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ELECTRONIC COMMERCE ON THE INTERNET: LEGAL DEVELOPMENTS IN TAIWAN

by GEORGE C.C. CHEN†

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I. INTRODUCTION

The age of the Global Information Infrastructure ("GII"), the National Information Infrastructure ("NII"),¹ Internet² and intranets,³ the World Wide Web ("WWW"), global satellite transmissions, digitization, and multimedia has been ushered in by the development of new technologies. These new technologies include the following: digital convergence; broadband communication; data compression; new telecommunications technologies; and cable and satellite transmissions. These technologies, along with 3C integration (the blurring of boundaries between computer, communication, and consumer electronics) have created a market for high technology products and services which have become the focus of international technological development and competition.

At the heart of all of this is the loose structure of networks which is often called the Internet. These networks are made up of linked information processing units which incorporate a wide range of resources including the WWW, File Transfer Protocol ("FTP"), e-mail, newsgroups, BBS, gopher, and other public and proprietary resources.

1. For more information on the GII and the NII in the United States and around the world, see generally *Vice President Al Gore Bringing Information to the World: The Global Information Infrastructure*, 9 HARV. J.L. & TECH. 1 (Winter 1996); INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE, prepared by the Information Infrastructure Task Force, NII: The New Legal Issues in the Digital Age (Sept. 1994); INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE—The Report of the Working Group on Intellectual Property (Sept. 1995); Bruce Lehman, *Intellectual Property and the National and Global Information Infrastructures*, in FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT (P. Bent Hugenholtz ed., 1996); Glenn G. Nash, *Copyright Protection on the Global Information Infrastructure*, in 2 INT'L COMPUTER LAW 9 (1994).

2. For more background on these technologies, see generally Richard A. Horning, *Has Hal Signed A Contract: The Statute Of Frauds In Cyberspace*, 12 SANTA CLARA COMPUTER & HIGH TECH. L.J. 254 (1996).

3. An intranet is a network within a single organization which links different parts of the organization in a manner similar to the Internet. Such networks may or may not be linked to the Internet.

To make use of these resources, it is necessary to operate through the network of access providers. In Taiwan, the three largest Internet service providers are HiNet (under the Directorate General of Telecommunications), TaNet (under the Ministry of Education), and SeedNet (operated by the Institute for Information Industry). These organizations, and others like them, provide the international links which allow a user to make use of the resources of the Internet wherever they are located around the world.

The Internet is growing at an extremely rapid rate, with approximately 9.5 million hosts connected as of January 1996, an increase of 94% from January 1995 and 700% from 1993.⁴ The value of commerce carried on the Internet was estimated at over U.S.\$159 million in 1995, and is expected to grow to over U.S.\$400 million by 1999.⁵ The numbers are growing rapidly, and Taiwan's NII Promotion Team under the Executive Yuan,⁶ aims to achieve a total Internet user population of 3 million within three years.⁷ In response to this massive increase in demand, Taiwan's government is already implementing projects ranging from electronic and network oriented government, electronic commerce on the Internet, telemedicine, distance education, and Internet libraries.

Internet businesses already cover a wide spectrum of commercial enterprise. Examples of industry websites include industry.net and marshall.net; book shops include Amazon.com among many others; travelers can search for information on TravelWeb and TravelWiz; and flowers can be ordered from FlowerShop and FTD. There are also agents (E*Trade, CapEX), financial services (SFNB, BOA), computer hardware (ISN, Software.net), media (CNN, WSJ, CMP), music (CD Now, Sony), and a whole range of others. Figures from Taiwan show that book shops are the most popular commercial Internet destinations, accounting for 58.3% of web users, followed by computer and peripherals (55.2%), software (52.7%), audio tapes/CDs (30.6%), ticketing agents, and theater, transport (22.6%), household products (17.5%), and flowers and gifts (16.4%).⁸

Moreover, Taiwan now ranks as the third largest information technology hardware manufacturer in the world. With an annual production value in 1996 of U.S.\$16.4 billion, Taiwan ranks second only to the United States and Japan. Taiwan's growth rate for the same year was

4. Daniel Akst, *Internet Hosts Doubling Yearly*, BOSTON GLOBE, Feb. 29, 1996, at 27.

5. See Joshua B. Konvisser, *Coins, Notes, and Bits: The Case for Legal Tender*, 10 HARV. J.L. & TECH. 319, 322 n.2 (1997).

6. The Executive Yuan is Taiwan's equivalent to the President's Cabinet in the United States.

7. This goal was set by Yang, Shi-jian, leader of the NII Promotion Team.

8. See Commercial Department of the Ministry of Economic Affairs Conference on Legal Issues Related to the Operations of Internet Merchants, June 6, 1997.

20.8%, compared to 9.8% in the United States and 11.2% in Japan.⁹ This energetic information technology ("IT") manufacturing sector has already begun to make its impact on the market for Internet products around the world.

On April 10, 1997, the Taiwan NII Promotion Team announced the Internet Electronic Commerce Project.¹⁰ This project was included under the umbrella of the Commerce Department's (Ministry of Foreign Affairs) Automated Commerce Project for administrative purposes, with matters relating to electronic payment placed under the administrative jurisdiction of the Ministry of Finance. The Internet Electronic Commerce Project aims to improve vertical integration of industry through the use of the Internet; the project will incorporate 50,000 businesses in forty industries. The project will commence with the set up of a rapid response system designed to increase vertical (upstream to downstream procedures) integration to improve responsiveness to customer requirements. This pilot program will initially involve five industries, extending to the remaining thirty-five in 1998.¹¹

In anticipation of a shift in the structure of commercial transactions as Internet commerce develops, the government is already making preparations. The Finance Information Service Center ("FISC")¹² and other agencies are working to set up an Internet electronic transaction system to provide a secure system through which to facilitate the growth of electronic commerce.

The volume of transactions the Internet is likely to carry in the near future, and its widespread use over a large number of industries, seems set to make it a vital element not only of corporate life, but also of government, commercial, and personal transactions. The rapid pace at which it is assuming this important role has given rise to many legal issues which need resolution if full use of this new resource is to remain viable. This paper aims to provide an overview of the legal landscape in Taiwan in relation to the Internet and the Internet's developments.

This paper first addresses the issue of contracts as they concern electronic commerce on the Internet, focusing on the questions of current legal forms which are presently deficient in regulating new technologies,

9. CHINA TIMES (Taiwan), June 9, 1997, at 18.

10. Working in conjunction with Taiwan's NII Promotion Team 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 Promotion Team. See George C.C. Chen, *The Internet and its Legal Ramifications in Taiwan*, 20 SEATTLE U.L. REV. (forthcoming 1997).

11. See *The 7th Electronics, Information and Telecommunications Policy Conference*, Technology Advisory Group, Executive Yuan, July 1- 5, 1997.

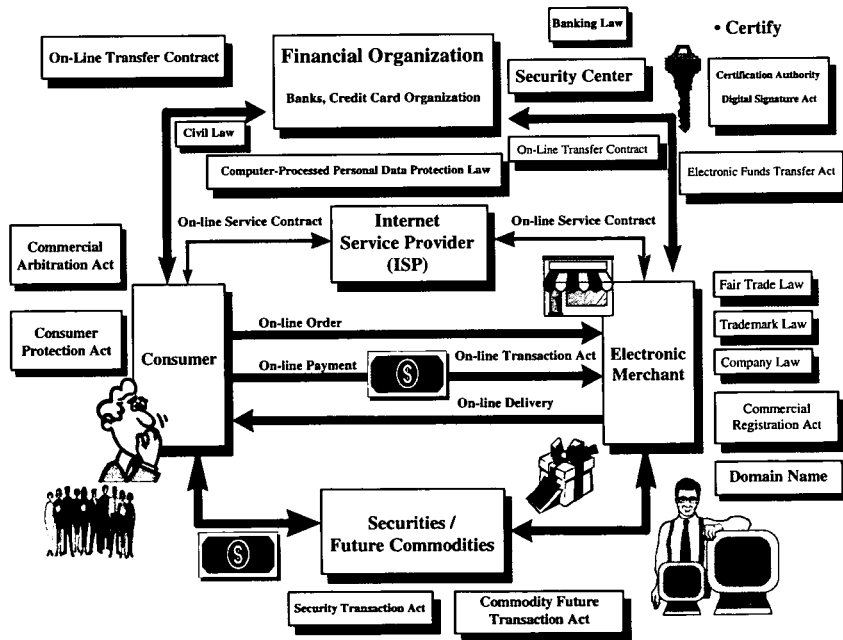
12. The Financial Information Services Center is a clearinghouse for financial services information operating under Taiwan's Ministry of Finance.

and the effects of new modes of doing business such as web-wrap contracts. Second, this paper addresses the legal status of electronic documents as crucial to establishing the legality of electronic transactions. Third, this paper addresses the importance of consumer protection in conjunction with the increased use and reach of the Internet to all avenues of society, and addresses the legal ramifications of new kinds of products (e.g., digital products that can be directly downloaded by the consumer) created by the Internet. Fourth, this paper briefly considers the various electronic payment systems used or under discussion, and the respective legal issues that arise. Finally, this paper discusses other issues that are connected with Internet commerce, including (1) personal data protection; (2) copyright; (3) protection of domain names on the Internet; and (4) business registration for Internet merchants.

Below is a diagram showing the range of basic legal relationships that exist in the context of electronic commerce.

II. CONTRACTS AND ELECTRONIC COMMERCE ON THE INTERNET

Legal Relationships in Electronic Commerce on the Internet



The Internet is a medium through which many kinds of commercial transactions can take place. The types of transactions range from orders placed by one business to another, to consumers browsing a Web Mall or

other commercial web site. Both of these kinds of transactions can take place in a local or a cross-border context. Whatever the nature of the transaction, the rights and duties of both parties engaged in the transaction should be outlined in a contract. There are many legal issues associated with the use of contracts on the Internet.¹³ More particularly, this section will deal with the relationship between contract law and how Taiwan's present laws relate to Internet commerce.

A. DISPOSAL CAPACITY OF CONCERNED PARTIES

Under Taiwan's legal system, all persons have certain rights and are subject to certain obligations.¹⁴ The law defines a person's rights at any given time and when that person's actions are effective under the law. Under Taiwanese law, entities are defined as being either natural persons or as legal entities. In the case of natural persons, which generally refers to individuals, the law does not recognize the actions of children under the age of seven.¹⁵ The law gives limited recognition to acts committed by persons between the ages of seven and twenty years old,¹⁶ providing for full recognition (except where specified by law).¹⁷ to the actions of persons over the age of twenty, the age of majority in Taiwan.¹⁸

Why is it important to define when a person's actions are recognized under the law or to define a person's capacity to dispose of their own affairs? The law seeks to protect those with limited or no ability to dispose of their own affairs responsibly. Therefore, the law requires that such persons have a legal representative to act on their behalf. In many situations, the legal representatives ensure that the person represented does not inadvertently act to defeat his own interests.

A person without capacity¹⁹ to enter into a contract with another²⁰

13. For further discussion of new legal issues in a United States context, see generally Horning, *supra* note 2; Raymond T. Nimmer, *Electronic Contracting: Legal Issues*, 14 J. MARSHALL J. COMPUTER & INFO. L. 211 (1996).

14. See Legislative History Of Taiwan's Civil Law, bk. 1, ch. 2.

15. CIVIL CODE art. 13, para. 1 (Taiwan) *translated in MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN* (1991) [CIV. CODE]. ("A minor who has not completed his seventh year of age has no disposing capacity.")

16. CIV. CODE art. 13, para. 2 ("A minor who is over seven years of age has a limited disposing capacity.") See also CIV. CODE art. 13, para. 3 ("A minor who marries acquires thereby, the disposing capacity.")

17. CIV. CODE art. 14 ("Persons who are in such a state of unconsciousness or feeble-mindedness that they are unable to manage their own affairs, may be interdicted by the Court on the application of the person himself, or his spouse, or two of his nearest relatives.")

18. CIV. CODE art. 12 ("Majority begins with the twentieth year of age.")

19. CIV. CODE art. 1086 (In the case of a child, the child's parents are considered statutory agents, "of their minor children.")

must have his legal representative act for him. For example, *A* and *B* enter into a transaction. *B* is a minor without disposing capacity. Therefore, a representative of *B* is required to agree to the transaction before it becomes a binding contract.²¹ In the case of a contract being entered into by a person with limited disposal capacity, the contract is not recognized until the contract is approved by the person's legally appointed representative.²² This point is especially pertinent when dealing with contracts made over the Internet.

The validity of contracts made over the Internet by people with full capacity to dispose of their own affairs is not problematical in this respect. However, in the case of persons with limited or no disposing capacity where the approval or agency of a legal representative is required, the cyberspace context of the Internet may give rise to problems. Particular problems may surface, such as how does one ascertain if a person is a minor or otherwise without any disposing capability (a requirement to input an identity card number or age would have little value insofar as they could be easily falsified)? The use of special legislation suitable for use in instances of contracts entered into over the Internet is being seriously considered.

B. OFFER AND ACCEPTANCE

Contracts in Taiwan are based on the principle of accord, under which a contract is considered to be concluded when all parties to the contract agree on the intention expressed in the contract.²³

Basically, the agreement that is the basis of the contract is made up of an "offer" by one party and an "acceptance" of that offer by a second party. For example, in a simple commercial transaction, the consumer makes an offer to purchase an item from the merchant and the merchant accepts the offer. In other words, they agree to the sale of a certain item

20. CIV. CODE art. 76 ("For the making or receiving of a declaration of intention, a person incapable of disposing is represented by his statutory agent.")

21. CIV. CODE art. 75 ("The declaration of intention of a person incapable of disposing is void.")

22. CIV. CODE art. 79 ("If a person limited in disposing capacity enters into a contract without the approval of his statutory agent, the contract is effective only upon ratification by the statutory agent."). See also CIV. CODE art. 77:

Where a person limited in disposing capacity makes or receives a declaration of intention, the approval of the statutory agent is necessary, unless the declaration of intention relates to the mere acquisition of a legal advantage, or to the necessities of life according to the age and social standing of the persons limited in disposing capacity.

Id.

23. CIV. CODE art. 153, para. 1 ("A contract is concluded when the parties have reciprocally declared expressly or tacitly their concurring intentions.")

for a certain price, and the sale is effected.²⁴

In another instance, under Taiwanese law, displaying goods for sale with their selling price is regarded as an offer. If the consumer accepts the offer, then the sale can be effected. On the other hand, the sending of a catalog or price list is not regarded as an offer,²⁵ it is merely an inducement to an offer. The important difference between an offer and an inducement to offer is that the former is considered binding once it has been made.²⁶ While "inducement for an offer," "offer," and "acceptance" are all clearly defined for the purposes of conventional commerce, this is not the case on the Internet. Tangible objects, such as goods displayed with their price, as in the case of a real world shop display, do not exist in the cyberspace world of the Internet.

When images or descriptions of products are displayed on a web page, they are not tangible objects displayed for sale. They may be seen as similar in nature to a catalog. In other words, the images or descriptions cannot be considered as an offer but only as an inducement to an offer. The same applies to price information listed on web pages. This information is provided for the consumer to browse through the Internet. It is material that has been sent by the merchant via a server to the consumer. Although the delivery process is by electronic means rather than through the postal service, this still qualifies as the "sending of price lists" and is therefore not regarded as an offer.²⁷ Moreover, the consumer is free to access information on the Internet, but this information only serves as a means by which a merchant attempts to interest the consumer in a product. Therefore, such information can only be considered an inducement to an offer and is not binding on the offerer.

The corollary, is that the consumer must actively make an offer to the merchant, probably by means of clicking on an icon on a web page. Only after the merchant has accepted the offer via the Internet or by other means, will the contract be regarded as concluded. Direct delivery of the goods will also conclude the contract under Taiwanese law.²⁸ However, digital products on the Internet, such as games which are dis-

24. Civ. CODE art. 345:

A sale is a contract whereby the parties agree that one of them shall transfer to the other his rights over property and the latter shall pay a price for it. The contract of sale is completed when the parties have mutually agreed on the object to be sold and on the price to be paid.

Id.

25. Civ. CODE art. 154, para. 2 ("Exposing goods for sale with their selling price is deemed to be an offer. However, the sending of price lists is not deemed to be an offer.").

26. Civ. CODE art. 154, para. 1 ("A person who offers make a contract is bound by his offer unless at the time of offer he excludes this obligation or unless it may be presumed from the circumstances or from the nature of the affair that he did not intent to be bound.").

27. *Id.*

28. Civ. CODE art. 161:

played with a price and can be utilized for entertainment purposes, are similar to goods bearing a price (rather than a catalog). Therefore, the display of digital products in such a manner constitutes an offer.

C. REVOCATION OF EXPRESSION OF INTENTION

Under Taiwanese law, a declaration of intent is effective based on the doctrine of "mutual understanding;" it becomes effective when all parties to the contract are deemed to understand its contents. In a situation when all parties are present, mutual understanding is sufficient to make the declaration effective.²⁹ In a situation where the parties are at different locations, the declaration becomes effective when a party is informed that the offer is accepted.³⁰ If revocation of the offer or acceptance reaches the other party prior to or simultaneously with that notification, then the declaration will not take effect.³¹

This works well in a real world situation where there is a delay between the dispatch of the notification and its receipt. However, in transactions performed over the Internet where the transaction can occur almost instantaneously, literally with the click of a mouse, this law seems to lack relevance. Moreover, the question of how an offer or acceptance may be withdrawn remains unresolved.

Another current law that might apply in this instance is one that deals in mistaken declarations.³² If a person misunderstands the declaration or is not informed of the true state of affairs through no fault of his or her own, the effects of the declaration or its acceptance can be

In cases where according to custom or owing to the nature of the affair, notification of acceptance is not necessary, the contract is concluded when, within a reasonable time, something has been done, which may be considered as an acceptance of the offer. The provision of the foregoing paragraph applies *mutatis mutandis* when at the time of the offer the offerer has waived notice of acceptance.

Id.

29. CIV. CODE art. 94 ("A declaration of intention *inter presentes* becomes effective at the moment when the person to whom it is made understands it well.")

30. CIV. CODE art. 95, para. 1 ("A declaration of intention *inter absentes* becomes effective at the moment when the notification of the declaration reaches the other party, unless notification of revocation reaches such other party previously or simultaneously.")

31. *Id.*

32. There are two sections of the Civil Code that apply, the first is Civil Code art. 88:

A declaration of intention may be avoided by the declarant if he was acting under a mistake as to the contents of the declaration of intention, or had he known the real state of affairs, he would not have made the declaration; provided that the mistake or the ignorance of the real state of affairs was not due to the declarant's own fault.

Id.

The second is Civil Code art. 89 ("A declaration of intention which has been incorrectly transmitted by the person or institution employed for its transmission may be avoided under the same conditions as provided for in the previous article.")

avoided.³³ However, even here there is considerable difficulty. A misunderstanding is limited only to a misstatement of fact in the declaration.³⁴ A misunderstanding does not include a situation where a person simply changes his or her mind, nor where the motivation of a party is misunderstood, but only includes a misunderstanding or misstatement of fact by a party concerned.³⁵

In situations where the person is permitted to revoke their declaration,³⁶ that person shall be liable for compensation of any loss or damage that another party may sustain due to accepting the validity of that declaration. For example, a potential buyer browsing the Internet accidentally clicks an icon which places an order with an Internet merchant and the merchant then delivers the product to the buyer.³⁷ Even if the buyer is able to revoke the declaration (the offer to purchase the product), the buyer would still be liable for delivery costs, unless otherwise specified in the terms of the purchase agreement.

Due to the legal difficulties of nullifying the effects of a declaration of intention, it is recommended that Internet merchants make use of a dialog box or other device which requests that a user confirm any purchase. By utilizing a dialog box, the declaration of intention has to pass through a two-phase process: the initial click to select the item followed by a second click to confirm that the user wishes to purchase the product described. A dialog box can reduce false declarations made due to carelessness of the user while browsing on the Internet.

D. SHRINK-WRAP AND WEB-WRAP CONTRACTS

Shrink-wrap contracts refer to a contract printed on the packaging, most often of a piece of software, outlining the terms and conditions of the product's use. The most common device with this type of contract to make it effective is the statement that in breaking the seal of the packaging, the consumer agrees to the terms and conditions stated in the contract. This type of contract emerged in the United States, and is now commonplace in the software market although its application under the law is still problematical.

33. CIV. CODE arts. 88 and 89.

34. Taiwan Supreme Court, Tai Shang Tsi No. 570 (1954).

35. Taiwan Supreme Court, Tai Shang Tsi, at No. 3311, (1962).

36. CIV. CODE art. 91:

If a declaration of intention is avoided under article 88 or article 89, the declarant shall make compensation for any damage which the other or any third party may have sustained by relying upon the validity of the declaration, unless the injured party knew, or had the means of knowing, of the ground on which the declaration was voidable.

Id.

37. See CIV. CODE art. 161 (describing, generally, that the act of delivery, in certain cases, can constitute an acceptance of an offer).

The issues can be seen in *Pro CD v. Zeidenberg*³⁸ in which the court analyzed enforceability of a shrink wrap contract. The district court regarded the shrink-wrap license as a contract under the Uniform Commercial Code ("UCC"), but maintained its inclusion as part of the packaging does not provide adequate opportunity for the consumer to familiarize themselves with the terms of the contract. Therefore, the court ruled that a shrink-wrap contract was not enforceable. This decision was later overturned by the Seventh Circuit on the grounds that the notification on the packaging provided adequate information and that the consumer had adequate opportunity after breaking the seal but prior to using the product of returning the product and thereby revoking any contractual obligations. The result of this ruling indicated that a shrink-wrap contract may be enforceable under United States law.³⁹

An extension of the shrink-wrap concept is "web-wrap" or "click-wrap" contracts which are used for distribution over the Internet. These contracts are often invoked when downloading content from the Internet (e.g., software, games) or in making use of Internet services and require the consumer to use the mouse device to click on an icon to indicate agreement with the product's terms and conditions. Whether web-wrap contracts can be dealt with under the same heading as shrink-wrap contracts is not clear.

Under Taiwan's civil law system in which offer and acceptance must clearly be in accord, the enforceability of shrink-wrap and web-wrap contracts is still uncertain with no ruling such as the *Pro CD v. Zeidenberg* case to provide a clear indication.

E. DIGITAL PRODUCT DEFECT WARRANTY

While many products purchased over the Internet are physical objects (such as flowers or books), they still require delivery by conventional methods (such as the postal system or courier). In this case, despite the order being placed over the Internet rather than by other means, the transaction differs little from a conventional sale. On the other hand, a new kind of product is increasingly common, namely digital products which can be transferred to the consumer directly over the network without the use of conventional delivery systems. Such products, such as computer software, electronic data, or electronic games can be downloaded directly from the web site at which the order is placed. While this is a great enhancement to the convenience of electronic com-

38. *ProCD v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996); see also Andrew S. Brenner & William A. Streff, Jr., *US Reverses Controversial Ruling on Shrinkwrap Agreements*, IP WORLD, July/Aug. 1996.

39. See Brenner & Streff, *supra* note 37.

merce, it also gives rise to questions of how warranties of merchantability and fitness of a product under civil law can be applied.

Under Taiwan's civil law, the sale of goods can be divided into "the sale of a thing" and "the sale of rights."⁴⁰ With the sale of objects, the merchant has an obligation to ensure that the product is free of defects and is fit for the purpose which it is intended.⁴¹ In the case of a sale of rights, the seller must warrant that his right to the thing exists and that no third party has an enforceable claim on the right.⁴²

With the introduction of Internet commercial transactions, the question arises as to how digital products such as electronic data or software which is downloaded directly from the merchant's web site should be defined. The transaction does not easily fall into either category of the sale of a thing or the sale of right.

The situation is complicated in the United States by the existence of UCC regulations, which differentiate between sales in which there is a physical delivery of goods (which are covered), and those which take place entirely within a computer, which current UCC regulations do not cover.⁴³ In Taiwan on the other hand, there is currently no need to revise the law in this regard due to provisions in the Civil Code extending provisions of the law to all non-gratuitous contracts.⁴⁴

F. GOVERNING LAWS AND JURISDICTION

Many Internet transactions are transnational in nature, involving people of different nationalities from many different geopolitical locations. For example: company *B*, operating out of country *A* places an

40. CIV. CODE art. 348:

The seller of a thing is bound to deliver it to the buyer and to cause him to acquire its ownership. The seller of a right is bound to cause the buyer to acquire the right sold. If, by virtue of such right, the seller can possess a certain thing, he is bound to deliver that thing.

Id.

41. CIV. CODE art. 354:

The seller of a thing warrants that the things sold is, at the time when the risk passes to the buyer according to the provisions of art. 373, free from any defect in quality which may impair or destroy its value, or fitness for ordinary purposes or its fitness for the purposes of the contract of sale. The profits and risks of the objects sold pass to the buyer at the time of delivery, unless otherwise provided for by contract.

Id.

42. CIV. CODE art. 349 ("The seller must warrant that the thing sold is free from any right enforceable by third parties against the buyer. The seller of a claim or of any other right must warrant the actual existence of such a claim or right.")

43. See Nimmer, *supra* note 13 at 213.

44. CIV. CODE art. 347 ("The provision under the present title apply *matatis mutandis* to such non-gratuitous contracts other than those of sale, unless the nature of the contract does not permit of it. A non-gratuitous contract is any contract which involves a consideration.")

order with company *D* in country *C*. This situation can easily give rise to a conflict of laws in which it is necessary to establish beforehand which legal system any action between the parties should be tried under.

Under Taiwanese Law, the legal system under which a contract is established is generally based on the intentions of the parties concerned;⁴⁵ in other words, company *B* and company *D* company can agree as to whether the contract will be governed by the law of country *A* or country *C*. In the case where the intention of the parties is not known, the contingencies are as follows: (1) in the case where parties of the same nationality, the law of their country shall apply; (2) if they are of different nationalities, the law of the place where the transaction took place will apply; (3) if the act is done in different places, the law of the place whence the notice of offer was issued shall apply; and (4) if a party has no knowledge from what place an offer is made, the law of the domicile of the entity that made the offer shall apply.⁴⁶

In the case of Internet transactions, which often involve people of different nationalities taking place in cyberspace, Taiwan law would regard that the contract should be governed by the law of the country where the offer was made. In our above example, in which company *B* makes an offer to company *D*, the contract will be governed by the law of country *A*, which is the country from which company *B* made the offer by clicking on the web page. It is important to bear in mind that the legal effects of such clicking (and making an offer) will be different in the case of digital and conventional products.

III. LEGAL STATUS OF ELECTRONIC DOCUMENTS

A. LEGALLY REQUIRED WRITTEN FORMAT

The Internet is a paperless environment, and in this regard, presents considerable problems for the law as it stands at present.

45. Law Governing the Application of Laws to Civil Matters Involving Foreign Elements art. 6 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991):

With respect to the requisites for establishing and the effect of a juristic act whereby an obligatory relation is brought about, the law to be applied thereto shall be determined by the intention of the parties to the act. In case where the intention of the parties is unknown, and where both of the parties are of the same nationality, the law of their country shall be applicable. If they are of different nationalities, the *lex loci actus* shall be applicable. If the act was done at different places, that place whence the notice of offer was issued shall be deemed as the place of the act. If the opposite party did not know the place whence the notice of offer was issued, the place of domicile of the offerer shall be deemed as the place of the act. If the place of the act mentioned in the preceding paragraph spans over two or more countries or it does not belong to any country, the *lex loci solutionis* shall apply.

Id.

46. *Id.*

These problems arise from the principle that certain acts must follow the form prescribed by law if they are to be valid, and that the form prescribed in many cases requires written documentation. 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.

To find an example of the key role of written documents, a person only needs to look at the provisions for the storage and carriage of goods and for financial transactions. On depositing goods in a warehouse, the warehouseman is required to deliver a godown warrant from the warehouse register which contains the name and address of the depositor, place of storage, and other details.⁴⁷ Another example is financial transactions, where bills of exchange, promissory notes, and checks are all 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.⁴⁸

In all of the above cases, the requirement that the documents for the transaction are 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 these provisions must be amended. Amendments may take the form of allowing electromagnetic records stored on a computer to serve as documentary evidence of an agreement (such an amendment has been incorporated into the new Draft Criminal Law which provides that electromagnetic records displayed through the agency of a machine or computer shall be considered a document). The law would also have to provide for instances in which the records from various parties to an agreement are not consistent and regulate as to which version of a document will rule.

The above mentioned documents are also marketable securities and may be transferred from one party to another. An example of the use of such securities can be seen in the use of negotiable instruments such as checks, which can be endorsed, transferred, or guaranteed. However, the law at present requires that they be in written form.⁴⁹

47. CIV. CODE art. 615-16 ("If required by the depositor, the warehouseman must make out and deliver to him a warranty from a warehouse register. The warrant shall contain the following particulars and be signed by the warehouseman . . .").

48. Law Of Negotiable Instruments art. 2-4 (Taiwan) *translated in MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN* (1991) [Major Laws]. For various other examples of the key role of written documents as expressed under Taiwan's laws, see CIV. CODE. arts. 624-25, 664; Maritime Law (Taiwan) art. 82, 97 & 98; Insurance Law (Taiwan) art. 43-44; and Law Of Tariffs (Taiwan) art. 7.

49. Law Of Negotiable Instruments art. 30 ("A bill is negotiated by endorsement except where the drawer expressly makes it non-negotiable by inserting therein a statement to that effect . . .") and art. 58 ("A guarantor or guarantors may be provided to guarantee

It can be seen that such documents are more than simply documentary evidence of a transaction and that their 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 a medium for commercial activity, the law must be revised in order to take into account the use of electronic mediums not amenable to various forms of endorsement or physical transfer from one person to another.

B. ELECTRONIC DOCUMENTS AND THE LAWS OF EVIDENCE

With the development of electronic commerce on the Internet, the number of conflicts that need to be settled in court that rely on electronic transmissions rather than conventional paper documents will necessarily increase. The admissibility of electronic documents as evidence is, therefore, an important issue to consider.

Under Taiwan's Law of Civil Procedure, the court has the right to demand parties involved in a dispute to produce certain kinds of written documents if it believes that these documents are of material interest to the case and that the application by the party on whom the burden of proof rests is well grounded.⁵⁰

While the original document is what best meets the courts purpose,⁵¹ this cannot always be produced. In this case, the court has the right to decide on the evidential strength of a copy of such a document.⁵²

the liabilities on a bill . . ."). For other examples of the requirement that marketable securities are written documents, see Civ. CODE arts. 618 & 627-30; and Maritime Law art. 104.

50. LAW OF CIVIL PROCEDURE art. 341 (Taiwan) *translated in* A COMPILATION OF THE LAWS OF CHINA (Kang Chi-Chao ed.) (1971) [CIV. PRO.] ("Documentary evidence must be tendered by producing the document."); CIV. PRO. art. 343 ("If the court considers that the fact to be proved is material and the application of the party on whom the burden of proof rests is well grounded, it shall, by means of a ruling, order the other party to produce the document."); CIV. PRO. art. 344 ("A party has the duty to produce the following documents: (1) Documents which have been referred to in the preliminary pleading or in the course of oral proceedings; (2) Documents which the other party may by law apply to inspect to or take delivery of; (3) Documents made for the benefit of the other party; (4) Documents made in connection with the legal relation in dispute between the parties; (5) Commercial account books.").

51. CIV. PRO. art. 352 ("A public document shall be produced in the original form or in the form of a verified copy. A private document shall be produced in the original form, but, if only its effect or interpretation is in dispute, it may be sufficient to produce a copy of such document.").

52. CIV. PRO. art. 353:

The court may in any case order the production of the original of a document. If the order of the court referred to in the proceeding paragraph is not obeyed, or if

As to deciding on the genuineness of public documents,⁵³ this can be decided on the basis of its form and manner of composition. If there is any doubt as to its genuineness, this can be verified by the government office or official in whose name the document was made.⁵⁴ In the case of a private document, the party providing the document shall provide proof that it is genuine.⁵⁵

In the commercial environment of the Internet, the transmission of electronic data has virtually replaced the use of conventional documentation (i.e., documents composed with ink on paper) and such as "original" document are almost completely without meaning. Despite the important role played by electronic documents in this growing field of commercial enterprise, their legal status is still very unclear. Indeed, it is still questionable if files, programs and digital data stored in a computer's memory constitute documents at all; after all, electronic data has no fixed format and can be displayed in different ways using different media. This conflicts with the definition of a document under Taiwanese law in which documents, while not being confined to words or symbols written on paper, are required to be tangible, having a fixed physical existence, and capable of being read without the intermediary of an electronic device.⁵⁶

A document is further defined as words or symbols on a paper or on a thing which is sufficient to express meaning.⁵⁷ Under Taiwan's Law of Criminal Procedure, an exhibit may be shown to the accused and the accused ordered to identify it.⁵⁸ Electronic data is intangible, existing as

the original cannot be produced, the court shall decide, by its free moral conviction, on the evidential strength of a copy of such a document.

Id.

53. A public document is document that is issued by the government.

54. CIV. PRO. art. 355 ("A document which, from its form and tenor, may be taken as a public document shall be presumed to be genuine. If there is any doubt as to the genuineness of a public document, the court may request the government office or official in whose name it is made to state whether or not it is genuine.")

55. CIV. PRO. art. 357 ("The party producing a private document shall prove the genuineness of such a document, except where the other party raises no dispute as to its genuineness."); CIV. PRO. art. 358 ("A private document, which has been signed by the maker himself or his agent, or on which the maker or his agent has affixed his seal or finger-print, or which has been verified by a court or a notary public, shall be presumed to be genuine.")

56. CRIMINAL CODE Chap. 15 (Taiwan) *translated in MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN* (1991) [CRIM. CODE].

57. CRIM. CODE art. 220 ("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.")

58. CRIM. PRO. art. 164 ("An exhibit shall be shown to an accused who shall be ordered to identify it; if it is a document and the accused does not understand its meaning, he shall be informed of its essential points.")

digital code until displayed through a computer; although a paper copy can be made of such a document, its admissibility is questionable.

Under Taiwanese law at the present time, electronic data does not qualify as a "document." It is important that the law be revised to include electronic data under the legal definition of a document or that the law be revised to make the law applicable to the increasingly important realm of the Internet.

The first steps towards resolving this problem have already been taken. Revisions to Taiwan's Law of Civil Procedure included reference to data that requires an electronic medium in order to be displayed. It states that documents, or articles with a similar effect to documents, in which there is real difficulty in providing an original or which require an electronic medium to be displayed, will be admissible if a printed copy of the data is provided and can be proved to be the same as the original data.⁵⁹

Revisions to the Criminal Law have also added provisions specific to new data transmission media which define audio and video recordings and electromagnetic records as documents in certain circumstances.⁶⁰ The definition of electromagnetic records specifically addresses the issue of data that cannot be directly perceived and must be processed by a computer.⁶¹

C. DIGITAL SIGNATURES AND THE CERTIFICATION AUTHORITY

One of the most significant differences between conventional face-to-face commercial transactions and those conducted over the Internet, is that the information required to conclude the transaction must travel through a network of computers. This network of computers, which is made up of area networks, servers, and telecommunication channels, is often described as Internet space. This space is relatively insecure and provides the opportunity for third parties to read or alter transmissions without authorization, to make transmissions under an assumed identity, or to falsify transmission records. The protection of data on the Internet is paramount if electronic commerce is to realize its full potential. This naturally raises the question of legal safeguards.⁶² These safe-

59. CIV. PRO. art. 363.

60. CRIM. CODE art. 220.

61. *Id.*

62. For discussion of the use of digital signature and its legal issues see William A. Hodkowski, *The Future of Internet Security: How New Technologies Will Shape the Internet and Affect the Law* 13 SANTA CLARA COMPUTER AND HIGH TECH. L.J. 218-22 (1997); Thomas J. Smedinghoff, *Electronic Contracts and Digital Signatures*, The University of Houston Law Center, 10th Annual Computer & Information Law Institute, Dallas, Texas, Sept. 1996; AMERICAN BAR ASSOCIATION DIGITAL SIGNATURE GUIDELINES—LEGAL INFRASTRUCTURE FOR CERTIFICATION AUTHORITIES AND SECURE ELECTRONIC COMMERCE, 1996; Benjamin

guards must focus on the following areas:

Confidentiality: to ensure the security of transactions (by means of Data Encryption Standard ("DES")⁶³ or RSA⁶⁴ encryption technology) to prevent theft or alteration of data transmissions.

Integrity: use of serial numbers, data identification code, and digital signatures to prevent unauthorized alteration, deletion, or forwarding of a transmission.

Authentication: use of data identification code and digital signatures to verify the sender and to prevent impersonation.

Non-repudiation: use of digital signatures to verify the transmission and receipt of data and prevent repudiation by either party.

Digital signature technology is now the most common means by which advanced nations seek to ensure that electronic transmissions are confidential and authentic, have not been tampered with during transmission, and cannot be repudiated by the sender or the recipient. A digital signature is not a written signature which has been digitized or otherwise input into a computer; in fact, it is not a signature at all in the conventional sense of the term. It is a system that uses asymmetrical public key encryption to encode certain data in such a way as to be inaccessible to anyone who does not hold a key to the code. The system uses a public key and a private key which have a mathematical relationship to each other which allows the encryption and decryption of the data which makes up the digital signature. Either key can be used to encrypt the signature; but whichever is used, only its counterpart can be used to decrypt it.⁶⁵

The procedure of using a digital signature is as follows: when *A* wishes to transmit an electronic message to *B*, the message to be transmitted will first be processed by a hashing function which will create a digest of the message (Digest One). The digest will then be encrypted using *A*'s private key – this encrypted digest is *A*'s digital signature. The message and the digital signature are then both transmitted to *B*. In order to verify the sender's identity, *B* then uses the original message to create a second digest (Digest Two) using the hashing function. *B* then uses his public key to decrypt Digest One and compares this with Digest Two. If the two digests are identical, *B* can be sure that the message has not been tampered with during transmission. As the digital signature cannot be forged without knowledge of *A*'s private key, *B* can also have

Wright, *Eggs in Baskets: Distributing the Risks of Electronic Signatures*, 15 J. MARSHALL J. COMPUTER & INFO. LAW 189 (1997).

63. For more details, see Hodkowski *supra* note 61, at 227-29.

64. *Id.* at 231-33.

65. *Id.* at 233-34.

reasonable assurance that the message originated from A.⁶⁶

While this helps resolve the problems of integrity and authentication, the problem of non-repudiation remains. For while *B* is now able to confirm or reject the integrity and authenticity of the message by a comparison of Digests One and Two, *B* is still free to deny receipt of the message, or *A* is still able to maintain that the contents of the message were altered. For the same reasons that letters are sent by registered post, it is important to ensure messages cannot be repudiated by either party. What is required at this stage is the presence of a third party to act as supervisor and arbiter of electronic transmissions. To achieve this, it is necessary to establish a certification authority ("CA"). With the CA acting as an intermediary in the transmission of encrypted messages carrying a digital signature, there will be recourse in instances of dispute between *A*, *B*, or a third party as to the secure transmission of any message.

The effectiveness of the system described above depends on the holder of the private key preserving the secrecy of that key, for the use of the private key, the verification by means of digital signature, and the CA are all central to the effectiveness of the system.

To return to the legal perspective, a number of important problems remain to be resolved. Under Taiwanese law, documents with legal effect require a physical signature⁶⁷ (in the conventional sense of the term) – there is no provision for the legal effectiveness of the system described above. Where the provisions of the law can be remedied by contractual agreements in which concerned parties agree to make a digital signature (as described above) binding in the same manner as a conventional signature is a matter that may have ramifications as to public interest and commercial order, and may conflict with legal requirements under Taiwan's Civil Law.⁶⁸ Therefore, it is generally agreed that Taiwan should enact a law dealing with the issues raised by the use of digital signatures.

IV. CONSUMER PROTECTION AND ELECTRONIC COMMERCE

Internet merchants exist in a cyberspace without geographic distance or boundaries and their customers encompass anybody with In-

66. See Smedinghoff *supra* note 61.

67. CIV. CODE art. 3:

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 signature, the affixing of such a seal is equivalent to a signature. If a finger-print, cross or other mark is used in lieu of signature, it is equivalent to a signature provided that it is certified on the document by two witnesses.

Id.

68. *Id.*

ternet access. While in many countries consumers in real world market places are protected by consumer protection laws which are intended to uphold the best interests of the consumer, these are generally directed at conventional methods of transaction. It is not surprising, therefore, that certain issues related to consumer protection in electronic transactions have arisen.

Taiwan's Consumer Protection Law was enacted in 1994. The following is a brief survey of how this law may apply to electronic transactions over the Internet.

A. STANDARD CONTRACTS ON THE INTERNET

The policy statements of Internet merchants often include a section detailing certain terms and conditions under which products or services will be provided to the consumer. The transaction is often governed by a standard contract prepared by the merchant which the consumer agrees to by clicking on a specified icon or some other means.

Web-wrap contracts⁶⁹ are usually in a form described as standard or adhesion contracts. The nature of these contracts is that merchants prepare these contracts without consultation or negotiation with the consumer. Furthermore, these contracts do not generally allow for emendation with reference to specific transactions. Instead, their purpose is for use with multiple transactions having multiple parties not specific to any single transaction.⁷⁰ A standard contract must have terms for the mutual benefit of both the merchant and consumer. In cases of dispute, it will operate in favor of the consumer.⁷¹

A standard contract is defined by the fact that if the consumer cannot provide for or foresee the terms and conditions therein, the terms and conditions shall not constitute part of the contract.⁷² These terms and conditions need not take the form of writing, but may take the form of projection screens, posters or other means.⁷³ Also, the consumer has a

69. See *supra* Part II.

70. Consumer Protection Law art. 2, subpara. 7 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991). [Cons. Prot. Law] ("The term 'standard contracts' means those contract terms unilaterally prepared by business operators for entering into contracts with nonspecific, multiple parties.")

71. Cons. Prot. Law art. 11, subpara. 2 ("Where the terms and conditions of standard contracts are ambiguous, interpretations shall be made favorable to the consumers.")

72. Cons. Prot. Law art. 14 ("If the general terms and conditions for a contract are not provided in standard contracts and, under normal circumstances, they cannot be foreseen by consumers, such terms and conditions shall not be constituted a part of the contract.")

73. Enforcement Rules Of Consumer Protection Law, art. 9 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991) [Enf. Rules Of Cons. Prot. Law] ("The term 'terms and conditions of standard contracts' as mentioned in the Law shall not be limited to those expressed in written form, and shall include those in such forms as projection screens, posters, bulletin boards or other methods.")

thirty day period of time to become familiar with the terms and conditions of the contract.⁷⁴ However, when the consumer cannot discuss the terms and conditions due to placement or typographical reason, the contract will not apply.⁷⁵

If the definition of standard contracts includes web-wrap contracts, then they will fall under the supervision of the competent government authorities who will set forth specific provisions for use in certain industries.⁷⁶ These same authorities may investigate conformity to these provisions at any time.⁷⁷ Thus, the provisions of the Consumer Protection Law seem adequate to protect the consumer in electronic commerce where the consumer uses web-wrap contracts that are judged to constitute a type of standard contract.

B. COOLING-OFF—THE RIGHT TO RETURN DIGITAL PRODUCTS

To protect the rights of consumers, the Consumer Protection Laws of some countries provide for a cooling off period where a consumer has up to seven days to return a product to the merchant for no reason. Taiwan's Consumer Protection Law has such a provision that applies to transactions conducted through mail order or door-to-door sales activity.⁷⁸

While there is no specific provision under the Taiwanese Consumer Protection Law regarding sales made over the Internet, such transactions have similarities with mail order purchases. Taiwan law defines mail order purchases as a transaction where the merchant uses the postal service or some other means such as a courier to deliver the

74. Enf. Rules Of Cons. Prot. Law art. 11, para. 1 ("Before entering into a standard contract with a consumer, a business operator shall provide the consumer with a reasonable period, not longer than 30 days, to enable the consumer to review all terms and conditions thereof.")

75. Enf. Rules Of Cons. Prot. Law art. 12:

The general terms and conditions for a contract, whether or not contained in the standard contract, shall not constitute a part of the contract if their existence is difficult to be noted or discerned due to lettering types, printing or other reasons; provided however, that a consumer may assert that such terms and conditions are still part of the contract.

Id.

76. Cons. Prot. Law art. 17, para. 1 ("The competent authorities at the central government level may designate certain industries, and set forth by public notice the mandatory and prohibited provisions of standard contracts to be used by them.")

77. Cons. Prot. Law art. 17, para. 3 ("Competent authorities may dispatch officials to review standard contracts used by business operators at any time.")

78. Cons. Prot. Law art. 19:

Consumers of a mail order or door-to-door sale, if unwilling to purchase the goods received by them, may return the goods or notify the business operators in writing to rescind the purchase contract within seven days of receiving such goods without stating reasons or paying any expense or the purchase price.

Id.

purchased product to the consumer.⁷⁹ The merchant elicits the offer through the use of advertisements over the broadcast media, through the use of catalogs, or other means where the consumer does not have an opportunity to view the actual sales item.⁸⁰ The use of a delivery system and the nature of the purchase where the consumer cannot inspect the product before purchase may, in certain instances, apply to Internet transactions.

Based upon the similarities between mail order purchases and Internet purchases, should consumers using the Internet also enjoy a seven day cooling off period, similar to that for mail order sales?⁸¹ Can the Consumer Protection Laws apply where a person places an order by clicking on a merchant's web page and then receives delivery of the product through the postal service or other conventional delivery service? Where the purchase of digital products (e.g., computer games, digital audio, etc.) comprise intangible property, Taiwan law will likely apply. This is particularly applicable where the act of downloading to a computer is regarded as equivalent to conventional methods of delivery.

An exception to the above exists where a consumer first tests a digital product on-line before deciding to make a purchase. This is particularly true with computer games, many of which are available for on-line trials. In this situation, the consumer has the opportunity to test the actual product—a situation quite different from that outlined above where the consumer is unable to examine the product before delivery. However, because the consumer can test the product before purchasing it, he will not likely enjoy the right of returning the product within seven days.

C. LEGAL STATUS OF DIGITAL PRODUCTS

The primary focus of the Taiwanese Consumer Protection Law is to ensure that goods and services are in accordance with the safety of the consumer.⁸² With regard to products, the Taiwan Consumer Protection

79. Cons. Prot. Law art. 2, subpara. 8 ("The term 'mail order purchase' means the type of transaction in which business operators use mail or other means of delivery for the sale of goods.").

80. Enf. Rules Cons. Prot. Law art. 3:

The term 'mail order purchase' as mentioned in subparagraph 8, article 2 of the Law refers to the type of contract whereby the advertisement made by the business operator via radio or television broadcast, telephone, telefax, mailorder of catalogs, or other similar means, has caused a consumer to make an offer to purchase without examining the goods and such offer is accepted by the business operator.

Id.

81. Cons. Prot. Law art. 19.

82. Cons. Prot. Law art. 7 ("Business operators engaging in the design, production or manufacture of goods and the provisions of services shall ensure that the goods and services provided by them shall be free from any danger to their safety or sanitation.").

Law is very specific as to the tangible nature of the products described therein. Thus, digital products, such as computer applications, games, or audio downloaded from a web site qualify as "goods" or "final products, semi-finished products, raw materials, or parts and components."⁸³ Furthermore, these computer applications, games, or audio constitute a service. The Consumer Protection Commission is studying the possibility of revising the law to clarify the legal status of digital products.

D. ADVERTISING AND LABELING ON THE INTERNET

Internet merchants rely heavily on advertising to establish their presence on the Internet. Unlike conventional merchants, they have no store fronts, displays, or sales staff to give potential customers a sense of security. The store front of the Internet merchant is his home page, which is similar to an advertisement because it provides information about goods and services. No matter how lavish or seemingly legitimate a web site may be, a danger exists that the information provided by the web site seeks to mislead the consumer for the purpose of defrauding him. Therefore, certain provisions which protect the rights of consumers makes the Taiwanese Consumer Protection Law and the Taiwanese Fair Trade Law of crucial importance.

The Taiwanese Fair Trade Law prohibits the falsification of product information in advertisements that may mislead the consumer.⁸⁴ The Consumer Protection Law also demands that advertisements provide accurate information about the products or services offered by the merchant to ensure that the products or services are not inferior to what has been advertised.⁸⁵ Therefore, these laws are thus applicable to the goods and services sold via the Internet.

The Consumer Protection Laws make merchants liable to consumers who have suffered a loss due to reliance on inaccurate or misleading advertising.⁸⁶ It demands that products be properly labeled in accordance with the Products Labeling Law and that imported goods and services

83. Enf. Rules Cons. Prot. Law art. 4 ("The term 'goods' as referred to in article 7 of the Law refers to real estates or personal estates which are the object of transactions, including final products, semi-finished products, raw materials or parts and components.").

84. Fair Trade Law art. 21, para. 1:

An enterprise shall not make, on goods or in advertisements relating thereto, any false, untrue or misleading presentations which may likely cause confusion to or mistake by consumers such as their price, quantity, quality, content, manufacturing process, data of manufacturing, validity period, use method, purpose of use, place of origin, manufacturer, place of manufacturing, and place of processing.

Id.

85. Cons. Prot. Law art. 22 ("Business operators shall ensure the accuracy of the contents of advertisements and their obligation to consumers shall not be less than what is stated in the advertisement.").

86. Cons. Prot. Law art. 23:

have labels and instruction in Chinese which are as comprehensive as those bearing the original language.⁸⁷ Moreover, the laws require the merchant to provide the consumer with a warranty for the goods and services.⁸⁸ However, because provisions are aimed at the world of conventional commerce, they have limited relevance to the borderless nature of Internet commerce. In this cyberspace context, does the term *import* have any meaning? Moreover, significant problems evolve from the demand for Chinese labeling and the need for warranty provisions because of the cyberspace context of the Internet's commercial environment. Lawmakers must take these difficulties into account when revising the relevant laws.

E. REGULATING ADVERTISING AND THE CONSUMER'S HEALTH

Advertisers have taken advantage of the high-level of exposure that the broadcast media offers in promoting products or services. In regulating the content of a broadcast, Taiwan's Broadcasting and Television Law attempts to protect the mental and physical health of consumers by placing restrictions upon, and requiring the licensing of certain types of advertising. Advertisements for drugs, foods, cosmetics, medical equipment, and medical treatments all require approval from the relevant authorities before a merchant can include them in a broadcast.⁸⁹ Whether these provisions, which are directed at regulating the broadcast media, apply to the Internet remains unresolved by lawmakers.

If a media business operator of publishing or reporting advertisements who knows or should know that the contents of the advertisement are inconsistent with the facts, it shall be jointly and severally liable with the business operators to consumers who have suffered losses in reliance upon such advertisements. The forgoing liabilities for compensation may not be restricted or waived by any agreement in advance.

Id.

87. Cons. Prot. Law art. 24:

Business operators shall label the products or services in accordance with the Products Labeling Law and other relevant laws and regulations. Imported goods or services shall be accompanied with labels and instructions in Chinese, the contents of which shall not be less comprehensive than the contents of labels or pamphlets from the place of origin. If imported goods or services at the place of origin are accompanied with warning labels, the preceding paragraph shall apply *mutatis mutandis*.

Id.

88. Cons. Prot. Law art. 25 ("Business operators shall furnish written warranties by their own initiatives when they warrant to consumers concerning the quality of goods or services . . .").

89. Broadcasting And Television Law art. 34 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991) [Broadcast. & Tel. Law] ("In advertisements involving medicines, foods, cosmetics, medical facilities, medical skills and medical undertakings, they shall be presented to responsible health agencies for approval and certification.").

Moreover, the legal status of alcohol and tobacco advertisements, and the distribution of pornographic material over the Internet remains unclear. Legal provisions, that may be applicable to these issues, such as those in Taiwan's Publication Law, are restricted to advertisements produced by mechanical or chemical printing of text or graphics.⁹⁰ Application of the Taiwan Cable Television Law is also questionable, as it defines cable television as audio or video signals transmitted through a cable directly to the receiver;⁹¹ a definition which excludes transmission over the Internet. The Broadcasting and Television Law, which encompasses both wireless and cable mass communications transmissions, might apply to the Internet.⁹² However, such application depends upon whether the Internet is considered a medium of mass communications. Whatever the case, revision of existing law is required to take account of this aspect of the Internet's function.

F. INTERNET SERVICE PROVIDERS AND MASS COMMUNICATIONS OPERATORS

The Consumer Protection Law states that a "mass communications operator" who knowingly carries false or misleading advertising is liable to the consumer for any loss resulting from the consumer's reliance on that information.⁹³ A similar provision under the Fair Trade Law also prohibits "advertising media" from carrying false or misleading advertisements.⁹⁴ While similar use of these laws to regulate advertising on the Internet is possible, one must consider that the nature of the services offered by Internet Service Providers differs from those conventionally thought of as mass communications operators. Furthermore, whether lawmakers should classify Internet advertisements as either a "mass communications operator" or an "advertising media" is open to question. Thus, further clarification of the nature of advertisements is required before application of either the Fair Trade Law or the Consumer Protection Laws is used to protect the rights of consumers.

90. Publication Law art. 1 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991) [Pub. Law] ("The term 'publication' as used in this Law shall mean those literary works, pictures and photographs, either printed or prepared by mechanical press or through chemical process for sale or free distribution. Sound discs or tape records shall also be regarded as publications.").

91. Cable Television Law art. 2, subpara. 1 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991) (defining cable television as "the transmission of images and sound, via cable, for direct visual and aural reception by the public").

92. Broadcast & Tel. Law art. 2 (describing broadcasting as the "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").

93. Cons. Prot. Law art. 23.

94. Fair Trade Law art. 21.

One way of viewing this issue is from the perspective of the Consumer Protection Commission of the Executive Yuan, which broadly defines advertisements as any method of conveying a meaning to an unspecified number of people through the use of a variety of media including electronically transmitted audio-visual signals, computers, and other means.⁹⁵ Any company that carries advertisements as a regular part of its business operations is thus open to consideration as an advertising media—a position that includes ISPs under the heading of advertising media, making them subject to the Consumer Protection Law. However, their liability, or how it is shared with advertisers, will depend on the circumstances of the case.⁹⁶

V. LEGAL ISSUES RAISED BY ELECTRONIC PAYMENT

A. STRUCTURE OF ELECTRONIC PAYMENTS

The preceding section has addressed some issues related to the use of contracts in electronic commerce. The final stage of most of these transactions is usually payment – the transfer of money from one party to another. In the context of electronic shopping, one can adopt a variety of methods to transfer money. For example, Taiwan currently uses four main methods: (1) post office remittance (38%); (2) credit card (28%); (3) cash (21%); and (4) bank transfers (13%).⁹⁷ Electronic payment will likely account for an increasing proportion of on-line money transfers in the future.

Methods of credit card payment include telephone credit card transactions, faxing of an order form (which can be printed from the merchant's web site) containing both of the relevant details and the consumer's signature, and the direct transmittal of credit card details over the Internet. At present, a new method called Secure Electronic Transaction ("SET") is undergoing a testing period. This new method was developed by Visa, Master Card, IBM, Microsoft, Netscape, GTE, and Verisign. A variety of participants include American Express, Japanese Credit Board, Discovery, and other major credit card firms, which aim to make the program an international standard.⁹⁸ Currently, the SET pilot

95. Enf. Rules Cons. Prot. Law art. 23:

The term 'the advertisements' as mentioned in article 22 and 23 of the Law refers to communications by means of television or radio broadcasts, films, slides, newspapers, magazines, leaflets, posters, sign boards, arches, telefax, electronic visual information, electronic speech-sounds, computer or other methods to allow nonspecific persons to know the contents communicated).

Id.

96. Consumer Protection Commission Ordinance Tai 86, *Hsiao Bao Fa Tsi* No. 00648, May 29, 1997.

97. See Conference, *supra* note 8.

98. See Conference, *supra* note 8.

program primarily makes use of the credit card as the means of the transaction. Visa and Master Card brought together banks, telecommunications firms, and electronics firms in Taiwan for trial transactions in May of 1997⁹⁹ with the commencement of operations scheduled for the end of 1997.

Electronic payment on the Internet is divided into three broad categories:¹⁰⁰ (1) electronic funds transfer; (2) credit card-based systems; and (3) electronic cash/money.

Electronic Funds Transfer on Internet

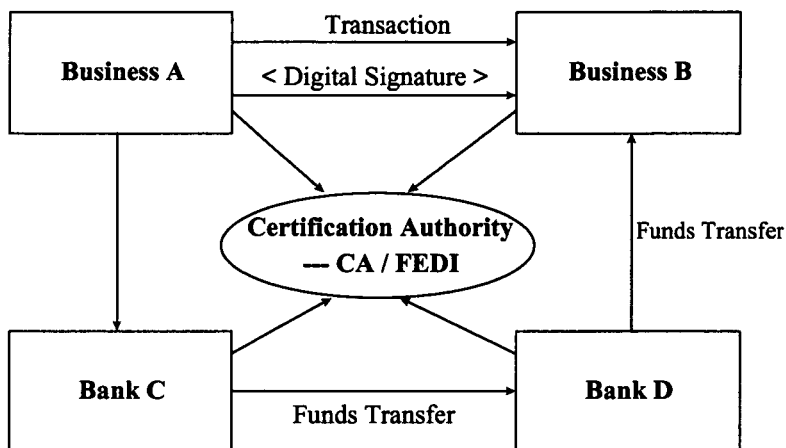


Illustration: Funds transferred from A's account in Bank C to A's account or B's account in Bank D.

Electronic Funds transfer is the transfer of funds from the bank account of one party to the bank account of another party. In principle, one can conduct this kind of payment entirely on the Internet. In practice, however, a lack of adequate infrastructure ensuring the secure transmission of information prevents its utilization. To use such a system some kind of verification infrastructure would have to be in place, perhaps, necessitating a public/private key encryption standard.¹⁰¹ Furthermore, using this kind of system requires the establishment of a certification

99. INDEPENDENCE TIMES, July 3, 1997, at 19. Citibank safe credit transaction network allows the customer to complete the first phase of a transaction by using his credit card number. *Id.*

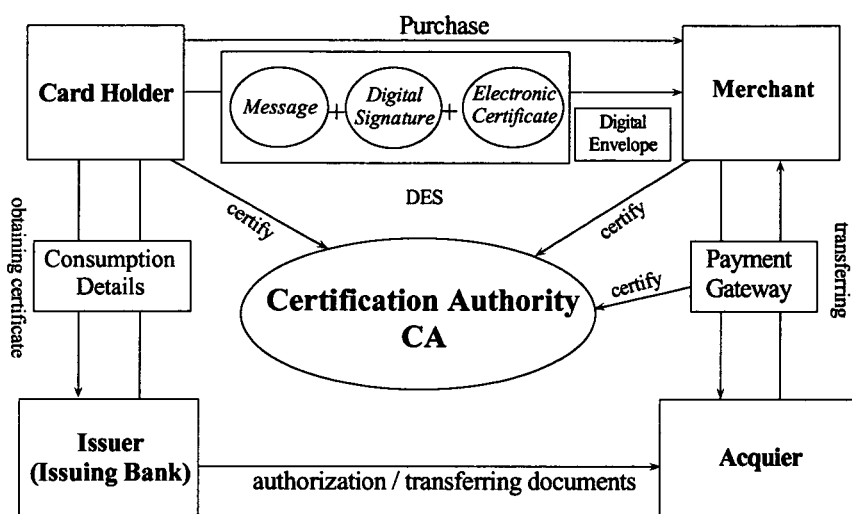
100. See Henry H. Perritt, Jr., *Legal and Technological Infrastructure for Electronic Payment Systems*, 22 RUTGERS COMPUTER & TECH. L.J. (1996) (discussing the legal and technological structures for electronic payment in a US context).

101. See Hodkowski, *supra* note 63. Encryption and decryption are the use of algorithms or other mathematical formula to create or decipher a code, where encryption into public key and secret key. See also PETE LOSHIN, ELECTRONIC COMMERCE: ON-LINE ORDERING AND DIGITAL MONEY, 41-47 (1995).

authority. Such precautions are necessary to verify the identity of the parties to the transaction and to ensure that data is not forged or altered during transmission.

Credit Card based systems include systems similar to SET, mentioned above, where a cardholder's credit card number is used as the basis of payment. Under such a system, the cardholder sends a message that is verified with a digital signature (which is then encrypted using RSA). This information, along with an electronic certificate, is made into a "key" using DES technology, sealed in a digital envelope, and then sent to the merchant. This message is sent via a payment gateway and pending certification authority for verification.¹⁰²

Credit Card Based System—SET



Electronic Cash/Money is the use of mathematical formulae to generate virtual money used in place of real money. Electronic money remains relatively undeveloped and exists in a variety of forms. For example, DigiCash and Mondex use a pre-paid system, while Visa Cash and Cyber Cash use a credit card based system.¹⁰³ Of the current systems, Cybercoin and Mondex are intended for small value transactions (from a few cents to about NT\$10).¹⁰⁴ In addition, there are also electronic check services such as Checkfree, which is part of Taiwan's Financial Electronic Data Interchange ("FEDI") project.

102. See Hodkowski, *supra* note 61 (describing these technologies).

103. See Conference, *supra* note 8.

104. See Conference, *supra* note 8. The currency of Taiwan is the New Taiwan Dollar ("NT").

The use of electronic money may prove problematic if it is regarded as a form of currency.¹⁰⁵ If so defined, it comes under Taiwan's Sentencing for Disruption of National Currency Law which stipulates that only the central government may issue currency.¹⁰⁶ Given the very undeveloped state of electronic cash, this problem, while worth bearing in mind, is one that can be left for future discussion.

B. NATURE OF LAWS RELATING TO ELECTRONIC PAYMENT

In the context of Taiwanese law, it is first necessary to understand the laws relating to IC cards¹⁰⁷ before dealing with the matter of electronic payment over the Internet. It is necessary to resolve questions of the respective responsibility of the bank and the legitimate card holder when transactions using the IC card have been made by a person other than the legitimate card holder.

When making a withdrawal from the bank in the real world, it is necessary to present a savings account passbook. In this aspect, the passbook can be defined as a marketable security.¹⁰⁸ An IC card, despite using a different format for the storage of data (an electronic format with an additional requirement of an identification password) is basically the same as a passbook. To use the IC card, the cardholder must insert the card into a terminal, card operated telephone, or other device.

While a passbook requires a seal for authentication, an IC card requires a password for the same purpose. They are both tangible representations of certain rights and can be seen as a marketable security. In the case of a transaction that takes place solely on the Internet, there is no such tangible representation of right. Instead, there is the necessity for digital signatures and public/private key encryption, which are collections of mathematical symbols which have no tangible existence. It is extremely important to clarify their status. Moreover, whether they can be seen as marketable or ordinary financial instruments under the law will determine the allocation of risk in the event of an erroneous or fraudulent transaction.¹⁰⁹

105. For a discussion of this important issue in an American context, see Konvisser, *supra* note 5.

106. Sentencing for Disruption of National Currency Law art. 1 (Taiwan).

107. An IC card is similar to a debit or ATM card which contains a memory chip which is able to record individual transactions between the cardholder and the bank. It functions in a similar way to a passbook for savings account, the only difference being that it would require computerized equipment to read the information stored on the chip.

108. See WANG JEN-HONG, *BASIC THEORY OF NEGOTIABLE SECURITIES*, (Cheng Yu-bo ed.) (1992).

109. See also Randy Gainer, *Allocating the Risk of Loss for Bank Card Fraud on the Internet*, 15 J. MARSHALL J. COMPUTER & INFO. L. 39 (1996).

C. RISK ALLOCATION AND ELECTRONIC PAYMENT

The use of digital signatures, and encryption systems helps to ensure the confidentiality, integrity, and authenticity of data transmitted over the Internet. Indeed, these security devices are difficult to circumvent. However, the allocation of responsibility in the event of the unauthorized entry into a person's computer system or the use of a private key, electronic certificate, or credit card number to illegally withdraw money from that person's bank account must be considered.

According to a Taiwan High Court Ruling,¹¹⁰ credit cards are defined as "bearer certificates," whereby the card itself represents the right of the possessor to use the card. Therefore, if a merchant accepts the card from a third party who is making unauthorized use of the card, the merchant will not be liable for any financial loss to the legitimate cardholder.¹¹¹ Since IC cards can function as credit cards, they are therefore also defined as bearer certificates under Taiwanese law.¹¹²

Thus, if a merchant accepts a genuine card in good faith, the merchant has the right to payment for the goods, even if the person who presented the card was not the legitimate cardholder. There are various security mechanisms already in place, as the sums involved in such transaction can be considerable. Moreover, it is important for the allocation of risk for the transaction between cardholder and bank to be clarified. While the merchant is expected to protect its commercial interest,¹¹³ the allocation of risk between bank and consumer should make the protection of the consumer its foremost consideration.

The uses of passbooks and seals are similar. The bank is not responsible for financial loss to the account holder if money is withdrawn through unauthorized use of the passbook and seal when the bank acts in good faith.¹¹⁴ The bank's freedom from responsibility is reinforced by Taiwan's Civil Law that regards an unauthorized withdrawal as valid if the bank did not know the passbook holder was an unauthorized account holder.¹¹⁵ Under Taiwanese law this is known as the doctrine of the quasi-possessor.¹¹⁶ This principle is extended to checking accounts. The bank is not responsible for any financial loss resulting from the cashing

110. Taiwan High Court Ruling, Shang Tzi No. 740 (1981).

111. *Id.*

112. A STUDY OF ELECTRONIC BANKING AND RELATED LAWS: Final Report, Financial Information Services Center, Taiwan National University, at 8 (Nov. 1993).

113. See Taiwan High Court Ruling, *supra* note 111.

114. Ruling of a Joint Meeting of the Civil & Criminal Courts of the Taiwan Supreme Court (Oct. 2, 1984).

115. CIV. CODE art. 310, subpara. 2 ("Performance made to the quasi possessor of the claim is valid if the person making the performance did not know the possessor was not a creditor.").

116. *Id.*

of a check when the check was made out with the unauthorized use of the account holder's seal.¹¹⁷

Based on the High Court and Supreme Court rulings cited above, in addition to the doctrine of "bearer certificate" or the doctrine of "right of the quasi-possessor," the bank is not responsible for financial loss resulting from a transaction using an actual passbook, seal, credit card, or IC card of an existing account holder.

In the United States, liability limits have been imposed under Regulation E of the Electronic Funds Transfer Act ("EFTA"),¹¹⁸ where the reporting of a lost credit card within two working days limits consumer liability to U.S.\$50, and reporting within sixty days of receiving a financial statement limits consumer liability to U.S.\$500. It is worth considering the scope of the EFTA in relation to the Internet environment. At present, Taiwan does not have anything similar to the EFTA, but may consider imposing some kind of limits to promote the use of electronic payment over the Internet.¹¹⁹

There are numerous difficulties in applying the laws intended for use in real world transactions using tangible instruments such as passbooks and seals to transactions that take place in cyberspace, where the instruments used to conduct the transaction are intangible. There are considerable difficulties in trying to define mathematical keys and electronic certificates so that they agree with the terms of reference set up for conventional transactions. The most that can be done is to include these intangible instruments within the compass of IC cards as a bearer certificate. Otherwise, it will be necessary to revise the law to take into account risk allocation specific to Internet transactions. Prior to such a revision, banks will have to rely on contracts to establish the terms and conditions of risk allocation in Internet transactions.

D. LEGALITY OF ELECTRONIC FUND TRANSFERS

Using a computer to access a bank to transfer funds between accounts is *not* illegal in Taiwan.¹²⁰ Indeed, local banks assert that there is no specific impediment to offering a wide variety of electronic banking services through the Internet. Furthermore, according to Ministry of Fi-

117. Joint Meeting, *supra* note 113.

118. Electronic Fund Transfer Act, 15 U.S.C §§ 1693-1693r (1994); Electronic Fund Transfers (Regulation E). 12 C.F.R. §§ 205.6(b), (b)1, & (b)2 (1997).

119. The issue of creating an electronic funds transfer law in Taiwan has been considered by the MOF, who decided to deal with the issue on a contractual basis rather than through the use of legislation.

120. Banking Law art. 3 (Taiwan) *translated in* MAJOR LAWS OF THE REPUBLIC OF CHINA ON TAIWAN (1991) (listing the twenty-two kinds of services that may be offered by banks). Under this legislation, there is no legal bar against these services being offered over the Internet. *Id.*

nance Regulations, electronic banking through an automatic teller machine ("ATM") is permissible. However, computer links between the bank and firms or households, for the purpose of transactions is not permissible under a MOF Ordinance.¹²¹ Such transactions may be permissible when the MOF is satisfied with the operation of the Financial Electronic Data Interchange ("FEDI") system, a joint project between the MOF, the Financial Information Services Center ("FISC"), and a number of local banks. The MOF is scheduled to form a decision in the near future.

In other words, despite the absence of any specific legal bar, financial transactions over the Internet are not permitted in Taiwan at the present time. It is currently being barred by the above mentioned MOF Ordinance, carrying an administrative fine of no less than NT\$30,000 and no more than NT\$600,000 for a violation.¹²² The reasoning behind this bar is that the infrastructure has not been set up to ensure secure transactions. When FEDI is deemed sufficiently secure to ensure that transactions will take place with an adequate level of security, then the ordinance will be rescinded.

VI. PROTECTION OF PERSONAL DATA ON THE INTERNET

There are a large number of Internet merchants who require their web site visitors to complete a form providing personal data, including the person's name, address, identification numbers, employer, telephone and fax number, e-mail address, marital status, and other information. Some merchants even go so far as to request information on salary and personal assets. In addition, there are Internet merchants who use a membership system that requires potential customers to complete forms providing personal data. This is quite different from the relatively simple real world cash transaction where the customer can maintain a high level of anonymity. Whatever the reason for this collection of customer data, whether to obtain some sense of the customer's identity, to provide after-sales service, or to register the customer for a lottery, it is important for this information not to be misused. Therefore, there is the necessity of protecting this personal data by strict legal standards.¹²³

121. MOF Ordinance, *Tai Chai Rong* No. 831981040, May 28, 1994. The MOF Ordinance states the following: "Authorization for financial settlements, transfer authorization and electronic transactions between banks and their customers will not be permitted until an Electronic Banking Network System (such as the Financial Electronic Data Interchange ("FEDI") system) has been established."

122. Banking Law art. 132.

123. For a broader discussion of the issue of personal data protection, see OECD, National Information Infrastructure: Agenda for Action, Administration Policy Statement, 58 Fed. Reg. 49,025 (1993); Information Infrastructure Task Force, *Privacy and the National*

In Taiwan, the law most closely related to the protection of personal data on the Internet is the Computer-Processed Personal Data Protection Law.¹²⁴ This law was enacted to regulate processing of personal data by computer, in an effort to avoid infringement of a person's moral rights, and to facilitate the reasonable use of such data. Personal data is defined as the name, date of birth, personal identification number, and other information sufficient to identify a natural person.¹²⁵ In fact, the law protects the following rights: (1) search or read the data; (2) reproduce data; (3) supplement or revise data; (4) stop further processing or use of data; and (5) deletion of data.¹²⁶

There are a number of important limitations to the applicability of the law in relation to the Internet as it stands at present. The law states that collection, computer processing, or use of personal data by any organization, whether public or non-public, may be conducted only for a proper purpose or under certain specified conditions.¹²⁷ The wording of this provision covers public institutions—legally constituted central or local government bodies that exercise civil authority.¹²⁸ This provision also covers the following private industries: credit rating organizations; hospitals; schools; telecommunications; financial; securities firms; insurance; mass communications;¹²⁹ and other businesses whose operations involve the collection and computer processing of personal data.¹³⁰ How-

Information Infrastructure: Principles for Providing and Using Personal Information, (last modified June 6, 1995) <http://www.iitf.nist.gov/ipc/ipc/ipc-pubs/niiprivprin_final.html>.

124. Computer-Processed Personal Data Protection Law art. 1 (Taiwan) translated by Lee & Li (1995). This law is enacted to "regulate the computerized processing of personal data to avoid any infringement of the rights appertaining to an individual's personality and facilitate reasonable use of personal data." *Id.*

125. *Id.* art. 3, subpara. 1. The term *personal data* refers to a person's "name, date of birth, identification card number, finger prints, marital status, familial status, education, profession, health condition, medical history, financial condition and social activities of a natural person, as well as other data sufficient to identify the natural person." *Id.*

126. *Id.* at art. 4.

Any concerned party shall not waive in advance or limit with special conditions the following rights to be exercised hereunder in respect of his/her personal data: (1) Inquiry and request for review; (2) Request for duplicates; (3) Request for supplements or amendments; (4) Request for cease of computerized processing and use; and (5) Request for deletion.

127. *Id.* at art. 3, subpara. 3. The term *computer processing* refers to "the use of computers or any automatic machines for input, storage, compilation, correction, indexing, deletion, output, transmission or other processing of data." *Id.*

128. *Id.* at art. 3, subpara. 6. The term *public institution* refers to "any agency at central or local government level performing official authorities by law." *Id.*

129. This includes book & magazine publishing, broadcasting, free-to-air, and cable TV and movies.

130. Computer-Processed Personal Data Protection Law art. 3, subpara. 1 & 2. The term *personal data file* refers to "a collection of personal data stored in electromagnetic recorders or other similar media for specific purposes." *Id.*

ever, provisions of this law fail to cover the categories of individuals or legal entities whose business activities involve the collection, processing and use of information available on the Internet. Therefore, the problem arises where if any of these individuals or legal entities misuse personal data via the Internet, it may not be possible to regulate them under the law. The law provides that certain entities can be designated by the Ministry of Justice ("MOJ") and the central government, as falling under the jurisdiction of the law despite not being specifically covered under the public or non-public organizations defined above.¹³¹ However, the MOJ has not yet taken steps to designate such entities. As for the private sector, it may not collect or make use of personal information without first obtaining a license from the appropriate governmental body.¹³²

Another question arises from the information included in e-mail messages, e-mail addresses, and domain names. If this data is regarded as sufficient to identify a natural person, it will be protected by the law, but if not, the protection of such personal data and the individual's rights might be at risk. With the development of new technologies and the spread of network use, the Internet is likely to become one of the main areas for the collection, and also the misuse, of personal data. Although the Taiwan Computer-Processed Personal Data Protection Law has taken some steps to protect this data from misuse, it still lacks a complete set of provisions specifically aimed at the Internet environment.

VII. COPYRIGHT AND ELECTRONIC COMMERCE ON THE INTERNET

Information on the Internet, in the form of text, sound, photos, video, animation or artwork, elements of media content, or software applications, may be protected by copyright law. In digital data format, it can be thought of as a resource for the creation of a home-page. However, it is important to note that without consent of the copyright holder the use of this material for commercial purposes, may be a violation of the copyright laws.¹³³

131. *Id.* at art. 3, subpara. 3. The term *non-public 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." *Id.*

132. Computer-Processed Personal Data Protection Law art. 19, para 1. ("A private sector institution, not registered with the government, "shall not engage in collection, computerized processing, international transmission and use of personal data.").

133. For a general discussion of copyright in the Internet context, see Bruce Lehmen, *supra* note 1; P. Bent Hugenholtz, *Adapting Copyright to the Information Highway*, THE FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT 81 (Hugenholtz ed., 1996); Jaap H. Spoor, *The Copyright Approach to Copying on the Internet: (Over)Stretching the Reproduction Right?*, THE FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT, 67 (Hugenholtz, ed., 1996).

A home-page on an Internet website and its content should primarily be comprised of original materials or material for which a license has been obtained. The extensive use of material drawn from other sources may be considered a violation of copyright.

When Internet merchants upload material onto the Internet, they should be aware that the act of uploading such information constitutes an act of reproduction.¹³⁴ To upload data onto a network, that information must first be copied onto a server, and by this action, the merchant may violate the copyright holder's right unless the circumstances are permitted under the law,¹³⁵ or has obtained the permission of the copyright holder.

Another popular device used on the Internet is that of hyperlinks which allow the user to jump from one website to another. These links are in the form of a text or graphic which indicate the nature of the target website. By clicking on this text or graphic, the user will be able to jump directly to the website described. While what appears on the first website is only an address or brief description of the target website, this is not an infringement of copyright.¹³⁶ The Internet merchant must be aware that partial links (e.g., frame links and image links) which violate the integrity or reproduction rights of the target website may constitute a violation of copyright.

Image links operate as follows: company A has a home page on which graphics from company B appear. At first glance, it seems that these images are physically present on A's server, therefore constituting an act of reproduction. To circumvent this, A simply creates links to B's server, from which the image is taken. In this way, there is no act of reproduction. The graphic that the user sees is in fact a portion of B's website. In effect, the user is browsing material from A's website and B's website simultaneously. If A has not obtained a license to use the

134. Copyright Law art. 3, subpara. 5. *Reproduction* specifically refers to "the activity of reproducing a work by means of printing, copying, sound recording, video recording, photographing, transcribing or other tangible reproductions." *Id.*

135. *Id.* at art. 65.

All circumstances shall be considered in determining whether the use of a work complies with the provisions of articles 44 through to 63. The following factors, in particular, shall be construed as the standards of determination: (1) [t]he purpose and nature of the use, including whether such use is of a commercial nature or is for non-profit educational purposes; (2) [t]he nature of the work being used; (3) [t]he amount and substantiality of the portion used in relation to the copyrighted work as a whole; (4) [t]he effect of the use upon the potential market and current value of the work.

Id.

136. Yoshiyuki Miyashita, *Current Situations in Japan on Network Related Copyright Issues*, INTELLECTUAL PROPERTY PROTECTION IN ASIA (Software Information Center ed., 1996).

graphic from *B*, such an act of linking may be considered an infringement of *B*'s copyright.

Frame links are also a popular device prone to abuse. Many web sites also act as jump stations providing access to a wide range of other sites. This is especially true of news and information services. Some of these stations have created the hyperlinks in such a way that when a user selects to link to a particular news service, while a portion of the screen will link across, the remainder of the screen will be reserved for the jump station for its own advertising or other purposes. The legality of such an action has been brought before the United States courts in a case brought by CNN, the *Washington Post*, and the *Wall Street Journal* against the website Totalnews,¹³⁷ who allegedly acted in the manner described above. Under Taiwanese law, the point at issue would be the protection of the rights of the original work under Taiwan's Copyright Law.¹³⁸ Such a situation could also give rise to actions under the Fair Trade Law for the use of unfair trading practices.¹³⁹

Another matter relating to copyright issues on the Internet is shareware and freeware.¹⁴⁰ Both of these kinds of software are protected by copyright law, and users should take note of the license conditions for use of the product. In using any kind of software, the limits of permissible use are quite narrow,¹⁴¹ and the user should be aware of these limits when using of the product so as not to infringe copyright. As noted earlier, the uploading and downloading of data requires that the data be copied to the hard disk of a network server. This act of reproduction is considered a violation of copyright under Taiwanese law. More-

137. Dan L. Burk, *Para-Site Draws Ire, Suit from NEWS*, (last modified Feb 24, 1997) <<http://www.wired.com/news/business/story/2230.html>>.

138. Copyright Law art. 17. The copyright holder has the right to "maintain the integrity of the contents, form and title of his/her work, except under certain circumstances . . . [o]ther non-substantive changes of the contents which are deemed necessary in accordance with the nature, purpose and manner of use of the work." *Id.*

139. Fair Trade Law art. 24. This Law specifically states that, "[A]n enterprise shall not conduct other deceptive or obviously unfair acts that are sufficient to affect trading order." *Id.*

140. In general, 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 a payment of a charge, this need not be the case. The creator of freeware also has full moral and economic rights to the product, but does not require the user to register use of the product or pay any charge.

141. See Copyright Law, 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.

Id.

over, the person uploading the data without the permission of the copyright holder, in addition to the person who downloads such data, may be construed as infringing copyright laws. The infringement of copyright through the improper use of shareware has been clearly indicated by the courts.¹⁴²

VIII. LEGAL PROTECTION FOR DOMAIN NAMES IN RELATION TO TRADEMARKS AND THE FAIR TRADE LAW

In order to do business, an Internet merchant must first register a domain. A domain name is the conversion of a numerical Internet Protocol ("IP") address which pin-points the location of an individual computer on the Internet into specific words making it easier to remember and more expressive as to the type of business. The domain name is similar to a street sign in the real world, indicating the location of the Internet merchant and the nature of his business. Its selection may also be used to enhance corporate recognition on the web. As Internet commerce grows in popularity, the selection of domain names also has grown in importance.¹⁴³

At present, in Taiwan, TaiwanNIC is the body responsible for processing applications and regulating domain names. All kinds of businesses have domain names. Responsibility has been delegated to separate government authorities: government organizations (.gov) are the responsibility of the Department of Information Management Research; educational organizations (.edu) are the responsibility of the Ministry of Education; and commercial business operations (.com or .org) are handled by either Seednet or Hinet (.net). While a business seeking a domain name should register directly with Seednet for a .com name, the business operator may also apply to an ISP who provides application agency services.

Most Internet addresses are made up of the company's name, an abbreviation of that name, or some aspect of its trademark. Because the domain name identifies the company on the Internet, there has been a rush to obtain the most commercially advantageous (i.e., recognizable)

142. 10 WORLD INTELL. PROP. (BNA) 275-76 (1996).

143. For further discussion of domain names and their relationship to trademarks in the Internet context, see Gayle Weiswasser, *Domain Names, the Internet, and Trademarks: Infringement in Cyberspace*, 13 SANTA CLARA COMPUTER & HIGH TECH. L.J. (1997); Gary W. Hamilton, *Trademarks on the Internet: Confusion, Collusion, or Dilution?*, 4 TEX. INTELL. PROP. L.J. 1, 2 (1995); Sally M. Abel & Marilyn Tiki Dare, *Trademark Issues in Cyberspace: Brave New Frontier* (last modified Aug. 12, 1995) <<http://www.fenwick.com/pub/cyber.html>>; Robert J. Raskopf, *Trademarks and the Internet*, INTELL. PROP. LAW INST. 1047 (Patents, Copyright, Trademarks, and Library Property Course Handbook Series No. G-416 (1995); Andre Brunel, *Billions Registered, But No Rules: The Scope of Trademark Protection for Internet Domain Names*, J. PROP. RTS., Mar. 1995, at 2.

names. This has given rise to conflicts as companies fight over names regarded as having a high appeal to potential customers.

In Taiwan recently, the search engine Yahoo sought to register its Internet address only to discover that another company had already registered the Yahoo name with Seednet, a situation that culminated in a legal dispute.¹⁴⁴ Of course, disputes of this sort have already occurred¹⁴⁵ in regard to the United States registration authority, Network Solutions Inc. ("NSI").¹⁴⁶ In response to the growing number of disputes of this type, NSI drafted a Domain Name Dispute Policy Statement.¹⁴⁷ The main thrust of the document is that companies must be responsible for their own domain name. In the case of disputes over entitlement, the date of registration of the trademark will have precedence over the date of registration of the domain name.¹⁴⁸ For example, if company A registers the domain name XYZ on Nov. 1, 1996 and company B then claims that, although it has not registered a domain name, its trademark XYZ was registered on Nov. 1, 1995, Company B will have first right to the domain name XYZ. NSI will not participate in resolving disputes through the courts, but it has provided the policy statement in an attempt to resolve the gridlock that has formed over this issue.

The unauthorized use of another's trademark as a domain name has the characteristics of trademark use. In case of a dispute, under the current interpretation of the law, the National Bureau of Standards (Taiwan's Trademark and Patent Office) may regard such use as an infringement of trademark law. Whether the use of such a logo constitutes a violation of another's rights, would have to be decided by the

144. Sally M. Abel & Marilyn Tiki Dare, *Trademark Issues in Cyberspace: The Brave New Frontier* (last modified June 30, 1997) <<http://www.fenwick.com/pub/cyber.htm>>.

145. See *MTV Networks v. Curry*, 867 F. Supp. 202 (S.D.N.Y. 1994); Stanley Kaplan v. Princeton Review 965 F. Supp. 731 (D. Md. 1997); and *Hasbro, Inc. v. Internet Entertainment Group, Ltd.* 1196 WL 84853 (W.D. Wash. 1996). For more information on the above disputes as well as others, see generally Gayle Weiswasser, *Domain Names, The Internet, and Trademarks; Infringement in Cyberspace*, 13 SANTA CLARA COMPUTER & HIGH TECH. L.J. 137 (1997).

146. Network Solutions, Inc. (last modified Sep. 2, 1997) <<http://www.netso1.com>>.

147. Registration Services, InterNIC (last modified July 28, 1997) <[wysiwyg://8/http://rs.internic.net/rs-internic.html](http://rs.internic.net/rs-internic.html)>. See also Network Solutions, Inc. (last modified Sep. 2, 1997) <<http://www.netso1.com>>.

148. Other measures taken in the United States include: the Draft Specifications of the International Ad Hoc Committee ("IAHC") whose Final Recommendations were announced on Feb. 4, 1997, <<http://www.iahc.org/draft-iahc-recommend-00.html>>; the gTLD-MOU, announced Feb. 28, 1997; the Challenge Panel's Draft Specifications for Administration and Management of gTLDs, Final Report of the IAHC; Recommendations for Administration and Management of gTLDs, announced Mar. 26 1997 to address the issues of conflicts over trademarks and registration.

courts.¹⁴⁹ The present position on the issue is if a company registers a domain name where its method of presentation resembles another company's trademark and is being used in such a manner,¹⁵⁰ this will be regarded as a violation of the logo owner's rights.¹⁵¹ In the case of trademarks that are unregistered or are in the processes of being registered, a resolution of the problem must be sought in other legislation. Currently in the United States, the Trademark Dilution Act¹⁵² is often used to deal with domain name disputes. In contrast, Taiwan's Trademark Law does not include any such concept at present. However, it is worth considering whether Taiwan should consider enacting such legislation in order to improve the comprehensiveness of the Trademark Law in relation to domain names.

In the case of Yahoo outlined above, it is important to note that Yahoo's trademark was not registered in Taiwan. Therefore, the Trademark Law, in its present form, cannot apply. On the other hand, it is possible that the issue might be dealt with under another Law. The YAHOO trademark may be considered a well known international trademark and its use by another company could engender confusion among the public and be considered competition by unfair means.¹⁵³ Such use

149. Establishment of a Memorandum of Understanding on the Generic Top Level Domain Name Space of the Internet Domain Name System (gTLD-MoU) (visited Feb. 28, 1997) <<http://www.gTLD-Mou.org/gTLD-MoU.html>>. See also International Ad Hoc Committee, *Final Report of the International Ad Hoc Committee: Recommendations for Administration and Management of gTLDs*, (Feb. 4, 1997) <<http://www.iahc.org/draft-iahc-recommend-00.html>>.

150. Trademark Law art. 6 The use of trademarks refers to:

[a]n act of applying a trademark on goods or on the package or container thereof, and selling such goods in the local marketplace or abroad. A trademark shown in television, newspaper advertisements, or an exhibition to promote the sales of the goods shall be deemed trademark in use; using the foreign language portion of the trademark or an export good shall be deemed use also.

Id.

151. *Id.* at art. 62. Article 62 lays out the penalties for the following:

1. Using the device of a trademark which is identical with or similar to that of another person's registered trademark on the same good or goods in the same class; 2. Applying the device of a trademark which is identical with or similar to another person's registered trademark to advertisements, labels, descriptions, quotations, or any other documents in respect of the same good or goods in the same class, and displaying or circulating . . . advertising materials . . .

Id.

152. 15 U.S.C. § 1125(c). See also *Litigation Report: Intellectual Property, PAT., TRADE-MARK & COPYRIGHT J.* (Mealey) (BNA), 49-50 (1996).

153. Fair Trade Law art. 20, para 1:

An enterprise shall not commit any of the following acts with respect to the goods and services provided by its business operations . . . 2. Use in an identical or similar manner of the name of any other person, the name of a business establishment, a corporate name or other symbols signifying the business or service of another person that are commonly known to the relevant public, if such use causes confusion with the facilities or activities of the business or service of any other

may also be considered deceptive and an unfair trade act under the Fair Trade Law.¹⁵⁴

One of the problems that Taiwan faces on this issue is that the review procedure for domain name registration is based on a simple first come, first serve basis and does not take into consideration the names applied for or the businesses applying for them, which provides a loophole against companies who have not registered. Moreover, in addition to regulation under the law, a restructuring of the application procedure would go a long way to resolve some of the legal problems in this regard.

IX. BUSINESS REGISTRATION FOR ELECTRONIC MERCHANTS

Under Taiwan law, a company is required to register with the relevant government agency before it can begin operations.¹⁵⁵ Furthermore, a person who acts in the name of a company which has not been registered with the competent authorities, will bear personal responsibility.¹⁵⁶ It is clear, therefore, that anyone wishing to become established as an Internet merchant is required to register prior to engaging in any business activities in the name of the company.

There is also a requirement in Taiwan that businesses must acquire a government permit before becoming eligible to apply to register as a business.¹⁵⁷ In the case of companies that are already registered and engaged in business prior to commencing business as an Internet merchant, an application for an amendment in the business registration procedure to incorporate the new area of business must be made within fifteen days.¹⁵⁸

person; or 3. Use on identical or similar goods trademark which is identical or similar to a well-known foreign trademark not registered in this country, or the sale, transport, export or import of goods bearing such trademark.

Id.

154. *Id.* at art. 24.

155. Company Law art. 6 ("No company may be formed until it shall have been incorporated at the office of the Central Competent Authority and given a Certificate of Incorporation."). *See also* Trade Registration Law art. 3.

156. Company Law art. 19:

Anyone, who engages in business or does a juristic act in the name of a company which has not been incorporated, shall himself bear personal responsibility; and in case of two or more persons in the act, such persons shall jointly be responsible and also severally liable to a fine not exceeding 3,000 *yuan*; and the Competent Authority may also interdict the use of the name of a company.

Id.

157. *Id.* at art. 17. ("If the business of a company should require a franchise by the Government such business can be registered for undertaking only after such franchise shall have been obtained."). *See also* Commercial Registration Law art. 5 (Taiwan).

158. *Id.* at art. 403. The Company Law states the following:

In case of any amendment in the record of registration of a company or of a foreign company, an application shall, within fifteen days after such amendment, be filed with the Competent Authority for a change of record. Responsible persons of the

Under the present system, an Internet merchant who has engaged in different types of commerce in order to respond to a rapidly changing market would have to make repeated applications for a change in business registration. This may be considered inefficient and the introduction of a new business category such as "Internet Commerce" might be established. This would benefit Internet merchants because they would have greater freedom to accommodate their respective market by altering the focus of their operations.

Internet commerce has blurred conventional distinctions between categories of business. Within conventional commerce, this blurring of distinction is evident in large-scale chain stores, which are increasingly relying on advertising as a source of revenue. The Internet is blurring these distinctions still further, and advertising will clearly be a major aspect of many Internet businesses whose primary focus is elsewhere. Therefore, it is likely that the current method of categorization of businesses should be revised to respond to new business trends.¹⁵⁹

X. CONCLUSION

One of the great strengths of the Internet is that it transcends borders, making international communication and commerce much easier than it has ever been before. However, this international nature of the Internet is also a cause of considerable difficulties. Indeed, many of the legal issues raised in this paper cannot be resolved without some kind of international agreement on Internet issues. Anything related to the Internet cannot be considered purely a national issue. While such a consensus would be commendable, it is not likely to be achieved in the short term. Many countries have already started to make some effort to regulate the Internet in terms of their own legal systems. Taiwan is no exception. This article has aimed to present a discussion of some of the outstanding legal issues related to the Internet and the manner in which Taiwan is presently trying to deal with these issues through the interpretation, revision and enactment of laws.

The enormous scope of the Internet means that it touches on many aspects of life, and correspondingly on many different laws. Revision or enactment under different laws is a lengthy process, but Taiwan has already taken the first steps in this direction. Another method that is being considered is the creation of a single Internet law to address the

company, who violate the aforesaid time-limit, shall be severally liable to a forfeit not exceeding one thousand *yuan*.

Id.

159. Presentation by the chief of the Trademark Office of the Trademark Administration and head of the National Bureau of Standards at a conference on legal issues that arise from the operation of Internet merchants held on May 1, 1997.

many issues related to Internet use, similar to Germany's Federal Bill Establishing the General Conditions for Information and Communication Services.¹⁶⁰ The Science and Technology Law Center ("STLC") of the Information for Information Industry ("III") is studying the viability of both these methods and is playing a key role in the revision of existing laws.

While a single Internet law may still be a distant vision, STLC is already working in cooperation with a government-wide initiative the NII Legal Infrastructure Task Force under the supervision of the Council for Economic Planning and Development. Agencies participating in the Task Force are the following: the Government Information Office; the Ministry of the Interior; the Ministry of Economic Affairs; the Ministry of Justice; the Ministry of Transport and Communications; the Ministry of Finance; the Ministry of the Interior; the Ministry of Educational; the Research, Development, and Evaluation Commission; and Chunghwa Telcom. A brief summary of the present situation in regard to the revision of laws is provided in tabular form below.

The work currently under way can only be considered a first step towards the goal of more comprehensive and integrated regulation of the Internet. One of the primary purposes of this article was to provide people in other parts of the world with an idea of the questions that Taiwan is currently addressing as part of an exchange of ideas that is crucial to regulation of the Internet.

160. Gesetz des Bundes zur Regelung der Rahmenbedingungen fuer Informations- und Kommunikationsdienste—IuKDG. (Dec. 11, 1996). An English translation is available at <<http://www.iid.de/rahmen/iukdge.html>>.

Table 1

Aim	Issues	Relevant Legislation	Responsible Agency
<ul style="list-style-type: none"> Consumer protection and protection of public rights in the conduct of Internet transactions 	<ul style="list-style-type: none"> Does the Consumer Protect Law apply to digital products? Are ISPs responsible for false advertising that they carry on their networks? Accountability for false advertising on the Internet? Agency responsible for regulating Internet advertising? 	<ul style="list-style-type: none"> Consumer Protection Law Fair Trade Law Both of the above Cable Television Law and/or Broadcasting and Television Law 	<ul style="list-style-type: none"> Consumer Protection Commission Fair Trade Commission Both of the above Others as yet unspecified
<ul style="list-style-type: none"> Copyright 	<ul style="list-style-type: none"> Internet users are still not sufficiently informed on copyright issues. Sections of the current Copyright Law are not suitable for application to copyright in an Internet context. 	<ul style="list-style-type: none"> Copyright Law 	<ul style="list-style-type: none"> Copyright Commission
<ul style="list-style-type: none"> Protection of Intellectual Property Rights ("IPR") 	<ul style="list-style-type: none"> Patents 	<ul style="list-style-type: none"> Patent Law 	<ul style="list-style-type: none"> National Bureau of Standards
<ul style="list-style-type: none"> Trademarks 	<ul style="list-style-type: none"> Trademark conflicts arising out of domain name and unfair competition. Study draft international agreements for resolution of domain name trademark disputes. Trademark Law Fair Trade Law IP Address Registration Regulations (temporary) 	<ul style="list-style-type: none"> National Bureau of Standards Fair Trade Commission Ministry of Education 	

Table 2

Issue	Suggestion	Relevant Legislation	Responsible Agency
<ul style="list-style-type: none"> The attributes of digital signatures under the law have not been defined and their influence on Internet transactions is not clear. 	<ul style="list-style-type: none"> In order to avoid the difficulty of revising numerous laws to take into account digital signatures, a single law should define its role under the law. 	<ul style="list-style-type: none"> Civil Law Digital Signature Law (new) 	<ul style="list-style-type: none"> Ministry of Justice Others as yet unspecified
<ul style="list-style-type: none"> How to reconcile the requirement under current law for "written documents" in the conduct of transactions in the paperless environment of the Internet. 	<ul style="list-style-type: none"> Legislation should be enacted that defines electronic documents as the same in nature as tangible documents so that electronic documents can be incorporated as evidence under existing laws. 	<ul style="list-style-type: none"> Civil Law Law of Civil Procedures Digital Signature Law (new) 	<ul style="list-style-type: none"> Relevant agencies Ministry of Justice Others as yet unspecified
<ul style="list-style-type: none"> Internet merchants will be faced with difficulties in categorizing and registering their business operations. 	<ul style="list-style-type: none"> Business registration regulations should be reviewed to facilitate Internet commerce. 	<ul style="list-style-type: none"> Company law Business Registration Laws 	<ul style="list-style-type: none"> Commerce Department, Ministry of Economic Affairs

Table 3

Issue	Suggestion	Relevant Legislation	Responsible Agency
<ul style="list-style-type: none"> Protection of personal privacy 	<ul style="list-style-type: none"> The government should set up a system for the secure transmission of information to prevent interference or misuse by a third party. The scope of the Computer-Processed Personal Data Protection Law is not adequate for this purpose. 	<ul style="list-style-type: none"> Computer-Processed Personal Data Protection Law 	<ul style="list-style-type: none"> Ministry of Justice
<ul style="list-style-type: none"> Ensure free competition 	<ul style="list-style-type: none"> Prevent the use of the Internet for purposes of unfair trading practices. 	<ul style="list-style-type: none"> Fair Trade Law 	<ul style="list-style-type: none"> Fair Trade Commission
<ul style="list-style-type: none"> Establish a mediation or arbitration agency 	<ul style="list-style-type: none"> This agency will obviate the need for extensive trial procedures caused by technology issues related to electronic commerce disputes. 	<ul style="list-style-type: none"> Articles relating to commercial arbitration 	<ul style="list-style-type: none"> Ministry of Justice Others as yet unspecified

Table 4

Issue	Suggestion	Relevant Legislation	Responsible Agency
<ul style="list-style-type: none"> • SET Standard—Credit Card Transactions • Still in the experimental stage. May form the basis of safe transactions by defining the rights of the issuing bank, card holder, merchant's bank and the merchant and setting up a framework for risk allocation, procedure to deal with errors that occur during the transaction, the use of digital signatures for authentication and other issues. 	<ul style="list-style-type: none"> • The responsible agency should continually monitor the operation of this standard through its experimental stage for potential problems; it should also review contracts offered by various international credit card operations. 	<ul style="list-style-type: none"> • Digital Signature Law • Civil Law 	<ul style="list-style-type: none"> • Ministry of Justice • Others as yet unspecified
<ul style="list-style-type: none"> • Internet Bank Transfers • FEDI (Financial Electronic Data Interchange) is still under assessment by the Bureau of Monetary Affairs, Ministry of Finance who will decide when to permit Internet payment and financial transfers. • Public opinion suggests the passing of an Electronic Fund Transfer Law in order to facilitate Internet fund transfers. 	<ul style="list-style-type: none"> • A standard for electronic payment should be established as soon as possible to integrate internal and inter-bank fund transfers so that consumers, businesses and industry can make use of electronic payment. • There is still a lack of consensus regarding the Electronic Fund Transfer Law; further research is required. 	<ul style="list-style-type: none"> • Banking Law • Electronic Fund Transfer Law (new) 	<ul style="list-style-type: none"> • Bureau of Monetary Affairs, Ministry of Finance

Table 5

Law	Responsible Agency	Digital Signature Law	Freedom of Information Law	Computer-Processed Personal Data Protection Law	Cable Television Law	Copyright Law	Consumer Protection Law	Criminal Law
		Pending decision by Executive Yuan	Ministry of Justice	Ministry of Justice	Government Information Office	Copyright Commission	Consumer Protection Commission	Ministry of Justice
Related Applications		Electronic and networked government Internet commerce and payment Telemedicine	Electronic and networked government Internet commerce and payment	Electronic and networked government Internet commerce and payment Telemedicine	Telecommunications development	Electronic and networked government Internet commerce and payment Electronic libraries Distance education	Internet commerce and payment	Electronic and networked government Internet commerce and payment
Current Status		The Research, Development and Evaluation Commission is responsible for coordinating the relevant departments and commissions.	Ministry of Justice has completed the drafting of the law.	The MOJ issued the revised draft of the Consumer Protection Law in April 1997 to accommodate the Internet environment.	The Government Information Office has already decided to revise the Cable Television Law to relax demarcation between cable television and telecommunications industries.	The Copyright Commission has commissioned a study by the Institute for Information Industry which is scheduled for completion in December 1997.	Schedule for revision has not yet been made known.	Currently under review by the Legislative Assembly

