

The Internet and its Legal Ramifications in Taiwan

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INTRODUCTION

The growth of the Internet over the last decade has been an astonishing phenomenon. Used by only a few academics in the late 1980s, it now has up to 65 million users worldwide.¹ Taiwan has followed the Internet trend eagerly, and already has approximately 500,000 users.

Ever since United States Vice President, Albert Gore announced the U.S. National Information Infrastructure (NII) project in September 1993, many other countries have followed suit, initiating similar projects to establish a comprehensive information infrastructure. Many governments regard such development as a prerequisite for continuing national advancement in the 21st century, and view success in this area as closely tied to the competitiveness of a nation's industry and the welfare of its people. In order to promote such a project, in June 1994, the Republic of China on Taiwan (hereinafter referred to as Taiwan) established an NII Special Project Committee² (hereinafter referred to as the NII Committee) under the Executive Yuan.³ Under the NII Committee's direction, many activities are underway that are intended to serve as the foundation of Taiwan's development into a regional

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1. This figure is only an estimate, as its widespread use and high rate of increase make it impossible to give an absolute figure.

2. Working in conjunction with the NII Committee is the Private Sector Advisory Board which is composed of members of the business community. The Board advises and provides feedback on the operations of the NII Committee.

3. The Executive Yuan under Taiwan's system of government is similar to the President's Cabinet.

communications center. Improved infrastructure through the NII, and other projects, will rapidly increase Taiwan's Internet penetration.

Taiwan's NII initiative is based on ten recommendations handed down by the Premier. They are as follows: (1) to form a special planning and implementation team; (2) to promote the idea of communication; (3) to liberalize communications regulations; (4) to revise communications laws; (5) to support communications research; (6) to implement pilot projects; (7) to plan effective use of the radio spectrum; (8) to enable network exchange; (9) to announce telecommunication procurement plans; and (10) to adopt national and international standards.⁴

A number of task forces were formed under the Taiwan NII Committee whose mission is to coordinate national resources, examine regulations and laws, support the development of the information and communications industries, and facilitate fiber and high-speed broadband network construction with the aim of raising national productivity and enhancing economic growth. As a result, the NII will be an important factor in improving medical services and education, expanding international exchange, and improving the general welfare of all of Taiwan's citizens.

The various projects underway include setting up a high-speed, broadband, backbone network; integrating cable, wireless, and satellite networks with an advanced telecommunications network; and the development of network content, applications, and services. Looked at as a whole, Taiwan's NII involves the merging of information, communications, and consumer electronics technologies, and their innovative applications, for the benefit of society.

Thus far, the NII has focused on distance learning,⁵ telemedicine,⁶ video-on-demand (VOD),⁷ electronic data interchange (EDI),⁸ customs clearance automation,⁹ and the promotion of the Internet.

4. These recommendations were announced by the NII Committee and issued in CURRENT STATUS OF ROC'S (TAIWAN) NII PROJECT (NII Committee, 1994).

5. Distance learning is the dissemination of educational resources through computer networks, to provide access to education by students who, because of geography, disability or other reasons, are unable to attend conventional centers of education.

6. Telemedicine is diagnosis and other medical functions performed through a computer network linkup, considerably speeding up diagnosis and treatment of housebound patients.

7. The concept of VOD has taken many forms, but generally seeks to provide a wider range of video entertainment through an interactive network.

8. EDI is a computer-to-computer linkup through a direct line or network through which electronic data is transmitted in an agreed format. See MICHAEL S. BAUM & HENRY H. PERRITT, ELECTRONIC CONTRACTING, PUBLISHING AND EDI LAW 2 (1991).

9. Customs clearance automation is a Taiwan government project which aims to computerize customs clearance operations.

The broad application of the Internet in all areas of our society naturally gives rise to many legal issues that must be addressed within the framework of NII. This Article focuses on five of these issues: copyright, electronic commerce, mass communications, personal data protection, and Internet crime. It will suggest ways in which laws in these areas must be changed to incorporate regulation of the Internet. The government's proper role in regulating Internet use is not to restrict the freedom of Internet users, but to lay down some rules for its operation so that the rights and freedom of all can be protected.

Part I of this Article briefly introduces the five main legal issues related to Internet use in Taiwan. Part II discusses network-related copyright issues, including the doctrine of fair use, personal and corporate use of the Internet, and one of the first court cases in Taiwan on this issue. Part III discusses issues arising from commercial activity on the Internet, including the validity of on-line contracts, the use of digital signatures for authentication, and the applicability of Taiwan's Broadcasting and Television Law, Cable Television Law, and Fair Trade Law to regulating commercial advertising on the Internet. Part IV discusses the relationship of the Internet and conventional mass communications media such as television and radio. It addresses the question of free speech, libelous or obscene content, and other issues which are familiar in a mass communications context but remain to be addressed as relating to the Internet. Part V deals with the protection of personal data on the Internet, especially in relation to the recently enacted Computer Processed Personal-Data Protection Law, and also touches on the protection of e-mail addresses and domain names. Part VI considers larceny, fraud, and other criminal acts perpetrated via computer networks (old crimes in new guises that have been termed "white collar" crime).

I. MAIN LEGAL ISSUES RELATING TO INTERNET USE IN TAIWAN

Since 1995, Internet¹⁰ promotion has been the main focus of NII activity. The chairman of the Taiwan NII committee has set a goal to increase the number of Internet users in Taiwan from half a million at present, to about three million within the next three years.¹¹ In

10. To facilitate discussion, this paper will use the terms "Internet" and "computer network" interchangeably to refer to all kinds of computer networks that are used for the transmission of data, including local area networks (LAN), wide area networks (WAN), and proprietary networks.

11. This forecast was made by Yang, Shi-jian, leader of the NII promotion team.

conjunction with this effort, a lawmaking and revising task force has been formed under the committee to examine Taiwan's laws and regulations and to make recommendations for changes that will take into account the growing importance of Internet use in society.

The legal issues related to Internet use can be categorized under five broad headings:

(1) Intellectual Property Rights (IPR). The term IPR is used to cover a number of legal issues, including copyright, trademarks, and the use of domain names. This Article focuses on copyright-related issues. The profusion of World Wide Web home pages, Bulletin Board Services, and other forums for discussion, as well as electronic mail (e-mail), on-line databases, file transfer protocol (FTP), and other means of accessing and transmitting large volumes of data, have made copyright infringement, under the conventional interpretation of the law, a constant concern for Internet users.

(2) Electronic Commerce. Computer networks have created a new world for business transactions of every kind. Virtual malls, Internet shopping, and a slew of other commercial network transactions have created a need for legal regulation of contracts and electronic payments within the Internet environment. Secure transmissions and authentication have also become an issue. The need for legal recognition of digital signatures and the role of a certification authority are all of the utmost importance if electronic commerce is to be fostered as a part of legitimate commercial life.

(3) Mass Communications. There is no clear consensus as to whether the Internet should be regarded as a common carrier or a medium of mass communications. The Internet has many features similar to those of mass communications media, and it is gaining an influence which may soon be as profound as that of radio or television. This Article focuses on the legal issues in this context.

For society to benefit from this powerful medium, a degree of regulation, of a nature that is similar to that regulating broadcast radio, television stations, and cable TV operators, is necessary. Ensuring freedom of speech while protecting society from pernicious influences is a fundamental problem of mass communications media; how this problem will be addressed in the much freer environment of the Internet remains to be seen.

(4) Personal Data Protection. Computer networks provide a medium through which large amounts of information can be collected, processed, and disseminated. To protect the privacy of individuals in society, personal data must be protected from improper use. How personal data is defined, what organizations can or are allowed to use

it, and under what conditions it can be used, are important points to clarify. Some steps have been taken by the enactment of the Computer-Processed Personal Data Protection Law promulgated in August 1995.¹²

(5) Internet Crime. Computer networks have become the main conduit for all kinds of financial transactions between persons, businesses, and organizations. It has greatly increased the convenience of these transactions, but it has also created a new realm for the activities of criminals. Because Internet crime most often involves intangible actions, such as the transfer, modification, addition, or destruction of data in computer systems, it makes such crimes difficult to detect and still more difficult to prosecute.

All of the above are relatively new areas of human endeavor and are not clearly regulated under Taiwan's present laws. The Lawmaking and Revising Task Force will play a crucial role in preparing the ground for further growth in Internet use. If the legal framework is insufficient, it will be impossible to exploit the full potential of new network technologies. The Parts that follow outline each of the five areas in more detail.

II. COPYRIGHT AND THE INTERNET

The huge amount of information which is exchanged on the Internet naturally gives rise to questions of intellectual property rights. The clear demarcation of these rights is important for the growth of the Internet both in Taiwan and in the rest of the world.

Many kinds of information are disseminated and exchanged over the Internet. This information includes, but is not limited to, text, images, photographic material, sound, animation, visual data, and computer programs. Much of this information is protected by copyright. Internet users should be aware of copyright regulations, and take them into account in their Internet related activities.¹³ When making use of computer networks, it is important to know what material is protected and to respect the rights of the copyright owner.

12. Computer-Processed Personal Data Protection Law (Aug. 13, 1995) (Republic of China) (English translation on file with the *Seattle University Law Review*) [hereinafter Computer-Processed Personal Data Protection Law].

13. These activities include uploading, downloading, posting/reposting, transmitting, forwarding, editing, compiling, amending, modifying, disseminating, or mirroring data.

A. Doctrine of Fair Use

According to Taiwan's Copyright Law,¹⁴ the use of Internet material protected by copyright should be limited to a "reasonable extent," unless prior permission of the copyright owner is granted.¹⁵ Permission to use copyright works "to a reasonable extent" embodies a concept similar to that of "fair use" under U.S. law.¹⁶ This means that copyrighted material may be used for noncommercial, personal purposes, such as research, without infringement of copyright and without the prior approval of the copyright owner. The "reasonable extent" provisions are intended to uphold the public good and the common interest of society.¹⁷

Internet users are therefore able to make use of copyright material accessed through a computer network to a "reasonable extent" without infringing copyright. However, if the use of this material exceeds what the law considers to be a "reasonable extent," then permission from the copyright owner is necessary. If use is made without such approval, use of the copyright material will constitute an infringement of the copyright.

Because Taiwan's copyright law prohibits unauthorized use or reproduction of copyrighted works, a user of a computer network may infringe on a copyright whenever he copies material from a network to a storage device, such as a hard disk, a floppy disk, a laser disk, ROM (Read Only Memory), CD-ROM, or other device. Under Taiwan's Copyright Law, "reproduction" means the creation of a "physical" copy by printing, photocopying, recording (sound or image), photographing, making notes, or by taking other tangible reproductions.¹⁸ At present, "physical" should be interpreted as presented in such a way as to provide a sense of the content of the original. This sense of the original does not have to be through direct sense perception, but may include indirect perception through the operation of a machine. Since material saved to hard disk, floppy disk, ROM, CD-ROM, or

14. Copyright Law (Aug. 1993) (Republic of China) arts. 44-63 (English translation on file with the *Seattle University Law Review*) [hereinafter Copyright Law].

15. Copyright Law, *supra* note 14, arts. 51-52.

16. See 17 U.S.C. § 107 (1994) ("[T]he fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research, is not an infringement of copyright.").

17. Copyright Law, *supra* note 14, art. 1. ("This Law is enacted for the purposes of protecting the rights and interests of authors with respect to their works, harmonizing the common interests of the society in general, and promoting the development of national culture.").

18. Copyright Law, *supra* note 14, art. 3, para. 5.

other storage device can be accessed (and a sense of the original obtained) through the operation of a computer, the saving constitutes an act of reproduction. If the material reproduced through this technology is protected by copyright, if the material exceeds a "reasonable extent," and if the permission of the copyright owner has not been obtained, then it is considered a violation of copyright. As to whether saving to RAM (Random Access Memory) constitutes an act of reproduction, U.S. case law¹⁹ supports the proposition that saving to RAM is an act of reproduction and therefore may be an infringement of copyright. Nevertheless, there is still considerable room for debate.

All Internet users, including network operators and administrators, must first ascertain whether the material they wish to upload or download from a computer network is protected by copyright. Because any material which is uploaded onto, or downloaded from, a computer network, whether it be text, images, photographic material, sound, animation, visual data, or computer programs, must first be copied to the hard disk of a computer network server, uploading or downloading necessarily constitutes reproduction. If the material reproduced exceeds what the law defines as a "reasonable extent," or there is no reason under law for uploading or downloading the material, it will be considered a violation of copyright unless the permission of the copyright owner has been obtained.

B. *Personal and Corporate Use of the Internet*

The growth of the World Wide Web over the last few years has created a new arena of commercial activity. Many firms have established a web presence for the purpose of self-promotion or as a platform to extend their commercial activities. This use of web pages or web sites for commercial purposes has given rise to a new range of problems relating to copyrights.

The content of web pages and web sites should either be original work or be used with the permission of the copyright owner. People establishing their own web sites should not use copyrighted material or copy other web pages or web sites in the creation of their own web pages or web sites. To extend this point, the content of a web page or web site should include a maximum amount of original content, and should not make use of copyrighted images, photographic material,

19. See, e.g., *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993); *Advanced Computer Services of Mich., Inc. v. MAI Systems Corp.*, 845 F. Supp. 356 (E.D. Va. 1994); *Triad Systems Corp. v. Southeastern Express Co.*, 64 F.3d 1330 (9th Cir. 1995).

text, or sound unless the permission of the owner has been obtained. All material used on a web page or web site must first be loaded onto the hard disk of a computer network server. Because this is an act of reproduction, it may constitute an infringement of copyright. Nevertheless, the extent to which fair use can be made of copyrighted material in the production of web pages or web sites is still a matter for debate.

Although much of the content of web pages and web sites is protected by copyright, and thus reproduction of their contents considered an infringement of copyright, the use of links to other web pages or web sites, the use of the address of other web pages and web sites, and the inclusion of brief descriptions of other web sites do not generally constitute an infringement of copyright.²⁰

It is not possible to say that all material posted on the Internet is protected by copyright, but a large proportion of it is. This gives rise to problems for network users who must decide to what extent they can legally make use of this information.

In the case of an individual downloading data from the Internet for strictly personal use, such as browsing off-line, the author believes that the principle of noncommercial use, which allows for the reproduction of copyrighted materials for nonprofit or family use,²¹ should apply.

In the case of reposting and forwarding of copyright material, the principle of noncommercial use and the provision that publicly released material may be quoted to a "reasonable extent" for teaching and other proper purposes should apply.²²

In the case of FAQs (frequently asked questions) and abstract versions (the collection and editing of Internet data for various kinds of alternative presentations) of copyrighted data available on the Internet, the provision stating that nonsubstantive or necessary changes that do not infringe the moral right of the author to maintain the integrity of his work should apply.²³ The wording of the provision

20. See generally Copyright Law, *supra* note 14. This assertion is based on the author's interpretation of the copyright law.

21. Copyright Law, *supra* note 14, art. 51 ("Works which have been publicly released may be reproduced to a reasonable extent for non-profit personal or family use, by using the copy machine in a library or the copy machine not for public use.").

22. Copyright Law, *supra* note 14, art. 52 ("Works which have been publicly released may be quoted to a reasonable extent as required for making reports, making commentaries, teaching or other proper purposes.").

23. Copyright Law, *supra* note 14, art. 17 ("The author shall have the right to maintain the integrity of the contents, form and title of his/her work, except for any of the following circumstances: . . . 4. Other non-substantive changes of the contents which are deemed

does not make clear the legality of compiling an FAQ or an abstract, and in this regard, as in the cases mentioned above, a liberal interpretation of the law is necessary to permit the unimpeded use of the Internet.

Presently, there is no case law to substantiate the above statements as to the interpretation of Taiwan's Copyright Law and its application to the Internet. The expert opinion of the author, which was commissioned by and has been submitted to Taiwan's Copyright Commission, is that the above analysis provides the most serviceable guidelines on this issue.²⁴ A brief description of the first network related case in Taiwan may help illustrate the trends of interpretation outlined above.

C. Taiwan's First Network Related Court Case

The first network-related case in Taiwan was a criminal action brought against Chun-I Huang, the proprietor of the Taiwanese company Kai Hsun. A group of writers had claimed that their writings to a network forum had been unlawfully downloaded by the defendant and used for commercial purposes.²⁵ The defendant used the material to make a CD-ROM compilation that it offered as a free gift with a magazine published and sold by the company.²⁶ The case was brought before the Taipei District Court.²⁷ The defendant pled not guilty, claiming that "the spread of knowledge was in the very nature of the Internet" and the purpose of authors posting their articles on the Internet was for the purposes of dissemination.²⁸ The defendant further claimed that by distributing the information as a free gift with its magazine, it was only continuing a dissemination of information which was fundamental to the nature of the Internet.²⁹ The court found the defendant guilty, stating that the use to which the material was put exceeded fair use or reasonable extent.³⁰ The court sentenced the defendant to seven months imprisonment suspended for three years.³¹

necessary in accordance with the nature, purpose, and manner of use of the work.").

24. George C.C. Chen, *The Response and Solution of Copyright Law to Developments in High-Technology* (Taiwan Copyright Office, Executive Yuan) June 1996 (on file with author).

25. *Taiwan v. Chun-I Huang*, Taipei District Court, 84 Yi Tzi No. 7348, (July 26, 1996) (Chinese version on file with the *Seattle University Law Review*).

26. *Id.* at 2-3.

27. *Id.* at 1.

28. *Id.* at 3-4.

29. *Id.* at 4.

30. *Chun-I Huang*, 84 Yi Tzi No. 7348, at 4-5.

31. *Id.* at 5.

The *Huang* case shows that if copyrighted material is downloaded from a computer network with the intention of commercial application, then it is highly probable that it exceeds the limits of fair use for copyright material and constitutes an infringement of copyright.

Copyrighted material includes both data and computer applications (software). A number of different categories of software which are presently available on the Internet give rise to their own specific copyright issues.

D. Commercial Software, Shareware and Freeware

In downloading software applications, Internet users must take note of the copyright owner's terms. Generally speaking, no commercial software can be downloaded or transmitted without the express permission of the copyright owner.³² The situation is more complex with two other categories of software which are expressly designed for distribution over the Internet—shareware and freeware.³³

Computer programs available on a computer network, such as freeware or shareware, will generally include a notice from the copyright owner allowing reasonable use of the material. Under Taiwan's Copyright Law, fair use of a computer program is construed narrowly. The only use that is considered fair use is the making of backup files by the owner of a legitimate reproduction of a computer program. In that case, the files may only be used by the owner and only while the original reproduction remains in his ownership.³⁴ Users should conform closely to the terms stated in the copyright owner's notice. If use of the freeware or shareware exceeds the terms of the notice, or the user distributes or alters the material or performs any other action not specifically permitted by the copyright owner, this may constitute an infringement of copyright.

32. An exception to this is the distribution of browser software by certain commercial companies through the Internet in order to win market share. For example, MS Internet Explorer and Netscape permit downloading in their licensing agreement.

33. Shareware is similar to commercial software in that its creator has full moral and economic rights to the product. It differs in that the creator allows a trial period after which the user is required to register. While registration often involves the payment of a charge, this need not be the case. A well known example of shareware is the World Wide Web browser Netscape Navigator. The creator of freeware also has full moral and economic rights to the product, but does not require users to register use of the product or pay any charge.

34. Copyright Law, *supra* note 14, art. 59 ("The owner of the legitimate reproduction of a computer program may modify such program to adapt the program to the machines used by such owner and may reproduce such program for use as a backup file. However, such modified or reproduced program shall be used only by the said owner.").

In sum, in order that the user is fully aware of his obligation to respect copyright and related regulations, the computer network operator or administrator should appropriately inform the computer network user of copyright-related regulations to be observed in obtaining or transmitting computer network content.

Additionally, given the nature and purpose of the Internet, the vast quantities of information that users routinely handle, and the practices of information use which have become established, a liberal interpretation of Taiwan's copyright laws is necessary.³⁵ Otherwise, many common actions performed on the Internet would involve a violation of the law.

III. ELECTRONIC COMMERCE AND THE INTERNET

On-line commercial activity, such as teleshopping and virtual malls, is on the increase,³⁶ but there are many legal problems which presently impede further development. Because the law has been slow to recognize the legality of digital signatures³⁷ and the authenticity of electromagnetic records,³⁸ the guarantee of payment and the validity of on-line contracts present significant problems.

Furthermore, the registration and use of domain names,³⁹ and the responsibilities of parties to an electronic transaction, or to Internet service providers, are not yet clearly defined. Transactions across national borders increase the difficulties of guaranteeing the safety and security of on-line commerce. Commercial law, laws of civil and criminal procedure, and other laws governing financial transactions, all have a bearing on electronic commerce.

35. This is possible under Article 65 of Taiwan's Copyright Law: "All circumstances shall be considered in determining whether the use of a work complies with the provisions of Articles 44 through 63, the following factors, in particular, shall be taken as the standards of determination: (1) The purpose and nature of the use, including whether such use is of a commercial nature or is for non-profit educational purposes; (2) The nature of the work being used; (3) The amount and substantiality of the portion used in relation to the copyrighted work as a whole; (4) The effect of the use upon the potential market and current value of the work." Copyright Law, *supra* note 14, art. 65.

36. For details about the nature of electronic commerce, see generally THOMAS J. SMEDINGHOFF, *ON-LINE LAW* (1996).

37. *Id.* at 53-55.

38. *Id.* at 29-38.

39. The use of registered trademarks as domain names by persons other than the trademark owner can give rise to trademark disputes. See KENT D. STUCKEY, *INTERNET AND ONLINE LAW* § 7.04 (1996).

A. On-Line Contracts

The Internet is a paperless environment, and in this regard regulation presents considerable problems under present law. These problems arise from the principle that certain acts require written documentation in order to be valid under the law.⁴⁰ For commercial transactions, documentation plays an important role, and how the law will treat electronic documents with no physical form is a subject which requires further research.

The growth of the Internet and other computer networks has changed the way companies, government agencies, and individuals communicate with one another. This electronic transmission of communications has created a new form for contracts between individuals and companies. For example, contracts consigning goods for shipment made between forwarding companies and their customers, commissions by customers to customers' agents, orders between trading customers, all take the form of electronic or magnetic records when transmitted via the Internet. Such records do not constitute a written document under the present law,⁴¹ and introduce a new factor into the laws governing conventional methods of conducting business.

Under Taiwan's civil law, an agreement or contract requires an offer to be made and accepted.⁴² The offer may be verbal or nonverbal;⁴³ the acceptance tacit or explicit. In the case of consigning goods for shipment, whether by verbal or nonverbal agreement, the consignor must charter the ship and the shipping company must complete a bill of lading.⁴⁴ In the above cases, the form of law governing these transactions is already well established, but depends strictly on the use of written documentation.

40. For examples of the key role of written documents under Taiwan's laws, see Civil Code (Jan. 4, 1982) (Republic of China) arts. 624-625 [hereinafter Civil Code], translated in MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN, 208, 217 (Liu Qingjing et al. eds., 1991) [hereinafter Laws of Taiwan]; Maritime Law (Jul. 25, 1962) (Republic of China) arts. 82, 97-98 [hereinafter Maritime Law], translated in LAWS OF TAIWAN, *supra*, at 640, 645; Insurance Law (Nov. 30, 1974) (Republic of China) arts. 43-44 [hereinafter Insurance Law], translated in LAWS OF TAIWAN, *supra*, at 681.

41. Maritime Law, *supra* note 40, art. 82, translated in LAWS OF TAIWAN, *supra* note 40, at 640.

42. Civil Code, *supra* note 40, art. 153, translated in LAWS OF TAIWAN, *supra* note 40, at 93.

43. Civil Code, *supra* note 40, arts. 94-95, translated in LAWS OF TAIWAN, *supra* note 40, at 72.

44. Civil Code, *supra* note 40, art. 624, translated in LAWS OF TAIWAN, *supra* note 40, at 207 ("If required by the carrier, the sender must make and issue to him a way-bill."); art. 625 ("If required by the sender, the carrier must make and issue to him a bill of lading.").

The Taiwanese doctrine of legally required formality holds that actions must be conducted according to a certain form if they are to be recognized by the law.⁴⁵ In the case of a contract made over a computer network, however, all that is required is that the parties transmit data through a network. At the completion of the transaction, the documentary evidence crucial to the business transaction in conventional commerce (for example, the sales confirmation, order, letter of credit, charter, or bill of lading) does not exist as a conventional written record. Whether such a transaction, conducted by means of electromagnetic records stored in a computer system, meets the standards of legally required formality is arguable.

Another issue raised by the growing use of on-line contracts is the issue of offer and acceptance. Conventional methods of making a contract leave ample opportunity for an offer to be withdrawn. However, because a contract takes effect when acceptance of it is received by the offering party,⁴⁶ the high speed at which data can be transmitted over a computer network means an offer will be very difficult to withdraw before taking effect.⁴⁷ In order to prevent damage or loss to parties in this type of transaction, the law should respond to this problem inherent in the new technology.

1. Digital Signatures

In most technologically advanced nations, digital signature is the favored method of authenticating communications and contracts. A digital signature is not a digitization of an actual handwritten signature, nor is it an image of a handwritten signature. In fact, it is not a signature at all in the conventional sense, but rather, it is the use of public key encryption (which makes use of mathematical formulae) which is processed through a computer to authenticate a message sent in electronic format. This system uses a public key and a private key,

45. Civil Code, *supra* note 40, art. 73, translated in LAWS OF TAIWAN, *supra* note 40, at 67. ("A juristic act which is not in the form prescribed by law is void, unless otherwise provided by law.")

46. Civil Code, *supra* note 40, art. 153, translated in LAWS OF TAIWAN, *supra* note 40, at 93 ("A contract is concluded when the parties have reciprocally declared expressly or tacitly their concurring intention.")

47. Civil Code, *supra* note 40, art. 162, translated in LAWS OF TAIWAN, *supra* note 40, at 95. ("If a notification revoking an offer arrives after the arrival of the offer itself, though it has been sent in such a manner that under ordinary circumstances it ought to have arrived before or simultaneously with the arrival of the offer, the other party so notified must notify the promisor (offerer) immediately of such delay. If such other party (the offeree) delays the sending of the notice specified in the preceding paragraph, the notification revoking the offer is deemed to have arrived with no delay.")

which have a mathematical relationship through which a message is encrypted. Either key can be used to encrypt a message, but whichever key is used in the encryption, its counterpart must be used for decryption.⁴⁸ Taiwan has already decided to adopt public key encryption to allow secure on-line transactions.⁴⁹

The use of digital signatures may resolve practical problems of authenticating an electromagnetic document, but it does not resolve legal difficulties. Under Taiwan Civil Law, a signature or seal is required for all legal documents⁵⁰ and, as explained above, a digital signature bears no resemblance to a conventional signature. It is, therefore, questionable whether digitally signed transmissions can be used like conventionally signed documents in a commercial transaction. It is also questionable whether digitally signed transmissions will adversely affect good commercial practice or impair public rights.

On-line contracts and digital signatures are not paper documents in the conventional sense of the term. As such, they do not fall under the relevant laws, since the interpretation of these laws must accord with the doctrine of legally required formality.

2. Legally Required Formality

The doctrine of legally required formality holds that certain acts must follow the form prescribed by law if they are to be valid, and the form required in many cases is *written* documentation.⁵¹ An example of the key role of written documents may be found in the Taiwanese law regarding the storage and carriage of goods. On depositing goods in a warehouse, the warehousemen is required to deliver a warehouse warrant from the warehouse register which contains the name and

48. Encryption and decryption are the use of algorithms or other mathematical formulas to create or decipher a code. Broadly, encryption is divided into public key and secret key encryption. See PETE LOSHIN, *ELECTRONIC COMMERCE: ON-LINE ORDERING AND DIGITAL MONEY* 41-47 (1995).

49. Public key encryption relies on the fact that it is relatively difficult to find the factor to very large numbers. When you encrypt a text using one of the factors of a very large number, it can only be decrypted with another factor of the same number. LOSHIN, *supra* note 48, at 48-55.

50. Civil Code, *supra* note 40, art. 73, translated in LAWS OF TAIWAN, *supra* note 40, at 67; art. 3, translated in LAWS OF TAIWAN *supra* note 40, at 49 ("Whenever a writing is required by law, it is not necessary that it be written by the person from whom it is required, but it must be signed by him. If a person uses a seal in lieu of a signature, the affixing of such seal is equivalent to a signature.").

51. Civil Code, *supra* note 40, art. 73, translated in LAWS OF TAIWAN, *supra* note 40, at 49.

address of the depositor, the place of storage, and other details.⁵² Other examples are found in various financial transactions, including bills of exchange, promissory notes, and checks, all of which are required to have a physical form which is signed by the payee authorizing a bank or other party to pay a specified party or bearer.⁵³

In all of the above instances, the requirement that the documents for the transaction be written and have a signature or seal affixed is central to their recognition under the law. If the use of the Internet and other computer networks is to be promoted as a means of transacting business, then amendments to the law are necessary. Amendments may take the form of allowing electromagnetic records stored on a computer to serve as documentary evidence of an agreement.⁵⁴ In order to prevent disputes, the law would also have to provide for instances in which the records from various parties to an agreement are inconsistent.

The above-mentioned documents are negotiable securities⁵⁵ which must be in the form of a written document in order to be recognized under the law. Negotiable instruments, as defined under Taiwan's Law of Negotiable Instruments as a bill of exchange, or a promissory note, or a cheque,⁵⁶ must also be written in order to be recognized, because transactions using these instruments require that they be endorsed or delivered, actions only possible with tangible documents.⁵⁷

52. Civil Code, *supra* note 40, arts. 615-616, translated in LAWS OF TAIWAN, *supra* note 40, at 205-06.

53. Law of Negotiable Instruments, (Jun. 29, 1987) (Republic of China) arts. 2-4 [hereinafter Law of Negotiable Instruments], translated in LAWS OF TAIWAN, *supra* note 40, at 567.

54. Criminal Code (December 26, 1969) (Republic of China) art. 220 [hereinafter Criminal Code], translated in LAWS OF TAIWAN, *supra* note 40, at 1091. This article currently states: "A writing or mark on a paper or on a thing which by custom or special arrangement is sufficient evidence of the intention therein contained shall be considered a document within the meaning of this chapter." *Id.*

55. Negotiable securities such as bearer bonds, certificates of indebtedness, coupons and warrants are documents carrying a certain value that can be transferred as part of commercial transactions. See generally Law of Negotiable Instruments, *supra* note 53, translated in LAWS OF TAIWAN, *supra* note 40.

56. Law of Negotiable Instruments, *supra* note 53, art. 1, translated in LAWS OF TAIWAN, *supra* note 40, at 567.

57. Law of Negotiable Instruments, *supra* note 53, arts. 30, 58, translated in LAWS OF TAIWAN, *supra* note 40, at 576, 583. For other examples of the requirement that marketable securities be written and tangible documents, see Civil Code, *supra* note 40, arts. 618, 627-630, translated in LAWS OF TAIWAN, *supra* note 40, at 206, 208-09; Maritime Law, *supra* note 40, art. 104, translated in LAWS OF TAIWAN, *supra* note 40, at 648.

In the case of marketable securities, the physical document is more than simply documentary evidence of a transaction. Its written form is central to their application. In the case of transactions conducted over a computer network, the absence of documentary evidence would put them outside the provisions listed above, and would also make their transference through endorsement virtually impossible. If the Internet or other computer networks are to be promoted as mediums for commercial activity, the law must be revised in order to account for the use of electronic mediums not amenable to various forms of endorsement or physical transfer from one person to another.

B. Commercial Advertising

In addition to addressing business and contractual transactions on the Internet, amendments to the law must be made to regulate commercial advertising.

The convenience and speed with which vendors can communicate with consumers through the Internet makes it an attractive channel for advertising. In order to protect the rights of consumers, advertising is regulated under Taiwanese law. However, the way in which the present laws which regulate broadcast and cable television advertising can be applied to computer networks is still a matter for debate. Advertising on the Internet is already widespread, so it is important to clarify the manner in which it should be regulated.

Below, a brief description is given of the ways in which commercial advertising is regulated under Taiwan's Broadcasting and Television Law, Cable Television Law, and Fair Trade Law. Provisions under these laws can be used as a reference for the way in which commercial advertising on the Internet should be regulated, but their present formulation means that they can only have a limited bearing on the issue.

1. Broadcasting and Television Law

Under Taiwan's Broadcasting and Television Laws, private commercial stations may broadcast advertising.⁵⁸ Broadcasting of advertising by all other stations must first obtain authorization from the Government Information Office (GIO).⁵⁹ Taiwanese law also regulates the proportion of program time that may be used for

58. Broadcasting and Television Law (June 7, 1982) (Republic of China) (English translation on file with the *Seattle University Law Review*) [hereinafter Broadcasting and Television Law].

59. *Id.*, art. 30

advertising, and the content of the advertising.⁶⁰ Furthermore, advertising must be clearly separated from the television programs, and no changes may be made to an advertisement after approval by the GIO without further approval of those changes.⁶¹ If an advertisement involves medicines, foods, cosmetics or related subjects, the advertisements must also be approved by certain health agencies.⁶²

Because the Internet has become a forum for advertisers it is only right that these advertisers be subject to the same restrictions as those who use conventional mass communications media.

2. The Cable Television Law

Provisions regulating cable and television transmissions are similar to those listed above for advertising under the Broadcasting and Television law. In addition, pay channels and pay-per-view services are not permitted to advertise (not including program trailers).⁶³ Most importantly, advertisements must be approved by the governing bodies for all industries where such approval is required under law. The GIO has the right to review advertisements fifteen days prior to transmission in cases that it deems necessary.⁶⁴

Whether the provisions of the Broadcasting and Television Law and the Cable Television Law can be used to regulate advertising on the Internet is still arguable.

As in the case of broadcast media, provisions which govern cable TV are designed to protect the public good. Similar regulations therefore should apply to the Internet.

3. Fair Trade Law

At present, Internet advertising is not totally unregulated if the Internet advertiser is considered a mass communications business under Taiwan's Fair Trade Law. The Fair Trade Law provides that an advertisement may not include false or misleading information

60. Broadcasting and Television Law, *supra* note 58, arts. 21, 31-32. Article 32 states: "Article 21 shall apply to the broadcasting of advertisements." Article 21 states: "No contents of broadcasting and television programs shall be allowed to: (1) Be detrimental to national interests or national dignity; (2) Contravene the national policy of anti-Communism and mainland recovery and the Government's laws and regulations; (3) Instigate people to commit crimes or disobey laws and orders; (4) Be detrimental to the mental and physical health of children; (5) Impair public order and customs; (6) Spread rumors and heresies and mislead the people." *Id.*

61. Broadcasting and Television Law, *supra* note 58, art. 33.

62. *Id.*, art. 34.

63. Cable Television Law (July 16, 1993) (Republic of China) art. 38 (English translation on file with the *Seattle University Law Review*) [hereinafter Cable Television Law].

64. *Id.*, arts. 38-42.

about the product.⁶⁵ An advertising media business which knowingly publishes advertisements which contain false or misleading information will be responsible for damages.⁶⁶ The important factor in the case of advertising over the Internet is that an Internet advertiser may be regarded as a mass communications business for purpose of the Fair Trade Law. Therefore, the protection which the Fair Trade Law provides could arguably help to keep the Internet free of false or misleading advertising.

C. Consumer Protection Law

Another means of looking at the problem of the regulation of commerce on the Internet is from the perspective of Taiwan's Consumer Protection Law.⁶⁷ No consensus has been reached as to whether commercial transactions over the Internet can be regarded in the same way as mail order sales for purposes of consumer protection laws. If Internet transactions are regarded as mail order sales,⁶⁸ then the Consumer Protection Law can govern such transactions. Under the Consumer Protection Law, the consumer who purchases a mail order product can return the product within seven days, or give written notice to terminate the contract without providing any reason or incurring any liability for payment or charges.⁶⁹

Under the law, vendors are required to provide adequate Chinese labeling and warnings.⁷⁰ If the quality of products or services is guaranteed, then the vendor is required to provide a warranty certificate.⁷¹ Provisions for Chinese language labeling and warranties are not in accord with the international nature of Internet commerce. Laws will therefore need to be revised to meet the new needs presented by the Internet.

In conclusion, the Internet raises a multitude of issues having to do with electronic commerce. Electronic funds transfers and electronic payment, which are central to the effective functioning of electronic

65. Fair Trade Law (Feb. 4, 1991) (Republic of China) art. 21, para. 1 (English translation on file with the *Seattle University Law Review*) [hereinafter Fair Trade Law].

66. *Id.*, art. 21.

67. Consumer Protection Law (Jan. 11, 1994) (Republic of China) art. 2 (English translation on file with the *Seattle University Law Review*) [hereinafter Consumer Protection Law].

68. Under Taiwan law, mail order sales are defined as businesses that use postal services or other means of delivery to ship products to the purchaser. Consumer Protection Law, *supra* note 67, art. 2, para. 8. It is the author's opinion that such a definition can be used to cover sales transactions over the Internet.

69. Consumer Protection Law, *supra* note 67, art. 2.

70. *Id.*, art. 24.

71. *Id.*, arts. 24-25.

commerce, give rise to numerous situations not covered by Taiwanese law. These situations arise in such areas as credit card use, stock and futures transactions over computer networks, on-line gambling, on-line commercial arbitration, and questions of jurisdiction. It is important that developments in all these areas are monitored and the laws revised in the best interests of the public, and in a manner which will allow for the future development of the Internet as an important channel of mass communication.

IV. MASS COMMUNICATIONS AND THE INTERNET

In our modern information-centered society, the Internet and other computer networks have become some of the most important transmission media for information. In legal terms, the characteristics of this new medium are still unclear; it may be defined either as a common carrier or as a media.⁷² A common carrier can be defined simply as a channel through which data is transmitted where the service provider is in no way able to regulate the nature of the content transmitted.⁷³ A telephone service is an example of a common carrier, for the service provider does not have the technology to regulate the content of the transmission. A media, on the other hand, has technology sufficient to control the content which is uploaded or transmitted, such as a radio or television station, and therefore has responsibility for the content carried.⁷⁴ This distinction is of the utmost importance in determining many of the legal issues associated with mass communication of the Internet. The applicability of Taiwanese communications laws to the Internet depends on the definitions of each media that are contained in each law.

Mass communications working through the Internet integrate the so-called 4Cs (computer, communications, consumer electronics, and content), as well as multimedia, digital, and cable TV technologies. Internet mass communication has been labeled "megamedia" for its comprehensiveness in encompassing the qualities of broadcast,⁷⁵ cable TV, and publishing.

The speed of technological development and the alacrity with which it has been taken up by mass communications businesses has left

72. See also Germany's Federal Integrated Information and Telecommunications Service Law, <<http://ourworld.compuserve.com/homepages/ckuner/homepage.htm>> (visited March 15, 1997).

73. BLACK'S LAW DICTIONARY 275 (6th ed. 1990).

74. See, e.g., *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367 (1969).

75. To facilitate discussion in this chapter, broadcast media will be used to refer to both television and radio broadcasting.

the law in its wake. In Taiwan, the Broadcasting and Television Law,⁷⁶ Publication Law,⁷⁷ and Cable Television Law,⁷⁸ as they presently stand, are inadequate to deal with these new developments. The Taiwanese government has attached considerable importance to revising laws so as to clarify the place of the Internet in communications law.

The Internet is primarily confined to text and audio transmission and cannot yet offer the range of video programming of cable or broadcast television. However, rapid developments in Moving Pictures Expert Group (MPEG)⁷⁹ and other technologies mean that both radio and television will soon have a significant presence on the Internet.

With the volume of content already on the Internet, it is natural that a variety of legal issues associated with other media of mass communications, such as freedom of speech and libel, should arise in this context. While freedom of speech issues are covered in Taiwan's Broadcasting and Television Law, Publication Law, and Cable Television Law,⁸⁰ no specific provision is made under these laws for the regulation of multimedia content transmitted on the Internet. Given the growing importance of the Internet and other networks as a conduit for mass communications, such regulation is of considerable importance.

A. Constitutional Right to Free Speech

Most countries have a constitutional right or espouse the principle of free speech. In Taiwan, the constitution upholds the right of all citizens to free speech⁸¹ in all situations which are "not detrimental

76. Broadcasting and Television Law, *supra* note 58.

77. Publication Law (Aug. 10, 1973) (Republic of China) [hereinafter Publication Law] translated in MAJOR STATUTES OF THE REPUBLIC OF CHINA (1990) [hereinafter STATUTES OF CHINA].

78. Cable Television Law, *supra* note 63.

79. A standard for the compression of moving picture data for transmission over computer networks which has been developed by a group of this name. The abbreviation usually refers to the standard rather than the group.

80. Broadcasting and Television Law, *supra* note 58, art. 1; Cable Television Law, *supra* note 63, art. 1. In addition, Taiwan's Satellite Broadcasting and Television Law which is currently being drafted can also be included in the number of mass communication laws. The purpose of these laws is to ensure the rights of readers, listeners, and viewers in such a way as to improve prosperity, education, and culture in society.

81. XIANFA (Constitution of the Republic of China), art. 11 (1992) translated in CONSTITUTIONS OF THE COUNTRIES OF THE WORLD (Gilbert H. Flanz ed., 1995). "The people shall have freedom of speech, teaching, writing and publication." *Id.*

to social order"⁸² and that right shall not be restricted by law except in special instances.⁸³ Freedom of speech on the Internet is regarded as a basic human right by many network users. But what is the position of Internet service providers (ISP), webmasters, or other kinds of network administrators in this instance? Should they not be subject to regulations similar to those of other broadcast media?

Taiwan's Broadcasting and Television Law states that broadcasting and television programs must not be detrimental to national interests, incite people to commit crimes, or impair public order or morals.⁸⁴ The Publication Law and the Cable Television Law also contain similar restrictions on freedom of speech.⁸⁵ These restrictions are consistent with the Taiwanese Constitution which provides that freedom of speech can be restricted in order to prevent harm or impairment to the freedom of others, to prevent crisis situations, to maintain public order, or to protect the greater public good.⁸⁶ Broadcasting, cable television, and publishing are all regulated by a government executive agency (in all three cases it is the Government Information Office), but the application of free speech principles to the Internet may be unclear because the Internet may fall outside the legal definitions of media currently codified in Taiwanese law.

Text transmitted over the Internet may resemble a published work in many ways, but it is unlikely to meet the definition of a published work under Taiwan law, which defines "published work" as that which is produced by mechanical or chemical printing.⁸⁷ For this reason, the Publication Law may not apply to Internet publications.

The Broadcasting and Television Law regulates the wireless or cable transmission of sound and images which can be directly received by an audience.⁸⁸ This would seem to partially cover many circumstances of network transmission, but it is questionable whether

82. *Id.*, art. 22 ("All other freedoms and rights of the people that are not detrimental to social order or public welfare shall be guaranteed under the constitution.").

83. *Id.*, art. 23 ("All the freedoms and rights enumerated in the preceding articles shall not be restricted by law except by such as may be necessary to prevent infringement upon the freedoms of other persons, to avert imminent crisis, to maintain social order or to advance public welfare.").

84. Broadcasting and Television Law, *supra* note 58, art. 21.

85. Publication Law, *supra* note 77, art. 32, translated in STATUTES OF CHINA, *supra* note 77, at 190; Cable Television Law, *supra* note 63, art. 35.

86. Constitution of the Republic of China, *supra* note 81, art. 23.

87. Publication Law, *supra* note 77, art. 1, translated in STATUTES OF CHINA, *supra* note 77, at 183.

88. Broadcasting and Television Law, *supra* note 58, art. 2. ("Broadcasting means transmission of sound through radio or wire for direct public listening. Television means transmission of image and sound through radio or wire for direct public viewing and listening.").

transmission over the Internet can be considered a broadcast or television transmission. The applicability of the Cable Television Law to transmission over computer networks meets with similar problems. Although the definition of cable television as transmission of sound and images over cables that can be directly received by an audience⁸⁹ would seem to cover transmissions over computer networks, the nature of cable television is clearly quite different. The Cable Television Law, therefore, may not be applicable to the Internet.

Whether Taiwanese communications laws apply to the Internet depends on the definitions of media contained in each law. If the definitions under Taiwanese law clearly include the Internet, then the rights upheld and the offenses regulated against in these laws could be used to regulate the Internet. Because the Internet does not fit precisely into definitions of media contained in existing laws, the need to revise the law so as to specifically include the Internet is crucial. When the Internet is clearly defined and included in an existing area of Taiwanese law, free speech principles can be applied accordingly.

Related to the issue of free speech are the topics of libel, threats, and obscenity.

B. *Libel, Threats and Obscenity*

Since its advent, the Internet has given rise to a variety of social problems which are closely related to the principle of freedom of speech discussed above. If a form of expression impairs the freedom of others, then it can be regulated by law. Such circumstances include the following: publicly insulting another; circulating information sufficient to damage the reputation of another; spreading rumors to injure the credit of another; or threats to cause injury to the life, person, liberty, reputation, or property of another, thereby endangering their safety.⁹⁰

The speed and convenience of the Internet for the transmission of data has already led to a large number of libel suits. Several instances of libel over the Internet have gained considerable notoriety.⁹¹ Consumers who are dissatisfied with new purchases have used the

89. Cable Television Law, *supra* note 63, art 2.

90. Criminal Code, *supra* note 54, arts. 305, 309-310, translated in LAWS OF TAIWAN, *supra* note 40, at 1118-1119.

91. See, e.g., *Cubby v. Compuserve, Inc.*, 776 F. Supp. 135 (S.D.N.Y. 1991). See also Edmund B. Burke, *And Makes Me Poor Indeed: The Law of Defamation in the Age of Information Technology*, 29 EDUCOM REV. 4 (July 1994) <<http://www.educom.edu/web/pubs/review/reviewArticles/29406.html>>; Mike Godwin, *Internet Libel: Is the Provider Responsible?* (visited June 10, 1997) <http://192.150.251.33/pub/mirrors/eff/Issues/Legal/net_libel.article>.

Internet to strongly criticize the vendor and urge others to boycott the vendor. Threats and personal insults exchanged over networks are also very frequent.

The amount of lewd or pornographic material on the Internet is also increasing. Under Taiwan's Criminal Code, the circulation, sale, or display of pornographic images or text is punishable under the law with a fine or imprisonment.⁹² Libel, threats, and obscenity over computer networks are, in principle, covered under the Criminal Code, but the nonphysical nature of electronic data may make criminal prosecution difficult.

C. *Special Regulations on Mass Communications*

Mass communications are subject to a wide range of special regulations because of the speed at which they transmit data and the influence that they have over society. For example, the Publication Law, Broadcasting and Television Law, and Cable Television Law all place restrictions on any comment regarding legal actions under investigation or at trial, on judicial handling of the cases or parties involved, and on the debate of lawsuits where publicity has been prohibited.⁹³

The Publication Law, Broadcasting and Television Law, and Cable Television Law all require that mass communication businesses correct errors within a specified time upon receipt of a request for such from interested parties, or formulate a written justification of the material published or broadcast.⁹⁴

The Broadcasting and Television Law and Cable Television Law require that if a broadcast program involves other people or organizations and is detrimental to their interests, the station shall not refuse any request from the parties concerned for an equal chance of defense.⁹⁵

92. Criminal Code, *supra* note 54, art. 235, translated in LAWS OF TAIWAN, *supra* note 40, at 1096 ("A person who distributes, sells, publicly displays or by other means shows to another person an indecent writing, drawing or other shall be punished with a fine of not more than 1,000 yuan. A person who with intent to sell makes or is found in possession of a writing, drawing or other thing specified in the preceding paragraph shall be subject to the same punishment.").

93. See Broadcasting and Television Law, *supra* note 58, art. 22; Publication Law, *supra* note 77, art. 33, translated in STATUTES OF CHINA, *supra* note 77, at 190; Cable Television Law, *supra* note 63, art. 52.

94. Broadcasting and Television Law, *supra* note 58, art. 23; Publication Law, *supra* note 77, art. 15, translated in STATUTES OF CHINA, *supra* note 77, at 186-87; Cable Television Law, *supra* note 63, art. 53.

95. Broadcasting and Television Law, *supra* note 58, art. 24; Cable Television Law, *supra* note 63, art. 54.

These regulations do not specifically address the use of Internet or other computer networks, therefore, whether and how these regulations apply to the Internet must be determined. Technology has outstripped the law and has consequently created loopholes in the law which are being addressed. The Internet will soon have as much impact on society as mass communications media and it is only proper that it be brought under a similar type of regulation.

All of these issues will become even more pressing with the planned integration of telecommunications and cable TV business.

D. Integration of Telecommunications and Cable TV

The amendment of Taiwan's Telecommunication Law has been an important step in the liberalization of the telecommunication industry.⁹⁶ Taiwan's NII committee intends to take this still further, integrating various networks in order to provide more bandwidth and greater convenience for consumers. In order to achieve this goal, the laws governing different types of networks will need to be integrated so as to simplify the regulatory structure and facilitate the use of telecommunication and cable television resources by private businesses. This trend is already evident in the U.S., where amendments to the Telecommunication Law allow cable television businesses to engage in telecommunications, and vice versa.⁹⁷ While Taiwan's Cable Television Law prohibits cable television businesses from operating telecommunication business at the present time,⁹⁸ the government has proposed amendments to remove such restrictions.

Transmission over the Internet may have the character of a mass communications media, but the volume and content of the data it carries differs significantly compared to publications, broadcasts, and television. The nature of the text it carries is different from conventional publications due to a lack of physical form. Similarly, the quantity and quality of sound and images cannot be compared to those carried by radio and television (developments in technology will rapidly reduce these differences).

Notwithstanding problems of definitions raised earlier, it is also not practical that the Internet be included wholesale under any of the mass communications laws. The mass communications laws discussed above all require publishers, broadcasters, and cable television operators to operate under a license obtained from the relevant

96. Taiwan's Telecommunications Law was extensively revised in 1996.

97. See generally Telecommunications Act of 1996, 47 U.S.C. §§ 151-614 (1997).

98. Cable Television Law, *supra* note 63, arts. 22, 62.

government department.⁹⁹ In the case of the Internet, such licensing requirements would be unacceptable to many in the network community (Netizens), the requirements would be virtually impossible to enforce given the nature of the Internet, and the requirements would also probably be detrimental to the healthy growth of the Internet. Nevertheless, the law must necessarily anticipate both the increased Internet use and the development of new technologies. To do this, the Taiwanese government need not formulate across-the-board regulations, but rather it must prepare itself to resolve the legal problems which the use of this new media will generate.

V. PROTECTION OF PERSONAL DATA ON THE INTERNET

High volume data flow is now a defining characteristic of our society. Whether on an individual, government, or commercial level, much of this data flow takes the form of electronic data transmitted via the Internet. As Taiwan's NII projects further extend the use of computer networks for the transmission and retrieval of data, access to large volumes of data has become possible. Apart from the many conveniences that this offers users, it also gives rise to the danger that personal data on computer networks may be accessed illegally or otherwise appropriated for improper use. The ease with which information can be accessed through computer networks makes clear that the regulation of information retrieval and management has become a top priority.

The use of computer networks for electronic transmission of data is a relatively recent phenomenon, and Taiwan's laws do not make any specific provision for offenses against privacy in this context.¹⁰⁰ The massive growth of on-line information in Taiwan under NII gives rise to potential dangers, which the 1995 enactment of the Computer-Processed Personal Data Protection Law¹⁰¹ was designed to anticipate. This law still requires extensive review in relation to its application in a computer network environment, with special reference to electronic data flow and offenses against privacy arising therefrom.

99. Broadcasting and Television Law, *supra* note 58, art. 10; Publication Law, *supra* note 77, arts. 9, 16, translated in STATUTES OF CHINA, *supra* note 77, at 185, 187; Cable Television Law, *supra* note 63, art. 19.

100. Taiwan's Civil Code does protect moral right, and while there is some overlap with privacy, there are other areas which it does not cover. See Civil Code, *supra* note 40, art. 18, translated in LAWS OF TAIWAN, *supra* note 40, at 52.

101. The Computer-Processed Personal Data Protection Law came into effect in August 1995. Computer-Processed Personal Data Protection Law, *supra* note 12.

A. *The Computer-Processed Personal Data Protection Law*

The Computer-Processed Personal Data Protection Law was enacted in order to regulate offenses against moral rights perpetrated through the wrongful use of computer-processed personal data, and to promote the proper use of such data.¹⁰² Personal data is defined as one's name, date of birth, personal identification number, and other information sufficient to identify a natural person.¹⁰³ The law protects the right to: (1) search or read the data; (2) reproduce data; (3) supplement or revise data; (4) stop further processing or use of data; and (5) delete data.¹⁰⁴ But this law, in only covering personal data defined as information which identifies a natural person, does not cover information about corporations or other legal entities. The applicability of similar protections for such entities is a question which may have to be addressed at a later stage.

There are a number of important limitations in applying the personal data protection law to the Internet. The law states that collection, computer processing,¹⁰⁵ or use of personal data by any organization, whether public or nonpublic, may be conducted only for a proper purpose or under certain conditions. The wording of this provision only covers public institutions (legally constituted central or local government bodies that exercise civil authority)¹⁰⁶ and nonpublic institutions (there are eight listed under this category: credit information organizations, hospitals, schools, telecommunications business, bank/financial businesses, securities business, insurance businesses, mass communications,¹⁰⁷ and other businesses whose main operation involves the collection and computer processing of personal data).¹⁰⁸ However, the provision fails to cover other categories of users including individuals or legal entities whose business

102. See Computer-Processed Personal Data Protection Law, *supra* note 12, art. 1.

103. *Id.*, art. 3, para. 1 ("The term 'personal data' means the name, date of birth, uniform number of identification card, special features, finger print, marriage, family, education, profession, health condition, medical history, financial condition and social activities of a natural person as well as other data sufficient to identify the said natural person.").

104. *Id.*, art. 4.

105. *Id.*, art. 3, para. 3 ("The term 'computer processing' means to use computers or any automatic machines for input, storage, compilation, correction, indexing, deletion, output, transmission or other processing of data.").

106. *Id.*, art. 3, para. 6 ("The term 'public institution' means any agency at central or local government level performing official authorities by law.").

107. This includes books and magazine publishing, broadcasting, free-to-air and cable TV, and movies.

108. Computer-Processed Personal Data Protection Law, *supra* note 12, art. 7, para. 3.1-3.2.

activities involve the collection, processing, and use of information available on the Internet. Therefore, if any of these individuals or legal entities misuse personal data via the Internet, it may not be possible to regulate them under Taiwan's law. Although the law does provide that certain entities can be designated by the Ministry of Justice (MOJ), and the central government authorities governing that business, as falling under Taiwan's legal jurisdiction even though they are not specifically covered under the public or nonpublic organizations defined above,¹⁰⁹ the MOJ has not yet taken steps to designate such entities. The difficulty of this task may lead to significant delays in implementing a comprehensive protection for personal data.

Furthermore, Taiwan's Computer-Processed Personal Data Protection Law specifies that businesses categorized within the eight types of nonpublic organizations listed above, and public organizations, may collect, process, and use personal data only for proper purposes and, under certain conditions, with the written approval of the subject.¹¹⁰ The question then arises as to whether an e-mail communication is a written document, and whether such a communication can constitute written authorization.

Under the present interpretation of the Computer-Processed Personal Data Protection Law, such an authorization must take the form of a document, which includes a writing or mark on a tangible paper, or a thing which by custom or by special agreement is sufficient evidence of an intention.¹¹¹ A communication over a computer network does not, therefore, qualify. To resolve this problem, the Draft Revised Criminal Law (which is currently pending in the Legislative Yuan) will state that electromagnetic records displayed by machine or computer in a manner that sufficiently evidences the intention contained in the record shall be considered a document.¹¹² Electromagnetic records will be defined as any records stored in an electronic, magnetic, or other format not directly accessible to human perception, which are intended for computer processing. These

109. See Computer-Processed Personal Data Protection Law, *supra* note 12, art. 7, para. 3.3 ("[T]he term 'nonpublic institution' applies to) other enterprises, organizations or individuals designated by the Ministry of Justice and the central government authorities in charge of concerned end enterprises.").

110. Computer-Processed Personal Data Protection Law, *supra* note 12, art. 7-8, 18, 23.

111. Criminal Code, *supra* note 54, art. 220, translated in LAWS OF TAIWAN, *supra* note 40, at 1091. Article 220 states in relevant part: "A writing or mark on a paper or on a thing which by custom or by special agreement is sufficient evidence of the intention therein contained shall be considered a document within the meaning of this Chapter." *Id.*

112. See Draft Revised Criminal Code (Republic of China) art. 220, para. 2 (Chinese version on file with the *Seattle University Law Review*).

amendments are yet to be enacted. When they have been, e-mail may be deemed a sufficient means of written authorization.

Presently, in order to partially circumvent the difficulties caused by the requirement for written authorization,¹¹³ Enforcing Rule 30 of the Computer-Processed Personal Data Protection Law was passed.¹¹⁴ Under this Rule, a nonpublic organization which wishes to collect, process, or use personal data for a specified purpose must first provide the concerned party with written information relating to the reasons for the collection, processing, or use of the personal data.¹¹⁵ If the concerned party does not refuse permission in writing himself, or through a legal representative, within a specified period of time, the authorization of the concerned party is then assumed to be given.¹¹⁶ How Enforcing Rule 30 can be applied to similar situations in an Internet context is still unclear.

B. *E-Mail Addresses and Domain Names*

A further difficulty arises in deciding whether e-mail addresses and domain names constitute information that identify a natural person. If they are deemed to be personal data sufficient to identify a natural person, then such information will fall within the province of the Computer-Processed Personal Data Protection Law. However, whether an e-mail address fits such a definition is still not clear-cut.

To give an example of the difficulty: the e-mail address of the author is <gcchen@iiidns.iii.org.tw>. In this address, "gcchen" is an abbreviation of the author's English name, "iiidns" is the mail server, "iii" identifies the Institute for Information Industry, "org" identifies it as an organization, and "tw" is an abbreviation for Taiwan. The combination of <iii.org.tw> makes up the domain name. A domain name is generally unique, but as it usually identifies the name and location of an organization, it cannot be said to identify an individual. But whether the "gcchen" section of the address, or a combination of "gcchen" with the domain name, can be said to constitute information "identifying a natural person" is still open to debate. The Computer-processed Personal Data Protection Law does not specifically deal with the issue of e-mail addresses.

The structure of the Internet makes it particularly easy for improper use of personal data to be made by individuals or legal

113. Computer-Processed Personal Data Protection Law, *supra* note 12, art. 18.

114. *Id.*

115. *Id.*

116. *Id.*

entities. Although the matter of international transmission is raised in the Computer-Processed Personal Data Protection Law and under the Enforcing Rules, many new technologies are not sufficiently defined under the law at present. The problems of improper use of personal data will only increase with new developments in technology and increased use of computer networks. In the light of these considerations, it will be necessary to come to a more comprehensive regulation of these areas through a broader interpretation or revision of existing laws.

The issues surrounding personal data protection re-emphasize the ease with which information can be accessed through computer networks and make it imperative that the Taiwanese government regulate the collection, processing, and use of personal data to protect rights of privacy. On the other hand, the Taiwanese government needs to be aware that over-stringent regulation may harm the growth of the Internet.

VI. INTERNET CRIME AND REVISION OF THE CRIMINAL LAW

The wide application of computer networks to modern life has led to the development of an equally large variety of network crimes. These include the infiltration of computer viruses, unauthorized access and damage to computer systems, improper use, deletion, or addition of computer files, modification or theft of computer files, and the dissemination of pornographic, threatening, or libelous material through computer networks.

Billions of dollars are lost every year to various kinds of white-collar crime. Computer technology has become the main conduit of all kinds of financial transactions between persons, businesses, and financial and government organizations. While this has greatly enhanced the efficiency of these transactions, it has also created a new arena for criminal activity. The volume of these transactions, and the potential value that they represent, has naturally attracted the attention of computer criminals. An added attraction to criminals is the difficulty in detecting computer crime. Even when such crime is suspected, it is very difficult to prove. In many cases, computer crime is discovered by accident and not by security or monitoring systems that might be in place.

Internet crime primarily involves the destruction, damage or theft through the operation of a data processing system. Computer crime can be divided into six major categories: (1) adding false entries or data into a computer system; (2) unauthorized use of computer systems; (3) modifying or damaging data stored on a computer system;

(4) theft of money, financial documents, assets, and services through the agency of a computer; (5) theft of valuable computer software, data and information; and (6) damaging or destroying a computer system.

Much computer crime makes use of a lack of precision in determining the control of facilities, the supply of services, and the demarcation of responsibility. This same lack of precision is also the main problem faced in regulating against various kinds of computer crime. The Ministry of Justice in Taiwan has proposed a Draft Revised Criminal Code¹¹⁷ (hereinafter referred to as the Draft Criminal Code) to make a specific provision for various crimes that make use of the Internet or other computer networks. Some of the provisions are outlined below.

A. Forgery

Under the conventional interpretation of the law as it presently stands, offenses of forgery are defined as the false making or alteration of a document.¹¹⁸ The definition of a document includes written material on a paper, or thing which contains writing which expresses a purpose.¹¹⁹ According to the doctrine that criminal offenses should be strictly determined by the law,¹²⁰ the act of forging data on a network or altering electronic files may not be deemed sufficient to constitute an act of forgery under the law. In order to remove this anachronism, the Draft Criminal Law will provide that electromagnetic records displayed through the action of a machine or computer, which are sufficient evidence of the intention therein contained, shall be considered a document.¹²¹ Electromagnetic records will be defined as any records intended for computer processing and stored in an electronic, magnetic, or other format not directly accessible to human perception. After this amendment has been passed, knowing alteration and forgery of data on a computer network will constitute an offense.

117. Draft Revised Criminal Code, *supra* note 112.

118. Criminal Code, *supra* note 54, art. 210, translated in LAWS OF TAIWAN, *supra* note 40, at 1089.

119. Criminal Code, *supra* note 54, art. 220, translated in LAWS OF TAIWAN, *supra* note 40, at 1091.

120. Criminal Code, *supra* note 54, art. 221, translated in LAWS OF TAIWAN, *supra* note 40, at 1019. ("An act is punishable only if expressly so provided by the law in force at the time of commission.")

121. Draft Revised Criminal Code, *supra* note 112, art. 220, para. 2.

B. Offenses Against Private Letters

Taiwan's Criminal Code states that a person who, without reason, opens or conceals a sealed letter or other sealed document belonging to another will be punishable under the law.¹²² Under the law as presently stated, it would be arguable as to whether unauthorized perusal of somebody else's electronic mail (e-mail) would constitute an offense, as the law specifies that the offense consists in opening or concealing "a sealed letter or other sealed document." In the Draft Criminal Code, "a person who without reason gains unauthorized access to the contents by means other than opening a sealed document" will be added to the above article.¹²³ This addition is intended to meet the needs of the Internet and prevent the use of electronic technology to gain access to the contents of secret documents.

C. Disclosure of Trade Secrets

The criminal law as it relates to the disclosure of trade secrets¹²⁴ was not framed to regulate the Internet. The control of information has gained increasing importance with the use of the Internet and other computer networks, and it has therefore become necessary to supplement the relevant provisions. The Draft Criminal Code will, therefore, include references to gaining knowledge of trade secrets through the use of a computer or related device,¹²⁵ and the use of such for the disclosure of these trade secrets.¹²⁶

D. Larceny

As electronic data on a computer network does not have physical form and is not moveable property, it does not fall under the conventional interpretation of larceny.¹²⁷ In order to extend the scope of

122. Criminal Code, *supra* note 54, art. 315, translated in LAWS OF TAIWAN, *supra* note 40, at 1277.

123. Draft Revised Criminal Code, *supra* note 112.

124. Criminal Code, *supra* note 54, art. 317, translated in LAWS OF TAIWAN, *supra* note 40, at 1228.

125. Draft Revised Criminal Code, *supra* note 112, art. 318, para. 1 ("A person who discloses without reason trade secrets of another which he knows or possesses through the use of a computer or related devices will be punished with imprisonment for not more than two years.").

126. Draft Revised Criminal Code, *supra* note 112, art. 318, para. 2 ("A person using a computer or related device to disclose trade secrets will have his sentence further extended by half of the original sentence.").

127. Criminal Code, *supra* note 54, art. 320, translated in LAWS OF TAIWAN, *supra* note 40, at 1122-23 ("A person who wrongfully takes the movable property of another with intent illegally to appropriate it for himself or for a third person commits larceny . . .").

larceny over data on computer networks electromagnetic records will be defined as a moveable and, therefore, subject to offenses of larceny under the Draft Criminal Code.¹²⁸ Unauthorized use of a computer or related device will also be included under offenses of larceny.¹²⁹

E. *Fraud*

In order that fraud perpetrated by means of the Internet or other computer networks may be adequately covered by the Criminal Code, amendments will be made to include any person who uses illegal methods to input false information or commands into a computer or related device, to infringe on copyright, to modify records or to appropriate the possessions of others.¹³⁰

F. *Offenses of Damage and Destruction*

As information on a computer network is not presently regarded as a physical object, there is no simple way to punish the introduction of computer viruses, and other means of damaging computer data, under offenses of damage and destruction. The Criminal Code will, therefore, be revised to include any person who, in a manner likely to cause injury to the public or to another, interferes with the processing of electromagnetic data.¹³¹ In the case of a computer virus, the knowing introduction of such a program with intent to cause damage to a computer system, would be difficult to prosecute as the law stands at present. Also difficult to prosecute would be the use of a computer program to infiltrate another system through a network link, to copy, occupy memory capacity, or in any way interfere with the normal functioning of the computer.

G. *Breaking and Entering*

Apart from these proposed revisions to the Criminal Code to cover forgery, offenses against private letters, disclosure of trade secrets, larceny, fraud, and offenses of damage, breaking and entering into a computer system should also be taken into account. Taiwan's Criminal Code covers breaking and entering with regard to a dwelling or other structure,¹³² and the refusal to leave the said premises on

128. Draft Revised Criminal Code, *supra* note 112, art. 323.

129. *Id.*, art. 322, § 2.

130. *Id.*, art. 339, para. 2.

131. *Id.*, art. 352, para. 2.

132. Criminal Code, *supra* note 54, art. 306, para. 1, translated in LAWS OF TAIWAN, *supra* note 40, at 1118 ("A person who without reason breaks and enters a dwelling house or structure of another, the adjacent or surrounding grounds, or a vessel belonging to another shall be

request.¹³³ It is not difficult to imagine a similar scenario in the context of the Internet or other computer network. A computer hacker might break into a computer system, and although he might not violate any other right or cause any damage therein, the simple act of breaking and entering is a violation of the freedom from interference that these provisions aim to preserve for houses and other physical premises. An amendment to cover unlawful and knowing entry into a computer system should also be enacted to maintain good order and safety on computer networks.

VII. CONCLUSION

Much remains to be done both in revising present law and creating new laws to regulate the Internet, which has so quickly become such an important medium of communication and commercial endeavor in our society. Many members of the network community are inclined to regard the government's only proper role in relation to the Internet as making a clear declaration of noninvolvement in Internet regulation. The author believes that this is not in the best interests of Internet users, for the regulation of the Internet is not an attempt to restrict the freedom of Internet users, but to lay down some rules for its operation so that the rights and freedoms of all can be protected.

Taiwan's NII Committee has placed great importance in bringing Taiwan's laws into line with the needs of the Internet. In this massive task, first priority has been given to revising the Copyright Law, the Civil Law, the Telecommunications Law, and the Cable Television Law.

The revisions to the Civil Law will allow the law to take cognizance of digital signatures and the role of certification authorities in order to allow secure on-line transactions to take place. The barrier that has existed between telecommunications and cable television businesses will also be removed to make more efficient use of data transmission resources.

Such a fragmentary approach to amending all the various laws which have a bearing on the Internet will be a time-consuming business, and Taiwan's NII Committee hopes that a caucus may be formed to revise a package of laws related to the Internet. This is

punished . . .").

133. Criminal Code, *supra* note 54, art. 306, para. 2, translated in LAWS OF TAIWAN, *supra* note 40, at 1118 ("A person who without reason conceals himself in the property specified in the preceding paragraph or refuses to leave up request shall be subject to the same punishment.").

intended to speed up the process of catching up with a technology that has left the legal world behind.

A more ambitious plan that is still in the discussion stage is the drafting of a special purpose network or Internet law. This will facilitate the process of keeping up with new technology without the necessity of revising a plethora of laws. Germany has already achieved this goal with its draft of the Federal Integrated Information and Telecommunications Service Law,¹³⁴ and this will naturally be consulted in the process of creating such a law tailored to Taiwan's own needs.

134. Federal Bill Establishing the General Conditions for Information and Communication Services (Dec. 11, 1996) (Federal Republic of Germany) (English translation available at <http://www.iid.de/rahmen/iukdgc.html> (visited April 25, 1997)).