protection of the international community. Currently, WTO rules are clearly the most effective protection against any self-interest of industrialized countries and their multinational corporations. Other international organizations are also forging governance rules and guidelines aimed at

⁴ United Nations Conference on Trade and Development, E-Commerce and Development Report 2004, UNCTAD/SDTE/ECB/2004/12004 (Geneva: UNCTAD, 2004).

maintaining order in the free market system. But John H. Jackson has queried, "whether all these international organizations and treaties are adequate - either in number and subject matter coverage, or in their structure and institutional makeup - to cope with the new and complex problems that have been developing in the context of greater world international economic interdependence."5

Jackson also has made the profound observation that:

The world has become increasingly interdependent. Great wealth has come with that interdependence: goods are produced where their costs are lowest; consumers have more choices; institutions of production are disciplined through competition; producers can realize the advantages of economies of scale. But with interdependence has come vulnerability. National economies do not stand alone: economic forces move rapidly across borders to influence other societies.6

There is a view that 'discipline through competition' does not foster disciplined behaviour beyond that assessed to achieve the financial objectives of the corporation. On the contrary, multinationals, transnationals and others operating in developing countries are known for 'breaking all the rules' in order to achieve the 'extra edge'. In that scenario the weak – firms and countries, must be protected from the strong. Tighter global governance rules enforced by global institutions are therefore imperative.

In many ways the Internet is like trade. Governance has not destroyed the flow of trade. Indeed there is much evidence to suggest that international trade rules as administered by the WTO have enhanced the flow of trade. US leadership in trade and global governance as it stands is critical. However, it must be noted that "Globalization is not inevitable. It depends on politics. In today's world it depends above all on US politics." ¹⁰ Like global trade, it is inconceivable that Internet governance can ever escape strong US influence.

Competition Policy and Next Generation Networks

From the days of the carrier pigeon and the horseback rider through to the telegraph and the telephone, society's need for remote communication has grown and continues to grow at dramatic rates. Driven by the new information and communication demands that contribute to, as well as results from globalization, the enabling technologies have responded well to the needs of the modern society. Global telecommunication networks and services have benefited

⁵ John H. Jackson, The World Trading System: Law and Policy of International Economic Relations (Cambridge: MIT Press, 1989) p. 34.

⁶ John H. Jackson, The World Trading System, 1989, p. 6.

from technical standards and regulatory tools developed and coordinated in the International Telecommunications Union (ITU). Interconnection and interoperability across national boundaries have therefore been facilitated. Now the Internet has taken advantage of this well developed global telecommunication system in which governments have played a key role.

From its humble beginnings in 1969 as a network of computers used by the military and research establishments in the United States, ARPANet11 expanded rapidly and embraced commercial partners from 1991. About four years later the Internet itself became a fully commercial system with a closely connected network of infrastructure, content and users.

Its growth has been phenomenal. Its application has been profound. It effectively places small firms in the same advantageous competitive position as large firms when it comes to international marketing and distribution of certain products. Today more than 233 million host computers, 51.6 million web sites and an estimated 676 million users in 200 countries worldwide⁷ - yet the population of users continue to grow. The WGIG nevertheless recognized that there are over four billion people, mostly in developing countries, still not connected. One of the peculiar features of the Internet, impacting its growth and its governance, lies in the unique self-driven, self-controlled manner in which these users interconnect; and their absolute freedom and insignificant cost of use. It is a credit to its scientists and to its technical management, particularly the Internet Corporation for Assigned Names and Numbers (ICANN) that the Internet has sustained such meteoric growth and yet remained stable and secure.

Also of critical importance to Internet development is the ability of modern electronics to convert every information signal into a digital format thus revolutionizing data transmission systems such that multiple services are able to converge en route through the transmission 'pipes' of Next Generation Networks (NGNs). Consequently, the technical convergence of telecommunications, broadcasting and other information services is stimulating greater commercial, legal and social challenges especially as these services cross national borders uninhibited.

It is this new challenge to competition policy and regulation that this section addresses. The WGIG Issue paper on Telecommunications Infrastructure and NGNs notes that:

From a 'governance' perspective, the managed development of the public switched telephone network since the nineteenth century is nothing less than successful. With a mix of heavy and light regulation from country to country the monopoly business model was encouraged until policy makers considered that the service had reached a level of maturity. Competition was

⁷ United Nations Conference on Trade and Development, E-Commerce and Development Report 2004.

then introduced (first) in the developed world from the 1980's. Nevertheless, the need for 'flexible or light' regulation has continued to this day, mainly to manage bottlenecks in the absence of effective competition. However, in a market with the correct conditions competition works.

Competition policy seeks to create an environment in which competition can flourish and deliver the social and economic benefits necessary in the society. However, the transition from monopoly through privatization and liberalization to competition must be managed. For example, the transition in the European Union (EU) telecommunications market was traced over three periods from 1987 to 1999 after which the Commission reduced the number of Directives from twenty to six reflecting "a belief that the European market has substantially completed the process of transition to a competitive market place."8 The interests of investors large and small, and of users large and small, must be accommodated within a policy framework that allows adequate flexibility both to stimulate innovation as well as to respond to innovation. This managed flexibility is critical in the rapidly developing Internet environment. In other words, underneath that layer of Internet freedom a layer of critical resources must be properly managed.

While efforts to negotiate a competition policy regime in the WTO has not yet been successful, the global cross-border influence of the Internet, satellite and mobile communications, coupled with the critical role that telecommunications play as a facilitator of trade has no doubt encouraged the WTO to develop a telecommunications framework of regulatory and basic competition policy rules as part of the General Agreement on Trade in Services (GATS). The GATS and its Annex on Telecommunication covers issues of transparency, access, technical cooperation and relations with other international organizations such as the ITU. Members then negotiated a Reference Paper on Telecommunications that, among other things, set rules for interconnection with restrictions of anti-competitive behaviour. In the US-Mexico arbitration case on telecommunication services, the panel found that Mexico was in violation of Section 1.1 of the Reference Paper as it relates to anti-competitive practices and also with respect to the Annex on Telecommunications, Mexico was in violation of Sections 5(a) and (b) for denying US carriers operating in Mexico access to certain facilities.

Sauvé and Stern are of the view that, "the Reference Paper [also] reflects a balance between the objectives of both trade liberalization and competition policy and other social or policy

⁸ Ian Walden & John Angel, eds., Telecommunications Law (Blackstone Press, 2005), pp. 280-281 and 313.

objectives of interest to governments and civil society." It is just this kind of balance that Internet governance requires at this stage.

Arguably, the WTO has not really tackled the Internet and convergence regulatory issues, and probably will not do so for some time. Possibilities for the future may, however, be gleaned from the Europeans who commenced crafting a policy some eight years ago.

The European Commission Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors, and the Implications for Regulation: Towards an Information Society Approach¹⁰ outlined, in Chapter V.1, five principles for future regulatory policy in the sectors affected by convergence as follows:

- Regulation should be limited to what is strictly necessary to achieve clearly identified objectives.
- 2. Future regulatory approaches should respond to the needs of users
- Regulatory decisions should be guided by a need for a clear and predictable framework. 3.
- 4. Ensuring full participation in a converged environment.
- Independent and effective regulators will be central to a converging environment. 5.

These principles are still of relevance today and can continue to coexist with competition policy. It was largely because of their internal treaty commitments that the fifteen European nations were able to adapt their public policies not only to manage their collective telecommunication environments from monopoly to competition but also to reform their regulatory philosophy and practice to accommodate convergence on the Internet.

The WGIG infrastructure paper noted that, "Internet governance was inextricably linked to the larger issue of globalization ..."11 The Internet and globalization both facilitate competition. This phenomenon does not easily lend itself to regulation as such but will probably require constant review and upgrading of international policy frameworks.

Whilst there is now more computer generated data than voice on telecommunications networks, it must be recognized that even voice as well as music and video are all now data on the network. So as telecommunication networks are being re-engineered as NGNs to more

⁹ Pierre Sauvé and Robert M. Stern, eds. GATS 2000 New Directions in Services Trade Liberalization (Washington, D.C.: Brookings Institution Press and Center for Business and Government, Harvard University, 2000).

¹⁰ Commission of the European Communities, COM (97)623 December 1997.

¹¹ Don MacLean, ed, Internet Governance: A Grand Collaboration (New York, UNICT Task Force, 2004), p. 345.

efficiently transport these converged services, the need for appropriate regulatory adjustments can be simplified by increased reliance on competition.

E-Commerce, Trade and Internet Governance

Commerce and governance issues have had a very long history of cooperation. In a thesis submitted to the Department of History at Harvard University, Stephen Edward Sachs opposed the widely held view that The Law Merchant, a body of law developed in the Middle Age:

> ...was created by the merchant community and expressed their customs, reflecting the unwritten usages of the community rather than the written command of a sovereign legislator. At the same time, it was not the product of any single merchant guild or even a single country, but was the creature of the international merchant community, establishing substantive principles and convenient procedures to govern commerce throughout the world. The result was a new legal order, free from the oppressive control of local laws and local lords. In the words of Levin Goldschmidt, a German lawyer and historian of the mid-nineteenth century, "Out of his own needs and his own views the merchant of the Middle Ages created the Law Merchant. 12

If correct, it is amazing that such collaboration could be achieved across Europe with the level of communication as it then existed. Now, collaboration is easy, a measure of self-regulation desirable, but only within an established government framework. Nevertheless, "in the era of globalization, the Goldschmidt thesis has taken on new life, as scholars attempt to craft a new means of regulating international commerce (or even regulating the Internet) based on the model of the medieval law merchant."13

As populations grew and the demands of societies expanded, trade naturally also grew. As we have seen, technology stimulated the development, production and distribution of goods. We have also seen that technology and the influence of public and corporate policy gave rise to the notion of globalization where the information and communications technologies are playing a most critical role.

¹² Stephen Edwards Sachs, "The 'Law Merchant' and the Fair Court of St. Ives, 1270-1324." http://www.stevesachs.com/papers/paper_thesis.html

¹³ Stephen Edwards Sachs, The 'Law Merchant' and the Fair Court of St. Ives, 1270-1324. http://www.stevesachs.com/papers/paper_thesis.html

It is said that "the first Trans-Atlantic (telegraph) cable in laid in 1866" "was the most important breakthrough of the last 200 years for the capital markets." Subsequently, the telegraph, telephone and fax have made enormous contributions to commerce over the last two centuries. Since 1981, Electronic Data Interchange (EDI) provided direct computer-tocomputer commercial transactions thus taking information transfer to another level of efficiency and sophistication. But distance selling has had a long history prior to the introduction of these modern information technologies. The mail-order and catalogue sales business pioneered in the US had to contend with interstate procedures for tax purposes. A Uniform Commercial Code was introduced in the 1940's to regulate these cross-border activities.

The Internet and e-Commerce

By the mid-1990's, the Internet was firmly established as a commercial entity with increasing business applications both at the corporate and consumer levels. EDI-type business-tobusiness as well as business-to-consumer transactions are now more widely dispersed across multiple jurisdictions using the Internet. But has the fundamental issue of goods and services crossing borders has not really changed?

The WGIG Background Report records that, "the Internet also provides new ways of trading goods and services through e-commerce." In examining the governance implications of the new ways of trading goods and services through e-commerce, UNCTAD has pointed out that here was a misconception that, "business in the Internet would work outside the traditional laws of economics" Entrepreneurs and investors began to throw money at this new thing and the market responded positively to the new hype and postponed the reality of profits. Alas the Internet bubble burst – demonstrating, according to UNCTAD, that "in reality, the laws of economics have proved rather resilient."15

Now that the market has settled and we look to the future, one of the questions raised in the WGIG Background Report is, "whether the rules and practices developed to govern trade in physical goods and services can and should be applied to e-commerce?" Although not fully developed, the work in the WTO may give an indication of the answer to this question.

The World Trade Organization and e-Commerce

In November 2001, the WTO Ministerial Conference at Doha agreed:

¹⁴ Martin Wolf, "Will Globalization Survive?" (Washington DC: Institute for International Economics, April 2005. http://www.iie.com/publications/papers/wolf0405.pdf

¹⁵ United Nations Conference on Trade and Development, E-commerce and Development Report 2001 (Geneva: UNCTAD, 2001), p. 16.

...to continue the Work Programme on Electronic Commerce. The work to date demonstrates that electronic commerce creates new challenges and opportunities for trade for members at all stages of development, and we recognize the importance of creating and maintaining an environment favourable to the future development of electronic commerce...... We declare that members will maintain their current practice of not imposing customs duties on electronic transmissions...¹⁶

This work commenced in September 1998 and agreed that the term electronic commerce meant the production, distribution, marketing, sale or delivery of goods and services by electronic means. Discussions have continued in the General Council, the Council for Trade in Services, the Council for Trade in Goods, the Council for TRIPS, and the Committee on Trade and Development and the work of other inter-governmental organizations are being taken into account.

The work is wide ranging across these five bodies. However, progress has been slow, mainly because members have not been able to agree on a classification for electronically delivered products. The rules governing trade in goods fall under the General Agreement of Tariffs and Trade (GATT) while the rules governing trade in services fall under the GATS. The fact that neither "goods" nor "services" are defined in the GATT and GATS respectively seriously complicates the already complicated matter of the electronically delivered product. The WTO recognizes that it is products previously traded only as physical goods but are now also tradable as digital information that presents the challenges.

Now WTO rules treat goods and services differently. With the exclusion of a few specific "exemptions", GATT rules focus on the binding reduction of tariffs applied to all members. On the other hand, GATS rules do not yet address tariff reduction and are mainly the result of bilateral negotiations where each member can retain considerable flexibility in the way its services are progressively liberalized. Also customs duties are rarely imposed on services.

While the WTO continues to support the avoidance of border taxes on "electronic transmissions" which presumably refers to products 'shipped' electronically. It must be noted that import duties and border taxes are important sources of revenue for most developing countries. Currently, most goods ordered using e-commerce are delivered by traditional means and are therefore accessible for inspection and charging as appropriate. However, a rapidly increasing volume and variety of soft goods: music, movies, books, architectural and engineering drawings etc are being shipped electronically and delivered over the Internet. The physical equivalent of some of these products are already recognized as goods and do have

¹⁶ World Trade Organization, Doha Declaration, November 2001, Paragraph 34, http://www.wto.org.

Harmonized System²² tariff codes identifying the physical characteristics of the media while ignoring its contents.

In 1995 the WTO Committee on Customs Valuation adopted a 1984 Tokyo Round Committee decision which permits members to levy taxes either on the value of the "carrier media" i.e. tape, diskette etc., or on the combined value of the carrier media and its contents i.e. software, movies etc. ²³ So electronic ordering and physical delivery does not present a problem. However, it is the electronic delivery that continues to present challenges in the WTO where the means of delivery and the content of the "package" come into conflict. The notion of the 'importation' of the data bits has given rise to the idea of "intangible goods" as a solution! 24

Also complicating the governance issue is the existence of intellectual property in both goods and services. Consequently, the application of Trade-Related Aspects of Intellectual Property Rights (TRIPS) ²⁵ rules may defy any general solution to e-commerce disciplines in trade.

While continuing to work on this issue, the WTO remains aware of work being done elsewhere. Internet taxation proposals are being developed in the Organization for Economic Cooperation and Development (OECD), the EU and the US for "harmonizing rules in international e-commerce," while UNCTAD has prepared a report on "Tariffs, Taxes and Electronic Commerce: Revenue Implications for Developing Countries" (2000). There is also a 1998 OECD report on "Electronic Commerce Taxation Framework Conditions."

With most of this work taking place without developing country participation it is not surprising that some developing country members in the WTO, arguing in support of a global economy, have signaled that it is "necessary to develop mechanisms to ensure effective developing country participation in the establishment of a global framework for e-commerce."

The WGIG Background Report is conscious of the interplay between e-commerce, trade and Internet governance and recorded that:

...international regulatory co-operation is necessary if cross-border trade in e-commerce is to grow to potential. Areas as diverse as data privacy; encryption technology; development of secure payments systems; and taxation all raise legitimate public policy questions to which trade officials (as well as others) will need to find answers that meet public policy objectives without restricting trade or preventing the benefits of access and lower costs that flow from it.

The Role of Technology

Just as technology has provided the communications capacity and reliability to meet the demands for rapidly increasing data communication between computers in the 1990's, so it is expected that computer technology and mathematical creativity will contribute to solutions to the current Internet content problems of privacy, crime, security, authentication etc. Technology is already being used with increasing levels of success in these areas. For example, sophisticated software is being used by the music industry to scout the Internet and track down certain kinds of intellectual property violations; while encryption processes are making on-line payments more secure. The continuing success of these initiatives requires that the private sector retains adequate freedom to innovate, invest and earn reasonable returns on that investment. Technical assistance for developing countries and technology transfers are also relevant if global success is to be assured.

"Government jurisdictions are geographic. The Internet knows no boundaries. The clash between the two will reduce what individual countries can do." ²⁶ As in the case of world trade, Internet governance needs a global solution. For e-commerce, the method of delivery should not impact the commercial treatment of the product delivered. The WTO must therefore continue the search for legal clarity and predictability in all goods and services trade.

Intellectual Property Rights

The WGIG Background Report suggests that:

"(T)he Internet allows the relatively low cost duplication and easier worldwide distribution of works of intellectual property in digital form. The ease of duplication and distribution also makes such works in the digital world highly vulnerable to unauthorized copying and modification. Thus the Internet raises fundamental questions about IPRs."

The law recognizes "creations of the mind" as intellectual property and confers certain exclusive rights on the creators, especially in the areas of copyright and patents for a limited number of years, and in trademarks for an indefinite period.¹⁷ Copyright and patent protection are not new, they both date back to the 18th century while trademark protection followed in the 19th century.

Dramatic changes in technology over the years have attracted a series of gradual changes to copyright laws. For example, the printing press, video recorders, computers and now the

¹⁷ Copyright deals with the protection of literary, artistic, musical and dramatic works. Patents respond to the protection of inventions. Trademarks identify and protect the brand of the owner.

Internet have all given rise to varying degrees of anxiety over the rights of the owners of intellectual property and the public in general. The first technology to revolutionize copying, in the form of printing, came in 1450 with the printing press. The British responded to copyright concerns by enacting the first copyright law in 1710.18 Several adaptations to Copyright law followed in the UK over the centuries to embrace new technologies such as radio and television in the Copyright Act of 1956 and "specific intellectual property provisions from the mid-1980's"19. This series of enactments addressed new concerns, including new technology concerns but nevertheless seem to have retained certain fundamental principles developed through the common law. A more recent example is the Copyright (Computer Programs) Regulations 1992 which extended the 18th century literary principles to computer programs and databases and hence demonstrates how the law progresses traditional common law rules (literary works) to embrace new technology (computer programs).

The Internet, as the current new technology, has presented the greatest challenge to intellectual property protection, - especially to copyright. All information embodied in the bits of a data stream may be protected, as is the software that controls their processing. The convergence of services and the ability of those services, with their protected content, to be routed to any and indeed all parts of the globe simultaneously - and copied perfectly is unprecedented. It has been suggested that, "if the invention of the printing press resulted in a move from an oral to a written tradition at the price of chaining information to the pages of a book, the information revolution frees information in the sense that it may be readily transferred without the need for linkage to paper or any form of storage device."20

This demonstrates some of the difficulties governance faces when dealing with the Internet. However, determination to maintain the fundamental principles of the common law does not inhibit the courts from making appropriate adjustments as the technology advances.

In the 2005 case of MGM Studios Inc. vs. Grokster Ltd. et al, the US Supreme Court ruled in favour of the music industry against an Internet peer-to-peer on-line file sharing facilitator. The presiding Justice, David Souter, held that, "we hold that one who distributes a device with the object of promoting its use to infringe copyright ... is liable for the resulting acts of infringement by third parties." This ruling makes it clear that the providers of the technology do bear some liability for the copyright infringement of their on-line customers. In similar cases where older and more limited technology was employed the file sharing operators succeeded since the courts at the time upheld the precedent set in the 1984 ruling with respect to the video recorder.

¹⁹ Ian J. Lloyd, *Information Technology Law*, Third Edition (Oxford: Oxford University Press, 2004) p. 4.

¹⁸ Statute of Ann 1710.

²⁰ Ian J. Lloyd, Information Technology Law, 2004, p. 4.

In some cases there is need for the clarification of definitions in order to permit certain fundamental legal principles to be applied to new technology. For example, in the UK Copyright, Designs and Patent Act 1988 as amended, some such clarification appears in Section 5 A(1)(b) and 5B(1) explaining that the meaning of "sound (is).... regardless of the medium on which the recording is made.." and "film means a recording on any medium."

To assist in crafting global solutions to these global problems, a number of treaties have been negotiated through the World Intellectual Property Organization (WIPO), aimed at providing protection for the creators of copyright property under an internationally approved framework.²¹ This framework provides protection in the countries which are signatory to these instruments - thus overcoming the jurisdiction problem, provided the instruments are embedded in the national law.

Despite this expanding framework, it has been suggested that, "just as the industrial revolution rendered obsolete aspects of law based on notions of an agrarian society, so a legal system focusing on issues of ownership, control and use of physical objects must reorient itself to suit the requirements of an information society."22 The principal institutions addressing such reorientation are WIPO and the WTO.

The Institutions

This reorientation process has begun in WIPO where intellectual property protection is being reviewed and adapted. These governance issues generate sharp differences between developed and developing countries, with the former calling for greater protection and the latter resisting increased protection as likely to be inimical to their development interests. For example, work on patent harmonization in the proposed Substantive Patent Law Treaty has met with stiff opposition from developing countries. It is expected that a negotiated result will reflect some balance between the rights holders and the general public so that narrow commercial interests will not dominate general human interests. The challenge to reassess the fundamental principles on which the governance of intellectual property should stand in the 21st century can be seen in a proposal tabled by Argentina and Brazil in October 2004 calling for WIPO to address its role in the United Nations led sustainable development process.²³ Key issues continue to be development, the balance between rights holders and society in general, technology transfer, technical assistance and the wider participation of civil society.

²¹ See the Berne Convention, WIPO Copyright Treaty, and WIPO Treaty on Copyright Performances and Phonograms at www.wipo.org

²² Ian J. Lloyd Information Technology Law, 2004 p. 6.

²³ WTPO Development Agenda, WO/GA/31/15, at http://www.wipo.org.

Some argue that the development of the law is too slow in relation to the speed of technology change. But this may be an advantage, as it would most likely avoid the trap of technology sensitive rules. Slowly adapting IPR rules as necessary helps to ensure technology neutral rules and such rules permit a more predictable commercial environment. For this reason WIPO recommends Alternative Dispute Resolution (ADR) procedures such as binding arbitration which is not only quick but is also cheap in settling IPR disputes. Some ADR procedures can be conducted on-line - and are sometimes fully automated. This again reflects the use of digital technology to help solve problems which arise from the use of the same digital technology.

More definitive binding and enforceable settlement of disputes are available in the WTO. While WIPO has the greater IPR technical expertise, the WTO, through interpretation of the TRIPS agreement, embodying the Berne Convention, can use the authority vested in its Dispute Settlement Body, which has the legal muscle to settle a wide range of intellectual property and other disputes. For example, in a year 2000 case brought by the European Union against the United States, the WTO ruled that the exemption provisions in the US Digital Millennium Copyright Act 1998 which excludes certain restaurant businesses using protected musical and performing arts works from copyright liability were a violation. The panel ruled that the US was in violation of Article 13 of the TRIPS agreement that, "confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder." The US is understood to have agreed to amend the legislation.

Intellectual property issues are numerous, complex and heavily legal. Although only a few examples were drawn, it is generally true that much copyright legislation and many court decisions around the world tend to lean towards maintaining the fundamental principles of the common law and adapting them as the technology advances. As the fundamental principles of economics remain resilient in the face e-commerce so too it would seem that so far, the fundamental principles of copyright continue to show some resilience even in the information age.

Conclusion

Despite its very successful past, the Internet is much too important to global peace and prosperity to be left alone. Just as in 1945 a small group of nations saw the need to initiate a global forum to advance world peace and human development in what became the United Nations, the need for a global forum of Internet governance is evident at this time. Despite recent unilateral tendencies, the US has to be trusted to take its global leadership role seriously. These two factors may suggest a continuing leadership role for the US in Internet governance but a role that embraces all other participating nations, and other stakeholders, in accordance

with the WSIS principles of transparency, inclusiveness and democracy – all notions which are already consistent with US philosophy.

Even the most powerful nations are influenced by "popular opinion" and civil society has developed tremendous skill, including the use of the Internet, in galvanizing such public opinion. Indeed, governance in a period of globalization is more likely to succeed if inputs from all sectors of the "global village" are considered in a balanced way. With Internet governance, there are strong views on both sides of the divide: to control or to leave free. Either extreme is likely to be untenable in the long run.

Multinational corporations have very strong influence on public policy. Foreign Direct Investment by these corporations is estimated as having a greater impact on globalization than is international trade. A global system of corporate governance: "the system by which companies are directed and controlled"24 is therefore critical. We have seen that multilateral trade rules, which bind the behaviour of governments, are also having a measure of influence on the behaviour of multinationals. With agreements covering industrial products, agriculture, services, investment, intellectual property and dispute settlement mainly, all 148 members of the WTO are voluntary participants in the globalization phenomenon.

A greater role for the WTO in Internet governance must therefore be anticipated. Globalization, e-commerce and intellectual property rights protection are all trade related issues that fall within the WTO's mandate. As it has with telecommunications, the very close relationship between the Internet and these issues will eventually dictate that the WTO gets involved with Internet governance.

Most Internet agitators appear to be in the free speech, free entertainment and casual use zone. However, it is the commercial use of the Internet that will determine how and by whom the Internet will be governed in the future. Significant steps have been taken in recent years to tighten corporate governance. It must be clear by now that the private sector cannot be left alone - at home nor abroad. If in doubt see the Sarbanes-Oxley Act of 2002 declared by PriceWaterHouseCoopers as "the single most important piece of legislation affecting corporate governance... since the US Securities laws of the 1930's."25 They also described the law as a piece of "monumental legislation". Now if the private sector itself needs such tight governance, is it logical that the critical global Internet should be left to the same private sector? It maybe that the same concerns that some have in considering the likely role of governments in Internet governance, some others must have in the current emphasis on the Internet being private

²⁴ The Cadbury Committee Report on financial aspects of corporate governance, 1992.

²⁵ PricewaterhouseCoopers http://www.pwc.com.

sector led. Consequently, mutual trust can only be achieved when all relevant parties work together in an appropriately structured forum.

Prime Minister Arthur of Barbados has called for "a radically reformed system of global governance and effective global institutions"; noting that "changes in international economic governance have not kept pace with the growth of global interdependence."26 The global Internet cannot be excluded from this demand.

Most elements of Internet usage and service content were regulated in some form or fashion – prior to the arrival of the Internet. Although there has been a call by some for the development of a body of Internet-specific, or cyberspace law, similar to the Law of the Sea, information technology is changing much too rapidly for any 'sui' generic body of law to be developed, implemented and maintain its relevance over time. The continuation of gradual adaptations of the tried and tested fundamental legal principles, as we have seen in economics and in intellectual property protection, is likely to be more successful.

As mentioned earlier, the WGIG infrastructure paper noted that, "Internet governance was inextricably linked to the larger issue of globalization"27 and is therefore unlikely to succeed in the absence of a clearly coordinated multilateral process." Martin Wolf has correctly placed responsibility for the future of globalization squarely in the hands of the United States. In all international organizations the powerful hand of the US is evident. This is part of the current reality. The interdependence of states is also evident in the current reality and can be seen in the work of the international institutions such as the United Nations and its agencies, the World Bank and the WTO in particular. The noted futurist Alvin Toffler predicted in 1990, prior to the commercial Internet, that "clearly we are heading for chaos if new international laws aren't written and new agencies created to enforce them..."28 Has the Internet rendered this prediction more or less plausible?

The WSIS Declaration of Principles is understood to reflect the will of governments when it was agreed in December 2003 that, "the international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations."

So let it be!

²⁶ Owen S. Arthur, United Nations General Assembly, Follow-up to the International conference on Financing for Development, November 2003, Agenda Item 104.

²⁷ Don MacLean, ed., Internet Governance: A Grand Collaboration (New York: United Nations Information and Communication Taskforce, 2004) p. 345.

²⁸ Alvin Toffler, Power Shift: Knowledge, Wealth, and Violence at the Edge of the 21st Century (New York: Bantam Books, 1991), p. 462.