

DECLARATION OF NOREEN VERGARA

I, Noreen Vergara, make the following Declaration pursuant to 28 U.S.C. § 1746:

1. I am the Model Laws Coordinator at the National Association of Insurance Commissioners ("NAIC"). I have worked at the NAIC since 2006. As part of my responsibilities at NAIC, I am familiar with the White Papers of the National Association of Insurance Commissioners National Meeting published by NAIC.

2. The NAIC publishes these White Papers and keeps records concerning those publications in the ordinary course of business. I have consulted those records in making this Declaration.

3. Based on the business records I have reviewed, the document attached at Tab A hereto provides a true and accurate copy of the article entitled "The Marketing of Insurance Over the Internet," adopted on March 15, 1998, and has been publicly available since that date.

I declare under penalty of perjury that the foregoing is true and correct.

Noreen H. Vergara

Executed on September 28, 2012

Noreen Vergara

At Kansas City, MO

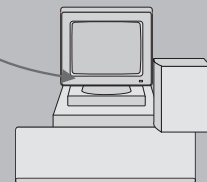
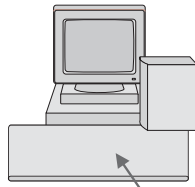
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**Liberty Mutual
Exhibit 1021**

Tab A

NAIC

*National
Association of
Insurance
Commissioners*



The Marketing of Insurance Over the Internet

Not for Reprint

THE MARKETING OF INSURANCE OVER THE INTERNET

National Association of Insurance Commissioners

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EXECUTIVE SUMMARY

With over 25 million users worldwide, the number of hosts doubling over the last two years and the number of domains quadrupling in less than a year and a half, the Internet is clearly no longer considered a fad and, in fact, is an effective means of mass communication. Internet technology presents the insurance industry with a new channel through which insurance products can be marketed, sold, and serviced. In some cases, the incorporation of Internet technology may also lead to substantive operational changes for industry and regulators alike.

This paper sets forth a detailed discussion of the Internet as it relates to the transaction of insurance, and draws together special conclusions and recommendations for making use of the Internet beneficial for everyone involved, consumers, regulators, and industry. In some cases, this paper calls for further discussion of special issues. If accomplished in a cooperative and proactive manner, these changes can help build consumer confidence.

In general, regulators feel that sufficient safeguards currently exist to effectively contend with any potential problems that may arise out of on-line insurance transactions. It is likely that the first few compliance actions that result from the transaction of insurance on the Internet will be closely monitored by regulators in all jurisdictions.

This paper also identifies and recommends action be taken on several items, such as signature and counter signature requirements, that must be closely examined at the state level. Other state specific issues may also need to be examined to ensure that they do not unnecessarily impede the transaction of insurance on the Internet, or its use by consumers, regulators or industry.

Additional in-depth review of certain specific items relative to the on-line transaction of insurance will be warranted. To this end, it is recommended that the NAIC help provide a forum for all parties to delve deeper into the specifics of insurance transactions, possible transactional guidelines and other issues relating to on-line insurance transactions, sometime next year.

During the past 18 months, this working group received a tremendous amount of assistance from consumers, the technology sector, and insurance industry representatives. Without their assistance this white paper could not have been completed in as short an amount of time as it has taken.

In addition to the consumer groups, regulators, and industry representatives who spent considerable time reviewing and commenting on the white paper throughout its drafting, we would especially like to thank the following people for their outstanding contributions:

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I. NAIC Charge

In response to the increased use of electronic commerce and the unique regulatory concerns surrounding electronic commerce, the NAIC charged the Market Conduct and Consumer Affairs (EX3) Subcommittee to study and issue a white paper, including recommendations, regarding the sale, marketing and regulation of insurance through the Internet; including, but not limited to, analysis of technology issues such as digital and electronic signatures, electronic fund transfers, electronic applications, privacy and confidentiality issues, contracted policy forms, producer and company licensing issues.¹

A. Internet Commerce

“Electronic commerce” is the buying and selling of goods via an electronic medium, a very broad definition that encompasses both the sale of goods through telemarketers and the sale of goods over the Internet. From a consumer’s viewpoint, electronic commerce may provide access to more information, faster and economically, and may result in lower product and service acquisition costs. Electronic commerce can also help organizations meet their goals of enhanced customer service, the economical dissemination of consumer information and increased sales.

Over the last several years, the proliferation of the use of the Internet has increased the use and importance of electronic commerce. With the Internet, companies can be accessible to customers and potential customers 24 hours a day, 365 days a year. Companies can also maintain this open line of communication with suppliers, independent contractors and any other entity that plays an integral role in the production and distribution of their products.

The securities and banking industries currently utilize the Internet for electronic commerce based upon self regulatory standards. The insurance industry has not yet embraced the use of the Internet for electronic commerce to the same degree.

B. Potential Uses of the Internet by Insurance Consumers, Regulators and Industry

Consumers

The Internet provides a convenient way to learn more about the availability and pricing of insurance products. Consumers generally make purchasing decisions based on information they seek out or information they receive through manufacturer marketing efforts. Conversely, companies continue to look for ways to more effectively market their products. Through the use of the Internet consumers can gain information to help analyze the various types and amount of insurance that may fit their particular needs, along with the associated costs, in advance of the insurance sales transaction.

¹ For the purpose of this paper, “producer” includes any agent or intermediary involved in the sale and/or the administration of an insurer’s product.

E-mail and home page capabilities allow consumers to communicate with producers and/or companies about changes to their insurance policies and to report and process claims. Not only can the Internet reduce “phone tag,” it can help provide instantaneous confirmations that consumers’ instructions have been complied with and, when e-mail is “saved”, provide “hard-copy” (print-out capability) of producers’/companies’ instructions (request for additional information, directions to repair facilities, claim information, inspection procedures, etc.) without the need to write down or remember the information.

Regulators

Regulators, in their consumer-protection and consumer education roles, could benefit from consumer access to the Internet. For example, insurance departments can post consumer information that could be disseminated much more cost-effectively and consistently. Many departments already provide consumer information, including general insurance information and premium comparisons, in hard-copy format. However, its dissemination is limited and can be expensive to produce and distribute.

The Internet also offers regulators an additional opportunity to actively monitor producer and insurer market conduct. Regulators, like consumers, can “surf” the Web, looking for suspicious solicitation activity. In most other cases, regulators must wait to be made aware of market conduct problems through audits and by receipt of individual consumer complaints. The Internet would allow regulators to take a more pro-active approach to such audit efforts.

The ease and speed of Internet communications mean that regulators could more frequently monitor producer and insurer compliance with regulatory requirements. Once appropriate record keeping requirements are in place, “spot checking,” “surprise audits,” and other tools could be as simple to implement as an exchange of e-mail.

Industry

Insurance companies and producers are already taking advantage of the commercial potential of the Internet by establishing Web sites. Through the establishment of Web sites, insurance companies and producers are opening up a new marketing and distribution channel that could eventually incorporate all facets of the insurance transaction, from initial contact with the consumer to collection of premium, issuance of the policy, and the payment of benefits. The vast capabilities of the Internet are recognized as potentially more efficient than many traditional marketing methods. The Internet allows information to be readily and continuously available; to post a “presence” that accurately portrays the variety of products and services; and to provide a convenient way for consumers to contact them for follow-up. Thus, the relatively low cost of electronic communication, compared to that of traditional hard-copy mailings and telephone solicitations, may result in cost savings for producers and companies that use the Internet effectively.

Not only would the Internet allow companies to service existing markets through a new communication channel, the Internet may also facilitate insurance company and producer expansion into previously untapped markets. Affinity marketing possibilities are more easily

possible on the Internet, allowing producers or insurers to post their information in such a way that it will be found by people pursuing related interests, such as crop insurance information by farmers and fine-arts coverage by art collectors.

In addition to sales, insurance companies and producers are using the Internet to better educate consumers on the different types of insurance available and the benefits of such insurance. Insurance companies can also utilize the Internet to service current policyholders by offering on-line claim assistance, complaint handling and answering general inquiries by consumers. Finally, the Internet offers companies the opportunity to expand their communication with their producers. The Internet offers insurance companies the opportunity to offer these services with greater speed and efficiency and at a lower cost.

II. Internet Overview

The Internet began in 1968 when the Advance Research Projects Agency (ARPA) at the United States Department of Defense developed ARPANet, the first large-scale computer network. ARPANet was designed to give scientists at universities and other research institutions access to distant computers, permitting them to use computing facilities which were not available at nearby locations.

Before ARPANet, most networks depended on a central server which, if it failed for any reason, jeopardized the integrity of the entire system. ARPANet used multiple servers and communications lines and protocols so that if any server had a problem, information could be re-routed to the remaining servers.

In the 1980's, the National Science Foundation (NSF) created five supercomputer centers and made them available for general research purposes. Access to these supercomputing facilities previously was limited primarily to scientists, universities and researchers. With the advent of the NSFnet, access opportunities broadened. Regional networks were developed and interconnected within the NSFnet and these, along with the MILNet, Bitnet, DECnets, and hundreds of Local Area Networks (LANs) made up what has become known as the Internet.²

A computer network is two or more computers which are connected to each other and can transmit information from computer to computer. Today, the Internet is comprised of thousands of computer networks located throughout the world. Common tools used to gain access to this world wide network of computers are e-mail and the World Wide Web. Because this access is available 24 hours a day and is available world wide, the Internet is revolutionizing the ability of individuals to communicate and to obtain information on almost any subject at any time.

² Using the Internet and the World Wide Web, Gestalt Systems, Inc. (1996)

A. Accessing the Internet

Access Through Commercial and Public Internet Service

Access to the Internet is typically achieved through fee-based Internet Service Providers or commercial on-line services. For corporate or government entities access can be by high-speed, dedicated lines, and for individual consumers access typically is achieved through ordinary telephone lines and modems. There is an increasing use of satellite and cable connections; although these are still in a distinct minority.

It is often assumed that only sophisticated individuals may be using the Internet. However, with the development of low cost, simplified hardware for use exclusively on the Internet or with cable television connections, electronic capabilities may be present in many, if not most, American homes at some time in the future. People may also access the Internet at public libraries and schools. Thus, the Internet offers the promise of improved distribution of products and dissemination of information to households almost everywhere. The advent of the PCs priced under \$1,000 and Web TVs priced under \$500 is having a significant impact on Internet access expansion among a wider range of consumer income levels.

However, unless the cost drops significantly, low-cost home access to the Internet may not soon become a reality for many people. Current prices for equipment necessary to access the Internet via a TV are still beyond the means of many people, as are Internet access fees. Limited access to the Internet could raise some regulatory issues concerning insurance company and producer marketing and distribution methods.

The Internet is relatively new and its popularity, and therefore dramatic growth in usage, have continued in recent years. Still, an important question is how the Internet will develop as a tool in the insurance marketplace.

B. The World Wide Web

The Internet actually uses a variety of technologies including File Transfer Protocol (FTP), Gopher Servers, electronic mail (e-mail), and the World Wide Web. Of these technologies, the World Wide Web is the interface methodology most consumers associate with the Internet. It uses Universal Resource Locators (URLs) known popularly as “domain names”, to identify Web sites. The URLs make the Internet’s numeric addressing scheme user-friendly. For example, www.naic.org is really the same address as 204.71.110.10 and much easier to remember. Combined with hypertext transfer protocol (the HTTP in a Web address) users can also navigate the World Wide Web by clicking with a mouse or other pointing device on select words or phrases, icons, or other graphic images.

The World Wide Web is also where many companies and producers have established Web sites that laymen compare to a marketing brochure in electronic format. Like a brochure, a Web site provides basic information about an organization, such as its main area of business and available products. Unlike a brochure, however, a company’s Web site may enable consumers to begin the evaluation process by entering information about their needs, obtaining a quote on-line and,

in some cases, beginning the submission process. Therefore, a major distinction of doing business on the Web is that an electronic advertisement may lead to a completed sales transaction.

A Web site may be limited to one page or may be expanded to include numerous pages of information. In addition, a Web site often includes hypertext links to other pages, enabling access to a Web of information on thousands of subjects. The linkages may be internal or external to the organization. For example, an insurer may provide vertical linkages from one line of business to another. Alternatively, horizontal linkages may be provided among organizations such as banks, healthcare entities, employers, and other professionals creating opportunities for streamlined information/shopping and/or additional regulatory challenges.

III. Sales and Service of Insurance Over the Internet

Current electronic commerce typically involves the sale of goods as opposed to services, such as insurance. This disparity in growth can be tied to a variety of issues, including consumer acceptance, security and regulatory concerns surrounding insurance sales on the Internet. Unlike the sale of a book or article of clothing, the sale of an insurance policy involves complicated contractual language and the transmission of what may be confidential information.

A. Single Source Sale Sites

Single source sale sites are comprised of a single insurance company or producer marketing products over the Internet through the establishment of a Web site. When developing a Web site for a single source sale site, insurance companies can use their Web sites as a promotional tools to direct consumers to their existing producers or as another distribution channel.

A single source sale site may enable the consumer to select and purchase insurance directly from an insurance company or producer. This type of insurance marketing over the Internet will presumably provide interested consumers with all the information that is necessary to purchase insurance, including completion of an application, payment of the premium and receipt of the policy on-line.

Some sites will also provide on-line requests for quotation (RFQ) forms. RFQ's typically involve a questionnaire that the consumer must complete to obtain an instant quote for insurance. RFQ's allow the consumer to obtain information directly and relatively quickly. If a consumer wishes to obtain more information on a particular product or make a purchase, insurers could provide the consumer with a list of producers that may be contacted to complete the transaction. In addition to providing a quote to the consumer, RFQ forms provide the company with valuable statistics on the "insurance needs" profiles of the individuals visiting the site.

Insurance companies may also develop Web sites that support their producers. These sites offer general information on products and help consumers examine their insurance needs. These sites generally direct consumers to producers in order to obtain quotes, more information about a particular product and to make a purchase. Insurance companies using this arrangement will likely be selling a more complex insurance product, such as whole life or universal life

insurance. When referring a consumer to a producer, the typical referral is to a producer's phone number and address or to a producer's Web site.

As indicated, insurance producers are also establishing Web sites on the Internet, and tens of thousands of producers already have some type of Internet presence. While many of these Web sites simply provide general insurance information and a producer's phone number and address, increasing numbers of producers are developing sophisticated, interactive Web sites. Many of these sites are allowing producers to offer added value to consumers in new and innovative ways. Producers, like their company counterparts, are beginning to offer consumers enhanced customer support and service. These innovations will certainly continue to develop. In addition to the benefits provided to consumers in this regard, producers benefit by the realization of market efficiencies, enhanced interfacing and information exchange, and the ability to conduct instant transactions and communications.

B. Insurance Malls

Insurance malls are marketing sites that offer the products of more than one insurer. Because of the diversity of products offered at such malls, they attract a diverse consumer audience and have the potential to become true electronic markets.

One of the key features of insurance malls is their ability to provide consumers with access to a wide variety of products, and product and insurer comparisons. Insurance malls are designed to provide consumers with one or more purchase alternatives by matching consumer profiles against company underwriting criteria and presenting a list of alternative companies from which the consumer may select insurance products. The consumer can then review policy information, pricing, and other aspects of various offerings from companies participating in the mall.

Apart from focusing on cost comparison and sales, many insurance malls also present information about the different types of insurance made available by participating insurance companies. Such malls may also provide a brief description of insurance terms, information on state insurance laws, insurer ratings and RFQ forms.

Other insurance malls combine sales and consumer-oriented information. These sites provide the consumer with the same information available in a site oriented to consumer education; however, they also provide the consumer with the ability to complete RFQ forms. Because many company Web sites will only be found if a consumer is actively shopping for insurance, which is dependent on his/her knowing or believing that significant on-line resources exist, insurance malls can also serve to inform consumers of the availability of on-line insurance information and quoting services. This is accomplished through efforts such as offering agent lists and hyperlinks to the Web sites of these producers/companies or to other Internet resources. In turn, this can provide an increased stream of traffic to member Web sites.

C. Service of Insurance Over the Internet

Consumers who use the Internet may experience increased interaction with their insurance companies and producers. A typical insurance consumer, without Internet service, only interacts with an insurance carrier on four occasions: 1) when the insurance is purchased, 2) when the insurance premium is paid, 3) when a claim is made on the policy, and 4) when changes in coverage or beneficiary are made. Consumers may, therefore, be more likely to use this medium to make their initial insurance purchase if all of these interactive elements are available over the Internet. Because the processing of claims, complaints and policyholder services are probably the most important aspects of the insurance transaction for consumers, providing consumers with on-line claim, complaint and policyholder service access should increase consumer familiarity with and confidence in insurance on-line services. Many companies and producers are beginning to service customers on-line who purchased their products in the same manner believing the same preference that led them to use the Internet instead of conventional distribution will translate into a preference for service the same way.

The increased use and demand for services over the Internet should be a constant reminder to the insurance industry and regulators that an increasing number of consumers have a strong desire to access more information that is relevant to their individual interests and needs, insurance services being among them. Once all facets of the insurance transaction are available over the Internet, consumers may begin to use this medium to make their initial purchase of insurance. Thus, as insurer Internet capabilities increase, so should instances of insurance commerce on the Internet.

D. Insurer/Producer Communications

The Internet also is a tool that could enhance company and producer communication. With the use of the Internet, producers can have a continuous line of communication to their insurance companies. This could enhance educational levels of producers and thus enhance the information producers pass on to consumers during the sales process. Producers will also have the ability to communicate with insurers more quickly and efficiently. Consequently, one can assume insurers and producers will be able to increase their responsiveness to consumer concerns.

Section IV. Elements of an Insurance Transaction

A. Insurance Contracts

The insurance contract is fundamental to the business of insurance. The form and content of insurance contracts may vary based on a number of factors, including among others, the kind of insurance (e.g., personal lines property and casualty vs. life vs. health vs. commercial/business); the type of policyholder (e.g., group, individual, corporate); and the method for memorializing the agreement (written vs. electronic signature and/or other method). Insurance contracts are generally considered to be “unilateral”, as opposed to “bilateral”, because only the insurer has an ongoing obligation to perform. The consumer pays a premium in exchange for the insurer’s promise to pay a claim or otherwise perform upon the occurrence of stated events and/or circumstances.

Insurance contracts are generally drafted by the insurer, using standardized forms. Personal lines and small business policies are often regarded by the courts as “contracts of adhesion” due to the unequal bargaining power of the parties, and ambiguities are therefore construed against the insurer and in favor of the consumer. In addition, contracts of adhesion have also become an active issue in Internet commerce generally, as courts are called upon to consider the legal effect of “click here” transactions.

Unlike most consumer contracts, insurance policies involve a screening process (called “underwriting” in the insurance industry) in which the insurer determines whether to accept the proposed risk and what the premium will be. The underwriting process typically starts when the consumer files an application on a form provided by the insurer (and in many states filed with and approved by insurance regulators). In the technical language of contract law, the application may be viewed in one of two ways: (i) the consumer is the offeror, making an offer to the insurer to purchase coverage on the insurer’s terms; or (ii) the insurer is the offeror, and the consumer accepts the offer by submitting an application and paying the necessary premium. Under either interpretation, the application is an integral part of the contract.

When the insurer acts on the application and the contract is delivered, the act of delivery (and payment of the necessary premium at or prior to delivery) generally completes the transaction and puts into place a binding contract of insurance.

Even though differences may exist among the various kinds of insurance, the following steps typically represent the general means for achieving an enforceable insurance contract:

- a. Application - the act of a consumer offering to purchase insurance or accepting the insurers offer to provide insurance.
- b. Offer and/or Acceptance - an insurer applying its underwriting standards and issuing the policy. In those instances where a risk is not acceptable to the underwriter, but coverage could be provided at a higher premium, the issuance of a policy at the higher rates or for different coverages would be considered a counteroffer that could be rejected or "accepted" by the consumer.
- c. Delivery and Consideration - premiums paid in exchange for the contract delivered by the insurer in which the insurer agrees to provide benefits at some future date (if certain conditions are met).
- d. Legal Purpose - insurers cannot enter into insurance contracts for products or services that are unlawful. (For example, business interruption coverage for a drug dealer would be illegal.)
- e. Legal Competency of the Parties - the basic rules as to legal competency generally apply in the context of the insurance contract.

B. Electronic Applications

From the consumer's standpoint, the primary issue is not whether all of the elements of a contract exist. Rather, the consumer wants to know one thing: "Is my coverage effective?" Typically, with an insurance policy, there are several methods for validating the "binding effect" of coverage following completion of the application process by a consumer - e.g., a conditional receipt or the insurance contract may be delivered immediately.

Computer-generated, online applications pose a number of challenges for insurers and consumers. Among other things, an acceptable method for verifying the identity of the applicant and recording the applicant's intention to purchase the insurance product is crucial to the transaction. While many states are passing legislation to legitimize electronic signatures, the question still remains whether electronic signatures affixed to an electronic application and/or policy will be legally sufficient to form an enforceable insurance contract in the remaining states.

Even without legislation on electronic signatures, general principles of contract law offer some latitude on the use of non-traditional signatures. For example, legal scholars who author the Restatement (Second) of Contracts state within Section 134, "the signature to a memorandum may be any symbol made or adopted with an intention, actual or apparent, to authenticate the writing as that of the signer." The accompanying comment is also relevant:

The traditional form of signature is of course the name of the signer, handwritten in ink. But initials, thumbprint or an arbitrary code sign may also be used; and the signature may be written in pencil, typed, printed, made with a rubber stamp, or impressed into the paper. Signed copies may be made with carbon paper or by photographic process.

However, established law on the use of non-traditional signatures is limited. From an insurance regulatory standpoint, there is some precedent. In Wilkens v. Iowa Insurance Commissioner (457 N.W.2d 1, 1990), the Iowa Court of Appeals examined whether the computer-generated signature of an insurance producer met the insurance code requirements for a signature under the applicable insurance code provision. The court upheld the validity of the producer's signature:

"[t]he fact that the signature is computer-generated rather than hand-signed does not defeat the purpose of the act. The issue is not how the name is placed on the sheet of paper; rather, the issue is whether the person whose name is affixed intends to be bound."

457 N.W.2d 1 (Iowa App. 1990)

Even though the issue in Wilkens pertained to a producer's signature, the court's reasoning would seem equally applicable to policyholders. That is, the primary question is: "Did the applicant intend, by signing - whether by pen or other means -, to be bound by the representations made in the application for the contract of insurance?" Considering that electronic signature technology exists, the next question becomes: "What are the methods for properly securing and validating those signatures?"

Electronic Signatures: The Technology and the Law

Technology

There are two primary forms of electronic signature: (1) digital signatures and (2) stylus signatures. In general, digital signatures provide at least two levels of security: integrity (i.e., validation that the signature was transmitted in an unaltered state); and authenticity (i.e., validation that the signature is true and correct). These two levels of security are obtained in large measure by the use of unique “keys” which are entered into the computer file: one by the party generating the electronic document, the other by the signing party. Changes to the underlying electronic data will render the electronic signatures invalid. Thus, the integrity of an electronic document is protected by these safeguards. Digital signatures are based on “public key cryptography”, where the signer uses a “private key” that transforms the data into unintelligible form and the recipient uses a public key to decipher and verify the data. Digital signatures protect the security and privacy of on-line transactions. There are a number of competing technologies for public key encryption, and no single one has yet emerged as a standard.

To verify that the digital signature is in fact sent by the sender, and not some unauthorized third party who has obtained a public-private key pair through some form of fraud or other means, the digital signature can include a digital certificate. A digital certificate irrevocably binds a person’s or entity’s identity to a public key or group of public keys. In effect it becomes an electronic equivalent to a driver’s license, passport, or other evidence of identification.

A digital certificate is issued by a “certificate authority,” a trusted third party that provides secure mathematical computations that result in unique individual digital certificates that cannot be duplicated. A certificate authority has the burden of verifying the identity of a person or entity requesting a digital certificate. Once a person’s identity is verified, the certificate authority can issue a digital certificate. The typical digital certificate is issued by the certification authority and signed with its private key. The certificate will verify the owner’s name, public key, expiration date of the public key, name of the issuing certification authority, serial number or register number, and the digital signature of the issuing certification authority. In any given consumer insurance transaction, the consumer would have a digital certificate, along with the insurer, the server, and a financial intermediary (if any). Thus, the identity of each of the parties that would have access to the message can be verified and authentication of the identity of the parties is ensured.

Stylus signatures offer similar safeguards and work in the following manner: the signer moves the stylus (or pen) across a computer screen, which displays an image that traces the movement of the stylus. The signer sees his or her signature as it is being captured by the computer, just as a signer sees his/her signature on paper. Upon completion, the signature is encrypted and sent electronically to its destination. . The process uses secret keys and the process is highly resistant to alteration or unauthorized access and use. Perhaps most important for insurers, the information set forth on the application is “locked” along with the stylus signature of the applicant (and probably producer). The fact that the application itself is more secure may reduce the possibility that information on that application can be altered.

Law

To date, however, the deployment of this technology has been hampered by different emerging technologies and a lack of consistency of laws being passed by states validating this technique. A summary of this legislation can be found in Appendix D. Federal preemption of this area is possible, but has yet to materialize.

The National Conference of Commissioners on State Laws is addressing electronic commerce transactions by proposing significant revisions and additions to the Uniform Commercial Code Article 2B. The revisions would implement a balance between electronic commerce and existing law that regulates consumer contracts. The General Notes to the proposed changes provide: (i) the “goal is to facilitate electronic commerce and to implement concepts concerning electronic trade”; and (ii) “concepts that were not at issue when existing consumer law developed, require adjustments appropriate to promote uniformity and certainty in commerce that is truly national in nature”. The current draft of proposed revised Article 2B is available on the Internet at <http://www.law.upenn.edu/library/ulc/ulc.htm>.

V. Advantages and Disadvantages of Insurance Sales and Service Over the Internet

A. Consumers

Advantages

Consumers have the ability to search the Internet for insurance quotes in some lines via numerous Web sites and other World Wide Web sites created by or on behalf of insurers and producers. Some Internet sites are interactive and permit the consumer to provide certain information and allow the producer or insurer to determine eligibility for certain coverages.

Consumers may also browse the Internet to locate producers and insurers in their area. This provides consumers the ability to narrow their search for a particular producer, insurance company or specific type of insurance coverage. In many cases, producers advertise the names of insurers they represent and the types of coverage they most commonly provide.

A particular advantage to consumers appears to be accessibility. Often, consumers may not have the time or the opportunity to shop for insurance during normal work hours. The Internet increases the opportunities for consumers to shop after hours and, in most cases, a quote can be received within minutes or the next day at the latest. The quote arrives electronically, which eliminates the need to personally interact with a producer. In addition to obtaining quotes, consumers currently have the ability from at least one auto insurer to complete the entire transaction on-line. Another auto insurer provides consumers the opportunity to complete the application on-line and then forwards the application to a producer located near the consumer to complete the transaction.

Consumers using the Internet for the purchase of insurance have the ability to contact their producer or insurer 24 hours a day. Depending on the Internet site's capabilities and response

time, this is likely to substantially enhance consumer service by eliminating delays in obtaining policy information and service. While some insurers already provide 24-hour service via telephone, the Internet has the potential to further increase consumer service availability.

Consumers already have the ability from at least one company to review their account status to determine when and how much they need to pay to maintain their existing policy. After checking how much is due, they can make a payment to the company online. This service eliminates the two step process of calling the company to find out how much is owed and then mailing a payment. Online payment could potentially prevent cancellations as this can be done at any hour of the day and any day of the week without the delay of a traditional non-electronic means of mailing.

Some insurers have indicated they may be able to deliver insurance products and services via the Internet in a more efficient and cost effective environment. This may result in overall lower premiums and/or enhanced quality and/or service for consumers if a substantial number are willing to purchase coverage and interact with a producer or insurer electronically.

Disadvantages

The most significant disadvantage to some consumers may be the lack of personal interaction with insurer representatives. Producers are trained to assist consumers in determining the type and amount of coverage that should be purchased to adequately insure their needs. Some consumers making insurance decisions on the Internet may focus on how much coverage they want to purchase, rather than on how much coverage they actually need. Without the assistance of a trained insurance producer, unsophisticated consumers may end up “ordering” insurance, without analyzing the various types and amount of insurance that may fit their particular needs. Unfortunately, consumers “ordering” insurance is not a practice that would be unique to Internet sales.

Many consumers are not acquainted with insurance laws and regulations. This includes, but may not be limited to, familiarity with the requirements for insurer and producer licensing, producer appointment, policy form filing and approval for products sold in the admitted market, and qualifications for sales in the surplus lines and reinsurance markets. Because the location and actual identity of the producer and/or insurer is not always obvious, consumers may not in all Internet transactions be able to determine whether they are doing business with regulated producers and insurers or are purchasing insurance products that have been approved by state regulators. Or worse, consumers could learn they purchased a fictitious policy, resulting in a variety of complaints where the desired level of regulatory protection may not be available to consumers.

Some consumers lack the financial ability to purchase computer hardware or software, and access the Internet. Even in today’s environment where accessing the Internet is becoming increasingly more affordable, the lowest cost access can be unaffordable for some consumers. If insurers offer lower premiums to Internet access users, certain consumers will not benefit from those savings unless they have Internet access from another source such as a public library.

Inadequacies in the telecommunications infrastructure also limit some consumers access to the Internet, especially in the rural areas of the country.

B. Regulators

Advantages

Industry and consumers will have electronic accessibility to those regulators who have a presence on the Internet. This will permit regulators to respond to inquiries or consumer complaints faster and more efficiently. This will permit state regulators to provide the insurance industry with electronic access to compliance guidelines; license applications and fees; information bulletin boards; e-mail; and, of course, faster response time to industry requests for information.

Those state regulators with Internet access will have the ability to directly monitor Internet sales and solicitation activity. There are approximately 42 state insurance regulatory agencies currently on-line, along with the National Association of Insurance Commissioners (NAIC). The NAIC has an extensive Web site at <http://www.naic.org> that serves as a communication link between insurance regulators, consumers and the industry. The site also provides links to all 42 of the state insurance regulatory agencies that have active Web sites, providing users with direct access to insurance regulators in each jurisdiction.

Many producer and insurer Web sites currently contain a hyper-link to the NAIC and state insurance departments. This provides consumers with electronic access to those regulators and, in turn, will provide those regulators with a better ability to respond to industry and consumer needs in a more timely and manageable manner.

The insurance industry has recently gained Internet access to the NAIC Producer Data Base (PDB) through the Insurance Regulatory Information Network (IRIN) (www.irin.org). For those states participating in PDB, industry will have electronic access to producer licensing information. This will substantially reduce the number of phone calls and written requests state insurance departments currently receive from industry for verification of good standing and/or licensing status. Time previously spent by regulators responding to these requests may instead be spent issuing licenses in a more timely manner.

In addition, the Internet has the potential to permit the electronic transmission of policy forms; thus cutting down on the cost of the application and policy issuance process.

Disadvantages

The vast dimension of the Internet makes regulatory monitoring of unlicensed activity and investigating consumer complaints difficult. The fact that some state regulators currently do not have adequate Internet access further complicates the matter.

The Internet provides the potential for ready consumer access to entities that are not licensed or regulated by state insurance regulators. Regarding unauthorized insurers, while most states provide for "direct access" by insureds under their surplus lines rules, such rules have not contemplated such universal access to the surplus lines market on the Internet to less sophisticated commercial or personal lines insurance consumers.

The insurance industry and insurance regulators are concerned that inadequate regulatory protections currently exist to protect against fraudulent insurance marketing and sales on the Internet. For example, an unlicensed individual could create an Internet Web site, complete a number of sales (collecting premiums), and then terminate his/her Internet Web site. In such a case, a regulator's ability to prosecute for fraud may be hindered by difficulties tracking down the perpetrator and/or obtaining sufficient evidence that a violation of state law has occurred. Unless there is a specific tie to an insurer and/or licensed producer, it may become very difficult to protect the consumer's interest in obtaining coverage.

The National Insurance Crime Bureau (NICB), Conning & Company Research Council and independent consulting firms estimate the cost of insurance fraud per household to be between \$800 and \$1200. There are numerous comprehensive insurance fraud cost studies that will be undertaken in 1999. Regulating electronic commerce, especially commerce over the Internet, will require cooperation from all interested parties.

C. Industry

Advantages

The most significant advantage of the Internet to industry is the ability to communicate and transact business electronically which could reduce administrative costs, and bring innovative and less expensive services to a wider audience.

Insurers will also have the ability to communicate and deliver marketing materials to their producers electronically, including rate manuals, underwriting guidelines, applications, company procedures and advertising guidelines.

Consumers who commonly use the Internet or similar electronic providers for the purchase of other products and services could search for competitive insurance quotes or a producer or insurer that best fits their personal needs. Consequently, the Internet could substantially enhance the marketing potential for those producers and insurers willing to be on the cutting edge of this new marketing opportunity.

Automation vendors are currently designing Web sites that are integrated with agency management systems. This will permit policyholders to access their producer or insurer electronically to examine their premium billing status, determine the type and amount of coverage, make changes on their policy, request quotes and obtain information about other coverages. The insurance industry views this as an opportunity to operate an insurance agency that is accessible to policyholders and consumers 24 hours a day.

The industry will also be able to electronically access most state insurance regulators to obtain compliance information such as license applications and guidelines, applicable fees, interpretation of certain state laws, communicate by e-mail with insurance department staff and respond to consumer complaints in a more timely manner. There are those in the insurance industry who believe the Internet will enhance their ability to improve regulatory compliance and reduce exposure to potential market conduct violations.

Producer and insurer access to the NAIC Producer Data Base (PDB) will allow on-line verification of the license status of producers on a state-by-state basis, as well as access to producer demographics, lines of authority, prior administrative actions taken by insurance and National Association of Securities Dealers (NASD) regulators and NASD exam results. In the near future, industry will also have access to producer appointment information and will have the ability through the Producer Information Network (PIN) to electronically appoint and terminate producers. This should enhance the ability of the industry to comply more efficiently with various state producer licensing and appointment requirements.

The National Council on Compensation Insurance, Inc. (NCCI) currently provides, via its Web site, carriers, producers, employers and regulators alike with worker's compensation related safety and educational materials as well as information on its products and services.

In 1998, NCCI's Web site will be expanded to facilitate access to key NCCI products and services. NCCI's Web site will also provide the door through which applications and deposit premiums can be submitted to the worker's compensation residual market in NCCI plan administered jurisdictions.

In the current paper environment, producers and insurers have expressed frustration and concern regarding delays in the effective dates of coverage bound through NCCI administered plans. Those producers who choose to transmit residual market applications electronically will receive immediate notification and verification that coverage is bound per the requested effective date. The NCCI system will also facilitate electronic payment of premiums.

Disadvantages

An issue for the insurance industry is remaining in compliance with insurance regulations while engaging in Internet-based sales and services. The Internet is global, and therefore insurance offerings can be accessed from anywhere, including states or countries where the insurance company or producer may not be authorized to do business. Thus, the insurance industry must continue to be cognizant of state regulatory requirements for the licensing of producers and insurers, and the filing and approval of insurance products.

In some states, insurers may only issue a policy through a licensed producer. Insurers, therefore, need to be certain that their Web sites clearly disclose where their products are intended to be offered and insure they only solicit business or make representations where they have authority to transact business.

Based on recent surveys conducted by the NAIC (the “NAIC Survey” attached as Appendix C), most states consider the electronic solicitation of insurance to be no different from solicitation through any other media. Therefore, in most states, producers and insurers must first be authorized or licensed to transact business before soliciting insurance to consumers in that state.

In using the Internet, there may be some question as to where an insurance transaction occurs. When a producer or insurer solicits insurance electronically, does the transaction occur in the state in which the producer is located, or in the state in which the consumer is located? The majority of states responding to the NAIC Survey believe the transaction would occur in the state where the consumer resides.

Some insurance industry representatives have also expressed a concern that without producer face-to-face contact with the consumer, it may be more difficult to qualify the applicant for many kinds of insurance. Inadequate medical records and other sources of information about the consumer may impair an underwriter’s ability to determine eligibility without actual contact and verification of information by the producer.

The rapid growth in development of Internet Web sites by producers also results in increased concerns regarding compliance with state advertising laws and regulations. Producers may be advertising insurance products and services without authority from the insurer and in violation of state laws and regulations. Based on the NAIC Survey, Internet advertising is considered subject to regulatory approval in many states.

Because producers must be licensed by state insurance regulators and, in most cases, appointed by insurers in those states where the producer transacts business, licensing costs will increase for those insurers who will permit their producers to solicit business in all states through the Internet if they presently do not solicit in all states.

D. Challenges Associated with Selling Insurance Over the Internet

Requirement of an applicant’s signature

Most state laws currently require an applicant’s signature on an application for insurance. An applicant’s signature is generally required to certify a sworn statement of the insured. Both the insurance industry and state regulators are expressing concerns that it may be difficult to prove misrepresentation or fraud on the part of an applicant without a personally signed statement.

At least twelve states have already enacted legislation authorizing the use of digital signatures in private communications (See Appendix D). These statutes generally provide that a digital signature will have the same legal effect as a written signature as long as the electronic signature

is unique to the signer, its authenticity can be verified, and the data in the document has not been altered. Once a legal framework is established and a reliable certification authority is in place, an application signed with a digital signature will have the same legal effect as one that is physically signed with ink.

Systems are currently in use (and will be enhanced in the future) that will allow for an electronic signature of the applicant. Sufficient security measures must be taken to assure that the applicant's electronic signature is valid and verifiable. The most serious unanswered question is what may be acceptable to courts as evidence of an electronic signature.

Blood, urine and oral fluid samples for life insurance

Depending on the level of coverage requested in a life insurance application, most insurers require a blood, urine and/or oral fluid sample for underwriting purposes. Sample kits are currently delivered to the applicant by the producer or insurer; the applicant then visits an authorized medical provider or administrator to provide the required samples for testing purposes. The medical provider or administrator then forwards the samples to either the insurer or a medical test laboratory.

In an electronic transaction, the producer would not deliver the sample kit; therefore, the insurer would likely have to mail the kit or have it delivered by a third party. Another alternative would be to schedule a visit with a healthcare provider or administrator for the applicant and advise accordingly. Regardless of whether the application is taken by a producer physically present at the point of sale or an electronic application is sent to a producer or insurer, the blood, urine and/or oral fluid test must be completed. The insurer will need to develop alternative procedures to ensure that the proper medical tests are performed. This change in procedure to prevent fraud might result in some increased underwriting risks and costs to the insurer.

E. Electronic Applications

In 1990, ACORD represented 600 insurers, and printed 220 million paper standardized insurance application forms. By 1996, the number of insurers had increased to nearly 1,000, yet less than 60 million paper forms were printed.

Nearly 100 software vendors and insurers (vs. 5 in 1990) now support agency management systems that allow the agent to complete an insurance application on the computer, and transmit the completed application to the insurance company underwriter.

The next step is the Internet. ACORD made its forms available at its Web site (www.acord.com) earlier this year, and now many companies and vendors are downloading these forms to their own Web site and using ACORD applications in their insurance marketing products.

A service in its infancy, but expected to grow rapidly, is the availability of policy change notices and loss notices at the insurers Web site. Insureds will soon be able to instantaneously advise their insurance company of changes in motor vehicles, purchase of property, etc., and will be able to report a loss just as swiftly.

Section VI. Regulatory Issues

A. Impact on State Insurance Departments

Current insurance regulation is based on geographic boundaries. However, the Internet, by its very nature, does not recognize geographic boundaries, i.e., it is "borderless". For the insurance industry to fully capitalize on the Internet's potential, changes are required-- some subtle, some more dramatic -- to the regulatory approach currently employed by insurance regulators. Recognizing that a host of regulations already exist that are both (i) based on existing operational procedures and (ii) fail to recognize the Internet's borderless nature, it is likely that some adjustment to the current regulatory system is necessary to allow insurers to realize, and consumers to reap, the benefits of the Internet's full potential. It is important to note that for these adjustments to be successful they must come from insurers, legislators and regulators.

With its ability to efficiently transfer documents with audio, video, text and hyperlinks embedded together, the World Wide Web portion of the Internet presents the best opportunities for electronic commerce on the Internet. In its December 1996 issue, "Internet World" reported that there are currently over 10,000 Web sites dedicated to music. In fact, the music industry was among the first to explode onto the World Wide Web and utilize electronic commerce to conduct business. According to "Internet World," the top 350 music distributors sell more than 25,000 Compact Discs per day via the Internet.

Using the generally accepted estimate that there are currently 25 million Internet users worldwide, "Internet World" reported that a full 10 percent report using the Internet to shop for goods and services in place of going to their favorite local shopping mall. Attempting to capitalize on this increase in the Internet's usage, the travel and financial services industries have recently begun using the World Wide Web to transact business as well.

With respect to insurance, what is on-line consists mostly of static insurer sites, insurance producers, quote providers, ancillary services, insurance regulators and trade associations.

Static insurer sites currently provide varying levels of information about insurance products, premium levels and insurer or producer contact information for consumers interested in purchasing coverage. Some insurer sites link potential customers to a nearby producer, while others ask the consumer to contact the insurer directly.

Many insurance producers are advertising their services on-line, particularly insurance producers, to assist consumers with locating the desired coverage. Some producer sites even have on-line forms for consumers to submit basic information, assisting the producer in providing the requested or alternatively appropriate products and services to consumers. If coverage is located, the consumer is contacted and underwriting usually proceeds via traditional channels.

Other sites of interest to consumers are those posted by quote providers. These sites allow consumers to compare the premiums of several insurers. Typically free to the consumer, quote

providers also attempt to link potential customers with insurance carriers, usually by providing a hyperlink, telephone number or e-mail address. For those who really want the nuts and bolts of premium calculations, there are also sites that provide insurer rates, for a fee, in a downloadable format. The rates only apply to states with prior approval requirements and, as one might expect, are usually difficult to understand. These types of rating services are typically visited only by insurance professionals, although they are available to anyone for a reasonable fee.

Regulator Web sites tend to incorporate varying degrees of detail. However, all provide general descriptions of the agency's function, consumer complaint procedures and basic contact information should the user be unable to find the information being sought. Many states have indicated that programs are either planned or underway to further enhance the capabilities of their Web sites. Many of the states that are not currently on-line view the Internet as a useful and efficient medium of communication and have indicated a desire to launch Web sites in the near future.

As an example, the California Department of Insurance's (CDI) Web site, located at <http://www.insurance.ca.gov>, was launched in April 1996. It currently contains over 860 separate documents, linked together with nearly 15,000 embedded hyperlinks, that are available to anyone with Internet access. Documents can be printed, downloaded for later use or simply read on-line. No interactivity beyond sending electronic mail to the site administrator is currently available, though extensive plans have been made to add a number of interactive features over the next two years. The site is similar in design to many other current state insurance regulatory agency sites.

Even in their infancy, these regulator sites seem to be fairly popular with the insurance industry and consumers. Activity on CDI's Web site has increased virtually every month since it launched. The site registered approximately 10,000 hits during its first month on-line (April, 1996). Just one year later, in March of 1997, the site registered over 70,000 hits per month. The number of documents downloaded has nearly tripled to over 210 per day.

The Internet also provides regulators the opportunity to more readily monitor fraudulent activities in distant locations in a real-time environment. Insurance regulators will need to become versed in Internet technology and use it as a tool to coordinate their enforcement efforts and to monitor questionable sales activities without regard to physical boundaries.

It is important for insurance regulators to have access to the Internet, whether it be through a dial-up modem, a dedicated transmission line, or server. Some states pool their resources to secure faster, dedicated transmission lines and direct Internet access for a fixed fee. To actually sift through the information available in the on-line world, insurance regulators also require access to an Internet browser.

Many states are developing personnel policies that define acceptable uses of the Internet as a tool to assist with job performance, just like policies developed in years past defining how to appropriately use a computer or telephone to complete job assignments. The essential elements of the personnel policy note that:

- Internet access is provided by the employer for the purpose of completing a job;

- Any personal use is incidental and must not interfere with job performance; and
- Management has the right to monitor and restrict usage should the employee fail to adhere to agency's policy.

Agencies may require all new hires to sign a copy of the Internet usage policy for placement in a personnel file, indicating that the employee was indeed furnished with, and read, the policy. Some agencies are also incorporating Internet, electronic mail and voice mail policies into one overall communications policy.

To be used effectively, Internet access must be seen as a communication tool. Very few people would seriously consider operating a business without a telephone. Today, that notion is more commonly being extended to Internet access as well.

A regulatory agency wishing to launch its own Web site will either need the knowledge and capability to create a Web site in-house, or the resources to contract with a vendor to provide the service. Once created, the Web site will need to reside on a server that is dedicated to the Internet, and the agency will need to create the necessary infrastructure to maintain the site, as static Internet sites quickly become on-line ghost towns. The regulator's Internet infrastructure may be as simple as hiring or training a site administrator to periodically update the site as directed. Or, the infrastructure may be as complicated as obtaining Web development software and appointing staff to maintain the content on various portions of the site and sending updates to a Web administrator responsible for the technical aspects of site maintenance.

Additional items, like a system firewall and other security measures, may be necessary depending upon the sensitivity of information being requested by insurers, producers and consumers. Tools like Web analysis software that provide automated and customized statistical reports of Web site traffic may also be necessary to determine what information is useful, what is not and what portions of a site are not "user friendly".

B. Applicability of Current Statutes and Regulations

One question regarding Internet insurance transactions is whether, and to what extent, such *transactions* should be regulated by the states pursuant to the McCarran-Ferguson Act or as commercial *electronic transactions* regulated by the federal government under the Commerce Clause. Insurance regulators believe that the business of insurance is regulated by the states regardless of the medium in which these transactions take place. In fact, many state insurance regulators view the Internet only as a new communications medium unlike the television, fax machines or electronic mail. They therefore believe it would not be necessary to drastically alter their structure in response to the Internet.

However, due to the various state regulations, Internet insurance sales cannot always be conducted in a uniform manner. Still, the concerns of insurers, producers, regulators, and legislators are similar. For example, there is not complete legal consensus with the issue of whether electronically transmitted insurance applications, policies and related forms are the legal equivalent of paper-based forms. Additional concerns include, in brief, the following issues.

Licensing

By transmitting information over the Internet, it is a simple matter to enter into potential sales situations in any and every state (and internationally) regardless of whether the insurer or insurance producer is appropriately licensed where the consumer is located. Accordingly, does an Internet insurance transaction occur in the state in which the consumer is located or in the location from which the electronic message originated (which may not necessarily be where the insurer or the producer is physically located and licensed)? Most likely (based on a traditional “doing business” analysis), the transaction would be deemed to occur in the state where the consumer is located.

If we are to view the Internet as a new communications medium, then states should give serious consideration to treating inbound e-mails requesting information about insurance in a similar vein as inbound telephone calls from a licensing perspective. That would suggest that a follow-up outbound telephone call from an insurer responding to the consumer's electronic inquiry be treated as an extension of the original inbound "call", and thus be regulated under the inbound licensing statutes in the state in which the outbound call center is based.

This also suggests that states permit follow-up outbound telephone calls in those instances in which the consumer in their state clearly initiated the communication (albeit electronically rather than via telephone) without invoking the need for licensing in their state to an insurance producer calling from another state. In essence, the consumer has elected, as a result of their inquiry across state lines, to be satisfied with the consumer protection regulations of the state to which they communicate via the Internet.

Advertising and Disclosure

As the insurance industry becomes more comfortable with the concept of “commerce on the Internet”, more Internet transactions will go beyond simple advertising and producer referral programs. However, the laws and regulations that pertain to advertising (and life insurance illustrations) would always be applicable. For example, insurance advertising rules generally prohibit deceptive or misleading statements about an insurer's or a competitor's product. Yet, with Internet advertising it will be difficult to always know who made a derogatory statement about an insurer's products or services and whether and to what degree the statement caused damage to the targeted insurer.

Insurer information transmitted over the Internet constitutes an advertisement that is regulated by state insurance laws. For example, the NAIC Model Rules Governing the Advertising of Life Insurance define “advertisement” as

material designed to create public interest in life insurance or annuities or in an insurer, or an insurance producer; or to induce the public to purchase ... replace or retain a policy including (a) descriptive literature of an insurer and published material, audiovisual material and descriptive literature of an insurer [and; (d)] prepared sales talks, presentations and material for use by insurance producers.

A life insurer's Web site should constitute an advertisement under the NAIC model because the site is likely designed to "create public interest in the" insurer and "to induce the public to purchase" insurance.

Web site marketing efforts could also trigger life insurance illustration regulation requirements. Marketing insurance products on the Internet involves a "presentation or depiction" that could be subject to such regulation. Thus, an Internet presentation that includes "non-guaranteed elements of life insurance over a period of years" is not excluded from the definition of "illustrations" and must satisfy all relevant regulatory requirements.

Situs and Choice of Law

Determination of the transaction situs for an insurance sale can impact the insurance product sold. For example, common contract choice of law, premium taxation, guaranty fund applicability, insurance policy termination, continuation of coverage, cancellation and nonrenewal laws vary among the states.

Signature Authentication

Contracts of insurance that are "bound" over the Internet require a form of signature made with the intention of authenticating the document. Because electronic signatures are a relatively new concept and may be perceived to lack a certain element of trustworthiness, procedures have been devised and are now being tested to authenticate signatures. They are discussed in detail elsewhere in this paper.

Statute of Frauds

Whether an insurance policy must be in writing is not always clear, and may depend upon interpretation and application by regulators of the various states' Statute of Frauds which require that certain agreements be reduced to writing and signed by the party to be charged. Such agreements generally include the sale of goods in excess of \$500.00, the sale of real estate and contracts that cannot be performed within one year. Typically, contracts of life insurance and annuities fall within the Statute of Frauds. The National Conference of Commissioners on State Laws would change or delete many aspects of the Statute of Frauds pursuant to a revised Article 2B so that a "writing" would not be necessary to a binding contract (the only requirement would be a record of the transaction, including one that is stored in a recognized format). The current draft of proposed revised Article 2B is available on the Internet at <http://www.law.upenn.edu/library/ulc/ulc.htm>.

Privacy

To initiate an insurance transaction, a consumer is often asked to disclose personal information. Along with a decision to divulge personal information comes a consumer expectation of privacy and secrecy. The traditional insurance sales process typically involves communication either in person or over the telephone between the insurer or its producer and the consumer. These

methods of communication provide commonly accepted assurances of privacy and anonymity and should, over time, be extended to Internet transactions.

Premium Collection by Credit Card

An insurer or producer marketing directly to consumers over the Internet must be willing to accept payment of the initial premium via credit card, and consumers must be willing to divulge their credit card information over the Internet. Legitimate concerns exist regarding access to credit card information on the Internet. Thus, establishing a secure “credit card environment” is vital to the success of insurance sales over the Internet.

Financial transaction safeguards should make consumers more secure when making credit card purchases over the Internet. However, it is also necessary to verify that the insurance laws of the various states do not prohibit making premium payments by credit card. States that permit insurance premium payments by credit card have varying requirements. The most common include: (i) credit card usage may not increase the premium or incur a separate fee (conversely, policyholders paying by cash or check may not be offered a discount); (ii) the credit card issuer may not cancel a policy if a cardholder fails to pay balances due that include insurance premiums; (iii) premium refunds must be made directly to the cardholder; and (iv) offers of an extension of credit for premium payments made through a particular credit card facility are prohibited.

Summary

New regulations may need to be considered, or existing regulations amended or rescinded, to ensure the Internet’s borderless nature is recognized and the regulations flexible enough to respond to operational changes that the Internet may produce. For example, if insurance producers are required to post their license number on business cards and printed advertisements, does that include advertisements posted electronically to the Internet that are not “printed?” Do current regulations cover that contingency?

At the same time, however, regulators must also be careful not to create a dual regulatory structure in which activities over the Internet are regulated less stringently than more traditional activities. While some problems are unique, it is important not to create a disparity between the regulatory requirements facing Internet companies and producers and their “live” counterparts.

The underlying point is that regulators need access to the on-line world before they can become familiar with, and monitor, Internet activity. Regulators must also monitor their own Web sites so they can share meaningful information with other regulators about their own on-line experiences.

Section VII. Security and Privacy Issues

A. Security

Consumers and insurers may be hesitant to engage in insurance transactions over the Internet due to concerns about security. While numerous security safeguards are currently available for use on the Internet, they have not been widely implemented. One reason is their perceived limited reliability. In addition to reliability issues, a general lack of insurance industry and consumer confidence in the overall security of Internet transactions exists, particularly with regard to using credit cards (and other payment systems) over the Internet. Current security safeguards also have a limited scope of use due to a lack of industry standards. Many safeguards currently are not supported by the various popular applications, servers, Web browsers, and e-mail systems. However, as will be discussed below, the computer industry is quickly moving to alleviate both reliability and security problems with Internet transactions.

Because of the rapidly advancing nature of Internet security safeguards, it may be too early to consider the regulation of Internet transactions with regard to security concerns in any substantive way. It is an emerging technology, and how it will develop cannot be totally predicted. Thus, it can be argued that regulation should not be unduly burdensome lest it impede the innovation and growth that has been achieved already. At the same time, however, it is important for regulators to weigh consumer protections while not impeding innovation as they consider what regulatory role needs to be played regarding security over the Internet.

There are three primary Internet insurance transaction security concerns. They are:

1. The privacy and confidentiality of personal information transmitted between an applicant and an insurer.
2. The alteration of information provided by the consumer/applicant by a third party such as the producer or another party with access to the file.
3. The tampering by unauthorized individuals with insurers' Web sites which may affect the accuracy of information consumers receive regarding insurance sales over the Internet.

Security concerns are multi-faceted and include: (i) misappropriation of personal and credit card information transferred from the applicant to the company or producer; (ii) authenticating the identities of the sender and the recipient are legitimate; and (iii) ensuring that information transmitted is not altered in the transmission process by third parties or accidentally altered during the transmission process.

Security concerns will likely be resolved by technical solutions developed by the computer industry. The various players in the computer industry are cooperating to develop industry standards and protocols. Most producers of Internet products, such as servers and Web browsers, are upgrading their products to be compatible with the various security standards and protocols being developed.

The industry is developing many techniques to address security issues. Among these are firewalls, encryption technologies, and good management practices (passwords, digital certificates, tokens, etc.). A discussion of these topics is outside the scope of this paper, though their importance cannot be overstated. Anyone seriously considering availing themselves of the

opportunities provided by electronic commerce would be well advised to learn as much as possible about these issues, and to deploy the best techniques and technologies available.

Computer services producers are developing technical solutions to address authentication and data integrity concerns. These technical solutions include "digital signature" and "digital certificate" programs that could increase confidence concerning both the identity of the sender and the integrity of the message received. Those technologies were discussed earlier in the paper.

A separate security concern is that unauthorized individuals will tamper with insurers' Web sites. For example, an unaffiliated third party could add a hypertext link to an insurer's homepage. When a consumer clicks on that link, he or she will leave the insurer's domain and any text or information presented will be provided solely by the unaffiliated third party. If security measures, such as those discussed above, are in place the possibility of entering into bogus transactions with an unaffiliated third party engaging in this practice becomes unlikely. Clearly, if the practice of tampering with Web sites becomes common, it will affect consumers' perception of the reliability of insurance information provided over the Internet. The solution apparently rests with developing technical security measures and continuous homepage monitoring by the person or entity maintaining the homepage.

B. Privacy

The first step in analyzing privacy concerns regarding personal information transmitted from an applicant to an insurer is to define the scope of the personal information that might be transmitted. Generally, the following information is requested from an applicant: (1) name; (2) address; (3) sex; (4) date of birth; (5) type of product to be purchased; and (6) payment information (i.e. credit card number or other payment source). Depending on the type of insurance being solicited, other information could include: (1) detailed health information; (2) detailed financial information; (3) type of automobile(s) applicant owns, applicant's automobile financing arrangements, and the applicant's driving record; (4) family information; and/or (5) specific information regarding property owned by the potential insured (i.e. home, boat, recreational vehicles, jewelry and other valuables).

The privacy concerns deal with how information is used once it has been received by the recipient, presumably an insurer or producer. These concerns are present with all types of insurance transactions; however, privacy concerns are heightened with Internet sales due to the aggregate dissemination of data that is facilitated by the efficient and interactive nature of the Internet. Since privacy issues are not limited to Internet sales, they will not be addressed in detail in this paper.

Section VIII. Conclusions and Recommendations

The NAIC, after gathering information since June 1996, has reached the following conclusions and, where deemed appropriate, provided recommendations.

Conclusions

1. The insurance industry has not embraced the use of the Internet to the extent other financial services have. This may be due in part to the industry concern of how the use of the Internet may be viewed by insurance regulators.
2. States do not have a consistent approach to regulating the business of insurance over the Internet.
3. Some states may require increases in personnel, training and/or equipment to effectively regulate the business of insurance over the Internet.
4. The absence of uniform standards for the use of electronic or digital signatures is an impediment to insurance transactions over the Internet.
5. Interstate and international access to the Internet presents unique regulatory challenges with respect to insurance activity. These challenges are created by the possibility of unlicensed solicitation by entities located outside of the U.S., the difficulty of determining the geographic location of the soliciting entity, and the potential for fraudulent activities.
6. Currently, not all consumers have access to the Internet. Some feel this could lead to unfair discrimination in underwriting and pricing of insurance by insurers who use the Internet. As accessibility increases, these concerns may be reduced.
7. There is a general belief in the insurance industry that, consistent with the achievement of operating efficiencies associated with the implementation of new technologies in the past, the Internet is likely to reduce the costs associated with the sales, acquisition and servicing of insurance policies.
8. In general, regulators tend to believe that a sufficient regulatory framework already exists for most potential problems posed by insurance activities on the Internet. It is likely that the first few enforcement actions arising from Internet transactions will be closely monitored by regulators in all jurisdictions.
9. In some cases, jurisdictions have enacted other statutes or regulations that tend to limit the viability or efficiency of using the Internet as a distribution channel because the statutes or regulations introduce logistical or other barriers. Examples include statutes or regulations requiring an agent's "wet" signature on a document, a consumer's signature on a form at a specified time, or an insurer offering the lowest rate in effect among all affiliates to certain classes of insureds. In many cases, the intent of the statute to combat fraud or otherwise protect consumers may outweigh the possible benefits afforded by the Internet. In an Internet environment, some of these requirements introduce unnecessary inefficiencies, add costs to the process, or make the use of the Internet as a tool for distribution and servicing of insurance so difficult as to be nearly impossible without providing a corresponding benefit or

protection to the consumer. In other instances, the consumer protection achieved by the requirement may warrant its continued existence.

10. The Internet provides consumers with another means of access to state insurance departments which maintain a Web site to distribute consumer information.
11. The Internet offers regulators an opportunity to actively monitor market conduct. Regulators can access insurance company and agent Web sites to monitor advertising and marketing.
12. The Internet offers regulators and industry a much faster and economical means of communication through the use of e-mail.
13. Regulators and industry have expressed concerns regarding the enforceability or legality of using electronic or digital signatures in insurance transactions. Only twelve states have addressed this issue to date.
14. Many agent licensing requirements are currently not compatible with electronic commerce. Additionally, as further illustrated in Appendix A to the White Paper, existing regulatory guidance in many states is deficient in enabling industry to identify and distinguish licensable from non-licensable activities. This situation creates an unnecessary level of regulatory uncertainty for industry, which inhibits the legitimate use of the Internet.
15. Insurers or producers marketing directly to consumers over the Internet may desire to accept premium deposits or payments via credit card or other on-line payment options, which would require that consumers be willing to divulge their credit card information over the Internet. Concerns exist regarding restrictions or prohibitions on the use of credit card usage for payment of premiums and the security of the consumer's credit card information.
16. Insurance information transmitted over the Internet constitutes an advertisement that is regulated by state insurance laws. For example, marketing some life insurance products over the Internet involves a "presentation or depiction" that could be subject to the NAIC Life Insurance Illustration Model Regulation.
17. Some states now require that policy forms must be delivered to consumers in exactly the same format as those filed and approved with the state insurance department. This may present a problem to be addressed by and with regulators when considering the delivery of a policy electronically.

Recommendations

1. The NAIC should consider providing support to state regulators in the development of their Web sites to improve consumer education and access to regulatory information.
2. Regulators should develop a strong consumer education effort regarding methods of verifying the legitimacy of the source of an Internet insurance offer by developing a

consumer education product to inform consumers as to their rights and responsibilities in online insurance transactions.

3. The NAIC should develop a specific education program to assist state regulators in monitoring possible fraudulent activities in the sale of insurance.
4. State insurance department regulators should add a request for a Web site and e-mail address where they exist to all applications of licensure or certificates of authority. In addition, regulators should advise insurers and agents to contact the state insurance department whenever their first level domain name (URL address) or e-mail address changes in the future.
5. The White Paper contains Appendix D outlining the various state laws recently passed regarding electronic and digital signatures. Technology is available to assure a secure signature environment. States that have not addressed this issue through legislative or regulatory changes should carefully examine their own laws to determine if changes are necessary to permit the electronic or digital signature of an insurance application.
6. The NAIC Producer Information Network (PIN) Working Group is currently designing a standardized non-resident agent license application. States should examine what steps will need to be taken to permit agents to apply for a license electronically without the need to submit a physically signed and/or notarized application.
7. NAIC should form a new working group to examine the current agent licensing model laws and regulations. Appendix A of this White Paper contains additional suggestions regarding this issue and these should be examined and considered by the new working group.
8. NAIC or states should design and permit Internet consumer access to agent and insurer licensing information for the purpose of licensure verification.
9. NAIC should encourage all insurers to take advantage of the Producer Information Network (PIN) for the electronic appointment and termination of producers. Industry should assist by encouraging all states to participate in the Producer Data Base (PDB) so that the producer licensing infrastructure is in place to maximize the effectiveness and efficiencies of the producer licensing process.
10. NAIC should encourage states that require approval of insurer or agent advertising to permit industry to file these advertisements with the various state insurance departments electronically.
11. Regulators should examine and update their current laws and regulations regarding the use of credit cards and other forms of electronic premium payment. Many of the current laws and regulations should be updated so as not to impede growth of electronic commerce.
12. Insurers and producers should become familiar with security standards developed to protect electronic financial transactions on any type of network.

13. State regulators should examine their current rate/form filing laws and regulations and consider adoption of the following (or similar) language: *For all purposes under the [insurance code], except where otherwise specifically excluded or restricted, no form or policy otherwise permissible for use shall be deemed invalid or impermissible if such form or policy accurately reflects the intentions of the parties and such form or policy is published electronically or transmitted electronically between parties.*
14. NAIC should host and/or sponsor an Internet Insurance Marketing Summit in conjunction with the 1998 NAIC Summer National Meeting to facilitate further discussion on issues and potential transactional guidelines pertaining to conducting the business of insurance over the Internet.
15. Other segments of the financial services industry have voluntarily implemented Internet transaction standards. It has been suggested that the insurance industry study the development of Internet insurance transaction standards. It has also been suggested that any such standards could be maintained through a self-regulating Internet Transaction Clearinghouse.
16. Insurer's and producers should consider adding disclosure statements on their Web sites identifying their licensing status in each state.

Not for Reprint

APPENDIX A

Licensing

Regulatory jurisdiction over insurance-related activity is based on a number of factors including the location of the parties, the location of the risk, and the residence of the risk. Jurisdictional concepts are sometimes described as "transacting insurance" or "doing business." Internet e-mail communications or the existence of an Internet insurance web site create the potential for engaging in insurance transactions in almost any jurisdiction, regardless of the insurer's or producer's licensure in the jurisdiction where the consumer is located.

Accordingly, regulators and industry face the challenge of determining whether and when an regulated insurance transaction has occurred. For example, would an "interstate" Internet insurance transaction be deemed to occur in the state in which the consumer is located or, alternatively, in the state from which an e-mail message was transmitted from a producer to the consumer. Would it matter if the consumer originated the first e-mail communication to the producer? In that case, would the producer's "outbound" response (e.g., telephone or e-mail) to the consumer be treated as an extension of the consumer's initial "inbound " e-mail communication and, thus, be subject to regulation only in the jurisdiction where the producer is located?

Unfortunately, there is no single answer. Some states (e.g., those basing jurisdiction on a traditional "doing business" test) would take the position that the transaction occurs in the state where the consumer is located. Other states would likely take a contrary view where the consumer originated the activity.

The advent of Internet-based insurance operations may make the regulatory analysis more difficult. It will be very important for regulators to carefully evaluate the Internet activity in question. For example, transmitting an email is analogous to sending a letter, albeit much faster. On the other hand, a consumer "pulls" web pages to his or her personal computer; the web site operator is not "transmitting" the page to the consumer. Basically, some Internet activity is inherently passive and controlled by the consumer, while other activity is less passive. Not surprisingly, traditional standards for evaluating jurisdictional issues must be carefully examined and clarified, and cannot be blindly applied in an Internet environment.

One area that requires careful regulatory interpretation and application is agent licensing. Several activities occur in the course of an insurance transaction, e.g., advertising, solicitation, negotiation, underwriting and effectuation, policy maintenance and claims service. Certain aspects of these activities must be performed by a licensed agent, while other activities are administrative or clerical and may legitimately be performed by a unlicensed person (See Appendix B for a table summarizing regulatory guidance on this point from the states of Virginia, West Virginia and New Jersey). This table illustrates that the states are not entirely uniform in their views regarding what activity can only be conducted by a licensed person, as compared to what "clerical/administrative" activity can be conducted by an unlicensed person.

This situation is also complicated by differences among the states as evidenced by the results of the NAIC surveys (see Appendix C). For example, these surveys reflect that approximately 95% of the jurisdictions surveyed define the conduct that requires licensure, at least in part, using "operative words" such as solicitation, negotiation and effectuation. However, only about 30% of those jurisdictions defined these operative words. As a result, about 70% of the jurisdictions in the United States provide no or relatively limited guidance to industry regarding what activity may require licensure. Research indicates that even those states that do define the operative words often rely on their broad common meanings, which can be somewhat vague in their application to the Internet.

The NAIC surveys also illustrate a lack of consistency among the states regarding activities that constitute "solicitation." Approximately 25% (11/41) of the states surveyed considered that a person is "soliciting" if it has an "Internet Home Page on the World Wide Web that is assessable to consumers...offering general insurance information." This interpretation would suggest that an insurer or consumer education organization is violating the law of State Y by posting a buyers' guide on its site located in State X.

On the other hand, 80% of the states surveyed by the NAIC believe that a person must be licensed to "quote rates" for specific insurance products. Most insurers use software tools to generate quotes for their products. In the past, these tools have been available from software used by agents on their desktop computers. The Internet is different in that on-line quotes are being generated on a third party's, insurer's or agent's server and, at his or her election, "pulled" to the consumer's computer. The issue then becomes "who" is quoting the rate under prevailing state law? It would seem appropriate to determine that neither the software developer who wrote the quoting software code, the phone company that is transmitting the quote to the consumer's computer, nor the Internet site company whose computers are actually "generating" the quote are engaged in licensable activity. Instead, it would appear that regulatory analysis would focus on whether the party who is identified as making the quote available to the consumer is licensed.

The difficulties in interpreting and applying the producer licensing laws to Internet activity also create uncertainty for industry as it tries to structure appropriate compensation arrangements. Traditionally, an insurer compensated its agent by the payment of a single percentage "commission" for a bundle of services relating to the agent's marketing, solicitation, negotiation, effectuation and servicing of insurance. This bundle of services provided by the agent included both those activities that require licensure and those clerical or administrative activities that do not require licensure. State laws regulating the payment, receipt and sharing of commissions usually apply only to compensation paid for licensable "insurance agent" activities. The Internet's computer and communications technology more readily permit insurers and agents to "unbundle" licensable activities from the non-licensable administrative activities. Insurers, agents and service providers will need the freedom and flexibility to distinguish between the compensation of licensable and non-licensable activities in order to develop adequate compensation structures for their Internet-related business relationships.

In summary, the expansion of legitimate Internet insurance activity will require that regulators carefully avoid creating unnecessary obstacles for industry and try to eliminate regulatory disparities and uncertainty.

APPENDIX B

LICENSABLE AND NON-LICENSABLE CLERICAL ACTIVITIESⁱ

ACTIVITIES	<i>Licensable. “Agent” Actsⁱⁱ</i>	<i>Non- Licensable “Clerical” Actsⁱⁱⁱ</i>
<i>Marketing, Advertising^{iv} and Promotion</i>		
Conduct marketing research or prospecting (so long as no attempt is made to solicit or to discuss a specific insurance product or to encourage replacement of an existing policy)		X
Advertising and promotion of insurance generally (non-product specific)		X
Advertising and promotion of specific products		X
<i>Solicitation:^v</i>		
Dispense brochures, and other general information (so long as no conversation relating to the terms of a contract)		X
Disseminating buyer’s guides, applications for coverage, coverage selection forms or other similar forms in response to a request from prospective or current policyholders ^{vi} .		X
Receiving and recording information from a policyholder or prospective policyholder to give to an insurance producer for his or her response, or transmitting ^{vii} information to a policyholder under the supervision of an insurance producer.		X
Scheduling appointments with insurance producers to discuss insurance.		X
Disseminating information as to rates secured by reference to a published or printed list or computer data base of standard rates ^{viii}	Jurisdictions appear to be split on whether the provision of quotes constitutes licensable activity; e.g., WV indicates that quoting rates as general information does not require a license.	
<i>Negotiation:^{ix}</i>		
Communicating with the policyholder or prospective policyholder in order to obtain factual information necessary for an insurance producer to complete a review. ^x		X
Explain, discuss or interpret coverage, analyze exposures or policies, or give opinions or recommendations as to coverage	X	
Discuss the effect of age, health or other risk-related conditions of the prospective policyholder	X	
Counsel, urge or advise any prospective purchaser to buy a particular policy or to insure with a particular company.	X	
<i>Effectuation^{xi} of policy:</i>		

Receiving requests for coverage for transmittal to a licensed insurance producer or for processing through an automated system developed and maintained under the supervision of an insurer or licensed insurance producer.		X
Receiving and recording information from an applicant or policyholder and preparing an application for insurance pursuant to instructions from and for the review of an insurance producer.	Jurisdictions appear to be split on whether this activity requires a license; e.g., WV appears to require a license for this activity if it amounts to “recording information on an insurance application.”	
Obtain underwriting information from credit agencies, DMV, and other insurance agencies and companies		X
As an underwriter employed by an insurer or by a licensed insurance producer, upon receipt of an application submitted by a licensed producer, requesting and reviewing information relating to the audit of records or loss control on underwriting verifications and inspections, requesting and reviewing the results of a physical examination of a prospective insured named in a submitted application, requesting and reviewing information from persons other than the applicant, making a determination that the applicant meets the insurer’s underwriting criteria, and mailing the policy to the policyholder or the producer. ^{xii}		X
Indicate that requested coverage is or will be bound or issued	X	
Bind coverage (this includes accepting premium payments prior to the binding of coverage by a licensed agent)	X	
Receiving and recording information from an applicant or policyholder and preparing for an insurance producer’s review and signature all binders, certificates, endorsements, identification cards or policies pursuant to instructions from the insurance producer.		X
Receiving premiums at the recorded place of business where the payment is being made on a binder made on a binder, endorsement or existing policy.		X
Collect premiums in person at other than a recorded place of business	X	
Sign agent’s name to insurance documents	X	
Issue certificates of insurance, endorsements, binders, commitments, insurance policies or insurance identification cards	X	
<i>Post-Sale Maintenance and ongoing communications</i>		
Receiving and recording an insured’s request concerning any additions or deletions to an existing policy and preparing the appropriate endorsements or processing the appropriate changes through an automated system developed and maintained under the supervision of an insurer or licensed insurance producer and		X

notifying the insurance producer of the endorsements or changes. ^{xiii}		
Informing the insured as to his or her coverage as Indicated in policy records.		X
Receive telephone calls reporting additional or replacement items (vehicles, property, drivers) for policies currently in force		X
Opening mail, office filing and mailing billings.		X

ⁱ This table reflects a compilation of regulatory and statutory guidance from New Jersey, Virginia and West Virginia.

ⁱⁱ Most statutes defining “licensable activities” focus on the activities of “solicitation, negotiation and effectuation”, although different terms (such as procurement) are used from time to time. By way of illustration, New Jersey Admin Code Section 11:17A-1.4 “Solicitation, negotiation, effectuation of an insurance contract” provides as follows:

“(a) No person shall solicit, negotiate or effect an insurance contract in New Jersey unless he or she is a licensed insurance producer or a registered limited insurance representative.

(b) Solicitation, negotiation and effectuation of an insurance contract includes, but is not limited to, the following activities:

1. **Discussing the effect of age, health or other risk-related conditions of the prospective policyholder;**
2. Urging or advising any prospective purchaser to buy any particular policy or to insure with any particular company;
3. Initiating sales over the telephone or otherwise;
4. Competing or signing applications for insurance if the person is other than the applicant’s authorized representative;
5. Collecting premiums in person at other than a recorded place of business;
6. Making or proposing to make an insurance contract;
7. Disseminating information as to coverages in general or for any particular policy, except that this shall not prohibit the dissemination of buyer’s guides or applications for coverage in response to requests from prospective policyholders;
8. Disseminating information as to rates in general or for any particular policy where the rate cannot be secured by referring to a published or printed list of standard rates;
9. Initiating an inquiry as to the terms of existing coverage, except as described at N.J.A.C. 11:17A-1.5(a)5;
10. Discussing or describing the coverages or terms of a proposed contract of insurance with a prospective policyholder, including counseling as to which coverages to buy;
Example: If an insured or prospective insured requests advice in any communication with an unlicensed employee, the response must be made by a licensed producer.
11. Recommending or independently initiating additions or deletions to an insured’s policy;
12. Signing binders, endorsements and insurance policies;
13. Authorizing the issuance or delivery of certificates of insurance, endorsements, binders, or insurance policies or insurance identification cards; and
14. Responding to a policyholder’s request for advice or counsel regarding policy provisions or coverage.

Example: In the course of requesting an application form or a change to an existing policy, if a policyholder or prospective policyholder, while speaking to an unlicensed person, requests an opinion about the terms of the proposed insurance contract or the proposed change to the existing contract, the response must be made by a licensed producer.”

ⁱⁱⁱ **By contrast, an insurance agent’s license is not required to conduct the administrative and underwriting activities relating to the agent’s solicitation, negotiation and effectuation of an insurance contract, which is**

the vast majority of the overall package of services being performed by the agent and his/her staff. See the definition of “clerical duties” under NJ Admin Code 11:17A-1.2 “Definitions.”

^{iv} Generally, “advertising” is the calling of information to the attention of the public.

^v Generally, “solicitation” implies “approaching an individual with a request that he do a particular thing, such as apply for an insurance contract...If one is asking or suggesting to people that they apply for a particular kind of insurance or insurance from a particular company, and if the person doing the soliciting is doing so in relation to his or her particular job, that person is likely to fall within the definition of ‘soliciting.’” VA Admin Ltr 1997-1. West Virginia has stated that the term implies “an attempt to urge a particular individual to do some particular things; for example, to purchase an insurance contract.” WV Informational Ltr 74, October 1990.

^{vi} Example: An unlicensed person may receive a request for an application and respond by mailing or giving an application for insurance and other related literature. The unlicensed person may not, however, initiate the conversation. NJ Admin Code 11:17A-1.2

^{vii} NJ Admin Code 11:17A-1.2 “Definitions” defines “transmission” as “any form of mailing including, but not limited to, third class mail, certified mail, any overnight delivery or express delivery, hand delivery and any wire transmission including, but not limited to, facsimile transmission or computer modem.”

^{viii} Example: An unlicensed person may respond to a specific request for the cost of a specific coverage from a rate manual published in print or in an electronic format. However, an unlicensed person may not provide advice or suggestions concerning the benefits or drawbacks of a particular coverage, deductible, limit, etc., in the course of disseminating this information. NJ Admin Code 11:17A-1.2

^{ix} Generally, “negotiation” implies “the discussion and settling of terms and conditions of a business transaction, such as the terms, conditions, benefits amounts, and rates of an insurance contract...If one is discussing the potential purchase of insurance in other than the most general terms, one is likely to fall within the definition of ‘negotiating,’ if not the definition of ‘soliciting.’” VA Admin Ltr 1997-1. West Virginia has similarly stated that the term implies “the discussion and settling of terms and conditions of a business transaction, for example, the terms, conditions, benefit amounts and rates of an insurance contract.” WV Informational Ltr 74, October 1990. NJ Admin Code 11:17A-1.2 “Definitions” defines “negotiate” or “negotiation” as the “act of conferring directly with, or offering advice to, a prospective purchaser of a contract of insurance concerning any of the substantive benefits, terms of, proposed changes to, or the premium to be charged for, the contract, but does not include clerical duties carried out under the supervision and control of an insurer or licensed insurance producer, or procedures relating to loss control, inspection, or the processing, adjusting investigating or settling of a claim on an existing insurance contract.”

^x Example: An unlicensed person may call an applicant to request the submission of additional documents. NJ Admin Code 11:17A-1.2

^{xi} Generally, “effectuation” implies “putting insurance coverage in effect, such as ‘binding’ an insurance contract or issuing a binder or conditional receipt for an insurance application.” VA Admin Ltr 1997-1. West Virginia has stated that the term implies “the actual acquisition of an insurance contract.” WV Informational Ltr 74, October 1990. NJ Admin Code 11:17A-1.2 “Definitions” defines “effectuate” or “effectuation” as “the act of insuring or making operable and effective an insurance contract, including all binders and endorsements, but does not include clerical duties carried out under the supervision and control of an insurer or licensed insurance producer, or procedures relating to loss control, inspection, or the processing, adjusting, investigating or settling of a claim on an existing insurance contract.”

^{xii} Example: An unlicensed full-time salaried underwriter not compensated based on sales, receives a non-bound life insurance application from a licensed producer. The underwriter requests that the applicant take a physical examination. Pursuant to authorizations in the application, the underwriter requests medical records from the applicant's physicians. The underwriter reviews the application, results of the physical examination and the medical records, and decides to issue the life insurance policy applied for. The underwriter mails the policy with a printed explanatory brochure to the applicant. All of these activities are permissible activities for the unlicensed underwriter. NJ Admin Code 11:17A-1.2

^{xiii} Example: An unlicensed person may receive an process a request from an insured to delete an automobile on an existing policy and to add a replacement automobile, or may receive and process a request to delete physical damage coverage on a particular automobile, or receive and process a request for similar routine policy changes initiated by an insured. An unlicensed person may not, however, initiate a change by, for example, telephoning a life insurance policyholder and suggesting that the insured increase the face amount of the policy. NJ Admin Code 11:17A-1.2

APPENDIX C

Survey Responses

Internet Sales of Insurance Survey Questions

Please note that 48 states responded to the survey but that each state did not respond to every question on the survey.

1. Has your department received any complaints regarding Internet sales of insurance?

YES 10

NO 39

A. If yes, on what lines of business and for what reasons were the complaint filed?

Lines of business:

Life 4

Property and Casualty 1

Health 1

Annuities 1

Not specific 1

Reasons:

1 online service

1 advertising

Were, or are, your current statutes and rules adequate to deal with handling of these complaints?

YES 10

NO 11

2. Does your state have a definition of “solicitation” in your statutes or rules?

YES 16

NO 33

A. If yes, what is/are the Code Citation(s) for this definition?

A list was provided by respondents.

3. Would the existence of an Internet Home Page on the World Wide Web that is assessable to consumers in your state fall under your definition of "solicitation" if it:
- A. Offered general insurance information?
- YES 11 NO 30
- B. Offered policy specific information?
- YES 27 NO 16
- C. Quoted rates for specific insurance products?
- YES 34 NO 8
- D. Collected information about the consumer that was used by an producer to contact them directly?
- YES 23 NO 14
Maybe 1
- E. Collected information to provide a rate quote for a specific insurance product?
- YES 32 NO 8
Maybe 1
4. Does your state have a requirement that advertising must be reviewed or approved by the department?
- YES 13 NO 33
- A. If you do, do you foresee Internet advertising falling under the requirement?
- YES 17 NO 0
Uncertain 1

Note: Some states that responded in the negative to question #4 answered this portion of the question.

5. Do you currently monitor, on a formal or informal basis, Internet insurance sales activity?

YES 15

NO 31

- A. If so, how is this done, by whom, and how often?

HOW : Most states answered informally.

BY WHOM : Most states answered by department staff and legal staff.

HOW OFTEN : Most states answered as necessary, randomly, based on inquiry or complaint, weekly and via staff submitted inquiry to web pages.

6. Does your state currently recognize electronic signatures as viable on insurance applications, change forms and disclosure forms?

YES 14

NO 28

Uncertain 1

Does your state currently have, or have pending, any legislation to authorize a method of electronic signatures?

YES 4

NO 29

- A. If so, what is the Code Citation for this legislation?

A list was provided by respondents.

7. What do you feel are the three most important areas of concern involved with Internet sales of insurance?

Unlicensed/unauthorized companies and producers	42
Fraud	18
Misleading/deceptive advertising /marketing	14
Misrepresentation	9
Identifying and locating the producer and where product is sold	8
Consumer protection	6
Unauthorized Activity	6
Confidentiality/privacy	5
Computer signatures	4
Security	3
Disclosures	3
Customer awareness of what is being purchased	3

Non filed rates and forms	2
Marketing practices	2
Accuracy/content	2
Unapproved policy forms/education about policy forms	2
Adequate disclosure of information to applicants	2
Unapproved Products	2
Jurisdiction Issues	2
Service	1
Records of transaction in such a fluid medium	1
Inability to prosecute for unfair claims practices	1
Evidentiary matters	1
Computer signatures	1
Allocation of state resources to spend time policing the Internet	1
Over-regulation	1
Misuse of customer information	1
Poor communications	1
Avoidance of existing laws	1
Seller's access to buyer's finances	1
Difficult to determine the difference between internet sales and mail order	1

8. Does your state currently have statutes or regulations requiring disclosure of the geographic location of a company or agency doing business on the telephone, Internet or other media?

YES 6

NO 40

- A. If so, what is the Code Citation for this legislation?

A list was provided by respondents.

9. Does your department require disclosure regarding a company's lack of licensure to be disclosed in some manner in all forms of electronic advertising?

YES 12

NO 31

Commission Sharing Survey Questions

Please note that 48 states responded to the survey, but that each state did not respond to every question on the survey.

1. Does your state define by statute the activities which create the legal status of an insurance producer or producer?

YES 46

NO 3

2. In your producer licensing statutes, does the definition of an producer become activated by the words "to solicit", "to negotiate", or "to effectuate" the purchase of an insurance contract?

YES 47

NO 0

- A. If so, which operative words?

Solicit: 42

Negotiate: 35

Effectuate: 25

- B. Are there any other operative words in your statute?

Procure	14
Take application	10
Act or hold self as producer	9
Place for others	6
Transact	5
Transmit	4
Appointed by insurer	3
Deliver	3
Engaging in the business of insurance	3
Renew	2
Continue	2
Receive/collect premium or application	2
Engages in the business of or abstracting of insurance	2
Countersign	2
Bind policies or certificates	1
Examine or inspect risk	1
Advises	1
Other operative words mentioned:	1
Receive commissions	1
Producer	1

Services as insurer may authorize	1
Sell, aid in	1
Execute	1
Issue	1
Regular salaried officers	1
Employees of a licensed insurer	1

3. Are any of the operative words defined?

YES 14

NO 34

A. If so, what are the definitions?

Definitions provided for transact, solicit, procurement, doing business

4. Does your state have a statute which regulates the payment of commissions?

YES 40

NO 8

A. If yes, does your statute use a different definition of producer than described above (Question 1)?

YES 3

NO 33

5. Does your state interpret the commission sharing statute to include any person or entity which is not defined by the operative words referenced in question 2 in this section?

YES 16

NO 29

6. Does your state consider a person or entity which is a general producer or marketing organization to be within the definition of an producer if the general producer or marketing organization does not perform any of the operation events of an producer?

YES 26

NO 18

Uncertain or unclear regarding the question 4

7. Can a licensed producer and/or an insurer in your state pay all or part of a commission to a licensed producer of another state if the producer in the other state is not licensed in your state?

YES 7

NO 40

APPENDIX D

Citations of Digital Signature Statutes

ARIZONA

1996 Arizona Session Laws 213. Arizona enacted changes to Section 41-121 of Arizona Revised Statutes on April 18, 1996 to provide limited use of digital signatures. The amendment provides that the Secretary of State shall "approve for use by all other state agencies, and accept digital signatures for documents filed with the office of the Secretary of State" and gives the Secretary of State authority to adopt rules to achieve this purpose. "The term digital signatures" is not defined.

CALIFORNIA

California Government Code Section 16.5 (1995). On October 4, 1995, California enacted this statute which governs only electronic signatures affixed to communications with *public* entities. The Act provides that an electronic signature (called a "digital signature" in the statute), shall have the same force and effect as a manual signature if: (1) it is unique to the person using it; (2) it is capable of verification; (3) it is under the sole control of the person using it; (4) it is linked to data in such a manner that if the data are changed, the digital signature is invalidated; and (5) it conforms to regulations adopted by the Secretary of State.

Digital Signature Regulations. On May 23, 1997 the Secretary of State released California's proposed Digital Signature Regulations for comment. The proposed regulations provide for the following:

1. Digital signatures must be created by an acceptable technology, as specified in the regulations.
2. The criteria for determining if a digital signature technology is acceptable for use by public entities is set forth in the regulation (and essentially includes the five requirements set forth in the statute, plus a requirement that the technology must create digital signatures that are able to satisfy California's requirements for introducing writings into evidence).
3. The regulations provide that acceptable technologies are:
 - (a) Public key cryptography
 - (b) Signature dynamics
4. The regulations provide a procedure for adding new technologies to the list of acceptable technologies.

With respect to digital signatures, the regulations impose upon a person who holds a key pair a duty to exercise reasonable care to retain control of the private key and prevent its disclosure to any person not authorized to create the subscriber's digital signature. The regulation also establishes an approved list of certificate authorities authorized to issue certificates for digitally signed communications with public entities in California.

Finally, the regulations do not address liability concerns because the Secretary of State deemed that it did not have the authority to do so through California State regulations. It anticipates that some of the liability concerns can be addressed contractually with the service providers, but recognize that other issues need to be addressed by the legislature. Public hearings on the regulation were held on July 15, 1997. A final regulation has not yet been adopted.

FLORIDA

Electronic Signature Act of 1996. Enacted on April 18, 1996, the Electronic Signature Act of 1996 authorizes the use of electronic signatures for public and private communications. It authorizes the Secretary of State to be a certification authority to verify electronic signatures.

1996 Digital Signature Advisory Committee Report. On November 30, 1996, the Florida Digital Signature Advisory Committee issued its report titled Electronic Commerce in Florida: Report To The Joint Legislative Committee On Information Technology Resources, From The Florida Department of State. Their report concluded that while licensure of private certification authorities is likely to be necessary in the future, there is not an immediate demand for digital signature services, and as such, comprehensive legislation would be inappropriate. Instead, the report recommends that the legislature authorize the Secretary of State to establish a voluntary system of licensure and regulation for private certification authorities, at such future time when it is clear that such a program has become necessary. The features of this future program would include voluntary licensure, funding by licensees through licensing fees and audit charges, identification of standards and specific requirements for licensure, audit procedures to assure program compliance, insurance, reserve, or bonding requirements, and procedures for license revocation or suspension. The report also recommends that the Secretary of State be authorized to enter into reciprocity agreements with other jurisdictions to allow the fullest possible recognition of digital signatures executed in Florida.

The Report also recommends the creation of a special class of attorneys, who are authorized under Florida law with the Secretary of State's approval, to act as international attorney-notaries to authenticate and execute international transactions.

GEORGIA

Georgia Electronic Records and Signatures Act. This Act was enacted on April 22, 1997. It defines the term "electronic signature" using the same 5 requirements as the California legislation. It provides that any person "may, but shall not be required to" accept or agree to be bound by an electronic record executed or adopted with an electronic signature. It further provides that where a person agrees to be bound by an electronic record executed or adopted with an electronic signature, then applicable writing and signature requirements shall be deemed satisfied.

The legislation also expresses the General Assembly's desire to encourage state government agencies and private sector entities to conduct their business and transactions using electronic media, and to that end authorizes all state agencies to establish pilot projects to serve as models for the application of technology such as electronic signatures, and to provide a proof of concept for same. The statute also provides that "one such pilot project may involve digital signatures and the use of a public key infrastructure established by a service provider."

Finally, the legislation creates an Electronic Commerce Study Committee composed of twelve members to issue findings and recommendations for proposed legislation by 12/15/97.

1997 Georgia House Bill 487. This law was enacted on April 14, 1997. It amends the Georgia statutes relating to motor vehicles and traffic to authorize the use of digital signatures under certain circumstances. It grants the Commissioner the authority to authorize use of a digital signature as an alternative to a handwritten signature as long as appropriate security measures are implemented which assure security and verification of the digital signature process. The Act defines a digital signature as a digital or electronic method executed or adopted by a party with an intent to be bound or to authenticate a record, which is (1) unique to the person using it; (2) capable of verification; (3) under the sole control of the person using it; and (4) linked to the data in such a manner that if the data are changed, the digital signature is invalidated;

ILLINOIS

Commission on Electronic Commerce. In April, 1996, Illinois Attorney General Jim Ryan announced the formation of a Commission on Electronic Commerce and Crime, which is charged with the task of drafting digital signature legislation for Illinois. The Commission has been meeting since July, 1996, and is working on draft digital signature legislation to be introduced in the Illinois General Assembly in January 1998. Titled the "Illinois Electronic Commerce Security Act", it is designed to facilitate electronic commerce by: ensuring that electronic records and electronic signatures of all types meet the writing and signature requirements within the State of Illinois; designating a class of "secure" electronic records and "secure" electronic signatures that provide a heightened degree of legal protection; and specifying when digital signatures will qualify as "secure" signatures, as well the rules that govern the activities of the various parties to a digitally signed transaction.

INDIANA

Electronic Digital Signature Act. Enacted June 5, 1997, this bill applies only to transactions with the State, and provides that a digital signature on a document received by or filed with the state is effective if: it is unique to the person using it; it is capable of verification; it is under the sole control of the person using it; it is linked to data in such a manner that if the data are changed, the digital signature is invalidated; and it conforms to regulations adopted by the State Board of Accounts. It also provides that the State Board of Accounts is responsible for implementing and administering a method used by the state to conduct authenticated electronic transactions using digital signatures, and requires the State Board of Accounts to seek the advice of public and private entities in adopting administrative rules.

KANSAS

Kansas Digital Signature Act; 1997 Kansas House Bill 2059. The Kansas Digital Signature Act was enacted on May 15, 1997. The Act simply provides that a digital signature may be accepted as a substitute for, and, if accepted, shall have the same force and effect as any other form of signature. It defines a digital signature as a computer created electronic identifier that is intended by the party using it to have the force and effect of a signature; unique to the party using it; capable of verification; under the sole control of the party using it; and linked to data in such a manner that it is invalidated if the data is changed.

MINNESOTA

The Minnesota Electronic Authentication Act. This Act was enacted on May 19, 1997 and authorizes the use of digital signatures for all communications. It also provides for licensure of certification authorities, performance audits and investigations, requirements for and obligations of certification authorities, controls of private keys, suspension, revocation, and expiration of certificates, recommended reliance limits and liability, presumptions in adjudication of disputes, and standards for recognition of repositories. It authorizes the Secretary of State to issue rules governing licensing of certification authorities, financial responsibility, and recordkeeping requirements.

MISSISSIPPI

Digital Signature Act of 1997. On March 17, 1997, Mississippi enacted the Digital Signature Act of 1997. The legislation authorizes the Secretary of State to serve as the certification authority to verify the digital signature of any public entity in Mississippi and to license private certification authorities that possess proficiency in encryption technology, possess sufficient working capital, and maintain an office or registered producer in the state.

Under the Act, digital signatures "verified by a licensed certification authority" shall have the same force and effect as a written signature. The use of digital signatures is optional.

NEW HAMPSHIRE

New Hampshire Digital Signature Act. Enacted June 19, 1997. This Act is similar to the California digital signature law. It applies only to communications between the State and any

agency or instrumentality of the State, and provides that an electronic signature shall have the same force and effect as a manual signature if the signature is unique to the person using it; capable of verification; under the sole control of the person using it; inked to the data in such a manner that if the data is changed the signature is invalidated; and conforms to regulations adopted by -- the commissioner of administrative services.

NEW MEXICO

Electronic Authentication of Documents Act. On March 4, 1996, New Mexico enacted the Electronic Authentication of Documents Act. The act describes as its purpose to "provide a centralized, public, electronic registry for authenticating electronic documents by means of a public and private key system; promote commerce; and facilitate electronic information and document transactions. An "office of electronic documentation" is established under the secretary of the state to maintain a register of public keys. The Secretary of State is required to adopt regulations to accomplish the purposes of the act, and may contract with a private, public or quasi-public organization to provide services under the act. The act took effect July 1, 1996, and is codified at NMSA Sections 14-15-1 to 14-15-6.

OKLAHOMA

Electronic Signature Act. Enacted on April 15, 1997, this Act creates a task force on Electronic Signature Technology, and requires submission of a report to the House Science and Technology Committee by December 1, 1997.

OREGON

Electronic Signature Act. Enacted on July 15, 1997, this Act authorizes the use of electronic signatures and provides that they have the same force and effect as a written signature. It also authorizes the Department of Consumer and Business Services to issue certificates for the purpose of verifying digital signatures, and to take other actions necessary to achieve the purposes of the Act including the suspension or revocation of certificates issued by the Department of Consumer and Business Services. The Department of Consumer and Business Services is also authorized to register certification authorities to ensure the integrity of digital signatures.

RHODE ISLAND

Electronic Signatures and Records Act. This Act was Enacted on July 8, 1997, and authorizes the use of electronic signatures in written communications between state departments and/or public agencies.

TEXAS

Texas H.B. No. 984. Enacted on June 1, 1997, this bill amends the Business & Commerce Code to establish the equivalence of written and digital signatures and allows digital signatures to authenticate written electronic communications sent to state agencies, subject to compliance with rules adopted by the Comptroller, State Auditor, and the Attorney General. It uses the term "digital signature" to refer to an electronic identifier, created by a computer, intended by the party using it to have the same force and effect as the use of a manual signature. It provides that a written electronic communication sent from or received in the state of Texas is considered signed

if a digital signature is transmitted with the communication. However, a digital signature may be used on communications with State agencies only if it conforms to regulations adopted by the Department of Information Resources. The regulations are to consider factors that may affect the reliability of a digital signature including whether a digital signature is: unique to the person using it; capable of verification; under the sole control of the person using it; and transmitted in a manner that will invalidate the digital signature if data in the communication or digital signature is changed.

Texas S.B. 645. This bill was enacted on June 20, 1997. It authorizes the state comptroller to establish procedures for using a digital signature under certain conditions. It also provides that a digital signature has the same legal force and effect for all purposes as a manual signature for purposes of state agency transactions.

UTAH

The Utah Digital Signature Act, Utah Code Annotated & sect; & sect; 46-3-101 to -504 (1995) This legislation was the first to authorize commercial use of digital signatures. It governs the use of public-private key pair encryption and certification authorities and was designed to comport with various international and national standards that are already in place. Certification authorities are to be licensed by the Utah Department of Commerce. The legislation also protects the subscriber's private key as property, and therefore its theft or unauthorized use is subject to criminal and civil liability.

1996 Utah Senate Bill 188 This Bill was signed by the Governor on March 12, 1996. It is the first set of substantial amendments to the Utah Digital Signature Act. The Act is concerned with notarization and authentication. It, among other things: defines certain terms; outlines the role of the Division of Corporations and Commercial Code; provides certification requirements, procedures, and duties; provides for performance audits and investigations; outlines enforcement responsibilities; provides for warranties and obligations of certification authorities; specifies control of the private key; provides for suspension, revocation, and expiration of certificates:

gives recommended reliance limits and liability; provides for collection on suitable guaranty; specifies signature requirements and presumptions in adjudications; recognizes repositories and their liabilities; and provides exemptions to auditing requirements.

Utah's continuing to draft its administrative rules to implement its digital signature program. It has also recently selected a vendor to develop a repository and to provide digital signature software and certification authority services for the state. Utah anticipates that it will begin implementing certification authority licensing and start using digital signatures by fall of 1997.

VIRGINIA

Virginia Senate Bill No. 923. Enacted on April 19, 1997, this is a limited digital signature statute. It uses the term "digital signature" to refer to an electronic identifier, created by a computer, intended by the party using it to have the same force and effect as the use of a manual signature. It provides legal recognition for digital signatures; allows digital signatures to serve in place of notarized or acknowledged signatures when filing documents with executive agencies of the Commonwealth; and requires the Council on Information Management to promulgate regulations on or before September 1, 1998, on the use of digital signatures. (to be codified as chap. 39, Section 59.1-467 et seq. Virginia Statutes)

1997 Virginia House Bill 2138. Approved on April 2, 1997, this bill established the Joint Commission on Technology and Science (JCOTS). The new Commission is, in addition to its many other duties, responsible for studying and promoting all aspects of technology and science in the Commonwealth (including digital signatures, cryptography, etc.). The bill amended the Code of Virginia by adding into Title 30 a chapter numbered 11 consisting of sections numbered 30-85 through 30-88.

WASHINGTON

Digital Signature Act. This Act was enacted on March 29, 1996. It creates the Washington Digital Signature Act. It declares an intent to facilitate commerce by means of reliable electronic messages, to minimize the incidence of forged digital signatures and fraud in electronic commerce, to implement legally the general import of relevant standards, and to establish in coordination with multiple states uniform rules regarding the authentication and reliability of electronic messages. The Act is modeled after the Utah statute.

1997 Washington Senate Bill 5308. This bill was approved signed by the governor on April 15, 1997. It amends existing digital signature law to provide that the Secretary of State is a certification authority, and that certificates issued by the Secretary have the same effect as a certificate issued by a licensed certification authority. It grants the Secretary discretionary authority to adopt rules to govern certification authorities, and repositories, suspension and revocation of licenses, record keeping, etc. It also makes a number of other minor changes and corrections to the Washington Digital Signature Act.

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APPENDIX E

Glossary of Internet Terms

Anonymous FTP—A function that enables computer files to be shared among members of the Internet community without requiring the person who is making the request to download a file from a remote computer to identify him or herself to the owner of the remote computer system.

ARPAnet—The network developed and funded by the Department of Defense that was the predecessor to today's Internet.

Bandwidth—The transmission capacity of the lines that carry the Internet's electronic traffic.

Bookmark—A favorite site on the Internet. Gopher software and text-only and graphical WWW browser software provide the ability to create pre-set connections to Internet sites that a user wishes to access frequently. Also known as “favorite places”.

Browser — A software program used to access or view material prepared for the WORLD WIDE WEB (WWW) by "pointing" at information located on a Web server. Examples of older browsers include Lynx (text-only), and Mosaic (graphical). Netscape Navigator and Microsoft Internet Explorer are the two dominate browsers today.

Client/server—Computer technology that separates computers and their users into two categories: clients or servers. When you want information from a computer on the Internet, you are a client. The computer that delivers the information is the server. Servers both store information and makes it available to any authorized client who requests the information. Web sites are typically stored on Web Servers.

Dial-in—An Internet account that can connect any stand-alone computer directly to the Internet. The computer connects with the ISP and establishes a TCP/IP link to the Internet that enables your software to access Internet information. The computer that accesses a dial-in connection needs either a modem to connect via a regular phone line or a terminal adapter (TA) to connect via an ISDN phone line.

Domain Name—Unique address identifying each site on the Internet, usually of two or more segments separated by full stops, and is plain language such as www.naic.org.

Domain Name Server—Computers connected to the Internet whose job it is to keep track of the IP Addresses and Domain Names of other machines. They take the Domain Name and convert it to the corresponding numeric IP Address. For example the much easier to remember NAIC domain name www.naic.org is actually IP address 204.71.111.10.

E-mail—(Electronic mail)—Messages transmitted over the Internet from user to user. E-mail can contain text, but also can carry with it files of any type as attachments.

FAQs (Frequently Asked Questions)–Files that commonly are maintained at Internet sites to answer frequently asked questions so that site managers don't have to repeatedly answer the same questions.

Firewall–A combination of hardware and software that protects a local area network (LAN) or Web Server from Internet hackers. It separates the network into two or more parts and restricts outsiders to the area "outside" the firewall, or to read-only access to the Web Server. Private or sensitive information is usually kept "inside" the firewall.

FTP (File Transfer Protocol)–The basic Internet function that enables files to be transferred between computers. You can use it to download files from a remote, host computer, as well as to upload files from your computer to a remote, host computer. (See Anonymous FTP).

GIF (Graphics Interchange Format)–A graphics file format that is commonly used on the Internet to provide graphics images in Web pages.

Gopher–A searching tool that was the primary tool for finding Internet resources before the World Wide Web became popular. Gopher still exists, but is often today accessed by the World Wide Web.

Home Page–On the World Wide Web, this is the main navigation page owned by a company, organization, university, individual, etc, from which hyperlinks are made to other pages on the site (or other sites).

Host–A computer that "hosts" outside computer users by providing files, services or sharing its resources.

HTML (Hypertext Markup Language)–The basic language that is used to build hypertext documents on the World Wide Web. It is used in basic, plain ASCII-text documents, but when those documents are interpreted (called rendering) by a Web Browser, the document can display formatted text, color, a variety of fonts, graphic images, special effects, and hypertext jumps to other Internet locations and information forms.

HTTP (Hypertext Transfer Protocol)–The protocol (rules) computers use to transfer hypertext documents.

Hypertext–Text in a document that contains a hidden link to other text or locations. You can click a mouse on a hypertext word and it will take you to the text or location designated in the link. Also known as hyperlinks.

Internet Service Provider (ISP) – A company dedicated to providing businesses or home users access to the Internet, usually for a fee.

IP (Internet Protocol)–The rules that provide basic Internet functions. (See TCP/IP).

IP Number—An Internet address that is a unique number consisting of 4 parts separated by dots, sometimes called a "dotted quad." (For example: 198.204.112.1). Every Internet computer has an IP number and most computers also have one or more Domain Names that are plain language substitutes for the dotted quad.

JPEG (Joint Photographic Experts Group) —The name of the committee that designed the photographic image-compression standard. JPEG is optimized for compressing full-color or gray-scale photographic-type, digital images. It doesn't work well on drawn images such as line drawings, and it does not handle black-and-white images or video images.

Leased line—A leased phone line that provides a full-time, dedicated, direct connection to the Internet.

Listserv—An Internet application that automatically "serves" mailing lists by sending electronic newsletters to a stored database of Internet user addresses. Users can handle their own subscribe/unsubscribe actions without requiring anyone at the server location to personally handle the transaction.

Modem—An electronic device that lets computers communicate electronically. The name is derived from "modulator-demodulator" because of their function in processing data over analog phone lines.

Search Engines -A Search Engine provides a means for finding information within the Internet and the WWW. It is usually a site that indexes relevant descriptions of all the sites within the WWW. Search for the information is achieved by visiting search engine sites and typing a description of the desired item. The search engine then scans through its index, matching the query with its data and presenting the result and the address of the information. Some of the more well-known search engines are Yahoo, AltaVista, Lycos, Webcrawler, HotBot, Excite and Infoseek.

SLIP/PPP (Serial Line Internet Protocol/Point-to-Point Protocol)—The basic rules that enable PCS to connect, usually by dial-up modem, directly to other computers that provide Internet services.

SMTP (Simple Mail Transfer Protocol)—The basic programming language behind the Internet's e-mail functions.

Spam—Applied originally to commercial messages posted across a large number of Internet Newsgroups, especially when the ad contained nothing of specific interest to the posted Newsgroup. Now applied to unwanted e-mail as well.

T1—An Internet backbone line that carries up to 1.544 million bits per second (1.544 Mbps).

T3—An Internet line that carries up to 45 million bits per second (45 Mbps).

TCP/IP (Transmission Control Protocol/Internet Protocol) –The basic programming foundation that carries computer messages around the globe via the Internet.

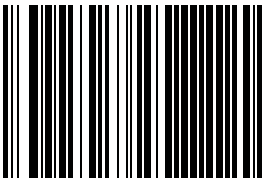
Telnet–An Internet protocol that let you connect your microcomputer as a remote workstation to a host computer anywhere in the world and to use that computer as if you were logged on locally. You often have the ability to use all of the software and capability on the host computer, even if it's a huge mainframe.

URL–(Uniform Resource Locator)–Similar to having the phone number of a place you wish to call. URLs work with your Internet software applications to locate an Internet site, and when rendered into a domain name make it easy to remember a location.

World Wide Web (WWW)–WWW is an acronym for WORLD WIDE WEB; and is a global, interactive, cross-platform hypermedia data system that runs over the Internet. It is also referred to as the "Web" It is an Internet client-server distributed information and retrieval system based upon the hypertext transfer protocol (http) that transfers hypertext documents across a varied array of computer systems. The Web was created by the CERN High-Energy Physics Laboratories in Geneva, Switzerland in 1991.

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