INTRODUCTION

America's movement to a digital network infrastructure may be threatened by the unavailability of high speed network channels to some sources of information. One reason for this unavailability is fear by network intermediaries that they may face legal liability for carrying harmful messages. The effects of this unwillingness could be ameliorated by requiring networks to provide equal access to all sources, but changing the law in such a manner would raise First Amendment questions.

Public policy goals for information exchange in American society historically have been pursued by a combination of market forces and legal regulation. When the marketplace is thought adequately to protect legitimate values, American society is generally content not to intervene with laws; however, as the marketplace changes, legal concepts must adapt. Shifting from older technologies to electronic mail and electronic publishing technologies changes market structures dramatically. Therefore, it is appropriate to consider how traditional concepts of regulation should evolve as market structures change.

New information technologies permit separation of information and its value-added features from physical formats, making it possible for multiple suppliers to add different types of value to what ultimately becomes a single information product. The people or organizations who create the information content are different from those who organize it to facilitate electronic retrieval, who are in turn different from those who market it. All of those people are different from those who permit dial-up access through an ordinary telephone line. This disaggregation of supply means vertically related stages in the production process that used to be organized through internal firm hierarchy now must be organized through the market and the legal system. The legal system is
struggling to adapt traditional doctrines\(^2\) to new market structures and technologies of information production and distribution. Much First Amendment, common carrier,\(^3\) and tort liability law originated when suppliers of the end products were also the originators of content. Because this is not true in an electronic environment, the assumptions on which the traditional legal doctrines are based may no longer apply.

The growth of digital networks as media for exchanging information has raised three concerns: (1) Under what circumstances is a network provider liable for defamation, invasion of privacy, or other torts\(^4\) because of the content of the information exchanged or stored on its network? (2) What rights do network users—both suppliers and consumers of information—have to nondiscriminatory access to networks? (3) What immunities from tort and equal access obligations do the First Amendment provide?

The traditional answers to all three questions depend largely on the degree to which a network exercises control over content. A network that consistently abstains from reviewing content supplied by its users and that does not supply its own content is less likely to be liable for tortious injuries caused by the content of messages passing through or stored on its network. Similarly, a network abstaining from content control is more likely to be a common carrier, with legally enforceable obligations to afford nondiscriminatory access to its services, except where discrimination can be justified. In other words, a network wishing to minimize its exposure to tort liability can do so by holding itself out as a common carrier.

Under accepted legal theory, a network services provider can choose whether it wishes to be a conduit, with tort immunity and equal access obligations, or a publisher, with First Amendment editorial control

\(^2\) Contract law adapts reasonably well to new technologies and market structures. Noncontractual obligations imposed to serve the public interest, to promote competition, and to ensure the opportunity for free expression are more difficult to adapt, because they involve shaping legal principles to serve fundamental public policy goals.

\(^3\) Framing the analysis in terms of common carrier obligations does not prejudge whether information value suppliers should have equal access obligations; nor does it prejudge, if such obligations exist, whether they should be imposed by common law or by statute and enforced by the regular courts or by a specialized administrative agency. Common carrier concepts pervade the law that is already applicable to many suppliers of information value. Tort and First Amendment concerns cannot be considered fully without relating them to common carrier concepts. To avoid implying preferences about the particular mode of equal access regulation, this Article uses the term "equal access" rather than "common carrier" wherever practicable.

\(^4\) A tort is a legal wrong entitling the victim to recover civil damages from the wrongdoer. Familiar torts include defamation (slander and libel), invasion of privacy, fraudulent misrepresentation, negligence, battery, assault, and false imprisonment.
rights. This choice can be manifested by an election announced generally to the world. If the network holds itself out as a common carrier, it is treated as a conduit and does not have First Amendment rights of its own. If it asserts publisher status, it has First Amendment rights, but no protection from defamation or other tort liability. These conclusions are far from certain because there is little case law on the subjects. In the absence of statutory answers, the common law is where a court presented with a controversy may find rules to apply.\(^5\)

Whether changes in the law are appropriate depends on the answer to a threshold question: Is legal intervention appropriate to ensure equal access? The answer to this question depends primarily on the technologies involved in two rather different uses: two-party electronic mail ("EMail") and electronic publishing. These technologies blur at their margins, and, with the advent of networks that handle information at varying levels of abstraction, sometimes become indistinguishable. The legal problems also depend on market structures because these structures affect the ability of market forces to be effective regulatory alternatives to legal intervention. Finally, the feasibility of policy alternatives depends on a political calculus.

A. Genesis

Discussions about the future of the Internet, and the potential for a National Research and Education Network, focus attention on the respective roles of high-speed backbone networks, mid-level networks, and specialized networks, or other electronic service providers to end users. Mitchell Kapor, developer of Lotus 1-2-3 and founder of the Electronic Frontier Foundation, has provided leadership by raising questions about the characteristics of this new electronic information marketplace. Kapor has offered several working propositions: First, consumer-oriented value will need to be added by those in the information distribution chain closest to the consumer. This point in the distribution chain can be called retailing for convenience in discussion. Second, retailers cannot reach substantial markets without access to mid-level networks and the backbones. Third, technology trends result

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\(^5\) The evolution of common carrier common law doctrine was largely arrested by the period of comprehensive economic regulation of transportation and communications from 1889 to the mid-1970s. Nevertheless, common carrier obligations during the period of comprehensive regulation were interpreted by reference to common law doctrines. There is some authority for the proposition that common law now replaces administrative regulation where carriers have been deregulated.
in low barriers to entry at the retail level, ensuring a reasonable diversity in technological approaches and points of view. Fourth, mid-level networks and backbones may be unwilling to let diverse retailers use their network facilities if they are exposed to civil and criminal liability for the content of the traffic generated by such retailers. Fifth, economies of scale are such that market competition is not likely to provide ready substitutes to a mid-level network or backbone that refuses to carry a particular type of traffic.  

B. Value-Added Framework

New technologies permit disaggregation of value-adding services and splinter entities formerly subject to legal regulation. The dimensions of new information technologies can be explored more carefully by considering ten discrete characteristics or attributes of information products, or "types of value." These types of value can be unbundled and assembled by various agents through high-speed digital networks or CDROMs for eventual presentation to the end user. Vertically integrated publishing, adding all ten types of value, may be less desirable as consumer preferences shift toward electronic formats and away from paper ones.

The value-added analytical framework posits that information products are bundles of ten types of value added through creation, organizing, retrieval-and-assembly, and marketing processes:

<table>
<thead>
<tr>
<th>Process</th>
<th>Type of Value</th>
<th>Print Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating</td>
<td>1. authorship</td>
<td>Content generated by original author</td>
</tr>
<tr>
<td>Organizing</td>
<td>2. chunking-and-tagging</td>
<td>Organization boundaries: sections, paragraphs, pagination, chapter boundaries; headings and titles, running headers and footers, page numbers</td>
</tr>
<tr>
<td></td>
<td>3. internal pointers</td>
<td>Tables of contents, indices</td>
</tr>
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A modern print publisher is a broker or assembler of all of the types of value. The publisher arranges with an author to supply authorship value and has designers and copy editors on staff or under contract to supply chunking-and-tagging value. Authors also supply substantial chunking-and-tagging value, typically determining the boundaries of paragraph, section, and chapter chunks. Publishers supervise extractors, who prepare internal pointers value in the form of tables of contents and indices, arrange with the Library of Congress for the cataloging-in-publication information and with *Books in Print* and reviewers for external pointers value, contract with printers and binders to supply duplication and presentation value, work with advertising agencies for promotion value, and handle distribution and billing value through warehousing and order fulfillment. Publishers traditionally also play an important quality control function, not only by editing and checking for clarity and accuracy, but also by selecting material, deciding which authors communicate effectively, and deciding which authors or concepts of information packaging are sufficiently authoritative to be useful to user communities.

Chunking-and-tagging value, internal pointers value, and external pointers value increase utility to consumers because they reduce the cost of manual browsing, searching, and retrieving. With print technologies, chunking-and-tagging value involves all basic typographic design features. Scanning a newspaper is easy because the material has considerable chunking-and-tagging value. It is easy because newspapers with state-of-the-art design features have indices (internal pointers value), which point to particular pages and story headlines (chunking-and-
tagging value). Researchers make use of external pointers value when they consult the *Index to the New York Times* or the *Readers’ Guide to Periodical Literature*. These resources also have pointers to human-processible tags and chunks, such as call numbers, page numbers, and article titles.

Information products are bundles of these different value types. For example, a typical book is a bundle of authorship value (in the raw text), chunking-and-tagging value (in the structure of the articles, sections, pages, and paragraphs), internal pointers value (in the tables of contents and indices), and presentation value (in the bound and printed text).

The ten-type value-added framework also accommodates EMail and electronic publishing. Legislatures, courts, administrative agencies, newspapers, and other print publishers are the primary providers of authorship value in electronic publishing. Electronic database services—sometimes several, linked through gateways—supply chunking-and-tagging value. Other electronic gateways may supply external pointers value to provide a single point of access to multiple databases. Value-added communications networks supply duplication and distribution value. Local exchange telephone carriers supply other distribution value. Electronic database services, electronic gateways, and value-added networks all supply promotion, billing, and integrity assurance value. EMail technologies organize the supply of value differently, with more emphasis on the supply of distribution value and less emphasis on the supply of the chunking-and-tagging, external pointers, and promotion and integrity assurance values.

While it may not be possible to postulate a single electronic equivalent of a book, it is possible to identify competing ways of supplying the major types of values and the market structures likely to be relevant to legal regulation.

**C. Scope and Organization of This Article**

This Article begins by articulating policy goals. It then proceeds to probe in some detail three major analytical components: equal access and its corollary, common carrier status; tort liability principles, with defamation liability as the model to which other types of tort liability may be compared; and First Amendment principles. Superficially, First Amendment principles may seem most important. This impression is

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7. The original material was chunked and tagged for print-on-paper formats. Usually, an electronic database vendor removes much of that chunking and tagging and substitutes chunking and tagging more appropriate for the electronic formats.
incorrect, for the First Amendment is a limitation on legal obligations, rather than a source. The First Amendment only affects specific types of obligation that may be imposed through tort liability or equal-access obligations. Thus, it makes sense to explore those sources of obligation before considering First Amendment immunities.

The last Section of the Article develops policy recommendations. It identifies interrelationships among the three conceptual categories and articulates principles for the future. Then, it applies the principles in light of present and future market structures. It explores the advantages and disadvantages of common law evolution, as opposed to statutory or administrative prescription of the principles. It concludes with specific recommendations for action by institutions. It argues that the time is not appropriate for a comprehensive codification of access, tort liability, and First Amendment principles. Rather, it states that common law courts should deal with actual controversies as they arise, imposing liability only when plaintiffs establish defined criteria. The FCC and other policy bodies should invite comments and reports of denials of access. Consideration should be given to establishing a voluntary system for providing electronic notice of equal access policies by network intermediaries.

This Article focuses on the handling of textual information by electronic networks, rather than the handling of activities associated with images and sound. However, the technology of radio and television broadcasting is rapidly converging with the technology of text messaging. Multimedia products on personal computers will likely stimulate demand for present text network services to accommodate digitized audio and video information. Accordingly, it is artificial to separate radio and television broadcasting and cable networks from other kinds of electronic networks. When appropriate, this Article addresses extension of these concepts to video broadcasting and cable networks.

I. POLICY GOALS

Any legal framework for resolving the conflicting interests should serve the following three goals: (1) There should be a diversity of information products and services in a competitive marketplace; this means that suppliers must have reasonable autonomy in designing their products; (2) users and organizers of information content should not be foreclosed from access to markets or audiences; and (3) persons suffering legal injury because of information content should be able to obtain compensation from someone if they can prove traditional levels of fault.

The first goal, diversity, reflects values derived from both capitalism and political democracy. Allowing diverse political views is at the heart
of democracy, while allowing the market, rather than the government, to determine product characteristics, including the characteristics of information products and the terms on which suppliers and consumers of such products trade, is at the center of competitive market assumptions. A diversity of information products will not exist unless suppliers have reasonable autonomy in designing their products. Suppliers must be able to define the nature of their information services. For example, a supplier of an EMail service, not defined or promoted as offering electronic publishing, public bulletin board, or other "one-to-many" services, should not have a duty to allow mass mailings on its service.

The second goal, access, reflects concern that users and organizers of information content should not be foreclosed from access to market or audiences. The autonomy implicit in the first goal could lead to denial of access to some information providers. This means that legally enforceable duties may be necessary to prevent information bottlenecks. In non-bottleneck situations, competition may sufficiently support this goal. However, a market structure in which there are many suppliers of essential services, all of whom deny access to certain users or content organizers, would warrant some legal remedy.

The third goal, compensation, reflects a belief that persons suffering legal injury because of information content should be able to obtain compensation from someone if they can prove traditional levels of fault. The law allocates responsibility for traditional types of harm flowing from information content such as invasion of privacy, defamation, and copyright infringement. These allocations should work so that there is a potential defendant in every case where legal injury and requisite fault are present. This goal is intended to ensure that the potential defendant with ultimate responsibility has sufficiently "deep pockets" to provide meaningful relief.

This third goal maps fairly neatly onto the tort liability branch of law, although there are important tensions between it and the first two goals. The first goal, diversity, maps fairly neatly onto First Amendment considerations, but has been limited by common carrier and tort liability doctrines necessary to ensure fulfillment of the second and third goals. Among the goals, conflict is most acute in the context of electronic publishing and least acute in the context of two-party EMail, because two-party EMail poses less risk of harm to third parties. Thus, it is appropriate to deemphasize tort liability concerns. The equal-access goal is easier to satisfy because of the possibility of ad hoc arrangements directly between sender and addressee as a market-based default possibility.

The goal conflict is greater in electronic publishing. Publishing aims at larger audiences, thus increasing the potential harm to third-party
interests. Reaching larger audiences entails a greater need for appropriate means of communicating with those audiences. This need raises the possibility of conflict. The desires of information originators for access to means of communication controlled by others may conflict with the First Amendment rights of the author, the conduit controller, or the consumer.

II. UNIVERSAL ACCESS

Universal access can be ensured by market forces, by common-law or statutory common carrier duties, or through application of the antitrust laws. Each is considered in the subsections that follow; the final subsection applies the legal concepts examined to the new digital infrastructure technologies.

A. Common Law Approaches

Policies promoting equal access to services, products, or facilities perceived as essential are not new. The duty to provide equal access is not placed on all businesses, but only those which sufficiently affect the public interest to warrant judicial involvement. At common law, common carriers were subject to legal duties even if they were privately owned and operated. These duties reduced the business’s power to deal with whomever it chose for whatever price it could demand.

1. Common Carrier Duties

Once a business was classified as a common carrier, it was required to serve all who applied. The carrier was liable for any refusal or failure to do so in a mandamus action or an action for trespass. A mandamus action could be brought to compel the business to serve the applicant as

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8. See Cook v. Chicago, R. I. & P. Ry., 46 N.W. 1080, 1082 (Iowa 1890) (arguing public or common carriers bound to accept and carry all upon being paid reasonable compensation); McDuffee v. Portland & R. R.R., 52 N.H. 430, 448 (1873) (legally binding common carriers to accept and carry for all upon payment of reasonable compensation); but see Bennett v. Dutton, 10 N.H. 481, 486 (1839) (innkeepers and stagecoach owners may refuse service based on character, condition, or purpose of applicant).

required by its obligation. The trespass action was available for damages caused by the failure to serve.

The carrier was also required to provide service on reasonable terms. This included reasonable prices and reasonable regulations for use. Reasonableness was determined on a case-by-case basis.

Later, the common-carrier reasonableness standard was enlarged to prohibit discrimination among customers. As described in McDuffee v. Portland & Rock R.R., "A service or price that would otherwise be reasonable may be made unreasonable by an unreasonable discrimination because such discrimination is a violation of the common right."

There were two branches of authority regarding whether discrimination was actionable in and of itself. The first is exemplified by the Ohio Court in Scofield v. Railway Co. This branch emphasized that at common law,

"[i]t was one of the primary obligations of the common carrier to receive and carry all goods offered for transportation, upon receiving reasonable hire .... Thus, in the very foundation and substance of the business there was inherent a rule which excluded a preference of one consigner of goods over another. The duty to receive and carry was due to every member of the community, and in an equal measure to each .... Recognizing this as settled doctrine, I am not able to see how it can be admissible for a common carrier to demand a different hire from various persons, for an identical kind of service under identical conditions."


11. See Weymouth v. Penobscot Log Driving Co., 71 Me. 29 (1880) (action on the case for damages caused by failure to perform).

12. See Cook, 46 N.W. at 1082; see Shepard v. Milwaukee Gas Light Co., 6 Wis. 539, 547 (1858).

13. See Cook, 46 N.W. at 1082.

14. See Shepard, 6 Wis. at 539, 540.


17. 3 N.E. 907 (Ohio 1885).

18. Id. at 919 (quoting Messenger v. Pennsylvania Ry. 36 N.J. L. 407, 410 (1873); see also Cook, 46 N.W. at 1082 (citing treatises stating rights of service are meaningless if the companies can discriminate); New England Express Co. v. Maine Cent. R.R., 55 Me. 188, 196 (1869) (Very definition excludes idea of unequal preferences); Western Union v. Call
The court went on to state that if the railroads were allowed to discriminate they would in effect become kingmakers by favoring one or more of the various competitors. This was against public policy because it would establish monopolies.\textsuperscript{19}

The second branch of authority was exemplified by\textit{Cowden v. Pacific Coast S.S. Co.}\textsuperscript{20} and\textit{Johnson v. Pensacola.}\textsuperscript{21} These cases followed the maxim stated by an English judge that "charging another person too little is not charging you too much."\textsuperscript{22} Under this line of cases, a plaintiff was required affirmatively to plead and prove that the defendant's prices were unreasonable. Proof of discrimination could only be offered to show that plaintiff's payment was unreasonable, but it was not determinative.\textsuperscript{23}

The\textit{Scofield} court attempted to reconcile these theories while stating that to the extent that reconciliation was impossible, the\textit{Cowden} view was contrary to the clear weight of authority:\textsuperscript{24}

\begin{quote}
[W]here no other reason intervenes to engrat an exception on the rule, all the consignor can demand of the common carrier is, that his goods shall be carried at a reasonable rate, not necessarily at an equal rate with all others. But when the reduced rate is either intended to, or has the natural tendency to injure the plaintiff in his business and destroy his trade, then a necessary exception is engrat on the more general rule . . .
\end{quote}

"In other words, if the charge on the goods of the party complaining is reasonable, and such as the company would be required to adhere to, as to all persons in like condition, it may, nevertheless, lower the charge of another person, if it be to the advantage of the company, not inconsistent with the

\begin{footnotes}
\item[19] See\textit{Scofield}, 3 N.E. at 918; \textit{New England Express}, 55 Me. at 194.
\item[20] 29 P. 873 (1892).
\item[21] 16 Fla. 623 (1878).
\item[22] See\textit{Scofield}, 3 N.E. at 928.
\item[23] See\textit{Johnson}, 16 Fla. at 667 (Discrimination may be a matter of evidence in determining whether a charge is too much or too little for the service but the difference between charges cannot be the measure of damages unless it is established that the smaller charge is the true and reasonable charge.); \textit{Cowden}, 29 P. at 875 (Though discrimination is evidence to show unreasonableness, it is no more than evidence tending that way.).
\item[24] See\textit{Scofield}, 3 N.E. at 918.
\end{footnotes}
public interest, and based on a sufficient reason."^25

Under the Scofield rule, after discrimination had been shown, three factors were weighed: corporate interest, public interest, and justification. This rule effectively shifted the burden of proof from the plaintiff to the defendant to demonstrate the reasonableness of the rate and the soundness of the purpose of the discrimination. Some reasons found to be acceptable have been differences in service,^26 charity,^27 desire to develop distant business,^28 and volume discounts.^29

The duty to serve reasonably was enforced by actions for mandamus, for damages in trespass, or for unjust enrichment in assumpsit. The trespass action could be maintained for expenditures necessitated by excessive pricing. The damages would be the difference between the reasonable rate and the price that had to be paid for replacement service.\(^3^0\) The more common action was in assumpsit. The cause of action was based on the difference between the reasonable price and the amount paid to the defendant.\(^3^1\)

It is difficult to draw a line between complete denial of access to facilities and discrimination in price or other services. If, for example, one says that only complete denial of access is justiciable, one then makes it possible for a supplier effectively to deny access by charging an outrageous price. In order to guard against this practice, regulatory bodies may exercise control over a range of prices in the guise of preventing denial of access. Thus, limited equal access obligations tend to disintegrate over time into detailed price regulation accompanied by detailed accounting and reporting requirements. Price regulation usually involves cross-subsidies to serve policy goals that cannot be supported without market entry and exit regulation. Thus, the full panoply of ICC- and FCC-type economic regulation may be the end result of any equal access regulation. On the other hand, it took approximately a century for limited common-law common carrier regulation to evolve into ICC- and

^25 Id. at 928–29 (source of quote unclear).
^27 See McDuffee v. Portland & R. R.R., 52 N.H. 430, 453 (1873). (citing authority) ("If apparent discrimination turns out ... to be private charity, there is an end of the case") (dictum).
^28 See Scofield, 3 N.E. at 629.
^29 See Cook v. Chicago R. I. P. Ry., 46 N.W. 1080, 1082 (1890); cf. Scofield, 3 N.E. at 923 (recognizing authority permitting discrimination based on volume shipped, but declining to apply it).
^30 See Johnson v. Pensacola, 16 Fla. 623, 667 (1878); Western Union, 62 N.W. at 513.
^31 See Cook, 46 N.W. at 1080 (difference was unjust enrichment); Western Union, 62 N.W. at 513.
FCC-type regulation, and the long period of gestation may produce desirable results.

2. Determinants of Common Carrier Status

Common carrier obligations have been imposed to serve policy goals. In reflecting public policy, the courts have shaped the common carrier category to take into account two primary considerations: protection of the public's expectations, and deterrence of monopoly. In addition, courts have considered secondary factors including the public need for the service, the inequity of allowing a business to reap a benefit from the public without a corresponding duty, and the inability of individuals to protect themselves adequately without judicial intervention.

Historically, one of the most important determinants of common carrier status was whether one held oneself out as a common carrier. This may seem an undesirable basis for determining externally imposed legal obligations because the obligor could determine its own obligations by the offers it made to the world. However, the justification for the "holding out" theory was contractual.32 A common carrier achieved certain benefits by holding itself out as an inn, blacksmith (farrier), stage line, railroad, telephone company, or other similar business. The price it had to pay for these benefits was bearing the common-law common carrier obligations, chiefly the obligation of nondiscriminatory treatment of customers. Although the FCC has repudiated this determinant of common carrier status, preferring a policy based on market structure, it is a reasonable starting point to suppose that a network holding itself out as providing service to the general public on standard terms may be treated as a common carrier.

One primary consideration, protecting the public's expectations, springs from the voluntary undertaking of a service by the business. This voluntary offer creates an implied contract with the public. The terms of the contract are supplied by law: The business must serve all in return for reasonable compensation.33 The key to the holding out theory

32. See Phil Nichols, Note, Dedeining "Common Carrier": The FCC's Attempt at Deregulation by Definition, 1987 DUKE L.J. 501, 507 & n.64 (citing SIR MATTHEW HALE, ANALYSIS OF LAW (1713) (Theory for enforcing duties of common hosts, common farriers, and common carriers was implied contract)).

is the voluntary assumption of the service by the business.\textsuperscript{34} The business always has the option to cease operation, but once in operation, the business must serve reasonably.\textsuperscript{35} It is an all or nothing arrangement. The business may take all the rights and obligations or none.\textsuperscript{36} The business cannot unilaterally designate whether or not it will assume the duties.

Although the business may intend to be a common carrier, the courts will look to the nature of the business to determine whether that claim is warranted.\textsuperscript{37} The clearest example of this analysis is \textit{Dutton v. Strong}\textsuperscript{38} in which wharves were held to be public if "the purpose for which they were built, the uses to which they have been applied, the place where located and the nature and character of the structure [were sufficiently public]."\textsuperscript{39} The Court went on to say that if the dock "[were] not located in a harbor, or other usual resting place for vessels ... and it had not been used by others or held out as intended for such use, no implication [of public use] would arise."\textsuperscript{40} Similarly, in \textit{Bennett v. Dutton}, the court looked beyond the defendant's assertions and held that the defendant was a general carrier of passengers.\textsuperscript{41} In a later discussion, the FCC concluded that the common law holding out theory was not principled because it allowed the business to designate whether it would be regulated.\textsuperscript{42}

Nevertheless, allowing self-determination of the status of persons who may have public law duties is not unique to the common carrier situation. The holding out theory is remarkably similar to the test of whether a person is practicing law or medicine and therefore subject to professional responsibility obligations or licensing requirements.

The next major consideration is the protection of the public from

\textsuperscript{34} See \textit{Wheeler v. Northern Colorado Irrigating Co.}, 17 P. 487, 490 (Colo. 1887).
\textsuperscript{36} \textit{See McDuffee}, 52 N.H. at 448-49.
\textsuperscript{37} \textit{See Dutton v. Strong}, 66 U.S. (1 Black) 23, 32-33 (1861); \textit{Barrington v. Commercial Dock Co.}, 45 P. 748, 749 (Wash. 1896); see \textit{Bennett}, 10 N.H. at 487.
\textsuperscript{38} 66 U.S. (1 Black) 23 (1861).
\textsuperscript{39} \textit{Id.} at 33.
\textsuperscript{40} \textit{Id.}
\textsuperscript{41} \textit{Id.}; see \textit{Bennett}, 10 N.H. at 487; see also \textit{Barrington v. Commercial Dock Co.}, 45 P. 748, 749 (Wash. 1896) (court looks past defendant's assertions).
\textsuperscript{42} 46 Fed. Reg. 10,955 ¶ 12. \textit{But see McDuffee v. Portland & R. R.R.}, 52 N.H. 430, 454 (1873). (When a corporation holds itself out as a common carrier, the corporation cannot evade obligations by arguing that it only undertook service under particular contract.). \textit{McDuffee} relies on \textit{New England Express Co. v. Maine Cent. R.R.}, 57 Me. 188 (1869) (Railroad could not escape liability as a common carrier simply by executing a contract fencing off express company.).
monopoly. Monopoly frustrates regulation by the marketplace and justifies legal control as a substitute. The existence of monopoly power was the most commonly contested issue in the early common carrier cases. In fact, in some instances, the courts struggled with the monopoly issue when it was not necessary for the determination of common carrier status. This may be because of monopoly's particularly strong potential for blunting the market forces that usually protect the public.

The leading monopoly precedent is the English case of Allnut v. Ingliss, in which a dock and warehouse were given the exclusive right to collect taxes on imported wines. The court held that the conferring of an exclusive right was a monopoly and therefore the defendant was obliged to take all goods. Identical reasoning appears in American cases. Other forms of monopoly have been held to affect the public sufficiently to support imposition of common carrier duties. These include development of an infrastructure that could not feasibly be challenged by another enterprise and control over a patent. Whether the showing of monopoly power is sufficient to give rise to common carrier duties is not entirely clear. Presumably, only certain historically regulated businesses, or ones analogous to them, were eligible, regardless of market structure.

There is a relationship between the holding out test and the monopoly test. When a business holds itself out as a common carrier it is likely to increase the conditions in which a monopoly exists. By holding itself out, it discourages other suppliers of the same services from entering the

43. See generally Bruce Wyman, The Law of the Public Callings as a Solution of the Trust Problem, 17 HARV. L. REV. 156 (1904) (urging that trust problems could be solved by extending common carrier (public callings) regulation).
44. See Barrington v. Commercial Dock Co., 45 P. 748, 749 (Wash. 1896) (rejecting right of owner to avoid common carrier obligations based on private property because of tendency to promote monopolies, after having determined character of wharf was public).
46. Id. at 211 ("[A]s long as their warehouse[s] are the only places which can be resorted to for this purpose, they are bound to let the trade have the use of them for a reasonable hire and reward.").
47. See, e.g., Nash v. Page, 80 Ky. 539, 547-49 (1882) (Tobacco warehouses were common carriers because they controlled trade and thus took on public character.); but cf., Dutton v. Strong 66 U.S. (1 Black) 23 (1861).
48. See State v. Nebraska Tel. Co., 22 N.W. 237, 238 (Neb. 1885) (No two companies will cover same territory once the "plant" is in place.); see also Wyman, supra note 43, at 170.
49. See Commercial Union Tel. Co. v. New England Tel. & Tel. Co., 17 A. 1071, 1073 (Vt. 1889); Hockett v. State, 5 N.E. 178, 182 (Ind. 1886); Bell Tel. v. Commonwealth, 3 A. 825 (Pa. 1886).
50. But see Shepard v. Milwaukee Gas Light Co., 6 Wis. 539, 546-47 (1858) (Monopolies must have duties to the public in order to justify their continued existence.).
market and it also discourages customers from making arrangements for alternative sources of supply.

The monopoly cases also depended upon secondary factors. The first of these secondary factors was necessity of the service. In each common carrier case the business regulated provided a service of great public importance.51 The importance of the product increased power to extort payment from the public. The problem with this analysis was that trades such as furrier, candle maker, and plumber were all necessary to the public, yet they were never regulated as common carriers.

A second factor was the inequity of allowing a business that has benefitted from a privilege granted by the government to refuse to serve. This situation commonly arose in cases where the defendant had benefitted from condemnation by eminent domain to build the apparatus of the service.52 These cases supported an estoppel argument. In order to benefit from condemnation by eminent domain, the supplier must have been using the property for a public service. Therefore, it should not have been allowed to assert later that the use was not necessary or that the supplier did not hold itself out as a public business. Furthermore, the eminent domain privilege was closely associated with government franchising, thereby implicating the monopoly power argument.

The last factor was closely related to modern market (monopoly) power concepts. When the market could control the provision of these services without judicial intervention, suppliers were not treated as common carriers. That was why plumbers and house builders were never regulated. One commentator suggests that because these businesses were dependent on individual contracts, the public was able to protect itself through the negotiation process.53 Similarly, Judge Smith in Shepard v. Milwaukee Gas Light Co. suggested that candlestick makers or clothing makers were not regulated because these businesses provided identifiable and transportable goods. The public was able to protect itself by buying outside of the immediate vicinity of the business.54

51. See, e.g., State v. Citizen's Tel. Co., 39 S.E. 257, 261 (S.C. 1901); State v. Nebraska Tel. Co., 22 N.W. 237, 239 (Neb. 1885); cf. 46 Fed Reg. 10,954 (FCC finding that "essentiality" was a key at common law).
53. See generally Wyman, supra note 43, at 156 (giving examples of when public cannot protect itself).
54. Shepard v. Milwaukee Gas Light Co., 6 Wis. 539, 545–46 (1858); see also Ex parte No. 320 (Sub. No. 2), Market Dominance Determinations and Consideration of Product Competition, 365 I.C.C. 118 (1981) (explaining concept of geographic competition, in which competitive conditions are established by proving that a source from a geographically remote location can supply needs).
Modern case law concerned with defining the term "common carrier" has developed along two paths. The federal courts, except when they are applying state law in diversity cases, have been primarily concerned with defining "common carrier" for purposes of statutory interpretation and preemption analysis. State courts, in addition to statutory interpretation decisions, deal with the common law definition of "common carrier" for other purposes such as tort litigation. Both state and federal courts, consistent with the traditional holding out theory, focus on the undertakings of the entity.

More recently, the common law definition of "common carrier" has evolved around two inquiries: What is "common" and what is a "carrier?" First, the decisions since 1970 establish three factors to consider when deciding whether an entity is a "carrier." Second, the courts have discussed four variables defining what is "common." 

The first of the three "carrier" inquiries is whether the entity provides the services on a "for hire" basis. That is, does the entity provide the service for the purpose of generating revenue directly.

The second "carrier" inquiry is whether the entity is primarily

55. See FCC v. Midwest Video Corp., 440 U.S. 689 (1979) (deciding whether a cable television station is a common carrier to determine if FCC preemption is appropriate); National Ass'n of Regulatory Util. Comm'rs (NARUC) v. FCC, 533 F.2d 601, 608 (D.C. Cir. 1976) (examining particular activities over which preemption was asserted to see if they qualify as common carriage); see also Wold Communications v. FCC, 735 F.2d 1465, 1471-73 & n.10 (D.C. Cir. 1984) (FCC validly determined sales of domestic satellite transponders not to be subject to common carrier regulation, rejecting scarcity of supply argument.).

56. North Carolina ex rel. Util. Comm'n v. Simpson, 246 S.E.2d 753 (N.C. 1978) (issue was whether an entity was a radio common carrier within the statutory definition of common carrier).

57. See Alpha Zeta Chapter v. Sullivan, 740 S.E.2d 127 (Ark. 1987) (Businessman who rented equipment to students for hayride on an ad hoc basis was not a "common carrier."); Adkins v. Slater, 298 S.E.2d 236 (W.Va. 1982) (Jury must first determine whether mobile home mover is a "common carrier."); Summers v. Montgomery Elevator Co., 757 F.2d 1255 (Kan. 1988) (Shopping center's private service elevator was not a common carrier.).

58. See, e.g., NARUC, 533 F.2d at 608 (Cable channels leased for non-video point-to-point access were intrastate common carrier services excluded from FCC regulation; test is whether they were held out to serve all potential consumers indifferently.); Kvalheim v. Horace Mann Life Ins. Co., 219 N.W.2d 533, 535-536 (Iowa 1974) (focused analysis upon whether there was a legal undertaking by the entity to provide common carrier services). 

59. These variables are synthesized from the cases, rather than applied explicitly in the cases.

60. See, e.g., Harper v. Agency Rent-A-Car, 905 F.2d 71, 73 (5th Cir. 1990) (Car rental agency that shuttled customers to a nearby location as a courtesy was not providing services "for hire" and therefore was not a common carrier.).

61. See, e.g., Broekway v. Travelers Ins. Co., 321 N.W.2d 332 (Wis. Ct. 'App. 1982) (Bus service provided, without charge, by the National Red Cross, was not a service "for hire" and therefore, not a common carrier for the purposes of establishing tort liability.).
engaged in the business in question. The courts have held that transportation services must be more than an incidental service provided in connection with an entity's other objectives in order to qualify as carrier services. The analog in the communications context is the distinction between a manufacturing company that affords its customers access to an electronic bulletin board versus one that sells electronic bulletin board services.

The third "carrier" inquiry is whether the entity conducts the transportation service on a regular basis. An entity can receive a significant portion of its income in return for transportation services, yet still not be considered a common carrier because those services are not regularly performed. For example, a heavy equipment manufacturer may derive significant income from transportation services performed delivering an oversized piece of equipment to a customer's plant. Delivery of the equipment may constitute as much as one-half of the project cost, but under the "regular basis" test, this entity is not a common carrier.

In addition to the three "carrier" factors, there are four variables regarding whether a carrier is "common." The first asks whether an entity holds itself out to the public as willing to serve all who apply. This inquiry has two components. First, a carrier may serve a limited number of customers and still be said to hold itself out to the public. The size of the customer base necessary to meet this test varies depending on the type of service being provided and the entity's capacity to serve. The second component focuses on various activities of the entity designed to promote the entity's transportation services to the public. Endeavors, such as advertising, personal solicitation, and keeping in

62. See Harper, 905 F.2d at 73. The reasoning of transportation cases can be extended to other types of service. Courts have broadly defined transportation to include the electronic transport of information. See, e.g., NARUC, 533 F.2d at 609.
63. See Mount Pleasant Indep. Sch. Dist. v. Lindburg, 766 S.W.2d 208, 213 (Tex. 1989) (school district's interest in operating school bus service only "incidental" to primary function of district, therefore not a common carrier).
64. See Harper, 905 F.2d at 73.
65. Note also that this test is not completely determinative. An entity may conduct regular transportation services and not be considered a common carrier. See, e.g., Mount Pleasant, 766 S.W.2d at 213.
67. See, e.g., Straley v. Idaho Nuclear Corp., 500 P.2d 218, 221 (Idaho 1972) (Company providing bus service for its employees was common carrier, despite not serving the general public.).
touch with former customers, are all evidence that the entity has held itself out to the general public. 69

The second "common" inquiry is whether the entity serves the public without discrimination. 70 The entity must be willing to serve all those members of the public who choose to engage the services of the entity. 71 There is no requirement that the entity be large enough to serve all potential customers. 72 When the entity has the capacity, however, it must undertake to serve all members of its respective public. 73

The third "common" inquiry relates to the monopoly theory of common carrier and asks whether the entity is said to be operating in the public interest. 74 A finding that an entity performing a transportation function is cloaked with the public interest—for example, an entity performing an essential public service in a monopolistic environment—is likely to draw the entity within the definition of common carrier. 75 Decisions with this focus generally arise when a court is deciding whether an entity is a public utility. 76

The fourth "common" inquiry focuses on whether the entity has control over the content of the goods being transported. To be a common carrier, in decisions involving telecommunication carriers, the entity must not control the content of the message. 77 From the user’s point of view, this means that users must be able to transmit messages of their own design and choosing. 78 Extending the content control inquiry beyond communications carriage is challenging. However, one can argue that content control is like carriage of physical goods manufac-

69. See Market Transp. v. Maudlin, 725 P.2d 914, 921 (Or. 1986) ("Advertising in newspapers and telephone directories, maintaining contacts with old patrons and active personal solicitation—these may constitute a holding out to serve the public generally.").
71. See id.
73. See id.; FRANCIS X. WELCH, CASES AND TEXT ON PUBLIC UTILITY REGULATION 138–40 (1968) (regulatory orders compelling acquisition of adequate facilities).
76. See, e.g., State v. Southwestern Bell, 526 S.W.2d 526, 529 (Tex. 1975) (Privately owned entity supplying communication services that for all intents and purposes enjoyed a monopoly, was a business affected with the public interest and therefore, was under a "common carrier" type obligation to provide nondiscriminatory service at reasonable rates.).
78. Id.
tured by the carrier, something that was prohibited during the heyday of railroad regulation. 79

B. FCC Common Carrier Regulation

The principal characteristics of common carrier regulation by the FCC 80 historically have been:

1. The provider of the services may not discriminate unjustly among customers; 81
2. The terms of the contract between the provider and customer are those contained in tariffs filed with the FCC; 82
3. Rates may be subject to approval by the FCC; 83
4. Structural and accounting requirements may be imposed by the FCC in support of its responsibility to eliminate discrimination and to regulate rates; and
5. The service provider may be prohibited from entering a market 84 unless the FCC approves in advance the new service. 85

The FCC has jurisdiction only over communications carriers. 86 The sta-

80. Telegraph and telephone carriers originally were regulated by the ICC, under the Mann-Elkins Act of 1910, Pub. Law No. 61-218, § 7, 36 Stat. 539, 544 (1910) (declaring telephone and telegraph services to be common carriers).
81. 47 U.S.C. § 202(a) (1988); see MCI Telecommunications Corp. v. FCC, 765 F.2d 1186, 1192 (D.C. Cir. 1985) (overturning FCC effort to "detariff.").
83. See 47 U.S.C. §§ 201(a), (b) (requiring just and reasonable charges); 46 Fed. Reg. at 10,926.
86. See 47 U.S.C. §§ 151, 152 (1988). But even in the area of communications, the regulatory power of the FCC is not absolute. For example, in FCC v. Midwest Video Corp., 440 U.S. 689 (1979), the Supreme Court held that the FCC lacks authority under the Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (1934), to subject cable television to content-based regulation, because the statute indicates that broadcasting is not common carriage. See 440 U.S. at 701-02; see also 46 Fed. Reg. at 10,933 (reviewing cases on whether cable television qualifies as common carriage).
tute defines "communications" as "... transmission [by wire or radio] of writing, signs, signals, pictures, and sounds of all kinds ... including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission."\(^{87}\) Under the statute, common carriers must file tariffs,\(^ {88}\) and may not discriminate unjustly or unreasonably in charges, practices, classifications, regulations, facilities, or services.\(^ {89}\) A basic concept of common carrier regulation is that the carrier must adhere to filed tariffs and not deviate from these through negotiations with individual customers.\(^ {90}\)

Whether an entity is a common carrier subject to FCC regulation is decided by a two prong test: (1) Does the entity's service constitute interstate communications? (2) If so, are these services rendered for hire to the public?\(^ {91}\)

Courts resort to the common law to apply the definitions.\(^ {92}\) Common carrier status under the statute is determined by actual activities. For example, a cable television carrier usually is not a common carrier with regard to broadcast retransmission activities,\(^ {93}\) but may be a common carrier when it carries two-way, point-to-point communications.\(^ {94}\) The first and historically most important determinant is whether there has been an undertaking to carry for all potential users, even if the market served is very narrow.\(^ {95}\) This is the "holding-out" criterion.

A second hallmark of common carriage in the communications field developed by the FCC is that a common carrier leaves it to customers to "transmit intelligence of their own design and choosing."\(^ {96}\) One who


\(^{90}\) See Maislin Indus. v. Primary Steel, Inc., 110 S. Ct. 2759 (1990) (reviewing filed rate doctrine and concluding that ICC's negotiated rates doctrine is invalid under statutes governing motor carrier economic regulation).


\(^{92}\) NARUC, 533 F.2d at 608.

\(^{93}\) See id. at 608 & n.26.

\(^{94}\) See id. at 608-09.

\(^{95}\) See id. at 608 (specialized carrier useful only to fraction of population may be a common carrier).

\(^{96}\) See id., at 609 & n.36 (quoting Industrial Radiolocation Service, 5 F.C.C.2d 197, 202 (1966)); see also Frontier Broadcasting Co. v. FCC, 24 F.C.C. 251, 254 (1958) (one-way cable television transmission is not common carrier activity).
makes individualized decisions in particular cases whether and on what terms to offer service is not a common carrier.\textsuperscript{97} In other words, a common carrier leaves content alone and does not serve or withhold service based on content.

In 1973, the FCC determined that packet switching network services offered to the general public constituted common carriage,\textsuperscript{98} raising the possibility that traditional cost-of-service regulation might be extended as technology produced new digital communications services. In 1979, the FCC determined that an EMail service intended to be offered by the U.S. Postal Service in cooperation with Western Union constituted common carrier service.\textsuperscript{99}

Other forces encouraged deregulation of common carriers. In 1976, the D.C. Circuit affirmed the FCC’s conclusion that specialized mobile radio systems were not common carriers.\textsuperscript{100} In 1979, the FCC began considering deregulation of services previously considered to be common carriage.\textsuperscript{101} Originally, the Commission pursued two means of deregulation: by forbearing to impose the requirements of Title II of the Communications Act on activities traditionally considered common carriage, and by narrowing the scope of the common carrier concept.\textsuperscript{102}

In 1981, the FCC determined that the Communications Act of 1934 does not compel the application of the Act’s economic regulation regime in Title II to all suppliers of communications services and facilities.\textsuperscript{103} The FCC also determined that it had discretion to exempt some common carriers from the “full panoply” of economic regulation.\textsuperscript{104} It rejected the common law analysis and its "holding out" criterion, as making legal treatment contingent on the intent of the potentially regulated carrier.

\textsuperscript{97} NARUC, 533 F.2d at 608–09.
\textsuperscript{98} Packet Communications, Inc., 43 F.C.C.2d 922 (1973) (application by PCI—Telenet subsidiary—to offer packet switching services).
\textsuperscript{99} Graphnet Sys., Inc., 73 F.C.C.2d 283, 299 (1979) (USPS must submit application for certificate of public convenience and necessity.).
\textsuperscript{101} See Nichols, supra note 32, at 503–04 (historical overview of “The FCC’s Drive Towards Deregulation”).
\textsuperscript{102} See id. at 504; Dean Burch, Common Carrier Communications by Wire and Radio: A Retrospective, 37 FED. COMM. L.J. 85 (1985) (reviewing two deregulation initiatives).
\textsuperscript{104} See 46 Fed. Reg. at 10,924.
rather than on a principled analytical framework. The FCC did, however, express its intent to continue determining whether a common law obligation should be imposed on a particular firm. In resolving this question, it noted that tariff requirements can be anticompetitive, that rate regulation is unnecessary in competitive markets because competitive carriers would price at cost, and that the statutory duty to serve is unnecessary in competitive markets.

Evolution of the forbearance initiative halted with the MCI case, invalidating the FCC’s “Sixth Report.” The redefinition initiative reached its high-water mark in the Third Computer Inquiry and its invalidation by the Ninth Circuit.

The FCC limited the scope of statutory common carrier obligations by distinguishing between basic services and enhanced services. It also distinguished between data processing and communications. Basic services are regulated as common carriers, while enhanced services are not. Communications systems (e.g. packetizing) are regulated while those incorporating data processing (e.g. protocol conversion) are not.

Enhanced services are defined as anything more substantial than basic transmission services:

105. See id. at 10,933.
106. See id.
107. See id. at 10,937.
108. See id. at 10,940.
109. See id. (noting that statute facially leaves little discretion to exempt carriers from duty to serve).
112. California v. FCC, 905 F.2d 1217 (9th Cir. 1990).
113. See Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry), 84 F.C.C.2d 50 (1980) (Computer II).
114. 47 C.F.R. §64.702(a) (1989) (“Enhanced services are not regulated under Title II of the Act.”). Title II contains the common carrier provisions. See also 84 F.C.C.2d at 51 (discussing proposed modification of definitional plan). The Commission decided that the plan would be unworkable in any other form, and declined to change the rules. See generally Public Service Comm’n of Md. v. FCC, 909 F.2d 1510, 1512–17 (D.C. Cir. 1990) (reviewing FCC decision to exercise authority under Title I to deregulate billing and collection services as not involving common carriage, and only “incidental” to statutory communications; denying petition to review FCC preemption of state regulation of rates for disconnect service provided by LECs to IECs).
116. Cf id. at 418, ¶90 (“[T]his structure requires the facilities of the underlying carrier to be transparent to the information transmitted . . . .”).
In these services additional, different, or restructured information may be provided the subscriber through various processing applications performed on the transmitted information, or other actions can be taken by either the vendor or the subscriber based on the content of the information transmitted through editing, formatting, etc. Moreover, in an enhanced service the content of the information need not be changed and may simply involve subscriber interaction with stored information.\textsuperscript{117}

A good example of an enhanced service is a system such as MCI Mail or AT&T Easylink that has the capacity to accept character messages and translate them into bit patterns that can be received by FAX machines.

In \textit{Computer II}, the Commission abandoned the attempt to classify activities as either communications or data processing based on the nature of the processing performed:\textsuperscript{118}

The respective technologies had become so intertwined, according to the Commission, that it had become impossible to draw an "enduring line of demarcation" between them. In the course of its \textit{Second Computer Inquiry}, the Commission concluded that the only clear and lasting distinction would be one between basic transmission service on the one hand and enhanced services and consumer premises equipment (CPE) on the other.

\ldots

The Commission found that enhanced service, and CPE were not within the scope of its Title II jurisdiction but were within its ancillary jurisdiction. Accordingly, the Commission dis-

\textsuperscript{117} \textit{Id.} at 420–21, \S 97 (discussing demarcation between basic and enhanced services); see generally Michigan Bell Tel. Co. v. Pacific Ideas, Inc., 733 F. Supp. 1132, 1136 (E.D. Mich. 1990) ("976" billing services for dial-a-porn provider was enhanced service and not common carrier service.).

\textsuperscript{118} See generally Computer & Communications Indus. Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982) (approving FCC Computer Inquiry II decision); Policy and Rules concerning rates for competitive common carrier services and facilities authorizations therefor, 77 F.C.C.2d 308 (1979) (Notice and Proposed Rulemaking); Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 F.C.C.2d 384 (1980) (Final Decision); Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 84 F.C.C.2d 50 (1980) (Memorandum Opinion and Order); Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 88 F.C.C.2d 512 (1981) (\textit{Computer II}, Memorandum Opinion and Order on Further Reconsideration).
continued Title II regulation of enhanced service, and with the exception of AT&T, relieved common carriers of the "maximum separation" requirement under which their offerings of enhanced services were conditioned under Computer I.\textsuperscript{119}

Noting that finding enhanced services to be covered by Title II would have required the Commission to reverse its Computer I policy of not regulating data processing services, the D.C. Circuit approved the Computer II decision not to regulate enhanced services.\textsuperscript{120} It approved both rationales offered by the Commission: (1) enhanced services are not common carrier services under Title II; and (2) even if they are, the Commission has discretion to abstain from regulating them.\textsuperscript{121} The proposition that enhanced services are not common carrier services depends upon acceptance of a key idea: "Inherent in enhanced service offerings is the ability of vendors to tailor their services to meet the particularized needs of individual customers."\textsuperscript{122} This conception of enhanced services fails to meet the common-carrier criterion of the carrier's undertaking to "carry for all people indifferently," meaning in the communications context "providing a service whereby customers may transmit intelligence of their own design and choosing."\textsuperscript{123} The alternative ground for finding non-regulation appropriate was affirmed essentially on impracticability grounds.\textsuperscript{124}

In its affirmance of Computer II, the D.C. Circuit also approved preemption of state regulation of enhanced communication services on the grounds that such regulation would interfere with the market forces that the FCC found most appropriate to protect the public interest.\textsuperscript{125} Eight years later, however, the Ninth Circuit found invalid as over-broad the FCC conclusion that any kind of state structural separation requirements would frustrate its regulatory strategy for enhanced services.\textsuperscript{126} This suggests that a mere determination by the FCC that something should go unregulated does not necessarily preempt state law. However, the Ninth Circuit invalidation of the Computer III preemption decision rested on narrow grounds, namely, specific language in section 2(b)(1)

\textsuperscript{119} 693 F.2d at 204--05.
\textsuperscript{120} See id. at 209.
\textsuperscript{121} See id. at 210.
\textsuperscript{122} Id. at 210 n.62.
\textsuperscript{123} Id. at 210 n.61.
\textsuperscript{124} See id. at 210--11.
\textsuperscript{125} See id. at 214--15.
\textsuperscript{126} See California v. FCC, 905 F.2d 1217, 1243 (9th Cir. 1990) (vacating and remanding Computer Inquiry III).
of the Communications Act preserving jurisdiction over intrastate services to the states. 127

In Computer III, the FCC rejected an approach that would have allowed treatment of protocol conversion as either non-common carrier enhanced services, or common carrier basic services depending on the type of underlying service with which the protocol conversion is integrated. It accepted the arguments of Timenet, Telenet, and others opposing relaxation of the regulation of protocol conversion services provided by RBOCs and AT&T. These unregulated suppliers argued that protocol conversion increasingly performs functions such as translating word processing file formats and handling EMail envelopes, activities more closely associated with data processing than communication services. 128

In Computer III, the FCC proposed, but failed to adopt, a definition of enhanced service that depends on whether content is affected. 129 This definition proposed that end-to-end “net user conversions” are enhanced services, while protocol conversions associated with call set up and similar basic communications activities are basic services. 130

The FCC also avoided regulation of value added networks, something the opponents of further relaxation of the regulation of protocol conversion services by the RBOCs argued might occur. 131

FCC deregulation of communications services has been complicated by two court of appeals cases. In MCI Telecommunications Corp. v. FCC, 132 the D.C. Circuit blocked the Commission’s order to MCI and others to stop filing tariffs, holding that the statute requires that tariffs be filed as to common carrier services. In California v. FCC, 133 the Ninth Circuit invalidated major aspects of the FCC’s Computer III, including its preemption of state regulation of services provided by providers of common carrier services.

129. See id. at 3126, ¶¶ 64–68.
130. See id. at 3131, 3119, ¶¶ 55, 57, 69 (deciding not to change to new “change-in-information-content” test to define the regulatory boundary between enhanced and basic services).
131. See generally id. at 3095, ¶ 38 (summarizing deregulation fears); id. at 3110, ¶ 46 (fear of deregulation of VANs at the state level is significant).
133. 905 F.2d 1217, 1223 n.1 (9th Cir. 1990) (a complete list of the orders under review).
The most important implication of the MCI case is that, under current law, once a service is determined to be common carriage, the Communications Act requires tariffing and the full panoply of cost-of-service regulatory measures.\footnote{134. But see MCI, 765 F.2d at 1196 (allowing FCC to "streamline" regulation in unspecified ways).} This implication may lead to modification of the statute or renewed effort by the FCC to change the definition of common carrier in order to narrow its scope to services where market structures inadequately protect access and other public interests.\footnote{135. For an example of how one state has extended common carrier status to include video and data transmission, see New York Pub. Serv. Comm'n, Opinion and Order Adopting Regulations Concerning Common Carriage, Opinion No. (0–9, Case 89–C–099 (1990) (adopting Common Carrier Rules, N.Y. Comp. Codes Rules & Regulations tit. 16, § 605 (1990)); see also the preceding report, New York Pub. Serv. Comm'n, Common Carriage Principles in the New Telecommunications Environment, Case 89–C–099 (1989), which discussed the historical role of common carrier regulation and requested comments from interested parties. The New York Public Service Commission ("NYPSC") addressed comments from thirteen parties, including MCI Telecommunications Corp., The Cable Television Association of New York Inc., New York Telephone Co., the Center for Media Law, and even church representatives. Afterwards, the Commission issued the "Common Carrier Rules," which defined a common carrier as "a corporation that holds itself out to provide services including voice, data, or video by electrical, electronic, electromagnetic or photonic means." New York Codes & Regulations tit. 16, § 605 (1990). In adopting the new rules, the NY PSC regarded common carrier status as an established fact in the telecommunications industry and thus sought to determine merely whether or not the concept should also apply to newer technologies. Nevertheless, the NY PSC clearly and deliberately viewed itself as "establishing" the common carrier rules in § 605 rather than "enunciating" them; the Commission asserted that regulation, and not the common law, has imposed these obligation upon the telecommunications industry. New York Pub. Serv. Comm'n, Opinion and Order Adopting Regulations Concerning Common Carriage, Opinion No. (0–9, Case 89–C–099 (1990). \footnote{136. United States v. American Tel. & Tel. Co., 578 F.Supp. 653 (D. D.C. 1983) (subsequent history omitted).} \footnote{137. United States v. American Tel. & Tel. Co., 524 F. Supp. 1336, 1352 (D. D.C. 1981) (stating general rule); Advanced Health Care Servs. v. Radford Community Hosp., 910 F.2d 139, 150 (4th Cir. 1990) (setting forth requirements for essential facilities doctrine; reversing dismissal of complaint alleging Sherman §§ 1 and 2, and Clayton § 3 viola-}
essential facilities are a bottleneck in the market, and the person controlling the bottleneck violates section 2 unless he lets competitors through. Part of establishing a section 2 violation under the essential facilities doctrine is proving the competitor's inability practically or reasonably to duplicate the essential facility. The other requirements are (1) showing that a monopolist controls the essential facility, (2) proving that the monopolist has denied the use of the essential facility to competitors, and (3) demonstrating the feasibility of providing the facility to competitors.

Plaintiffs rarely win under the essential services doctrine. The dominant airline reservations systems have been found not to constitute essential facilities, although sufficient evidence of market power and predatory conduct was presented to withstand summary judgment.

**D. Application of Common Carrier Principles to Digital Network Technologies**

When applying common carrier principles to contemporary and potential future digital network technologies, it is best to identify the factors that indicate whether the originator or handler of an electronic communication is a common carrier. The factors can be grouped naturally into those relating to the holding out theory, and those relating to the market structure theory (the theory given greatest emphasis by the FCC).


140. *Compare Delaware & H. Ry. v. Consolidated Rail Corp.*, 902 F.2d 174, 179–80 (2d Cir. 1990) (reversing summary judgment for defendant under four-factor essential facilities test) with *Laurel Sand & Gravel, Inc. v. CSX Transp., Inc.*, 924 F.2d 539, 544–45 (4th Cir. 1991) (rejecting essential facilities claim under four-factor test); see also *Advanced Health Care Servs.*, 910 F.2d at 150 (citing MCI Communications v. AT&T, 708 F.2d 1081, 1132–33 (7th Cir. 1983) and *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973)).

141. *In re Air Passenger Computer Reservations Sys. Antitrust Litig.*, 694 F. Supp. 1443 (C.D. Cal. 1988) (computerized reservation systems do not constitute essential facilities; monopoly leveraging theory not available; but triable issues of fact exist on market power and predatory conduct allegations for monopolization and attempted monopolization theories), aff’d, 948 F.2d 536 (9th Cir. 1991).
1. Holding Out Factors

The factors determining whether a service provider is holding itself out as a common carrier are as follows:

(1) A service provider that engages in mass marketing of its services is more likely to be found to be a common carrier than one who negotiates with customers on an individual basis;

(2) A service provider that targets marketing to general populations is more likely to be a common carrier than one that targets its marketing efforts more narrowly to some identifiable group;

(3) A service provider that offers standard service to all customers or to customers within broad categories is more likely to be a common carrier than one offering tailor-made services to the needs of a particular customer; and

(4) A service provider that offers explicitly or impliedly to accept any message tendered is more likely to be a common carrier than one that explicitly announces conditions for acceptance in advance of contracting with a subscriber.

These factors together determine whether the service provider holds itself out as a common carrier. The problem with the holding out test is that, outside the communications context, almost any modern retailer could be found to be a common carrier. On the other hand, in the future the common law may develop to a point where "common-carrier-like" nondiscrimination obligations will be imposed on mass retailers. The problem rarely arises because of state, local, and federal nondiscrimination obligations imposed on places of public accommodation.

2. Market Structure Factors

The same factors that are important in determining whether a Sherman Act section 2 violation has been committed are relevant to determining whether sufficient monopoly power exists to justify common carrier regulation. Essentially, this is the FCC's current approach to regulation under Title II of the Communications Act, although the FCC has not explicitly embraced the Sherman Act monopolization factors.

The only principled difference between this branch of the common carrier analysis and Sherman Act analysis is the relevance of the particular market. In the common carrier analysis what is relevant is not whether any hypothetical supplier of competing services could enter the market, as in Sherman Act analysis, but rather whether the source itself could start up a parallel service or could induce a third-party supplier to
start up a service providing it meaningful access to the same markets. The question for common carrier communication regulation is one of access through communications intermediaries, not competitive market conditions for their own sake.

E. Appropriateness of Existing Law

The common law principles discussed earlier, principles which the FCC increasingly applies under the statute, form an adequate basis for developing legal obligations to provide equal access. Properly interpreted and adapted to modern views of competition and emerging network technologies, those common law principles impose access obligations only on network service providers who offer to take all comers (the holding out theory) and only when market structures are such that competitive forces are not likely to be effective in ensuring alternative access to ultimate consumers.

The FCC's criticism of the holding out theory is essentially valid. There is a circularity in the theory that is troublesome, unless one looks at it as a contract theory enforcing an offer made by the carrier. The assumption that enhanced services are not subject to common carrier regulation, while applied too broadly by the FCC, nevertheless contains the seeds of a useful distinction between services offered on a standard basis to mass markets and services actually tailored to the needs of a particular customer.

The FCC's emphasis on the efficacy of market forces to ensure equal access has the virtue of unifying common carrier concepts and antitrust monopolization concepts through the essential facilities doctrine.

Subject to two caveats, there is no reason to believe that common law litigation is not the best way to pursue the equal access goal. The first caveat is that common law development is uncertain. The second caveat is that a finding of common carrier status at common law may trigger federal preemption as to interstate services. Once preemption is found, tariffing and the full panoply of Communications Act regulation are

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142. Current FCC policy narrowing common carrier regulation is subject to criticism for its rejection of the holding out theory, for its incorrect assumption that enhanced communication services are provided on a tailor made basis, and for its improper usurpation of congressional power to make policy determinations about how equal access can be ensured. See generally Nichols, supra note 32, at 513–14 (FCC redefinition is wrong for three reasons: departure from two centuries of common law; contravention of congressional intent; and lack of support in the legislative history.). On the other hand, one may argue that the FCC's approach to holding out and to market structure factors is logical, and that Congress is perfectly capable of protecting its own policy role.
required. Common law evolution is an attractive alternative to traditional FCC cost-of-service regulation because it is more flexible, and focuses more directly on the relationship of broad duties and policy concerns. Although administrative regulation theoretically is thought to protect these virtues, the judiciary may enjoy an advantage when administrative regulation has become encrusted with five decades of details developed around old technologies. Courts are in a much better position than the FCC to take a fresh look at the interrelationship of access duties, tort liability, and the First Amendment.

III. TORT LIABILITY PRINCIPLES

One important interest that must be considered in formulating electronic network policy is that of potential victims of network communication. These are people whose interests in reputation, privacy, or intellectual property may be injured by the distribution of information products on electronic networks. While the legal questions differ in some respects depending on the nature of the underlying legal interest, the law of defamation has developed a number of sophisticated principles to allocate responsibility among originators and carriers of communications. Accordingly, this Section of the Article begins with a review of defamation law and extends this review where appropriate to the privacy and intellectual property infringement contexts.

A. Defamation

Defamation is a reasonable proxy for assessing tort liability in the context of information distribution. Under the common law of defamation, a republisher of defamatory material and its author are equally liable, but only so long as the republisher exercises control over content. Telephone and telegraph companies are not liable for defamatory communications transmitted on their facilities, and newsstand operators are not liable absent notice of defamatory material. Further, a common carrier obligation necessitates a privilege to transmit defamatory material because of the irreconcilable conflict between a duty to censor and a

143. For example, common carriers have a higher standard of care in negligence law than persons or entities that are not common carriers. In defamation, the underlying interests are reputation; in privacy torts, the underlying interests are peace of mind and autonomy; and in intellectual property torts, the underlying interest is enjoyment of the fruits of one's intellectual effort. In each case, tort law is concerned with compensating injury to the particular interest, and discouraging conduct that risks injury to the interest.
duty to carry everything.\textsuperscript{144} Accordingly, a network willing to undertake common carrier services and thus potentially subject to legally enforceable duties to serve everyone without regard to content would have a reasonable chance of avoiding liability for defamation or other tort liability. To the extent that the common carrier obligations are clarified through litigation or contract terms, the argument becomes stronger.

This Section considers when users and operators of computer-based data transmission networks can be held liable for defamatory statements transmitted over such networks.\textsuperscript{145} There are four subsections. The first is a hypothetical fact pattern. The second reviews the elements of the defamation cause of action. The third applies these elements to the hypothetical fact pattern. The final subsection applies the elements to users and operators of computer networks.

1. Hypothetical

The following hypothetical fact pattern provides a framework for examining and applying the common law elements of a claim for defamation.

The six actors in the hypothetical are an author, a publisher, a commercial printing house, a book distributor, a retail bookstore, and the plaintiff, David Sweatlocke. The facts are as follows.

The author spent five years researching the childbirth patterns of a small midwestern town, paying equal attention to each family in the town of 300. The author was looking for background material for a new book exploring the advantages of early prenatal care. The author spent considerable time with every family and was a regular at community events.

Upon completing the research and analysis, the author sent the completed draft manuscript to a publisher that had published all of the author's previous twenty-five books. The following appeared on page six of the manuscript: "Mr. and Mrs. Sweatlocke are childless. This is because Mr. Sweatlocke is never home and spends all his time at a corner bar." Mr. and Mrs. Sweatlocke actually have five children and Mr. Sweatlocke has never been in the corner bar.

\textsuperscript{144} See Restatement (Second) of Torts § 581 cmt (1977).
The publisher completed a substantial edit, outputted "repros" on its high-resolution laser printer, and sent them to the printer, who printed the first edition. The bound volumes were picked up at the printing plant by the book distributor. The distributor stored the volumes until the bookstore owner called and ordered three dozen copies. The bookstore owner had been anxious to get the shipment because he had read wonderful things about the book in a trade periodical. In the same periodical the bookstore owner read a lengthy article detailing how the author had just lost a third libel suit brought by a plaintiff defamed in two of the author's other books.

Sweatlocke learned from a friend who had bought the book from the bookstore that the book contained the offending statements. In a rage he called the bookstore and demanded that the books be removed from sale. The bookstore owner paid no attention and hung up the phone. The bookstore sold fifteen copies of the book and it was not long before Mr. Sweatlocke was approached at a Little League game and chastised by several parents who had read the book. Sweatlocke also lost his job as a result of the misstatements.

Mr. Sweatlocke then brought an action for defamation naming as defendants the author, the publisher, the printer, the distributor, and the bookstore.

2. Cause of Action

This subsection focuses on the cause of action for libel. The common law developed the distinct torts of libel and slander. Slander is associated with oral statements or statements that are not embodied in at least semi-permanent form. Libel is the publication of the statements in a more permanent form. To recover damages for libel a plaintiff must

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146. This aspect of the hypothetical blurs the multiple roles of publishers, typesetters, and printers, but is acceptable in the interest of simplicity. Real-world publishers perform certain functions close to authorship (content-oriented editing), some close to printing (pre-press copy editing), and some marketing functions related to the activities of the distributor and bookseller in the hypothetical.

147. See Restatement (Second) of Torts § 568 (1977).

148. See id.

149. The tort of libel encompasses defamatory messages carried by the printed word or by words embodied in a form with a substantial degree of permanence which has the harmful qualities of printed words. See Restatement (Second) of Torts § 568 cmt. d (1977). A message stored in a database or displayed on a screen will exist for an indefinite period. Obtaining a printout of messages stored on the system is an option available to almost all users of networks. Each of these options creates text that is as permanent as a printed text. Each can convey a harmful message with the same clarity and impact as a traditional vehicle for a libel such as a newspaper.
establish four essential elements. 150

The first element comprises two components: requirements that the statements are (1) false and (2) defamatory. 151 A defamatory statement is one that in addition to being false has the tendency to harm the reputation of the plaintiff. 152

The second element is "publication." 153 "Publication" is a term of art 154 and has three components: (1) the intentional or negligent act of the defendant 155 which results in 156 (2) the communication of the allegedly defamatory statement to (3) a third person. 157

More than one party can "publish" the same statement. 158 The original author vicariously publishes statements communicated by an agent of the author. 159 All who repeat a defamatory statement are "republishers" 160 and can be held liable without regard to the liability of the original publisher or other republishers. 161

Republication is treated like an original publication in that it is actionable only if the plaintiff can show an intentional or negligent act by the transmitter that results in the communication of the defamatory message

150. See Restatement (Second) of Torts § 558 (1977).

151. See id.

152. See Restatement (Second) of Torts § 559 (1977); see also Davis v. Costa-Gauras, 619 F. Supp. 1372, 1375 (S.D.N.Y. 1985).

153. See Restatement (Second) of Torts § 558 (1977).

154. See Ostrowe v. Lee, 175 N.E. 505 (N.Y. 1931); see also Youmans v. Smith, 153 N.Y. 214, 47 N.E. 265, 266 (N.Y. 1897) (Printing a libelous statement is a "publication" when it is done with the expectation that it will be read by some third person.).

155. See Smith v. Jones, 335 So. 2d 896, 897 (Miss. 1976) (not a publication if defendant spoke the words with reasonable expectation that they would not be overheard); see also Barnes v. Clayton House Motel, 435 S.W.2d 616, 617 (Tex. App. 1968) (letter sent with knowledge that it may be read by a person other than the intended recipient is not a publication; it is not sufficient that there was a mere possibility that someone other than the intended recipient would read the letter.).

156. The communication must be caused by, be induced by, or be the natural consequence of the defendant's action. See Woodling v. Knickerbocker, 17 N.W. 387, 388 (Minn. 1883); see also Commonwealth v. Pratt, 95 N.E. 105, 106 (Mass. 1911) (it is a publication if defendant intended that matter should be published, and furnished substance to a reporter); see generally Maytag v. Cummins, 260 F. 74, 79 (8th Cir. 1919); Sawyer v. Gilmers, 126 S.E. 183 (N.C. 1925).

157. See Restatement (Second) of Torts § 577 (1977). See, e.g., Ostrowe, 175 N.E. 505 (defamatory writing not published until read by one other than the one defamed, publication can be to a telegraph operator, compositor in a printing house, or a copyist).

158. See Restatement (Second) of Torts § 578, cmt. b (1977).

159. See, e.g., Draper v. Hellman Commercial Trust, 263 P. 240, 246 (Cal. 1928) (Private detective agency hired by the defendant, published defamatory statements about plaintiff; held that defendant was liable on theory that principal is liable for a libelous statement published by an agent who is acting within the scope of employment).

160. See id.

to one other than the subject of the message.\textsuperscript{162} This act may be the overt act of transmitting or delivering a defamatory message to another.\textsuperscript{163} It may also be the inaction of one who has physical control over the method of communication and knows of the defamatory nature of the message and yet fails to remove the message from circulation.\textsuperscript{164}

Regardless of the nature of the intervening act, for the plaintiff to establish "republisher" liability, the plaintiff must establish that the defendant knew or should have known of the defamatory nature of the message.\textsuperscript{165} Knowledge, or imputation of knowledge, may be the result of the conduct and the undertakings of the defendant, and is generally found when the defendant exercises editorial control over the contents of the publication.\textsuperscript{166} The courts have been reluctant to impute knowledge of the defamatory nature of the message to defendant transmitters who


\textsuperscript{163} See, e.g., Ostrowe, 175 N.E. 505.

\textsuperscript{164} See Fogg v. Boston & L. R.R., 20 N.E. 109, 110 (Mass. 1889) (Defendant railroad published defamatory statement placed on company bulletin board because company was aware of its existence and failed to remove it from the board); see also Woodling v. Knickerbocker, 17 N.W. 387, 388 (Minn. 1883) (Failure by defendant to remove defamatory placard was sufficient evidence for jury to conclude that the defendant published the defamatory material.); Hellar v. Bianco, 244 P.2d 757, 759 (Cal. 1952) (republication occurred when defendant tavern had reason to know of the existence of defamatory message on a bathroom wall and failed to remove the message); but see Scott v. Hull, 22 Ohio App. 2d 141, 259 N.E.2d 160, 161 (Ohio Ct. App. 1970) (distinguishing the cited cases, found no liability on the part of a building owner who failed to remove defamatory graffiti painted upon the building; absent an affirmative act mere nonfeasance does not support liability).

The view expressed in Scott does not really impact the analysis of the potential liability of a computer network. Even under the logic adopted in Scott, the acts of creating the network and encouraging its use by others satisfy the act requirement if the defendant transmitter knows or has reason to know of the defamatory nature of messages transmitted.

\textsuperscript{165} See Dworkin, 611 F.Supp. at 786 (adopting Restatement (Second) of Torts §581 (1977), which provides in part that a person, or entity, that transmits defamatory messages authorized by another is not liable for the publication of those messages unless the transmitter knows, or has reason to know, of the defamatory message contained in the matter transmitted); see also Church of Scientology v. Minnesota Medical Found., 264 N.W.2d 152, 156 (Minn. 1978) (rule requiring that republisher either knew or should have known of defamatory nature of the statements transmitted protects libraries and vendors of books, magazines, and newspapers).

\textsuperscript{166} Compare Smith v. Utley, 65 N.W. 744, 744 (Wis. 1896) (managing editor of newspaper liable for publication of libelous article whether or not he actually knew of publication; matter is constructively under editor's supervision) with Anderson v. New York Tel. Co., 320 N.E.2d 647, 647 (N.Y. 1974) (telephone company not liable for disseminating defamatory material; reason-to-know standard applies only to media of communications involving editorial, or participating functions, such as newspapers, radio, and television).
do not exercise editorial control. Only when a set of special circumstances exists, such as knowledge of past litigation, have the courts been willing to impute knowledge to the defendant.

The third element in proving libel requires the establishment of defendant’s fault, reflecting a series of Supreme Court decisions beginning with New York Times Co. v. Sullivan which balance the First Amendment right to free expression with the states’ interests in protecting the reputation of individuals. At common law the tort of libel was a tort of strict liability. Sullivan and its progeny altered the common law and imposed a fault requirement, initially in cases involving media defendants and public official plaintiffs. The Court later expanded the fault requirement to cases involving “public figure” plaintiffs and ultimately to cases involving non-media defendants.

For cases involving private individuals as plaintiffs the Court allowed the states to choose the applicable level of fault. The states, however,

167. See Osmond v. EWAP, Inc., 200 Cal. Rptr. 674, 680 (Cal. Ct. App. 1984) (adopting and quoting the Restatement (Second) of Torts § 581 cmt. b (1977); see also Maynard v. Port Publications, Inc., 297 N.W.2d 500, 501 (Wis. 1980) (although contract printer had twice previously refused to publish materials printer thought obscene, this did not give rise to a continuing duty to check all future printings for defamatory content).

168. Compare Dworkin, 611 F.Supp. at 786 (concerning about self-censorship and First Amendment protection caused court to refrain from imposing a duty to investigate upon a retail store that knew that magazine publisher had once been sued or had engaged in questionable behavior in the past) with Dworkin v. L.F.P., Inc., 647 F. Supp. 1275, 1278 (D. Wyo. 1986) (combination of fact that store and plaintiff were already engaged in litigation over defamatory statements appearing in the magazine sold at the store with the fact that an agent of plaintiff called store and asked that it stop selling the magazine, was enough to constitute special circumstances neccesary to allow case to go to trial on the issue of whether defendant should have known of the defamatory nature of the statements contained in the magazine).


170. This balance is created by requiring “fault” on the part of the publisher. The fault at issue here is failure to ascertain the truth or falsity of the defamatory statements. See id. at 287 (plaintiff claimed defendant newspaper libeled plaintiff by printing an advertisement containing defamatory falsehoods; in order to find liability plaintiff must show that the defendant acted with “reckless disregard” as to whether or not the information printed was true, when plaintiff is a public official).


172. See Sullivan, 376 U.S. at 254.


174. Dun & Bradstreet, Inc., v. Greenmoss Builders, Inc., 472 U.S. 749, 762 n.9 (1985) (plurality opinion declined to address distinction between media and non-media defendants, making it likely that in future cases distinction will not be significant).

175. Gertz v. Robert Welch, Inc., 418 U.S. 323, 347 (1974) (As long as states do not impose liability without fault they are free to define for themselves the appropriate standard of liability for a publisher of defamatory falsehoods injurious to a private individual.).
may not impose liability in the absence of some showing of fault. As a result most states have adopted a negligence standard when the plaintiff is a private figure.

The fault requirement and the requirement that a republisher act with knowledge, or imputed knowledge, are reflections of the same judicial concerns regarding chilled speech and as a result are likely to be established with substantially similar evidence.

The Constitutional protection extended to defendant publishers by the Supreme Court parallels the protection the common law offered republication. The Court has voiced concern about protecting "robust and uninhibited" communication. At common law the requirement that the defendant know the defamatory nature of the communication was also a reflection of the concern about self censorship.

If a republisher cannot reasonably rely on the accuracy of the original author with respect to a particular statement, and the republisher knows of the defamatory content of that statement, then the republisher has an obligation either to verify the statement or to remove it before it is read by another. Thus, when the element of publication is established, the issue of fault usually turns solely on the efforts made by the defendant in ascertaining the accuracy of the statements. A private figure plaintiff, operating under the prevailing negligence standard, need only show that the effort is less than reasonable.

The fourth element requires the plaintiff to establish damages either by demonstrating the actionability of the statement itself or by demon-

176. Id. at 347 n.10.
178. See Sexton v. American News Co., 133 F. Supp. 591, 593 (1955). At the extreme, the fault standard requires actual malice, which means that the defendant must act with reckless disregard or with a high degree of awareness of probable falsity. See Gertz, 418 U.S. at 332 (quoting St. Amant v. Thompson, 390 U.S. 727, 731 (1968)).
181. See Rinaldi v. Holt, Rinehart & Winston, Inc., 366 N.E.2d 1299, 1307 (N.Y. 1977) (Book publisher who had no reason to question the accuracy of original newspaper articles upon which the book in question was based, had no duty to inspect and therefore was not charged with knowledge of the contents); see also Karaduman v. Newsday Inc., 416 N.E.2d 557, 569 (N.Y. 1980) (Absent substantial reason to question the accuracy of newspaper reporter's article, the rule set forth in Rinaldi means that the subsequent publisher can rely on the accuracy of the article and has no duty to investigate.).
An action in libel was traditionally actionable per se, that is, actionable without proof of actual loss. The Court has modified this rule and has provided that, in the absence of actual malice, a public figure plaintiff or a private plaintiff, bringing suit based on statements concerning matters of public interest, is limited to actual damages. A private figure in a non-public-issue case may still seek punitive damages and actual damages may be presumed.

Even if the plaintiff is able to establish the existence of all of the elements, the defendant may still escape liability by showing that the statements were privileged. Whether a privilege exists is a function of the nature of the communication or the identity and relationship of the sender and receiver. A special privilege protects an entity that merely provides the means of communication. Even if such an entity knows or has reason to know of the false and defamatory nature of a transmission, there is no liability if the original author was privileged or if the transmitter reasonably believed that the author was privileged. Additionally, when the transmitter is a common carrier with the attendant obligation to serve, the privilege is broader unless the transmitter knows or has reason to know that the author was not privileged.

The expansion of the privilege in cases involving common carriers is a recognition of the inherent dilemma a carrier would face if the privilege did not exist. The broad privilege for common carriers also reflects judicial fear that doing away with the privilege would impair a necessary public service.

In practice, however, this privilege has had little impact. Common carriers are unlikely, due to the nature of the services traditionally offered, to act in ways that either give rise to knowledge of the defama-
tory nature of messages or support imputation of such knowledge. Because such knowledge is required before the transmitter can be liable as a republisher, a common carrier is unlikely to be prima facie liable. Absent a prima facie case of libel, privilege analysis is irrelevant.

At the other extreme, once an entity exercises content control, certain to give rise to knowledge or imputation of knowledge of the false and defamatory nature of a statement, the entity will no longer merely be supplying the means of communication and the privilege will evaporate. The privilege would offer protection in those limited cases where the

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195. Republisher liability depends on the interaction among Restatement (Second) of Torts §§ 578, 581, 602, and 612, and the assessment of five different kinds of fault. The most basic distinction is drawn between republishers in general and those who only deliver or transmit information. Id. § 578 cmt. a. Mere deliverers and transmitters are removed from the scope of § 578, although the structure of the black letter language indicates that they are republishers subject to special treatment. The coverage language of § 581 is the same as the exception from § 578, meaning that mere deliverers and transmitters are covered by § 581 and not by § 578. Section 578 republishers are treated exactly like originators of the information they republish. The four elements, and the five fault concepts work in the same way. Section 581 deliverers and transmitters (except for radio and television broadcasters, who are treated as though they were covered by § 578; see § 581 cmt. g) are subject to liability only if they know or have reason to know of the defamatory character of the communication. But this may not be much of a barrier to liability because original publishers and general republishers cannot be liable unless they are shown to have been negligent with respect to truth or falsity and defamatory character. The standard "knew or should have known" is not conceptually different from the standard of negligence. Moreover, § 578 cmt. b indicates that all fault is covered by §§ 580A and B, which articulate the Sullivan and Gertz standards. The commentary to § 581 classifies the following as mere deliverers or transmitters: bookstores (§ 581 cmt. e), news dealers (§ 581 cmt. d), libraries (§ 581 cmt. e), telegraph companies (§ 581 cmt. f), ticker tape services (§ 581 cmt. f) and teletype services (§ 581 cmt. f). Authors, printers, and publishers are explicitly labelled general republishers rather than mere deliverers or transmitters. Id. at § 581 cmt. c.

The privileges may exculpate an information service provider from liability even if it is prima facie liable under §§ 578 or 581. Section 591A creates an absolute privilege to publish information required by law. See id. § 581 cmt. g (absolute privilege under § 592A for broadcaster to broadcast information required by law); § 592A cmt. a (referring to mandatory air time for candidate); § 592A cmt. b (protection not limited to broadcasters). Section 612 creates a derivative privilege, so that certain republishers are as privileged as those who provide information to them. The scope of § 612 may be different from the scope of § 581. Section 612 applies to those "who provide a means of publication" and to public utilities under a duty to transmit messages. The first phrase covers: newspapers printing articles or letters to the editor; radio or television stations providing time; ticket, teletype or other private wire services; and printers, and stenographers who take dictation and mail letters. Id. at § 612 cmt. c. The standard for those who provide a means is reasonable belief of privilege in the provider. The standard for public utilities is no reason not to know the provider is not privileged. The difference is that the public utility has no duty to inquire, suggesting that the provider of means who is not a public utility does have a duty to inquire. Id. at § 612 cmt. g.

Summarizing, it is important to understand that an actor who makes available only equipment or facilities is not subject to liability under § 581, nor presumably under § 578, because such actors are not republishers at all. Id. at § 581 cmt. b.
republisher knows of the nature of the statement through sources other than its business activities, has acted with the requisite fault, but reasonably believes that the author was privileged, or, in the case of the common carrier, did not know that the author was not privileged. The only clear example of this situation is where the transmitting entity is informed by another that the defamatory message exists, is at least negligent regarding the accuracy of the statement, engages in no additional act which aids in the distribution of the message, and reasonably believes that the author was privileged. Behavior consistent with the definition of a common carrier is the type of behavior most likely to fit these conditions. As a result, the privilege is likely to be important only in cases involving common carrier defendants.

3. Application

Sweatlocke can establish the existence of the first and fourth elements: a false and defamatory statement, and damages. Both elements can be established without reference to a particular defendant and therefore can be established with respect to all defendants.

The second and third elements are relatively easy to establish with respect to the author. The author published the defamatory statement. Communication to anyone other than the subject is a publication. The manuscript was published when it was sent to the publisher, who is a third party. Additionally, because the author intended that the book be printed and sold to the public, he is liable for the distribution of the message to the purchasers of the book.

197. The hypothetical supports a finding that the statements were false and had a defamatory impact on Sweatlocke. The statement caused him to be ridiculed and scorned in his community.
198. Sweatlocke lost his job. This establishes pecuniary loss.
199. To establish the first element, the false and defamatory nature of the statement, a plaintiff will offer evidence related to the nature of the statement itself. See Restatement (Second) of Torts §§ 559, 581A (1977). The fourth element also looks to the nature of the statement and in the alternative, the impact that the statement had on the plaintiff. See id. § 569. Neither of these elements requires reference to a particular defendant and as a result the method of proof does not vary between publishers and republishers.
200. See, e.g., Schoepflin v. Coffey, 56 N.E. 502, 504 (N.Y. 1900) (reversing judgment based on evidence defendant published libel when he talked to newspaper reporter; no procurement or command of subsequent written dissemination). The court assumed slander would have occurred when the statement was made to the reporter but for the failure to allege or prove either special damages or slander per se. Id.
201. See, e.g., Woodling v. Knickerbocker, 17 N.W. 387 (Minn. 1883) (defendant store owner liable for placards placed on table in front of his store saying plaintiff was a deadbeat, despite lack of evidence defendant personally placed them there).
Sweatlocke must establish that the author failed to exercise reasonable care by failing to check the accuracy of the statements and therefore acted with the requisite fault. 202 The author spent five years in the small town, yet failed to recognize that Mr. Sweatlocke had five children, and then published the offending statement. A fact finder could certainly find that a reasonable person would have exercised greater care. That finding would establish negligence, the required degree of fault in most states. 203

The publisher and printer are liable if Sweatlocke can demonstrate, first, that they were republishers and, second, that each acted negligently when it failed to verify the accuracy of the statements. 204 There can be no question that a publisher and commercial printer acted intentionally to disseminate the printed works. Sweatlocke must also establish that because the publisher had editorial control over the content of the book the publisher should be charged with knowledge of its contents. Second, Sweatlocke must establish that the publisher acted unreasonably when it relied on the accuracy of the author’s statements. The fact that the author had lost earlier libel suits, combined with the fact that the statement was so obviously offensive, may support a finding of breach of the duty to exercise reasonable care. The question is to be settled with reference to the particular efforts of the publisher to verify the accuracy of the statements. The printer presents somewhat different facts on the same issues. It is unlikely that the printer will be charged with as much responsibility as the publisher to know the content and verify its accuracy. It is thus likely that the printer will escape liability unless Sweatlocke can show some involvement with content beyond that of setting type. 205

The distributor is also likely to escape liability. The distributor was a mere conduit with no reason to know the nature or content of the book. As a mere conduit, the distributor is not liable as a republisher. 206

The bookstore is likely to be labeled a republisher by the court. Therefore, if the requisite fault can be established, it may be liable for the resulting harm. Sweatlocke phoned the store, told the operator the nature of the statements contained in the book, and requested that the books be removed from sale. Additionally, the bookstore operator had read of the author’s repeated courtroom adventures. Although either of

204. See Gertz, 418 U.S. at 347.
205. The printer was aware of the statement because he edited the manuscript. A printer who simply sets type without reading the content might have a stronger defense.
these factors alone would not lead to a reason to know, the combination of the two may create the special circumstances referred to in *Dworkin v. L.F.P., Inc.* 207 As a result the bookstore may be labeled a republisher.

The bookstore operator probably acted with the requisite fault. The operator did not attempt to ascertain the accuracy of the statements. The operator was negligent when it failed to perform a reasonable investigation of the accuracy of the statements after being informed that they might be defamatory. Because Sweatlocke is a private figure and because the statements did not involve matters of public interest, negligence by the bookstore operator will establish the required fault. Different treatment of the bookstore and the distributor is justifiable on the grounds that the bookstore exercises greater discretion in selecting which titles to stock and therefore exercises a greater measure of content control.

4. Application to a Network

Applying the common law rules of libel to network users and operators yields the following conclusions.

First, a message originator that distributes a defamatory message over a computer network is liable for the tort of libel. It is possible to establish each of the four elements. 208 The first element, the false and defamatory nature of the message, is established in the same manner as it would be with any type of transmission device. 209 The fourth element, proof of harm, again requires no special application when a computer network is used to disseminate the information. Transmission over a network is a publication by the author, so the second element is satisfied. It is reasonably foreseeable that the defamatory messages will reach someone other than the subject of the message, 210 so there is a publica-

208. See Restatement (Second) of Torts § 558 (1977).
209. The fact that the message is sent over a network is not relevant to the analysis of the message itself. It would be no different than if the message were published in a newspaper or magazine.
210. It is certainly possible for a message to be transmitted and encoded for privacy. It is also possible that the intended recipient will be the one defamed. If either of these possibilities is realized, and the author did not negligently communicate the statement, there will be no liability because there was no publication.

In the more typical case likely to give rise to a cause of action for libel, however, the messages are sent to or are available to multiple parties. In this case the act of sending the message can either be intentional or negligent. It is a relative certainty that the transmission was intentional, for it is unlikely that a computer operator would not know that it was sending a message. Nevertheless, it is still a requirement that the plaintiff establish the intentional or negligent communication of the message.
tion by the sender. Finally, to establish the third element, the author must have acted with the requisite fault regarding the truth or falsity of the statement. In most states, the author must have been at least negligent if the plaintiff is a private figure.\textsuperscript{211} This is a question for the trier of fact, and the use of a network does not change the analysis.

Second, computer network intermediaries are liable for defamatory statements transmitted over the network only if both of the following can be established: The message distributed must be shown to be false and defamatory. Then, the network intermediaries must be shown to be republishers. Because a transmitter is not a republisher unless the transmitter acts with knowledge of the content, and because one who supplies the means of communication is not a republisher unless there is knowledge of the defamatory content, the focus is on what the network intermediaries knew or should have known.\textsuperscript{212} Knowledge, or the imputation of knowledge, can be established in two ways. First, if the intermediary exercised content control over the messages on the network, the court may impute knowledge of the defamatory nature of the messages. A clear example would be the moderator of a bulletin board conference who screens messages before posting them. Second, if special circumstances were present, such as the fact that the operator knew of the user's repeated transmission of defamatory messages and had knowledge that a recent message may be defamatory, the court may impute knowledge. This special circumstance may arise if an intermediary that otherwise does not exercise content control receives complaints about an originator of messages.

Third, the network operator may be negligent after learning that a message is false or defamatory.\textsuperscript{213} The requisite degree of fault will depend on the identity of the plaintiff and the nature of the statements.\textsuperscript{214} As with the negligence formula in other contexts, whether the requisite care has been exercised depends on the technological and economic feasibility of taking additional steps to prevent the harm. This allows consideration of the technology used on the network and the ease with which it permits content to be screened. If republisher liability is premised on specific complaints about a particular originator, the technological inquiry may focus only on whether it is technologically feasible to

\textsuperscript{212} This conclusion is premised on a finding by the court that by supplying the network and encouraging its use, the operator was a participant in communication of the statement. See generally Scott v. Hull, 259 N.E.2d 160 (Ohio Ct. App. 1970); Anderson v. New York Tel. Co., 320 N.E.2d 647 (N.Y. 1974).
\textsuperscript{214} Id.
exclude that originator. The probability of network intermediary liability varies depending on whether electronic publishing or EMail is involved.

When EMail is involved, the Electronic Communications Privacy Act ("ECPA")\textsuperscript{215} imposes duties on network operators not to intercept messages or to alter their contents.\textsuperscript{216} This legal obligation alters results of applying the feasibility formula for content control, thereby reducing the likelihood that the negligence standard requires a network intermediary to exclude potentially harmful EMail messages. Nevertheless, the policy behind the ECPA permitting networks to protect their interests\textsuperscript{217} may be enough to obligate the network intermediary to police content of potentially harmful EMail messages, at least if it has special knowledge of potential harmfulness.

The Commissioners on Uniform State Laws are drafting a statute to regulate republisher liability, especially focused on the electronic information context.\textsuperscript{218} Section 8-103 of the current draft would immunize an information retrieval service from liability if it is not reasonably understood in the normal course of business to assert the truthfulness or reliability of the information it maintained, or if it takes reasonable steps to notify customers or patrons that it does not assert the truthfulness or reliability of the information.\textsuperscript{219}

\section*{B. Invasion of Privacy}

Invasion of privacy is a tort divisible into four distinct branches.\textsuperscript{220} The intrusion and the disclosure of private facts branches are discussed in this Section.\textsuperscript{221}

\begin{itemize}
  \item \textsuperscript{216} 18 U.S.C. §§ 2701-2702 (1988).
  \item \textsuperscript{217} 18 U.S.C. § 2702(b)(5) (1988).
  \item \textsuperscript{218} National Conference of Commissioners on Uniform State Laws, Defamation Act With Prefatory Note and Comments, Discussion Draft Prepared for August 2-9, 1991 Meeting.
  \item \textsuperscript{219} Id. § 8-103. In the value-added framework discussed in this Article, the model act creates an immunity or privilege for an information services provider that expressly forbears from adding integrity assurance value.
  \item \textsuperscript{220} The four branches are intrusion, disclosure of private facts, portrayal in a false light, and appropriation of name or likeness. See Michael S. Baum & Henry H. Perritt Jr., ELECTRONIC CONTRACTING, PUBLISHING AND EDI LAW §§9.28-9.43 (1991).
  \item \textsuperscript{221} The portrayal in false light branch is concerned with the same reputational interests as defamation, and the kind of conduct and intent likely to give rise to defamation liability is also likely to give rise to liability for false light invasion of privacy. The appropriation branch is closely associated with copyright infringement because it is concerned with conduct that wrongfully appropriates the economic gain potentially available to the owner of information or personality.
\end{itemize}
This Section sketches concrete factual situations in which liability for invasion of privacy by a supplier of network services is plausible. It then explains the common law determinants of liability and concludes with an application of those common law concepts to the factual situations.

A network service provider may face invasion of privacy liability for intrusion or disclosure of private facts in several circumstances:

1. A network services provider could misroute a private message to a recipient not intended by the sender of the message;
2. A network services provider could read the contents of a message intended to be private;
3. A network services provider could make it possible for a third party to obtain undesired access to private messages; or
4. A network services provider could make it possible for a third party to disseminate private facts or information obtained through intrusion.

The invasion of privacy torts produce liability only when the plaintiff can show a reasonable expectation of privacy in the information, use of unreasonable means by the defendant, and, in the case of the disclosure branch, a type of disclosure that would be offensive to a reasonable person, and that would involve more than a few recipients of the information.

In the electronic network context, the reasonable expectation of privacy element can be affected by the way a network services provider describes its services. The provider can defeat a reasonable expectation of privacy by making it clear that messages are subject to access by people other than the addressee in certain circumstances.

There are few republisher invasion of privacy cases. It is reasonable to analogize to defamation law and conclude that a republisher of information or an entity that only delivers or transmits information could be liable for invasion of privacy either if the republisher is an agent of a third party tortfeasor or has the requisite intent.

To apply these concepts to concrete factual situations, suppose that the supplier of an electronic bulletin board organizes a conference and encourages users to disseminate EMail messages obtained without the consent of the sender and addressee. This would almost certainly produce liability under the disclosure branch of invasion of privacy. If the actor arranged to obtain the messages by electronic connection to an EMail service designed to defeat security measures, liability for the intrusion branch is likely as well. On the other hand, if the service provider does not intend, and has no knowledge of intrusive or disclosing conduct by a third party, liability for the network service provider is not appropriate.
If the service provider knows or has reason to know of intrusive or disclosing conduct by a third party and if the service provider reasonably can prevent the conduct, liability for invasion of privacy depends on whether the court requires proof of negligence rather than intent to invade. Whether liability exists for negligent invasion of privacy is a matter of some controversy at common law. Most states do not recognize a negligence theory of liability.

The likelihood of invasion of privacy liability for a network services provider is lower than the likelihood of defamation liability because of a more demanding fault requirement. A merely negligent electronic republisher can face liability for defamation, while a merely negligent republisher of private facts or provider of services that aid in electronic intrusion probably faces no liability for common law invasion of privacy.

C. Copyright Infringement

Contributory infringement exists when a prominent use of the defendant's product is for copyright infringement. The usual dispute in contributory infringement cases is whether the product has a substantial noninfringing use.

Virtually any network service has substantial non-infringing uses. But if a particular service or product, like a bulletin board or a conference, is devoted primarily to the distribution of copyrighted material, the possibility exists of liability for contributory infringement by the supplier of that particular service. It is not evident from the recent case law that suppliers of products or services with substantial noninfringing uses have any obligation to design features into their products so as to reduce the likelihood of occasional infringing use by third parties.

D. Content Control Is the Key

In all three major categories of tort liability, the requisite fault cannot be proven without showing either (1) that the actor and potential tortfe-
sor exercised some actual control over content or (2) that it was feasible for it to control content and that it could foresee the possibility of harm if it did not control content.

It is not a sufficient answer to say that a carrier can escape tort liability if it declares its intention not to control content. From the perspective of the victim, the important question is whether the carrier had an opportunity to prevent foreseeable harm yet failed to do so. The victim would prefer a rule that would allow a defendant to avoid tort liability only in situations in which content control is technologically infeasible.

Infeasibility, however, is a concept with an economic dimension. Determining what is feasible requires balancing of risks and benefits. Ultimately one must balance the social benefit of having an uncensored channel against the risk of injurious communications in that channel. The balance can be drawn by legislatures or by courts applying common law rules.

E. Termination of Access as a Sanction for Harmful Content

A judgment for damages is not the only kind of economic penalty a network services provider faces. Federally subsidized "backbone" network services and connections through the voice telephone network can be cut off, based on injurious, offensive, or otherwise inappropriate content.

1. Acceptable Use Policies

The federally subsidized Internet restricts use of the subsidized backbone to educational and research activities. Largely because of these restrictions, entities providing services in connection with Internet impose "acceptable use policies" as a condition of supplying their services. These acceptable use policies are content restrictions.

Two difficulties are associated with acceptable use policies. First, restricting use to educational and research purposes greatly limits commercialization. Second, the existence of an acceptable use policy invites narrowing of acceptable uses by adding prohibitions against offensive content. Pressure from various groups to add prohibitions is likely.224

224. See Carlin Communications, Inc. v. Mountain States Tel. & Tel. Co., 827 F.2d 1291, 1297 (9th Cir. 1987) (Mountain Bell's contractual prohibitions against carrying dial-a-porn service did not constitute state action.), cert. denied, 485 U.S. 1029 (1988).
Such pressure may be as much a concern as tort liability for the network service provider with an acceptable use policy.

2. Enforceability

One of the problems in enforcing duties of suppliers of electronic information and related services is that it may be difficult to ascertain the identity of the supplier and to obtain meaningful physical access or control over its assets. One of the realities in controversies over 900 telephone services is that the billing agent, the telephone company, is frequently the only avenue through which a customer with a grievance can get relief. By imposing duties on the billing agent, potential victims can intercept the stream of revenues to the tortfeasor. In other situations, the identity of the tortfeasor may not be ascertainable absent cooperation from network intermediaries.

U.S. West reportedly has drafted a policy for 900/700 services with the following components:

(1) No billing for services that contain information or use marketing practices that cause harm to the telephone company’s reputation. This includes pornographic services and fraudulent marketing activities, and activities that exploit children;

(2) No billing for goods or information exchanged in a separate transaction;

(3) No billing for services producing high numbers of complaints; and

(4) No billing for services soliciting political or charitable contributions.  

U.S. West also planned to establish a review committee following published procedures to determine when a service meets the criteria for discontinuation of 700/900 billing services. There are thus important dispute resolution issues of a fairly general nature regarding implementation of any framework for defining substantive tort rights and responsibilities. The motives for a restrictive 900 billing policy overlap considerably with the motives for a restrictive acceptable use policy. The result in both cases is denial of access.

225. See S. J. Diamond, Phone Firms Setting Limits on Dial-a-Porn, L.A. TIMES, Mar. 4, 1988, §4, at 1.
F. Impact of Existing Law on Providers

The actual risks of economic sanctions for objectionable content are somewhat different, depending on whether sanctions are imposed through the tort law or by cutting off access. Tort liability poses a greater problem to suppliers of information content than to suppliers of channels through which the content flows. The importance of content control in the editorial context was emphasized in Anderson v. New York Telephone Co., which held a telephone company not liable for disseminating defamatory material.

Some difficulty in applying content control concepts from other contexts to electronic bulletin board conferences may arise from the practice of shifting or shared responsibility for facilitating the conference. It is difficult to identify a specific individual who controls content and is, therefore, the most appropriate defendant. Invasion of privacy liability is likely only for network providers that intentionally establish services aimed at disclosing private facts or wrongfully obtaining access to electronic messages. Contributory copyright infringement liability is likely only if the dominant use of the service involves copyright infringement. The substantive legal rules diminish the risk of tort liability for suppliers that exercise little content control. Nevertheless, the uncertainty of the common law may leave such suppliers wary. The risks of curtailment of access to a network backbone based on content are less tightly associated with voluntary content control. A mid-level network is responsible, in theory, for ensuring that it carries no content inconsistent with the backbone's acceptable use policies. Thus, acceptable use policies, in a hierarchy of networks, may have a stronger chilling effect than tort liability.

IV. FIRST AMENDMENT PRINCIPLES

When considering public policies for information exchange, one must be concerned about the First Amendment, which provides in material part: "Congress shall make no law . . . abridging the freedom of speech, or of the press . . . ."227

The First Amendment is a shield against legal regulation and control. It is perhaps better understood as the grant of immunities rather than as a source of affirmative right. The First Amendment adds a dimension to equal access analysis and to tort liability analysis not present with non-

communication common carriers. Thus, while railroad tort liability and common carrier nondiscrimination principles evolved without concern for the First Amendment, today's information exchange technologies receive First Amendment protection. But even where protection exists, constitutional immunity can be overridden when a sufficiently compelling state interest supports regulation.

There are several touchstones for applying the First Amendment to electronic networks and bulletin boards. First, state action must exist. Second, distinctions between freedom of speech and freedom of the press must be addressed. Third, commercial speech must be addressed. Fourth, cases extending First Amendment protection from information services to information intermediaries should be analyzed. Finally, and most pertinent to the interaction between the First Amendment, common carriage, and tort liability, cases defining First Amendment protection for broadcasters and cable television providers should be examined.228

A. State Action

As a threshold issue in First Amendment analysis, state action must exist. The First Amendment and its fundamental rights as incorporated into the Fourteenth Amendment protect persons from governmental interference with free speech. Significantly, state action in the First Amendment context includes common law judgments in addition to statutory restrictions.229 Thus, a First Amendment violation conceivably occurs if one of the common law principles discussed in Section III is applied to permit a damage judgment against a private person enjoying First Amendment protection on an electronic network.

State action exists when the government, its agents, or its instrumentalities act. If the FCC, a government agency, refuses to issue a license to a communication service provider who opposes administration policy, the First Amendment state action requirement is satisfied. State action also exists when a private entity performs a traditionally governmental function,230 or when a private entity highly regulated by the government

228. The interrelationship between the First Amendment and tort liability was considered in the context of tort liability principles in Section III. In this area, the First Amendment has been internalized into substantive tort law. See Restatement (Second) of Torts § 558 (1976).


performs an act directed by a regulatory agency.\textsuperscript{231} In the tort liability area, state action occurs when tort law is used to impose damage judgments or equitable decrees.\textsuperscript{232}

However, when a government agency permits, but does not compel an action, state action is not involved.\textsuperscript{233} Thus, decisions of the FCC constitute state action, but decisions of a communication service provider regulated by the FCC are not state action unless the provider acts pursuant to an affirmative FCC mandate.\textsuperscript{234} The refusal of a private digital network to handle traffic from advocates of gay and lesbian rights, for example, would not be state action because it does not involve an affirmative governmental mandate.

\section*{B. Distinction Between Freedom of the Press and Freedom of Speech}

The Supreme Court has not drawn an explicit distinction between free press and free speech.\textsuperscript{235} When addressing issues involving freedom of

\begin{footnotesize}
\begin{enumerate}
\item See Jackson v. Metropolitan Edison Co., 419 U.S. 345 (1974) (holding that state action requirement was not met when action by a privately owned, heavily regulated utility was approved by state utility commission: regulation by state or federal government may constitute state action, but only when the regulation actually mandates private sector action that infringes the First Amendment rights in question).
\item See Cohen v. Cowles Media Co., 111 S. Ct. 2513 (1991) (Application of state promissory estoppel rules in state court to impose liability on newspaper constitutes state action.);
\item See CBS, Inc. v. Democratic Nat'l Comm., 412 U.S. 94, 114–21 (1973) (reversing court of appeals conclusion that broadcaster's refusal of political advertisements under FCC rule permitting such refusal was state action for First Amendment purposes); Sinn v. Daily Nebraskan, 829 F.2d 662 (8th Cir. 1987) (Student editors of college newspaper were independent of state university and their conduct was therefore not state action.); but see Louis L. Jaffe, The Editorial Responsibility of the Broadcaster: Reflections on Fairness and Access, 85 HARV. L. REV. 768, 782–87 (1972).
\item See Carlin Communications, Inc. v. Mountain States Tel. & Tel. Co. 827 F.2d 1291, 1297 (9th Cir. 1987), cert. denied, 485 U.S. 1029 (1988) (Mountain Bell's contractual prohibitions against carrying dial-a-porn service did not constitute state action.); Morgan W. Tovey, Dial-a-Porn and the First Amendment: The State Action Loophole, 40 FED. COM. L. J. 267, 280–83 (1988).
\item See Minneapolis Star & Tribune Co. v. Minnesota Comm'r of Revenue, 460 U.S. 575, 593 (1983) (statute which taxed the use of ink and paper violated First Amendment because state offered no satisfactory justification for the tax); Heber, . ..lando, 441 U.S. 153, 155 (1979) ("[W]hen a member of the press is alleged to have circulated damaging falsehoods and is sued for injury to the plaintiff's reputation, the plaintiff is [not] barred from inquiring into the editorial processes of those responsible for the publication when ... the inquiry would produce evidence material to the proof of a critical element of his cause of action."); First Nat'l Bank of Boston v. Bellotti, 435 U.S. 765, 795 (1978) (Statute prohibiting politically persuasive donations violated First Amendment because it prohibited protected speech in a manner unjustified by a compelling state interest.); Virginia Bd. of Pharmacists v. Virginia Consumers Council, 425 U.S. 748, 773 (1976) ("a state may [not] completely suppress the dissemination of concededly truthful information about [an]
the press, the Court intertwines the constitutional rights of press and speech. In fact, the only Justice who explicitly asserted that such a distinction exists was Potter Stewart. 236 Stewart argued that "[i]f the Free Press guarantee meant no more than freedom of expression, it would be a constitutional redundancy." 237

In *Minneapolis Star & Tribune Co. v. Minnesota Commissioner of Revenue*, 238 the Court recognized Stewart's viewpoint:

> When the State singles out the press ... the political constraints that prevent a legislature from passing crippling taxes of general applicability are weakened, and the threat of burdensome taxes becomes acute. That threat can operate as effectively as a censor to check critical comment by the press, undercutting the basic assumption of our political system that the press will often serve as an important restraint on government. 239

But since the Court did not explain or expand upon Stewart's basic assumption, one should not overstate the significance of this acknowledgement.

In the cases in which the Court recognizes the right of a free press, it is careful not to extend this right beyond the First Amendment protection afforded to the general public. 240 This point is reinforced in two recent

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236. Justice Stewart's viewpoint was recorded at a Yale Law School Convocation in 1974 and transcribed in the Hastings Law Journal. Potter Stewart, Or of the Press, *HASTINGS L.J.* 631, 634 (1975) (arguing that "[t]he primary purpose of the constitutional guarantee of a free press was ... to create a fourth institution outside the Government as an additional check on the three official branches").

237. *Id.* at 633. Stewart's position has received some academic support. See, e.g., David A. Anderson, *The Origins of the Press Clause*, 30 UCLA L. REV. 455, 493 (1983) (concluding that "Justice Stewart was right").


239. *Id.* at 585 (citing Stewart, *supra* note 236, at 634).

240. See Pell v. Procuer, 417 U.S. 817, 833 (1974) ("It has generally been held that the First Amendment does not guarantee the press a constitutional right of special access to information not available to the public generally ....") (quoting Branzburg v. Hayes, 408 U.S. 665, 684 (1972)); Pittsburgh Press Co. v. Human Rel. Comm'n, 413 U.S. 376, 382 ("The publisher of a newspaper has no special immunity.") (quoting Associated Press v. NLRB, 301 U.S. 103, 132 (1937)).
decisions. In *Cohen v. Cowles Media Co.*, the Court held that the First Amendment does not shield a newspaper from liability to a news source for breach of a promise of confidentiality. The Court did not suggest any distinction between free press and free speech, emphasizing that the press is not immune from laws which apply to the general public. In *Masson v. New Yorker Magazine, Inc.*, the Court held that misquoting a public figure is actionable when the fabricated quotation materially alters the speaker's comments. Again, the Court did not suggest any distinction between free press and free speech.

The Court has recognized that freedom of the press is a constitutional right and an important part of our society, yet an institutional press protection as distinct from a personal right of free speech is limited. By articulating restrictions on freedom of the press as a distinct right, the Court ensures that freedom of the press is effectively no greater than freedom of speech.

C. Commercial Speech

Commercial speech was held entitled to First Amendment protection in *Virginia Board of Pharmacists v. Virginia Consumers Council*, after an extended period during which the Court expressed reluctance to afford commercial speech such protection. In extending First Amendment protection to commercial speech, the Court emphasized that where there is a willing speaker, First Amendment protection encompasses both the source and recipient of communication.

The fact that communication is purely factual does not mean that it per se falls outside the realm of First Amendment protection. Additionally, the fact that communication is commercial does not disqualify it from First Amendment protection. Rather, in order for commercial speech to lack First Amendment protection, the content of the communication must be distinguishable from protected speech. The mere quality

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242. at 2525.
244. See *Pell*, 417 U.S. at 832 ("The constitutional guarantee of a free press 'assures the maintenance of our political system and an open society . . . ."") (quoting *Time, Inc. v. Hill*, 385 U.S. 374, 389 (1967)); *Pittsburgh Press*, 413 U.S. at 382 ("A free press stands as one of the great interpreters between the government and the people.") (quoting *Grosjean v. American Press Co.*, 297 U.S. 233, 250 (1936)).
of speech as commercial is not enough to exclude it from First Amendment protection.

**D. Resellers as well as Originators of Content Enjoy First Amendment Protection**

Treatment of the First Amendment rights of electronic information intermediaries is certain to be based on treatment of analogous suppliers of value in the print-on-paper context. Three kinds of print-on-paper intermediaries are of interest: printers, book warehouses, and bookstores.

Although the Supreme Court has recognized a First Amendment right to publish, it has not explicitly recognized a First Amendment right to print. The closest the Court has come to making the latter recognition was in *Murdock v. Pennsylvania*. In addressing First Amendment freedoms, the dissenting Justice Reed stated: "'Free' means a privilege to *print* or pray without permission and without accounting to authority for one's actions." Of course, since the statement came in dissent, it is not authoritative. It does, however, indicate the Court's inclination to recognize that a printer has First Amendment rights.

The key link in the logic that printers enjoy First Amendment protection is the necessity of printing to effective dissemination of ideas. In *Talley v. California*, the Court stated: "Liberty of circulating is as essential to [freedom of expression] as liberty of publishing; indeed, without the circulation, the publication would be of little value." Although the Court did not recognize the First Amendment right of printers, such a conclusion may be drawn from the decision. Publication

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247. See *Bridges v. California*, 314 U.S. 252 (1941); see also *Murdock v. Pennsylvania*, 319 U.S. 105, 117–33 (1943) (Reed, J., dissenting) (arguing that a tax on religious publications does not violate freedom of the press). A publisher is defined as:

One who by himself or his agent makes a thing publicly known. One whose business is the manufacture and sale of books, pamphlets, magazines, newspapers, or other literary productions. One who publishes, especially one who issues, or causes to be issued, from the press, and offers for sale or circulation matter printed, engraved, or the like.


248. A printer is defined as: "one that prints ... a: a person engaged in printing b: a device used for printing: esp: a machine for printing from photographic negatives . . . ." **WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY** 935 (1983).

249. 319 U.S. 105 (1943).

250. *Id.* at 122 (Reed, J., dissenting) (emphasis added).


252. *Id.* at 64 (quoting *Lovell v. Griffen*, 303 U.S. 444, 452 (1938)).
and circulation would be of little value without printing. Thus, the denial of First Amendment rights for a printer is a constructive denial of circulation and thus a denial of First Amendment rights for a publisher.

Printers existed at the time the Founding Fathers wrote the First Amendment. In the late 1700s, printers were the primary means of disseminating information among the thirteen states. As a matter of common sense, all newspapers, magazines, and literature are made by printers. If a printer has no First Amendment rights, then the right of free press is meaningless. This analysis applies equally well to book warehouses and bookstores.

Because the Court embraces the right to distribute literature, the Court has explicitly recognized that book warehouses and bookstores enjoy First Amendment protection.253 Additional authority for the proposition that bookstores are protected by the First Amendment arises from scrutiny of laws against obscenity. Obscenity is not protected by the Constitution,254 but difficult boundaries between permissible and impermissible obscenity regulations are drawn because bookstores, the most frequent target of anti-obscenity enforcement, enjoy First Amendment rights.255 Book warehouses, like booksellers, must have First Amendment rights, or authors and publishers would be effectively denied their rights.

E. Application to Electronic Formats and Media

First Amendment jurisprudence extends doctrines developed in the context of disseminating print-on-paper information to electronic technologies in a straightforward manner. It is appropriate to start with telephone communication, the most basic form of electronic communication.

When the First Amendment was drafted in the late 1700s, the telephone did not exist. Therefore, a strict interpretation of the intent of the drafters might exclude the possibility that a person has a First Amendment right to make or receive a telephone call. Today, however, the

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252. "The right of freedom of speech and press ... embraces the right to distribute literature ..." Board of Educ. v. Pico, 457 U.S. 853, 867 (1982) (plurality opinion) (quoting Martin v. Struthers, 319 U.S. 141, 143 (1943)) (school board's content-based removal of books from school libraries offended First Amendment principles); see also Smith v. California, 361 U.S. 147, 150 (1959) (noting that the publication and dissemination of books are within the constitutional protection of free press, and that a retail bookseller plays a most significant role in the distribution of books).

254. See Roth v. United States, 354 U.S. 476, 483–85 (1957); see also Kaplan v. California, 413 U.S. 115, 119–20 (1973) (books containing only words can be obscene); Miller v. California, 413 U.S. 15, 23–25 (1973) (using a community standard test to determine what material is obscene and thus unprotected).

telephone is a mode of communication as important as any other. Given this ubiquity and the notion that the term "free speech" embodies all conversation, the right to make and receive a telephone call should be embodied in the First Amendment.

The Court's general recognition that a person has a First Amendment right to disseminate information means that a person has a First Amendment right to make a telephone call. In making a telephone call, a person disseminates or distributes oral information. A person has a First Amendment right to make a telephone call because oral speech is clearly within the protection of the First Amendment. Following the print-on-paper paradigm, though, a First Amendment right to make a telephone call extends only to protected expression. Since obscenity is not a form of expression that is protected by the First Amendment, it is not protected in the context of telephone communication.

While the Supreme Court has not explicitly recognized that a person has a First Amendment right to receive a telephone call, this conclusion flows naturally both from the general right under the First Amendment to receive information and from the proposition that making telephone

256. See supra notes 251-52 and accompanying text.
257. See Miller, 413 U.S. at 23-25 ("As with pictures, films, paintings, drawings and engravings both oral utterance and the printed word have First Amendment protection . . . .") (emphasis added); see also Roth, 354 U.S. at 483-85.
258. See supra note 254 and accompanying text.
259. See Sable Communications of California, Inc. v. FCC, 492 U.S. 115, 124 (1989) ("In contrast to the prohibition on indecent communications, there is no constitutional barrier to the ban on obscene dial-a-porn recordings."); see also Carlin Communications, Inc. v. Mountain States Tel. & Tel. Co., 827 F.2d 1291, 1297 (9th Cir. 1987), cert. denied, 485 U.S. 1029 (1988); Tovey, supra note 234, at 280. In Carlin, a split panel of the Ninth Circuit, after invalidating state prohibitions on dial-a-porn services carried by Mountain States Telephone Co., held that the telephone company's contractual refusals to carry such service did not constitute state action. Compare Sable Communications of California, Inc. v. Pacific Tel. & Tel. Co., 890 F.2d 184 (9th Cir. 1989) (state action found when telephone company encouraged state officials to force it to disconnect sexually explicit, but not obscene, message service) and Westpac AudioText, Inc. v. Wilks, 756 F. Supp. 1267, 1270-75 (N.D. Cal. 1991) (state action found when telephone companies refused to provide billing and collection services to dial-a-porn providers) with Omniphone, Inc. v. Southwestern Bell Tel. Co., 742 S.W. 2d 523 (Tex. App. 1988) (approval of tariff does not make subsequent action by carrier, including disconnecting service, state action).
calls enjoys First Amendment protection. A denial of a First Amend-
ment right to receive a telephone call constructively denies a right to
make a telephone call. Thus, in order to protect telephone commu-
nication, a particular audience must have a right to receive telephone calls.

The telephone illustration suggests that both senders and receivers of
digital electronic communication enjoy First Amendment protections,
although not all regulation of persons handling information violates the
First Amendment. The reasoning that extends First Amendment pro-
tection to publishers, printers, booksellers, and book warehouses also
logically extends protection to intermediaries handling digital electronic
communications. Moreover, protection of commercial speech justifies
no distinction between different types of electronic communications.

F. Content Control Is the Key to
Must-Carry Regulation

Regulation of speech based on its content is subject to the greatest
scrutiny under the First Amendment. Conversely, content-neutral,
incidental burdens on speech are subject to less demanding constitutional
scrutiny. Under the test in United States v. O'Brien, a sufficiently
important governmental interest not aimed at speech can justify incident-
tally limiting First Amendment freedoms, provided that the governmen-
tal interest is substantial and the restriction is no greater than neces-
sary.

But even when content regulation is involved, the justification burden

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478 U.S. 1 (1986) (recognizing the First Amendment right to receive information by recog-
ning the right of access to sealed transcripts); Washington Post v. Robinson, 935 F.2d 282
(D.C. Cir. 1991) (vacating order sealing plea agreements; procedures unduly restricted First
Amendment right of access).

261. Sometimes audience interests conflict with information provider interests, as when
the state seeks to prevent intrusive residential solicitation. See South-Suburban Housing
Center v. Greater South Suburban Bd. of Realtors, 935 F.2d 868, 890 (7th Cir. 1991) (First
Amendment allows ordinances to protect homes against unwanted solicitations.).

U.S. 748, 770–71 (1976) (content-oriented regulation of commercial speech violates First
Amendment as distinguished from content-neutral time, place, and manner regulation).


264. The O'Brien test sets out four elements in establishing the First Amendment vali-
dity of a government regulation: (1) The regulation must be within the constitutional
power of the government; (2) It must further an important or substantial governmental
interest; (3) That interest must be unrelated to the suppression of free expression; and (4)
The restriction on First Amendment interests must be no greater than is essential to further
the governmental interests. Id. at 377.
is not insuperable. Special sensitivity of the communication's audience and the nature of the communication technology involved may justify restrictions on speech. There is at least a hint in the Supreme Court cases that the First Amendment permits content regulation based on the need to promote diversity of information sources and to limit monopoly control over bottlenecks in the infrastructure: "It is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market, whether it be by the Government itself or a private licensee."

In a cable television case, Chicago Cable Communications v. Chicago Cable Commission, the Seventh Circuit accepted the need for more outlets for particular information sources as a governmental interest sufficient to support regulation. This factual situation closely parallels the notion of requiring digital network intermediaries to provide access to certain types of information sources in order to increase the number of outlets available to them. Such a network equal access requirement seems constitutional. To the extent that the beneficiaries are identified without regard to content or ideological position, the likelihood of content-based First Amendment infringements would be even less than in Chicago Cable.

The principal constitutional impediment to network equal access is represented by Pacific Gas & Electric Co. v. Public Utilities Commission. In Pacific Gas & Electric, a split Court found that the First Amendment bars state administrative order requiring electric utility to devote space in its newsletter to messages from specific public interest group.

265. Compare Rust v. Sullivan, 111 S. Ct. 1759, 1772-75 (1991) (government may fund programs to encourage certain activities while discouraging others without violating First Amendment) with id. at 1780 (Blackmun, J., dissenting) (First Amendment has never permitted viewpoint-based suppression through selective public funding of programs.).


268. 879 F.2d 1540 (7th Cir. 1989).

269. See id. at 1549 (holding that local origin requirement as applied to cable television programming does not violate First Amendment under O'Brien; justifications included increasing the number of outlets for community self-expression and the creation of minority jobs); see also United States v. Midwest Video Corp., 406 U.S. 649 (1972) (validating community self-expression interest).

270. 475 U.S. 1 (1986) (invalidating state administrative order requiring electric utility to devote space in its newsletter to messages from specific public interest group).

Amendment prohibits requiring private persons to distribute messages with which they disagree when the disagreeable message comes from a specific source that the intermediary is required to accommodate. The plurality likened the imposition to the license plate messages invalidated in Wooley,\(^{272}\) and found the private nature of the communications medium unlike the public forum in PruneYard.\(^{273}\) The plurality also emphasized that singling out a particular beneficiary for use of the mandated distribution channel undercut content neutrality.\(^{274}\) All of the Justices appeared to accept that audience interests in receiving diverse information are entitled to First Amendment protection,\(^{275}\) but the case focused on the interference with First Amendment rights of the source, the public utility company.

*Pacific Gas & Electric* would be inhospitable to a requirement that digital network service providers that exercise editorial control handle messages from sources whose viewpoints are contrary to the positions of the service provider. But *Pacific Gas & Electric* would afford less First Amendment protection (1) to a network service provider without editorial control or messages of its own, (2) to a service that offers facilities to the public at large, or (3) in instances in which the mandated access is extended to a diverse class of sources rather than a particular source.

**G. Historical Distinction Between Publishers and Broadcasters**

Historically, a major distinction for First Amendment purposes is drawn between publishers and broadcasters. While publishers enjoy

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\(^{272}\) 475 U.S. at 17 (citing Wooley v. Maynard, 430 U.S. 705 (1977) (State could not require citizens to display slogan on automobile license plates)).

\(^{273}\) 475 U.S. at 12 (citing PruneYard Shopping Center v. Robins, 447 U.S. 74 (1980) (shopping center had no First Amendment right to exclude pamphleteers)). A different question is presented when the person desiring distribution rights uses the First Amendment as a sword, arguing that the shopping center is equivalent to state property, and thus private restrictions on distribution offend the First Amendment. See Hudgens v. NLRB, 424 U.S. 507 (1976) (First Amendment does not protect union campaign in shopping mall because mall prohibitions do not constitute state action; overruling Food Employees Local 590 v. Logan Valley Plaza, 391 U.S. 308 (1968) (Shopping center was functionally equivalent to company town so prohibition on union literature distribution was state action)).

\(^{274}\) 475 U.S. at 20.

\(^{275}\) Id. at 8.
broad First Amendment protection, broadcasters enjoy limited protection. The rationale for allowing greater governmental regulation of broadcasting stems from the finite number of available broadcast frequencies. Although an unlimited number of people can publish, broadcasting implicates a scarce frequency spectrum, and the state has a perceived need to regulate its allocation.

As electronic communication that exhibits aspects of both publishing and broadcasting, cable television falls between these two poles and offers a useful analogy to electronic networks and bulletin boards. In particular, treatment of the cable "must-carry" rule and the cable "fairness" doctrine provides a basis for analysis of network issues.

1. The Fate of Must-Carry Rules for Cable Carriers

The FCC first applied the must-carry rule to cable systems in 1966 in order to prevent undermining of the regulatory framework of broadcast television and to protect local broadcasters from competition by cable television. The must-carry rule requires cable systems to carry, without compensation, all significant over-the-air transmission signals offered by local television broadcasters.

In 1985, having been denied relief from the mandatory carriage rules in separate petitions filed with the FCC, the then current formulation of

276. See FCC v. Pacifica Found., 438 U.S. 726, 748 (1978) (noting that "of all forms of communication, it is broadcasting that has received the most limited First Amendment protection"). Compare Miami Herald Publishing Co. v. Tomillo, 418 U.S. 241 (1974) (Florida statute requiring newspapers to allow responses by political candidates violated First Amendment) with Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969) (FCC regulation requiring broadcasters to give free time for response enhanced rather than infringed First Amendment rights.).


279. Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434, 1439 (D.C. Cir. 1985) (citing Rules re Micro-wave-Served CATV, First Report and Order, 38 F.C.C. 683 (1965) and Second Report and Order, 2 F.C.C.2d 725 (1966)).

the must-carry rule was challenged on First Amendment grounds in *Quincy Cable TV, Inc. v. FCC.* 281 The challenge to the rule was based on the notion that the mandatory carriage of local broadcasts filled cable channels that otherwise could carry alternative programs, thus preventing cable systems from exercising editorial control of those channels.282

The *Quincy* court found that the FCC's must-carry rule should be treated as an incidental burden on speech,283 and as such, applied the test set forth in *O'Brien.*284 The court then found that the must-carry rule failed the *O'Brien* test because the FCC did not adequately show that a substantial governmental interest existed,285 and because the regulations were overly broad.286 Consequently, the court held that the must-carry rule was unconstitutional as written, but explicitly left open the possibility that such rules may be constitutional if they are both sufficiently justified and narrowly tailored.287

As a result of the *Quincy* decision, the FCC withdrew the challenged version of the must-carry rule and replaced it with a more limited version in 1986. The revised regulation differed in two material ways. First, rather than requiring the mandatory carriage of signals of all significant local broadcasters, the new version of the rule established limits on the number of channels that cable carriers were required to devote to local broadcast signals.288

Second, the FCC changed its justification for the must-carry rule and limited the prospective rule's duration to five years.289 The justification for the revised rule was that it was needed to ensure to viewers continued receipt of local broadcasts during the phasing out period of the manda-
tory carriage rule. After the five-year period, viewers would continue to receive local broadcast transmissions through the use of an A/B switch that the revised regulations required cable systems to offer to their subscribers.290

The revised version of the must-carry rule was challenged by fourteen cable operators in *Century Communications Corp. v. FCC.*291 As in *Quincy,* the *Century* court applied the *O'Brien* test and subsequently held that the rule in question violated the First Amendment.292 Specifically, the court found that the justification for the revised rule was speculative and failed to advance a substantial governmental interest.293 Additionally, and despite the rule's five-year duration, the court found that the rule was overly broad and failed to meet the *O'Brien* requirement that it be narrowly tailored.294

The court of appeals holding in *Century* therefore appears to signify the ultimate demise of the must-carry rule as applied to cable television carriers.295

2. Fate of the Fairness Doctrine

The fairness doctrine involves two elements. The first element of the doctrine requires broadcasters to cover controversial issues. The second element requires coverage in a balanced way.

In *Syracuse Peace Council v. FCC,*296 the D.C. Circuit engaged in a particularly thorough review of the policy and constitutional issues associated with the fairness doctrine. Approving the FCC's abandonment of both aspects of the fairness doctrine, Judge Williams, writing for the plurality, based his decision on traditional administrative law grounds.297 He concurred with the FCC's policy judgment that the fairness doctrine inhibited rather than promoted balanced coverage of important issues and held that the FCC's abandonment was not arbitrary and capricious and was within the agency's statutory discretion.

Judge Wald wrote separately, agreeing with Judge Williams' analysis

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290. See id. §76.66.
292. Id. at 304.
293. Id. at 300.
294. Id.
295. While *Century* still leaves open some possibility that must-carry rules may comport with the First Amendment, see id. at 304, it is unlikely that must-carry rules will resurface because local broadcasting has remained competitive absent such regulation.
296. 867 F.2d 654 (D.C. Cir. 1989).
297. See id. at 655.
of the second element of the fairness doctrine, but disagreeing that adequate notice was given as to the FCC's intent to abandon the first element. Judge Starr also wrote separately, concurring in the results concerning both aspects of the fairness doctrine, but arguing that the court should have considered First Amendment issues that the FCC found to be inextricably intertwined with policy issues. In contrast, Judges Williams and Wald found it unnecessary to resolve the First Amendment issues.

Accordingly, Judge Starr's opinion is the most interesting in terms of First Amendment analysis. He found it appropriate to apply First Amendment concepts to broadcast regulations in terms of the interests of the audience in receiving balanced, diverse views, rather than in terms of the interests of the broadcasters in editorial control. He also found it appropriate to consider the justification for content regulation in terms of the reasonable necessity of the particular form of content regulation. In applying the reasonable necessity standard, he found it appropriate to consider the inter-market and intra-market structures of a particular segment of the information industry. Thus, the FCC is allowed to evaluate competitive conditions within broadcasting, as well as inter-industry competition among television and radio broadcasters, and between broadcasters and newspapers.

The Starr opinion thus embraced an approach to First Amendment jurisprudence in regulating electronic media. Under this approach, the First Amendment is both a sword, justifying affirmative regulation, and a shield, channeling the types of regulations to those justifiable with respect to market conditions.

H. Application to Digital Electronic Network Context

The First Amendment influences digital electronic networking in two respects. First, it potentially can be a source of right to gain equal

298. See id. at 669 (Wald, J., concurring in part).
299. See id. at 673 (Starr, J., concurring).
300. See id. at 657 (applying Ashwander v. TVA, 297 U.S. 288 (1936)).
301. See id. at 681–82 (Starr, J., concurring).
302. In developing his approach, Judge Starr differentiated between the marketplace of potential licensees and the marketplace of potential ideas. He rejected the view that "allocational scarcity," the situation where "demand for broadcast frequencies exceeds supply," constituted a basis for state regulation of cable television. Id. at 682. Instead, Judge Starr embraced the view that cable itself presents a sufficiently broad marketplace of views such that state regulation through the fairness doctrine is both unnecessary and unconstitutional. See id. at 682–84.
access. Second, it can be interpreted to prohibit legal requirements for equal access.

The First Amendment is not likely to be an effective sword for information service providers seeking to use it as an affirmative source of equal access rights. Only if the FCC or the Congress or another governmental entity imposes specific affirmative requirements on private information service providers is the conduct of the service provider likely to be sufficient state action to implicate the First Amendment.

The second application of the First Amendment is of major importance in fashioning a comprehensive digital network policy. The case law permitting the FCC's imposition of obligations on broadcasters emphasizes that even broadcasters, with the least First Amendment protection of all the media, nevertheless have First Amendment rights with respect to their editorial decisions. Proponents of imposing equal access obligations on entities that arguably exercise some degree of content control must justify the imposition on monopoly grounds. This presents the strongest justification under the First Amendment, drawing on the cases supporting the public interest in preventing monopoly and characterizing the First Amendment as protecting information consumers' rights to diverse sources as much as the rights of monopolistic suppliers of information. Moreover, this second branch of First Amendment law should not preclude equal access obligations imposed only on information service providers who do not exercise control over content.

The must carry, fairness and 900-number cases support these propositions for First Amendment protection of digital email and network publishing. First, the existence of editorial control justifies some degree of First Amendment protection, as in the must-carry cases. Second, the First Amendment rights can be overcome by a sufficient showing of state interest. Third, the means of regulation must be minimally intrusive into content. It is thus logically conceivable that a sufficient showing could be made of the need for universal access to certain network intermediaries to justify common carrier regulation of these entities, notwithstanding possible First Amendment rights. Moreover, the actual activities of most network intermediaries is content neutral and therefore unlikely to implicate First Amendment interests associated with editorial control.

There is a difference in the degree of interference with information

303. Compare Information Providers' Coalition v. FCC, 928 F.2d 866 (9th Cir. 1991) (FCC reverse blocking rules found permissible under First Amendment) with American Information Enters., Inc. v. Thomburgh, 742 F. Supp. 1255 (S.D.N.Y. 1990) (Statute restricting access by providers of indecent information violated First Amendment because it was not the least restrictive means.).
provider content control resulting from the must-carry rules, the fairness
document, and likely digital network equal access requirements. The
must-carry rules conflict most directly with information provider edi-
torial control. These rules force a provider to accept a specific message
even if the provider is completely opposed to its content. The fairness
document presents an intermediate degree of conflict with provider edi-
torial control. The doctrine thwarts a provider’s possible desire to be an
advocate for only one point of view, but it leaves considerable discretion
to the provider on how to present opposing points of view.

Likely equal access requirements for digital networks are related to
the fairness doctrine in that they would require providers of information
services to carry all points of view without limitation. They thus could
be understood an extension of the fairness doctrine to its logical limits.
On the other hand, such equal access requirements do not have anything
to do with content. They do not force a particular message on a provider
because of its content. Rather, they can be viewed as a simple prohibi-
tion on content-sensitive control by the provider.

Distinctions between activities analogous to the “press” and more
general types of electronic speech are unimportant, as are distinctions
between commercial information and other kinds of information. Inter-
mediaries enjoy First Amendment protection to the extent necessary to
allow originators to reach their audiences.

I. Appropriateness of Existing Law

Conceptually, First Amendment jurisprudence is perfectly consistent
with a legal framework that accommodates all three goals of information
product and service policy. Market structure analysis is allowed in
assessing the permissibility of regulation that affects First Amendment
interests. The unavailability of sufficient channels to permit a diversity
of views to reach certain classes of information consumers is a legitimate
condition to justify regulating network service providers. Further, First
Amendment jurisprudence recognizes the interplay between the First
Amendment rights of intermediaries and the First Amendment interests
of sources wishing to use intermediary services to reach audiences. The
jurisprudence does not allow either interest to eclipse the other.

Since legislatures and administrative agencies cannot change First

304. Nevertheless, all three types of regulation are similar in that they advance the First
Amendment rights of suppliers of authorship value and of consumers of information by re-
stricting First Amendment rights of information intermediaries.
305. See supra Section I.
Amendment interpretations, the question concerning the First Amendment is not so much whether the result is acceptable, but rather whether the First Amendment allows enough scope for pursuit of the policy goals of information technology. Nevertheless, the answer is "yes" to both questions.

V. SYNTHESIS AND RECOMMENDATIONS

This Section develops guidance for future legal development. It begins by articulating principles for the future, explaining how these principles differ from existing law. It then evaluates interrelationships among the three categories of legal doctrine and explores these interrelationships in the context of probable technologies and market structures. It explores the advantages and disadvantages of common law evolution versus statutory or administrative prescription of the principles. It concludes with specific recommendations for action by particular institutions.

A. Principles for the Future

1. Ensuring Equal Access

Public policy should balance information suppliers' need for meaningful access with network owners' rights to allocate their resources as they wish and to design their products. Policies aimed at ensuring equal access should not result in forcing suppliers to provide services at whatever price the person demanding the services desires. This would substitute political control for market forces.

There needs to be a safety net to ensure meaningful access to information markets. To a considerable extent, an adequate safety net is provided by the universal presence of the voice telephone system and by public packet switching networks such as Sprintnet and Tymnet. The combination of these services, regulated as common carriers by the FCC, permits suppliers of authorship value and entities performing information-organizing functions to set up their own bulletin board services and to provide universal consumer access via modem and dial-up telephone connections. This safety net will continue to function effectively, however, only as long as two conditions exist: (1) these services are regulated as common carriers; and (2) these services continue to accommodate the most pervasive digital communications technologies. Equal access obligations should be imposed only when a supplier holds itself out as providing equal access or when market structures are such
that an information supplier desiring access has no reasonable alternative.

When imposition of equal access requirements is appropriate, the First Amendment requires that impact on content be minimized. It requires a rifle shot rather than a shotgun blast. Regulatory action should be restricted to only those parts of the infrastructure that need regulation in order to ensure unimpeded access. Under such a structure, most suppliers of authorship, chunking-and-tagging, presentation, duplication, promotion, and integrity assurance value could be exempted from the equal access requirement; instead, regulation could focus on suppliers of distribution and billing value.

Any equal access obligations must allow for denial of access for certain legitimate reasons. The scope of "legitimate" depends on the nature of tort immunity granted to equal access providers. Denials of access intended to protect the obligor's own interests would be appropriate, unless the obligor is immune.

2. Tort Liability

Any entity exposed to potential tort liability will be discouraged from engaging in the activity that leads to the exposure. Yet immunity from tort liability eliminates effective relief for some deserving victims. It is inherently more difficult to specify a rule for tort liability than to specify First Amendment or equal access rules. Nevertheless, some benchmarks of appropriate tort liability rules are evident.

First, the greater the obligation to provide equal access, the lesser the exposure to tort liability should be for that portion of the business associated with the equal access obligation. A network service provider that holds itself out as available to all comers should face commensurately less exposure to tort liability for the content carried. Conversely, if common law or statutory tort immunities are created, they should be less available to network service providers that engage in content-based discrimination.

Second, First Amendment protections should condition tort responsibility under a similar standard to that in New York Times Co. v. Sullivan. This principle is reflected in the Restatement (Second) of Torts rules for defamation liability.

307. See supra note 195.
Third, to prevent the risks associated with private enforcement, the general legal principles for information torts must accommodate the criteria for messages that expose an intermediary to liability. Notice to an intermediary should not subject it to liability as a republisher unless the person giving notice makes a prima facie showing that the information in question creates an actual risk of a recognized category of legal harm. Declaratory judgment should be available to determine whether the message or series of messages is offensive in the way alleged. The intermediary should conclusively escape liability if the message is determined, in an action against the primary tortfeasor, to be legally innocent. This does little more than apply general principles of res judicata and collateral estoppel.

The value-added framework serves as a useful starting point for defining tort immunities. Adding authorship, chunking-and-tagging, internal and external pointers, and integrity assurance values all involve some responsibility for the underlying content. Some selection of authorship or affirmation of its accuracy is involved in each of these types of value. Adding these types of value should expose the actors to liability under at least the negligence standard. Conversely, adding duplication, distribution, or billing value using network technologies is remote from the underlying content and should not expose the actors to liability. Actors adding presentation and promotion values should be exposed to, or immunized from, tort liability, depending on whether the presentation and promotion value is specific to the particular content. Under some circumstances, an intermediary should be able to escape liability simply by providing a potential victim with information sufficient to identify the primary tortfeasor. It is not altogether clear whether this safe harbor should be available only to intermediaries affording equal access or to all intermediaries.

3. The Disadvantages of Private Enforcers

If providers of network services face potential liability for the content of traffic carried on their networks, they will be quick to cut off anyone

308. See supra notes 197–207 and accompanying text.
309. A counterargument would note that the amount of reputational injury from defamation increases with dissemination. Thus, these types of value increase the harm. Nevertheless, imposing no-fault liability on suppliers of these types of value would be inconsistent with print-on-paper defamation principles and would significantly chill the supply of network services. In addition, the primary tortfeasor's awareness—in fact, intentional use—of the distributional abilities of networks should act to shield the network.
310. Some electronic presentation values are vessels into which different content may be poured. Pre-created presentation procedures are combined with content automatically by a computer, under the direction of the user.
whose activities might give rise to liability. Such private termination is far less likely to be subject to adequate legal controls than public action to enforce restrictions on informational activities. If a public enforcement agency takes remedial action against a supplier of information content, state action is involved, triggering First Amendment, substantive and procedural due process, and equal protection safeguards. If a private supplier of conduit services takes the same remedial action, state action is unlikely to be involved, thus making these constitutional safeguards unavailable. The power of a supplier to terminate its relationship with a customer is unlimited by the law unless the customer can articulate and prove entitlement to a specific right based on statute, tort, or contract; the terminated customer must prove that the supplier had a specific duty not to terminate services. Within broad limits defined by public policy, suppliers can write contracts that disclaim any duty to customers and leave the suppliers free to terminate service at will. When the market does not make available such private networks, either because of a monopolistic structure or because all competitors act in the same way, there is a commensurate need for greater procedural protection for those who may be denied access.

4. First Amendment

Application of the First Amendment to network service providers should involve recognition of the different types of value added by the provider. In the ten-type value added model, authorship, chunking-and-tagging and internal and external pointers values are sufficiently expressive to be entitled to First Amendment protection. Adding presentation value may or may not be expressive, depending on whether selection has occurred when presentation value is added. Integrity assurance value is expressive, because it involves endorsement of another's viewpoint.

In contrast, adding duplication, distribution, promotion, and billing values is less expressive. An expansive view of First Amendment rights protects information distribution and marketing activities to ensure

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311. Accord, Brenner, supra note 278, at 331 (1988) (arguing that the key to cable's treatment under the First Amendment lies in distinguishing among the expressive and nonexpressive activities of cable operators).

312. Internal and external pointers may be more or less expressive, depending on whether the pointers are created with an awareness of the content of the information to which they point, as in a bibliography, or whether they point to tags that may be created subsequently by someone else, as in the Library of Congress classification system or the West key number system.
actual availability of a diversity of viewpoints. The local loop, the network conduit, and the database service providing menu access to the original content, should be protected, just as the printer, book warehouse, and bookstore must be protected in order for there to be a channel between originator and audience.

When providers engage in activities historically associated with only weak First Amendment protections, as by holding themselves out as common carriers, it is appropriate to consider First Amendment privileges waived to some degree. In some instances, First Amendment protection also may be appropriate in an affirmative sense. Network service providers might be treated as the equivalent of the states, as in Food Employees Local 590 v. Logan Valley Plaza. This is appropriate only when analysis of market structure shows that the provider has a monopoly that precludes feasible alternatives for reaching the audience.

5. Interrelationships

There is a tension between First Amendment author or publisher status and obligations to provide equal access. There also is a tension between equal access and tort liability. The equal access obligation dilutes the information provider's control over content because it forces it to handle material with which it may not agree, or whose quality it may not endorse. Therefore, the greater the obligation to provide equal access, the more unfair exposure to tort liability becomes. Tort liability is imposed for failure to screen out harmful material. Strong equal access obligations prohibit such screening.

Content control is important to all three branches of legal doctrine, and its influence balances the tensions among the three doctrinal branches to some degree. The greater the degree of content control, the lower the likelihood of common carrier equal access obligations. The greater the content control, the greater the exposure to tort liability and the greater the First Amendment protection.

The threshold question is whether legal intervention is appropriate to ensure equal access. If it is, First Amendment issues arise because of the resulting restrictions on the editorial discretion of network service providers subject to the equal-access obligations and because tight equal-access regulation is more likely to make the regulated providers state actors (and thus potential defendants in First Amendment claims by

313. 391 U.S. 308 (1968). But see Hudgens v. NLRB, 424 U.S. 507 (1976) (holding that the First Amendment does not protect union campaign in shopping mall because mall prohibitions do not constitute state action; overruling Logan Valley).
sources seeking access). If equal access regulation is not appropriate, First Amendment questions do not arise, except as influences on tort liability.

Legal intervention to promote equal access comes in two forms. The strongest form is direct imposition of duties to afford equal access by the common law or by statute. An indirect form is the removal of disincentives to providing equal access by reducing exposure to tort liability. Reducing exposure to tort liability, by itself, does not raise First Amendment issues.

B. Technology and Market Structures

Whether the strong form of equal access regulation is appropriate depends on market structures because market structures affect the ability of market forces to ensure access. Market forces operate in the several markets for different types of value that can be added to electronic information. The market structures depend on the technologies used for EMall and electronic publishing. Evaluation of market structures begins with an overview of the types of technologies likely to be used in information products made available through digital networks. The most basic distinction is between two-party EMall and electronic publishing.

1. Two-party EMall

Point-to-point EMall serves a private messaging function. The supplier of information knows who the consumer is when the information is transmitted. Typically, the supplier of the information prefers that persons other than the addressee not have access to the information.

The economics and the intended effect of EMall depend on reliable, cheap addressing and delivery of individual messages to specific addressees within the entire universe of potential addressees. EMall users need access to networks or internetworks of wide scope because of the high transaction cost associated with making special ad-hoc arrangements with addressees or to access a particular network with which the addressee but not the sender already has a commercial relationship. A variety of standard internetwork addressing approaches, supplemented by inter-
network directory standards, are under active consideration.\textsuperscript{315}

The function of EMail overlaps the function of traditional written communication handled by the post office and by private services such as Federal Express and the functions of telephonic communication. The social utility of EMail is thus equivalent to the social utility of communications through the U.S. Postal Service and through the voice telephone system.\textsuperscript{316}

Two-party EMail raises relatively little potential for goal conflict because of the reduced likelihood of injury due to wide public dissemination of message content, and because of the practical alternative of connecting sender and addressee directly if network routing is not available. The occasion for tort compensation and the need for legally mandated equal access are thus reduced.

2. Electronic Publishing: Three Technologies

Electronic publishing differs from EMail in the same manner that print publishing and radio and television broadcasting differ from exchanging written messages through the U.S. Postal Service and its modern supplements. Electronic publishing involves the exchange of information between suppliers and relatively large numbers of consumers, the identities of whom may not be known to the supplier at the time of transmission. The economics and the intended effect of electronic publishing necessitate access to broad markets in terms of geographic scope, although subject matter specialization may be narrow.

There are three basic approaches to electronic publishing through networks: (1) EMail and USENET-like approaches; (2) Electronic conferencing on host computers; and (3) digital libraries such as Thinking Machines Corporation's WAIS concept.\textsuperscript{317}

EMail can be used as an electronic publishing technology and is regularly used for that purpose on Bitnet. Consumers of information to be published in this fashion place their EMail addresses on mailing lists.

\textsuperscript{315} Most commercial EMail services already have implemented standard addressing approaches centered on the ISO X.400 standard. They are discussing directory approaches, but these, centered on the ISO X.500 standard, are less mature.

\textsuperscript{316} Equivalent social utility does not mean identical social utility. Much EMail presently occurs within organizations and thus is more private in character than mail communications between legally separate individuals. On the other hand, a substantial amount of print-on-paper publishing makes use of the mails, and this Article explains how EMail is used for electronic publishing.

\textsuperscript{317} Optical media such as CDROM obviously present other possibilities for electronic publishing. This Article focuses exclusively on network methods, however, because network methods present a wider range of legal issues.
The supplier of the information in this publishing medium sends an EMail message to a list server, which then automatically transmits the message to all those on the mailing list.

USENET is a sophisticated, specialized implementation of this approach, borrowing from host-based conferencing technology. In the USENET approach, authors post materials on local conferences. Periodically, an application makes copies of the new postings from the local conference and transmits them to the next USENET node. The next node sends them along to the next node, and so on, throughout the entire USENET network. Since no global routing table is used for the distribution process, no single node has control of the network.

The EMail and USENET approaches are relatively decentralized in the message processing techniques used, but they require access to networks of wide scope. The EMail technology thus increases the potential for goal conflict because suppliers of one kind of value need access to third-party facilities in order to reach an audience effectively.

The conferencing approach publishes documents by placing them on one host machine. Persons who wish to read or otherwise access the documents log on to this machine remotely. WESTLAW, LEXIS, CompuServe, Prodigy, and ABA/net conferences are examples of this form of electronic publishing. The remote log-in can occur through public commercial data networks such as Tymnet or Sprintnet or through FTP or Telnet protocols on an internetwork. Because there is only one copy of the data in this approach, although users may make their own copies unless prevented from doing so, greater host control is ensured. On the other hand, communications with the single host present a potential bottleneck, the avoidance of which requires large capital investments or access to third-party networks.

The host/conference technology presents less potential for goal conflict than the other electronic publishing technologies in one respect, but greater potential in another. Goal conflict is decreased because the point of access and all value-adding activities are centralized and under the control of the supplier of host services. Such a supplier has First Amendment rights with respect to the selection of authorship value and has relatively less need for access to communications facilities

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318. The USENET approach is more efficient than the Bitnet list server approach because nodes talk to each other, ensuring that copies of postings are not sent to nodes that already have those postings. On the other hand, multiple copies of published data exist in the system. The aggregate storage requirements and network traffic requirements are much greater than they would be in a more centralized system.

319. Section I identified equal access, diversity of sources, and compensation for injury as the three basic goals for electronic information network policy.
controlled by third parties. As long as there are multiple, competing suppliers of hosts, there is no problem with any of the goals. If there is supplier concentration, however, the needs of information sources for access to database intermediaries increases. But legally imposed obligations to provide access raise major First Amendment concerns because of the close association of the database intermediaries with content.

Both EMail and host/conference technologies have major limitations. Users of EMail technologies must know in advance about the locations of source and consumer nodes. Users of host/conference technologies are limited to the information made available by a particular host. Digital library concepts provide ways of relaxing these limitations in more intelligent, decentralized networks.320

WAIS is the only current implementation of the digital library concept.321 Data reside on multiple servers distributed throughout a wide area network. WAIS has approximately thirty servers running on the Internet. User software on local workstations accepts plain language queries, with instructions on where to look. The user receives an aggregate listing of all of the files that appear responsive to the query, regardless of the server on which they reside. Users may then select items from the list and receive their full texts.322 The WAIS approach employs an intermediate degree of centralization. It is more centralized than USENET, but less centralized than the host/conferencing approach.

The WAIS approach has strong implications for the future of electronic publishing. As more authors and first-level publishers of electronic information provide direct public access to the information in electronic form, it is logical for these sources to establish their own servers with their databases on them. Then, if the requisite standardization exists under the WAIS approach, single-point-of-access electronic information vendors such as West Publishing Co. and Mead Data Central can provide the user software and the network connecting these servers. To some extent, the gateways to other services provided by WESTLAW and LEXIS are modest precursors of such an approach. The WAIS technology has large potential for goal conflict, because suppliers of one kind of value need access to third-party facilities in order to reach an audience

320. The digital library concept is one of the more fully developed visions of a public, distributed electronic publishing system. See generally Corporation for National Research Initiatives, Workshop on the Protection of Intellectual Property Rights in a Digital Library System (May 18–19, 1989).

321. WAIS is implemented in software from Thinking Machines Corporation, Cambridge, Mass., under a joint prototype sponsored by Dow Jones Co., Thinking Machines Corp., Apple Computer Co., and KPMG Peat Marwick.

322. WAIS is more efficient than USENET for larger documents because copies are made only on demand.
effectively. The difference between the WAIS approach, in which major database vendors may play a conduit role, and the traditional host/conference approach, is that content control is decentralized in WAIS. Supply of different types of value is less integrated.

Wide area networks are evolving to encompass all of the functions that can be accommodated by local area networks. Local area networks provide a greater range of services than wide area networks because of their greater bandwidth and lower degree of incompatibilities among nodes. Some functions currently performed on local area networks but not yet on wide area networks are likely to be parts of a future wide area network infrastructure. These functions may be described as:

(1) One node can publish a document on a remote printer\(^{323}\) without loss of any of the information or formatting. Either the supplier or the consumer can control what is published, and when and where it is published;

(2) Computation and storage responsibility can be divided between nodes, as in the client-server model for database management; or

(3) Fully functional EMail can be routed from any node to any other node by the network. Any file can be attached to an EMail message.

These functions can be part of point-to-point EMail or electronic publishing systems. These functions, and the shift toward more intelligent electronic publishing networks like WAIS, have two implications for electronic network law and policy. First, they make it harder for the supplier of any one type of value to reach markets without access to other parts of an integrated network. Second, they involve blending communications and data processing activities, thus blurring the historical boundary between market forces and equal access obligations.

3. Market Structures

Despite the ability to identify some technology trends, it is far from clear how the production of the ten different types of value ultimately will be organized. The role of traditional print publishers is broad, covering everything from authorship to billing and collection of monies. Traditional publishers perform important roles and they occupy fairly clear legal niches. While these roles may be performed differently by

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\(^{323}\) Similarly, one node can publish to another out *or* storage device at a remote node.
different entities in an electronic marketplace, someone must perform them. Someone must select material and vouch for its quality and relevancy. Someone must perform substantial creative activity to organize information in a way that meets the particular needs of segments of the market. There may be many suppliers of raw information, but there are certain to be screening mechanisms. It is unlikely that networks will survive where absolutely anyone can publish and users can read everything, deciding for themselves about value.

The taxonomy of ten different types of value helps one to understand how traditional publisher functions may be reallocated to different suppliers in the new electronic architectures. Recall the four major processes leading to supply of the ten different types of value: creation, organization, retrieval-and-assembly, and marketing. With today’s electronic publishing technologies, the creation activity is performed predominantly by individuals with no or a limited commercial motive. They are not intending to sell their information product. Legislatures, courts, administrative agencies, and authors of scholarly journal articles are the main sources of authorship value. Some small bulletin board operators also supply authorship value, usually with a limited profit motive.

In today’s market, the organizing activity is performed by major sellers of database access like West, Mead, and Dialog, which currently use the host/conferencing approach, with some gateways between the major hosts beginning to emerge. Suppliers of gateway services add some of their own chunking-and-tagging value to information created by others. Virtually all suppliers of gateway services supply external pointers value in the form of menus to specific products and families of products. These phenomena are more applicable to host/conferencing technologies than to the other electronic publishing technologies.

In order to reach substantial markets, suppliers of authorship value must be accessible through the intermediaries who supply organizing and assembly-and-retrieval values. Technologies and formats must be compatible, and the intermediaries must be willing to carry the authorship value.

As electronic publishing becomes more commercial, the organization of assembly and retrieval activities becomes more important. Major comparative advantages of electronic formats over paper formats are the ability to publish on demand and the availability of a richer set of search and retrieval approaches. Realizing these advantages challenges the assembly and retrieval activities. “Publishing” means that the intended audience will be able to retrieve authorship value, assembled according to consumer specifications. The host/conferencing approach responds to this challenge by integrating the assembly and retrieval activities with the organizing activity below them and the marketing activity above
them in the sequence of production. The EMail technologies essentially leave it to the consumer to perform the assembly and retrieval activities. The newer technologies, such as USENET and WAIS, attempt to address the need for appropriate presentation and distribution by permitting these types of value to be added by different suppliers in a way that still affords one-stop shopping to a consumer. The greatest challenge is the organization of the marketing activity. No one yet knows exactly how pricing, billing, promotion, and integrity assurance should work.

Two-party EMail demands less of the marketplace in adding different types of value. In the simplest EMail system, the only two important types of value are authorship and distribution, with only enough integrity assurance value to protect against corruption or forgery. Accordingly, the existing technologies for information exchange are much more adequate for two-party EMail than for electronic publishing.

Market structures result from the interaction of demand for different information products with the cost of producing different levels of those products. For example, large demand can support multiple suppliers using a particular technology, while smaller demand might result in a natural monopoly because of economies of scale.\textsuperscript{324} When barriers to entry are low and the conditions of natural monopoly are not satisfied, an originator of information denied access to suppliers of complementary value can become his own supplier of the denied service. This is likely to be true, for example, in the case of basic bulletin board services, as long as the provider of bulletin board services has access to sophisticated networks of broad scope.

Economies of scope can encourage integration of processes for adding different types of value.\textsuperscript{325} This integration reduces competition in the markets for the processes considered separately. Aggregating

\textsuperscript{324} In economies of scale, unit costs decline as production increases. For the purposes of economies of scale in this analysis, an oligopoly, a monopolistic combination of a few suppliers, is equivalent to a natural monopoly.

\textsuperscript{325} Economies of scope arise when a single firm performs multiple functions or sells multiple products. Horizontal economies of scope deal with the same firm handling multiple products and thus increasing the scope of its activities. Vertical integration occurs when vertical economies of scope exist. Vertical economies of scope are realized when a firm handles multiple stages in the chain of production. See, e.g., FREDERICK M. SCHERER & DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE, 100-02 (1990) (explaining economies of scope); see generally David J. Teece, Economies of Scope and the Scope of the Enterprise, 1 J. ECON. BEHAV. & ORG. 223 (1980) (explaining that enterprise scope is determined by transaction costs and realization of economies associated with simultaneous supply of inputs common to processes for producing distinct outputs); David J. Teece, Towards an Economic Theory of the Multiproduct Firm, 3 J. ECON. BEHAV. & ORG. 39 (1982) (exploring economies of scope for different inputs).
demand through a network of wide geographic scope increases effective competition because it permits each supplier to reach a larger market, thus encouraging entry by new suppliers, and permits each supplier to compete for the present customers of a larger number of other suppliers.

Eventual market structures may be somewhat different for electronic publishing and EMail. The shift to electronic publishing from print-on-paper publishing will increase competition in creating and organizing information, but may reduce competition in distributing and marketing. Small, inexpensive desktop computers, and word processing and database software make it easier for small enterprises to add authorship, chunking-and-tagging, internal pointers, and external pointers value to information to be published electronically. The same technologies encourage integration of the supply of these types of value because the same software can be used to add all these types of value at the same time an original draft is generated or revised. The result is likely to be vigorous competition in creating and organizing activities. The costs of assembly and retrieval activities will be reduced, but the economies of scale and vertical economies of scope will increase, leading to larger integrated suppliers. Fixed costs are high in comparison with variable costs for distribution value in all telecommunications technologies. The extreme is represented by broadcast technologies, which have near zero marginal costs for copies (duplication value). On the other hand, there are very large fixed costs for the transmitters and antennas (cables and wiring for cable television). Economies of scope also exist because the value of a network to a consumer is greater the more points the network connects. In such networks, the marginal cost for

326. The economies of scale have been reduced because of the power and low cost of decentralized computing.
327. In other words, the economies of vertical scope will increase.
328. These activities add presentation, duplication, and distribution value.
329. Economies of scale, the determinants of natural monopoly, were high in long-distance telephone communications, but questionable in other areas of the telecommunications industry as defined and regulated before the AT&T divestiture.
331. There is an increasing trend toward using digital broadcasts; for example, consider Knight/Ridder's Money Center product and other products marketed through satellite digital broadcast channels. There is every reason to expect that these technologies will become commonplace for both electronic contracting and electronic publishing when one-to-many relationships exist.
332. Transmitters and antennas are necessary for satellite communication, as well as for direct broadcast.
each additional message is not zero, but it is very small. With these cost structures only a few suppliers can be supported by currently foreseeable demand levels.

The costs of accounting, billing, and collection systems are sharply lower with electronic technologies than with conventional technologies.\textsuperscript{333} The same channels for delivering the product can also meter usage and make accounting entries as delivery is accepted.\textsuperscript{334} Economies of horizontal scope for promotion value will remain high. An electronic publisher with multiple products incurs lower unit costs for advertising and other sales expenses. The upper limit is determined by how many different products effectively can be sold in a single communication.

Use of different technologies for electronic publishing results in somewhat different implications for market structures. The EMail/Bitnet/USENET approach requires list servers, but barriers to entry are minimal. Suppliers just need to know where the list servers are located. The host/conferencing approach represents greater barriers to entry and the possibility of natural monopoly because of the economies of scale and scope.\textsuperscript{335}

Vertical integration may be intensified in electronic publishing because of the absence of standards or conventions for exchanging electronic information. Economies of scope are affected by the degree of compatibility in formats. In the absence of effective standards for exchanging all ten types of value, vertical and horizontal economies of scope are substantial because of the transaction costs of exchanging incompatible electronic information formats with other suppliers. Such incompatibility makes WAIS-like technologies impracticable unless a WAIS standard is adopted universally. Effective standards or conventions for inter-supplier transfer and for ultimate delivery to consumers reduce economies of scope and diminish the incentives for vertical integration, yielding larger numbers of competing suppliers, each seeking market share by innovation in product features.

A major reason that host/conferencing technologies predominate in

\textsuperscript{333} Accounting, billing, and collection systems are well-developed in computer software, and buying and running the software is much cheaper than paying clerks to perform the same functions.


\textsuperscript{335} A database vendor with a broader scope of information enjoys competitive advantages.
commercial or near-commercial electronic publishing is that these technologies avoid format incompatibilities. USENET and WAIS technologies can become commercial successes only if format standardization occurs. Host/conferencing technologies are associated with larger, more integrated suppliers.

Future markets are likely to be highly competitive with respect to authorship and basic chunking-and-tagging values, and highly concentrated with respect to duplication, distribution, and billing values. Concentration with respect to other types of value depends on which competing technology wins. The predicted market structure for electronic publishing does not justify legal requirements for equal access (beyond application of the antitrust laws' prohibition against collusion among competitors) except with respect to the supply of certain duplication, distribution, and billing value through networks, where the conditions of natural monopoly may exist. Economic analysis thus supports the proposition that market forces will be more effective in facilitating creation, organization, assembly, and retrieval activities except for supplying relatively pure distribution value at the backbone level.

The market structure for assembly and communication of EMail is similar to that for electronic publishing because the same kinds of networks are used for both. The likelihood of integrating marketing processes with assembly and communication processes is high because the sender/addressee matching process is hard to distinguish technologically from the addressing and routing of messages that goes on in any network. Therefore, the conditions of natural monopoly appear greater for these areas of EMail than for those of electronic publishing.

The lower level of value-adding—adding authorship, chunking-and-tagging, internal and external pointers—present the greatest uncertainty. If standard-setting organizations reflect intellectual property rights in their standards, they may possess substantial market power as they develop more sophisticated structures for EMail. It may be appropriate to consider legal requirements for equal access to standards organizations, especially if they exercise de facto governmental authority.

C. Drawing Boundaries

Virtually all reassessment of the role of common carrier obligations in a digital electronic world has struggled with drawing a boundary between communication services that might be subject to equal access
obligations and other, higher level, services that would be equated with traditional publishing and thus free of such obligations. The FCC initially distinguished between computer and communications activities, then between basic and enhanced services. The foregoing market structure analysis similarly suggested that only suppliers of duplication, distribution, and billing values are likely candidates for equal access duties.

One can consider two places where the boundary might be drawn: (1) under the value-added model that focuses on the higher levels of information packaging and delivery; and (2) under the OSI model adopted by the International Standards Organization and the United States government.

In the ten-type value added model, authorship, chunking-and-tagging, and internal and external pointers values are sufficiently content-oriented to be associated with the publisher’s role. Adding presentation value may or may not be content-oriented, depending on whether any degree of selection occurs when presentation value is added. Beyond this, adding duplication, distribution, promotion, or billing values does not seem very content-oriented and could be associated with equal access requirements. The final type of value, integrity assurance, is more closely associated with publishing because it involves warranting the correctness of the information.

The OSI model provides greater detail with respect to distribution, duplication, and presentation values. No one would suggest that supplying services at OSI layer 1 should be associated with First Amendment publisher status. Layer 1 involves the electrical signal aspects of digital communications. Similarly, almost no one suggests that the boundary should be drawn below layer 2 or layer 3. When one gets to OSI layer 4, however, protocol conversion begins to occur. Protocol conversion has sometimes been classified as a basic communications service subject to equal access obligations and other times as an enhanced service free of such restrictions. The structural regulations imposed on the RBOCs, until recently, by Judge Green are an anomaly in this dichotomy. RBOCs were prohibited from offering enhanced services because of their past monopolistic behavior and a fear that they would unfairly subsidize such services from their regulated basic services. See supra note 137.

337. Layer 1, the physical layer, defines the electrical and mechanical interface, including numbers of pins, cable type, and electrical levels (voltage and current).
338. Layer 2, the data link layer, covers link setup and error control. It deals with frames.
339. Layer 3, the network layer, deals with establishing virtual circuits. It defines how packets are assembled, disassembled, and routed.
340. Layer 4, the transport layer, is concerned with defining quality of service, and is closely integrated with layer 5, the session layer. Probable mismatches between services provided and protocols used on two different ends of a connection provide major challenges at the transport layer.
341. The structural regulations imposed on the RBOCs, until recently, by Judge Green are an anomaly in this dichotomy. RBOCs were prohibited from offering enhanced services because of their past monopolistic behavior and a fear that they would unfairly subsidize such services from their regulated basic services. See supra note 137.
Internet protocol is generally associated with OSI layer 4, though it is not itself an OSI standard. In some aspects, the Internet protocol translates from one protocol to another, but in others it simply routes. When one gets to the next level, layer 5, protocol conversion and a certain amount of reorganizing of information definitely occurs. TCP and other protocols operating at this level combine packets or datagrams into the correct order to form a stream. They also perform other activities to maintain a connection between origin and destination, obviating the need for each packet to carry complete information about the logical communications link. At OSI layer 6, the presentation layer, a variety of techniques for describing and representing data emerge, such as translating between different character representation approaches such as EBCDIC and ASCII. Under the FCC and Green models, this activity certainly involves information content.

At the top of the OSI model is layer 7, the application layer that includes services like file transfer between dissimilar systems. This part of the model begins to encompass activities such as those performed during publishing on demand, when a user requests and is delivered information chunks from several different sources combined into one package. A lawyer may get five appellate cases in response to a query. A journalist may get six wire service stories on the same subject. Someone using an electronic directory may get six electronic addresses for companies with similar names. In all three cases, the small collection of information that has been defined by the user may not have existed before. Selection and arrangement of material almost always is associated with the kind of content control that is inconsistent with equal access obligations and more closely associated with First Amendment protection.

First Amendment analysis should relate each kind of value and its associated processes with the interests protected by the First Amendment and tort liability. First Amendment values are concerned, at a minimum, with protecting originators of information and, more broadly, with pro-

342. Layer 5, the session layer, performs three interrelated functions: It relates the logical user interface to the communications layers; it establishes and manages communications paths or channels between two communicating applications processes; and it establishes and releases connections.

343. Layer 6, the presentation layer, deals with data representation, data transformations on messages received from the application layer, compression, and data conversion and formatting, e.g., EBCDIC to ASCII.

344. Layer 7, the application layer, serves applications programs through service calls, providing file transfer, document transfer, and EMail. The application layer usually passes an address in the form of a service request to the session layer, which maps addresses into a form which is acceptable to lower layers.
tecting activities that distribute diverse viewpoints to the public. A narrowly focused analysis would protect only the most content-oriented activities, while a broader focus would protect almost everything involved in efficient and effective distribution of information, including promotion, billing, and duplication or distribution itself.

Tort liability generally is imposed only on those with some degree of fault. Fault, with respect to injury-causing information, necessitates awareness of either injurious content or the identity of senders likely to cause injury, in addition to a practical capability of filtering for content.\textsuperscript{345} This filtering is possible at all of the value-added levels, except possibly pure distribution. It is not possible below the presentation level of the OSI model, because it is not possible to check for content below that level.

In the following table, a "5" signifies high eligibility of that type of value for treatment under the legal concept listed. A "1" signifies low eligibility. Equal access ratings are determined primarily by the probable efficacy of market forces. When market forces are likely to ensure adequate access to suppliers, the appropriateness of a legal requirement of equal access is low.

<table>
<thead>
<tr>
<th>Type of Value</th>
<th>Equal Access</th>
<th>Tort Liability</th>
<th>First Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. authorship</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. chunking-and-tagging</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3. internal pointers</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4. external pointers</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5. presentation</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6. duplication</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7. distribution</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. promotion</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>9. billing</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. integrity assurance</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

345. In tort analysis, it is important to acknowledge that privacy violations involve the acquisition of information as often as the origination of information.
The equal access and First Amendment considerations both necessitate careful evaluation of market structures. Despite the New York Public Service Commission's reluctance to encourage debates of an antitrust nature on market structure, the analysis is inescapable, at least in a serious policy evaluation. Currently, it is difficult to make the argument that competitive conditions will not exist with respect to digital electronic communications. The barriers to entry are low. The number of competing sources of information is high. The difficulty of accessing these sources is minimal for anyone who has a modem and telecommunications software.

As the network infrastructure evolves, however, these conditions may change. A completely interconnected infrastructure makes each node more dependent on every other part, unless the network is intelligent enough to route traffic around those segments that exclude particular types of traffic. Unimpeded access to the various nodes of a network infrastructure is inextricably tied to the successful evolution of these networks, just as unimpeded access to all nodes of the voice telephone system was a precondition to the evolution of the telephone.

The supplier of distribution value is the strongest candidate for equal access regulation. In particular, suppliers of distribution value at the lower levels of the OSI hierarchy are strong candidates. Even here, however, alternative means of disseminating messages are increasing. In the inter-exchange market, AT&T, MCI, Sprint, and a growing number of private physical networks compete in offering relatively transparent connections to local access carriers. Present competition in the local access market is lower, but even there alternatives are available, including direct access to satellite channels via small aperture antennas, dedicated microwave links, cellular telephone access, and emerging local bypass networks. All of these represent alternatives to the franchised telephone companies, which are regulated as common carriers.

D. Specific Recommendations for the Near Future

Once one decides what the substance of digital network law should be, policymakers must still decide whether that substance should be expressed in statutes and agency regulations or in common law rules developed through the process of case-by-case adjudication. It is important to recognize that each method has its advantages and disadvantages. For example, common law development is uncertain, often involving

346. The policy evaluation might result in statutory or common law rules that could be applied without determining market structure in individual cases.
years to reach consensus. Common law evolution, however, deals with concrete problems and factual settings, while the abstraction of statutory law may misperceive or overlook future problems.

A second threshold issue informing the above judgment is the timing of regulation; in other words, is legislation appropriate now, based on predictions about behavior, or is it better to wait and observe real behavior that can then be integrated into a more mature network policy? While it is helpful to wait before attempting to write a truly comprehensive legal codification of network policy, public institutions should not be entirely passive.

Courts should be willing to exercise common law jurisdiction over equal access disputes, applying the common-law common carrier concepts developed in this Article to actual controversies as they arise. If a plaintiff can show that a defendant held itself out as providing equal access, or if the plaintiff can show that it has no reasonable alternative means of access, courts should impose liability on defendants supplying the appropriate types of value. As a body of case law develops, the specific legal issues ultimately to be addressed by legislatures or administrative agencies will become clearer. Participants in digital electronic network communications should be energetic in asserting potential common law rights to promote early development of a body of case law.

Congress and state legislatures should hold investigatory hearings concerning the strengths and weaknesses of market solutions in promoting the development of diversity and state-of-the-art information exchange. Absent instances of behavior that undermine social goals, there is no basis for changing the law. Behavior justifying changes in the law could, of course, be behavior illustrating the costs of legal regulation, as well as behavior demonstrating the costs of no legal regulation.

The FCC and agencies with similar jurisdiction at the state level should begin an investigation into the most appropriate ingredients of digital electronic network policy. The FCC should publish a notice in the Federal Register soliciting complaints by present and potential participants in digital electronic network information exchange. The solicitation explicitly should request examples of denials of access, determinations not to supply services or offer new products because of concerns about market forces or legal results, and instances of product design influenced by exposure to potential legal liability. The solicitation explicitly should caution that the complaints are not received for the purpose of affording remedies, but only for the purpose of understanding problems that may warrant legislative or rulemaking initiatives.
E. System for Electronic Notices of Equal Access Policy

An alternative to common law imposition of equal access duties would be statutory imposition of equal access duties built around an electronic and simplified tariffing obligation. This approach builds on the Department of Transportation’s (“DOT’s”) electronic tariff system for airline tariffs and on some of the original purposes of tariffs when statutory common carrier obligations first were imposed under the Interstate Commerce Act of 1887.347 This approach would follow the holding-out theory more than the market structure theory for equal access obligations. A provider of network services could post an electronic notice on a central, federally supported electronic database. The notice would be functionally equivalent, though legally different, from an airline tariff posted on DOT’s electronic tariff database or the Federal Maritime Commission’s planned electronic tariff system. The network services notice would identify the types of services provided according to a classification system developed by the sponsoring agency, presumably the FCC. Posting of the notice would establish the status of the poster as a network services provider offering equal access. This equal access provider status would qualify the provider for tort immunity and would obligate it to provide equal access. The provider would gain two benefits in exchange for adopting the duty of providing equal access: it would gain tort immunity, and it would obtain additional business opportunities from potential customers who read the notice. A person posting the electronic notice would waive First Amendment privileges of content control.

Initially, the notice simply would provide information on how to connect with the network service provider and obtain the offered services. Eventually, the electronic notice system could be integrated with actual networks, with some degree of automated matching between requests for service and offers of service. As with the original tariff concept, this electronic notice system would protect those with equal access rights.

347. See generally Henry H. Perritt, Jr., The Electronic Agency and the Traditional Paradigms of Administrative Law, 44 ADMIN. L. REV. 79, 82 (1992) (describing DOT electronic tariff system); GABRIEL KOLKO, RAILROADS AND RATE REGULATION 8–9 (1965) (precursors of Interstate Commerce Act involved major efforts by railroads to establish private structures for making and enforcing rate agreements); B. WYMAN, RAILROAD RATE REGULATION § 60 at 49 (1915) (state requirements for filing rates and classifications predating Interstate Commerce Act); id. at § 72 (ICC originally could not perform its investigatory role effectively because it did not know rates, necessitating 1889 and 1891 amendments to Interstate Commerce Act).
against secret discrimination. It would simplify administration of legal regulation by unambiguously identifying equal access. Finally, it would make the market for certain types of network services more efficient by setting up the electronic equivalent of a bourse.

CONCLUSION

This Article began by articulating three goals for digital electronic network policy: encouraging a diversity of information products; preventing suppliers of information content from being foreclosed from access to markets; and allowing persons suffering legal injury because of information content to obtain compensation. It identified the relevant features of common carrier, tort liability, and First Amendment concepts, and evaluated their effects on achievement of these goals in a digital electronic context. It concluded that existing doctrine works reasonably well to promote the three goals.

When suppliers of digital network services are more closely involved in controlling content, they are not appropriate candidates for equal access obligations, they enjoy a high degree of First Amendment protection, and they bear increased risk of tort liability. Conversely, if a supplier seeks little content control, perhaps because it holds itself out as common carrier, substantial equal access obligations may be appropriate, immunities from tort liability may be appropriate, and less First Amendment protection is acceptable. An efficient electronic institutional mechanism for permitting suppliers to hold themselves out as common carriers would simplify application of the three legal doctrines. Finally, analysis of market structures is appropriate to determine the need for equal access obligations, to justify regulation under the First Amendment, and to evaluate the impact of private enforcement or censorship induced by the threat of tort liability. As technology permits different types of value to be disaggregated, legal regulation is more appropriate for the types of value that are resistant to market forces.

In general, the common law is capable of adapting old doctrines to new technologies and markets. It is better to wait for the case law to develop before codifying digital electronic network law.

348. See United States v. Chicago & A. Ry., 148 F. 646, 648 (N.D. Ill. 1906) (purpose of tariff is to permit shipper to know his cost of transportation and to determine competitors’ costs); American Warehousemen Ass’n v. Illinois Cent. R.R., 71 I.C.C.R. 556 (1898).