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# WILL UNIVERSAL SERVICE AND COMMON CARRIAGE SURVIVE THE TELECOMMUNICATIONS ACT OF 1996?

Eli M. Noam\*

*The introduction of competition has challenged both common carriage and universal service, the traditional pillars of telecommunications policy. The 1996 Telecommunications Act accelerates competition into the core of networks. One would imagine that universal service, being essentially a modern regulatory construct, will disappear in a competitive regime, while common carriage, as an ancient common law concept, will prosper. But the opposite is true. Universal service will endure and even expand, because its support is ensured as advanced connectivity becomes even more essential. On the other hand, under competition common carriage will inevitably be replaced by private carriage. What then of the goal of non-discrimination? In a competitive regime, interconnection rights will achieve most goals previously achieved by common carriage, and it is becoming the substitute. But will such interconnection have to be protected by a detailed regulatory system? In a competitive environment, non-discriminatory common carriage can be maintained by a single legal rule proposed in the article, that of "third party neutrality." All that is necessary is to prohibit a carrier from restricting its customers' customers.*

*The conclusion therefore is that the redistribution policy of universal service will continue in reformed garb, while common carriage will disappear, though its goals can be maintained by a different rule.*

## INTRODUCTION

Historically, common carriage and universal service have been two pillars of telecommunications policy. The two concepts are related but distinct. Common carriage aims to ensure non-discriminatory use of telecommunications services; universal service aims to spread telecommunications across society and geography. Common carriage seeks equality of treatment among users; universal service seeks to create equality of outcome by supporting the service to some users. Common carriage is process oriented; universal service is allocative.

The third pillar of telecommunications policy has been anti-monopoly protection. When that goal was being pursued through regulation of conduct and market structure, common carriage and universal service could readily be reconciled with the anti-monopoly policy. But when the latter was being sought through the opening of markets to competition, it became less clear whether such reconciliation was possible. The 1996

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Telecommunications Act<sup>1</sup> has now accelerated competition into the core of networks, making that question even more urgent: *Can competition coexist with universal service and common carriage?*

For years the conventional wisdom has been that universal service, being an essentially modern regulatory construct, would disappear in a competitive regime since it was based on internal cross-subsidization within a monopoly. This Article argues that the reverse is true. Universal service will endure and even expand. If anything, the politically mandated support for universal service will increase in the age of information. The argument is essentially one of public choice analysis. In a democracy, the constituencies desiring subsidization of their telecommunications service can create a majority coalition. Regulatory policy then becomes a matter of devising a system of levies and beneficiaries. The 1996 Telecommunications Act reflects this dynamic. For all its pro-competitive rhetoric, it is a solid commitment to redistributive universal service to rural areas, the poor, the middle class, and the educational system.

Common carriage, on the other hand, is endangered. As this Article argues, in head-to-head competition, common carriage cannot survive against private carriage (*ceteris paribus*). The 1996 Act makes virtually no provision for the protection of common carriage. What then of the goal of non-discrimination, if common carriage withers under competition? This Article contends that, in a competitive regime, *interconnection* rights will achieve most of the goals that lie behind common carriage. Interconnection rights, indeed, have become the major battleground in American telecommunications.<sup>2</sup> But to achieve non-discrimination, an additional legal rule is needed. This Article proposes such a rule and calls it "*third party neutrality*": A carrier can pick its own customers and discriminate among them, but it cannot restrict its customers' customers. This is similar to rules for other economic activities whose purpose is to facilitate transactions, such as the holder in due course rule, legal tender, or the first sale doctrine.<sup>3</sup> Such a rule will be the substitute for common carriage in a world of private carriage.

The conclusion is therefore that the redistribution of universal service will continue in reformed garb, while common carriage as such will disappear, though its goals can be maintained by a different and simple common law rule.

The plan of this Article is as follows. Part I will discuss the past system of *universal service* funding in the United States, and its public choice foundation. I will then discuss options for reform. Thereafter, I will look at the most recent evidence—how universal service is promoted in the

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1. Telecommunications Act of 1996, Pub. L. No. 104-104, 1996 U.S.C.A.N. (110 Stat.) 56 (to be codified in scattered sections of 47 U.S.C.).

2. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Rcd. 15,499 (1996) (describing conflicts between telecommunications companies over interconnection rights).

3. See *infra* notes 84–87 and accompanying text.

1996 Act. Part II discusses *common carriage* and its rationale. It analyzes the challenge to common carriage by private contract carriers and the impossibility of long-term coexistence. After concluding that competition will lead to the erosion of common carriage and its eventual demise, in Part III I will analyze the emergence of *interconnection* as a substitute for common carriage, and will propose an alternative to a highly regulated system of interconnection: the principle of “*third party neutrality*.”

#### I. REFORMING UNIVERSAL SERVICE IN THE FACE OF COMPETITION

What is universal service? A universal telecommunications service goal, simply defined, is a public policy to spread telecommunications to as many members of society as possible, and to make available, directly or indirectly, the funds necessary to support the policy. In the past this has usually been accomplished through the establishment of a monopoly system in the provision of telecommunications, with the monopolist's profits used to support some of its endusers, especially residential and rural customers.

More recently, competitive inroads into all segments of telecommunications—and the AT&T divestiture separating long-distance and local operations—has limited the ability of companies to generate the funds necessary for such internal cross-subsidies.<sup>4</sup> But since the demands for funds used to maintain universal service have not declined, the old system has been propped up with great complexity.

The financing of universal service in the United States is based on a motley collection of contributory elements.<sup>5</sup> There are inter-carrier transfers such as high access charges paid by interexchange and mobile carriers to local exchange companies (LECs). There are high cost funds, toll pools, long-term support agreements, lifeline contributions, and universal service funds. Major inter-customer transfer mechanisms also exist, such as higher prices on business customers and prices that are “averaged” across geography. And there are some direct governmental contributions, primarily by Rural Electrification Administration loan guarantees.<sup>6</sup> Analogous rules exist in every state under respective laws and public utility commission regulations.

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4. Even before the AT&T divestiture, funds flowed from AT&T to small independent telephone companies serving primarily rural areas, e.g., by way of various revenue pools administered by the National Exchange Carriers' Association.

5. It should be noted that no two participants in the communications environment can seem to agree on the nature of the financial flows, including their size, direction, or beneficiaries. It is not the purpose of the present Article to settle those questions, but rather to reform them out of existence. One quantification is Carol Weinhaus et al., Telecommunications Industries Analysis Project: What is the Price of Universal Service? Impact of Deaveraging Nationwide Urban/Rural Rates, Telecommunications Industries Analysis Project, July 1993.

6. The Rural Electrification Division of the Department of Agriculture provides three types of loans: (1) Standard (3 subscribers or less per sq. mile) (5% interest); (2) Higher Interest (greater than 3 subscribers per sq. mile) (5% plus premium based on ability to

The resultant myriad of state and federal pricing and allocation arrangements has created a system of such aggregate complexity that it is barely intelligible, even to specialists. Society at large, including its policymakers, has lost the ability to see the big picture or to judge the present system in a framework of fairness or efficiency.

As competition increased, this system came under major strains and was in drastic need of reform. The basic reason was that those customers and services that generated the subsidies were the preferred target for competitive entrants. It was therefore often feared that such "cream-skimming" would reduce traditional telephone companies' profits and cut into the cross-subsidies of their socially desirable services. But it is elementary in the analysis of public finance issues to separate conceptually the mechanism of taxation from that of distribution. It is not necessary that telecommunication services be supplied by a monopoly to ensure their adequacy.

#### A. *The Reasons for a Universal Service Policy in Telecommunications*

Universal service goals exist in every developed country. This suggests that similar benefits of widespread interconnectivity are perceived around the world, regardless of the political party in power.

What is the explanation for such widespread support for universal service? Perhaps the best way to look at a network in economic terms is as a *cost sharing arrangement* among several users. In telecommunications, fixed costs are high, marginal costs low, and a new participant C helps the incumbent users A and B to lower their cost by spreading it over an additional participant.

Subscribers will find it attractive to join a well-sized network, because the high fixed costs of the network are spread over many users, making average costs low. At the same time, the number of subscribers adds to positive "utility," because the more people that can be reached, the more useful the network is. Among network subscribers, this is the positive "externality" to utility of participants in a network. Where the network size is small, average cost is high and positive externalities are low. In that initial range of network size, a network will not be feasible unless subsidized by external sources, either by government or by the network operator's willingness to accept losses in the early growth of operations.

But beyond that point, the network will grow on its own. The network users can lower their cost by adding members. However, at some point average costs begin to increase because additional subscribers are high-cost users. Similarly, the utility of adding still more members to the network diminishes. The optimal network size is where net benefits are highest. Left to themselves, the existing subscribers of the network would

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pay; local service provider must have 1.5 interest coverage ratio or better to qualify); (3) Guaranteed loans by Federal Financing Bank (serves remainder of rural LECs; interest rates vary depending upon financial condition of the rural LEC).

not accept members beyond that "private" optimum, and the network will cease to grow on its own. But this limiting principle is based on the assumption of a pricing scheme in which each subscriber paid an equal share of the cost. There is no reason why such equality of cost shares would persist if prices are allocated through a decision mechanism that permits the majority of network users to impose higher cost shares on the minority. If prices are set in such a fashion, a political majority will lower the prices to itself by raising it for others.

With such internal redistribution, the network will expand further. For the majority, there is added utility from added network members, especially if most of its cost is born by the minority. The majority will therefore seek expansion. At the same time, the minority is growing too. Eventually, the network's size increases beyond the minimum needed for operation, and the benefits of exit become strong for the minority. The first network "tips," and a new network is ready to emerge.<sup>7</sup> Since such a minority exit would deprive the network majority of the source of its subsidy, the majority will try to prevent the establishment of the new network.

Thus, the pressures for the break-up of the monopoly network into multiple networks are not based on a failure of the traditional network. To the contrary: The more successful the traditional system is in terms of achieving universal service and "affordable rates," the greater is its associated redistributive burden, and the greater the pressures for fracture of the network.

There is no reason to assume that just because the monopoly network system breaks apart and new networks emerge, the majoritarian pressures for redistribution will cease. They will simply change the mechanism from redistribution within a single network to one across networks. There are various ways of doing so. They include:

1. High interconnection charges from one network to others;
2. Subscriber charges;
3. General taxes;
4. A specialized tax on telecommunications equipment or property; and
5. A telecommunications sales tax or value-added tax. One variant of such a system has been proposed by the author under the name *NetTrans Account System*.<sup>8</sup> It is not a new form of transferring money, but rather a way of *keeping*

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7. The unraveling of the existing network commences even earlier if a new network has the right to interconnect into the previous one, because in that case the new network would enjoy the externality benefits of a larger reach of interconnected subscribers, while not being subject to the redistributory burden. This is the reason why interconnection has always been the main battleground between new entrants and incumbents.

8. See Eli M. Noam, *Beyond Liberalization III: Reforming Universal Service*, 18 *Telecommunications Pol'y* 687, 695 (1994). The proposed system in a nutshell:

In an independently administered account system, all carriers are *debited* a flat percentage of their transmission revenues, net of payments to other carriers. They are *credited* for net transfer outlays and for providing service to all users in



*score*—where all carriers pay a share that is proportionately similar to their net revenues. The benefitted users are provided with portable “virtual vouchers” they could use with any carrier.<sup>9</sup>

### B. *Universal Service Reform in the 1996 Telecommunications Act*

How did the 1996 Telecommunications Act deal with universal service? The Act was hailed by its architects as deregulatory in nature, freeing telecommunications from the shackles of regulation. But when one looks at some of the actual provisions, a more regulatory picture emerges. For universal service, the political dynamics unfolded just as our public choice analysis would have predicted. The majority coalition of stakeholder groups made sure that redistribution was solidly enshrined in U.S. telecommunications for the foreseeable future by mandating its inclusion in a competitive market structure. It did so in several ways. First, it set, as the principle for the absolute level of prices, that these must be “just, reasonable, and affordable”<sup>10</sup>—the language of traditional utility regulation, with the third term, significantly, added to federal law. Second, the new Act also imposes relative equity. It cements a rough equality of rural areas, high cost areas, and low-income consumers on the one hand with customers in metropolitan areas on the other hand.<sup>11</sup> Third, the Act expands the range of universal service by adding subsidized access to advanced services for schools, hospitals, and libraries—the so-called Snowe-Rockefeller amendment.<sup>12</sup> Furthermore, the Act defines the scope of universal service dynamically—“an evolving level of telecommunications services that the FCC shall establish periodically . . . taking into account

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low-density regions. Benefitted customers receive “virtual vouchers” usable at any carrier as a credit to its account.

Id.

9. Many residential and rural telephone users were previously an uninviting target for new telecommunications providers; their subsidized “affordable rates” were a golden chain tying them to the established carrier because the subsidy was not portable. With the voucher system, subsidization and provider-neutral choice can be combined. Without a monopolistic hold on these customers, the efficiency of providing service is also likely to improve, leading to a reduction in the gap between cost and price.

10. Telecommunications Act of 1996, 47 U.S.C.A. § 254(b)(1) (West Supp. 1997).

11. Carriers must provide telecommunications services to rural public or non-profit health care providers at rates that are “reasonably comparable” to rates charged for similar services in urban areas. The discount that is provided is then treated as part of the carrier’s obligation to contribute to the provision of universal service. See *id.* § 254(h)(1)(A). This is essentially a system of net transfers which further supports the principle of neutrality of contribution. This approach is also applied to the provision of services to schools and libraries, the only difference being that the discount to be provided is to be determined by the FCC (with respect to interstate services) and the States (with respect to intrastate services). See *id.* § 254(h)(1)(B).

12. See *id.* § 254(h).

advances in telecommunications and information technologies and services.”<sup>13</sup> Criteria are the essentiality and ubiquity of such services.<sup>14</sup>

On the funding side of the equation, the Act established the principle that all providers of telecommunications services must contribute on an equitable and non-discriminatory basis to the “preservation and advancement of universal service.”<sup>15</sup> Support would flow to “eligible telecommunications carriers,” which must be service providers of last resort.<sup>16</sup> But eligible telecommunications carriers have no exclusivity, and several of them could co-exist.<sup>17</sup> Congress did not provide support for the actual end-user directly, e.g., by way of vouchers. An amendment to provide vouchers was resoundingly defeated.<sup>18</sup>

The political dynamics of this remarkable affirmation and expansion of a redistributory and regulatory system under a Republican, deregulatory, anti-entitlement, contract-with-America Congress are not hard to discern. Most of the Republican legislators instrumental in telecommunications regulation hailed from rural states and protected their constituents.<sup>19</sup> These Republicans and Democrats on the “farm team” were joined by liberal Democrats traditionally supportive of the poor. To this mix, one can add the high-tech wing of the Democratic party, with its Silicon Valley and educational constituencies. It is therefore no wonder that far-reaching assurances of universal service were put into the Act.<sup>20</sup>

To its credit, Congress understood that under competition new methods had to be found to fund universal service. To design such re-

13. *Id.* § 254(c)(1).

14. *See id.*

15. *Id.* § 254(b)(4).

16. *Id.* § 254(e) read with § 214(e).

17. *See id.* § 214(e)(2) (providing that, on request, a “State commission may, in the case of an area served by a rural telephone company, and shall, in the case of all other areas, designate more than one common carrier as an eligible telecommunications carrier for a service area . . .”).

18. However, its author, Senator John McCain, assumed the Chairmanship of the Senate Commerce Committee in 1997, and his proposal might return. The text of the McCain amendment can be found at S. Rep. No. 1276, 141 Cong. Rec. 8266 (1995); the record of the defeat of this amendment is at vote No. 251, 104th Cong., 1st Sess., 141 Cong. Rec. D719 (1995) (it was defeated 82-18).

19. The chairman of the Senate Commerce Committee and major architect of the legislation, Senator Larry Pressler of South Dakota, was facing a bruising reelection campaign in 1996, which he lost—the only Republican senator not reelected that year. Other Republican senators from rural states who were active in the legislative drafting included Stevens (Alaska); Burns (Montana); McCain (Arizona); Lott (Mississippi); Hutchinson (Texas); and Dole (Kansas).

20. Indeed, earlier drafts of the Act went still further, sprawling over several pages. The final version reduced much of the detail, establishing instead principles and delegating the details to the FCC and the state utility commissions (which had been vociferous in protecting their jurisdictional turf). *See* Telecommunications Act of 1996, Pub. L. No. 104-104, 1996 U.S.C.A.N. (110 Stat.) 56 (to be codified in scattered sections of 47 U.S.C.).



form, a Federal-State Joint Board<sup>21</sup> was mandated; it had to make its recommendations within nine months, i.e., by November 1996, just after the presidential and congressional elections. The FCC received an additional six months to implement the recommendations of the Joint Board.<sup>22</sup>

In November 1996, the Joint Board issued a voluminous but vague report. It reaffirmed the importance of quality services at affordable rates to all consumers in all areas of the nation,<sup>23</sup> defined the supported service,<sup>24</sup> and reassured rural phone companies<sup>25</sup> and the poor.<sup>26</sup> It avoided most of the hard issues on how to measure and distribute cost, except for adopting the principle of neutrality of burden across carriers.<sup>27</sup>

The Board, divided on most issues, had a much easier time in expanding universal service to provide subsidized connectivity to schools and libraries, because this concept had captured the public imagination. Campaigning in the presidential election, President Clinton had urged an "E-rate" to provide free basic Internet services and subsidized high-speed access and other advanced Internet services to all elementary and secondary schools and libraries in the country.<sup>28</sup> Instead, the Joint Board recommended a graduated discount of twenty to ninety percent with most discounts in the forty to ninety percent range,<sup>29</sup> based on income formulae among schools.<sup>30</sup> Annual expenditure was to be capped at \$2.25 billion.<sup>31</sup> But this is likely to be only the first round. The demand

21. The Federal-State Joint Board consisted of eight members: three FCC Commissioners, four State Commissioners nominated by the National Association of Regulatory Utility Commissioners (NARUC), and one State-appointed utility consumer advocate nominated by the National Association of State Utility Consumer Advocates. The FCC's Joint Board members are Chairman Reed Hundt and Commissioners Susan Ness and Rachelle Chong (succeeding former Commissioner Andrew Barrett). The state members are Julia Johnson of Florida, Kenneth McClure of Missouri, Laska Schoenfelder of South Dakota and Sharon Nelson of Washington. Martha Hogerty of the Missouri Office of Public Counsel is the consumer advocate representative. See FCC's Federal-State Joint Board Meets for First Time, *Newsbytes*, Apr. 16, 1996 available in LEXIS, News Library, Curnws File (on file with Columbia Law Review).

22. See 47 U.S.C.A. § 254(a)(1)-(2) (West Supp. 1997).

23. See *In re Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, 1996 WL 656113, ¶¶ 22, 834 (F.C.C.).

24. The Joint Board recommended universal service support along the following trivial definition: single-party, touch tone, voice grade telephone service with access to emergency numbers and operators. See id. ¶ 46. This is basically regular phone service, except for second lines or second homes which are excluded.

25. See id. ¶¶ 134-182 (Chapter VI, "Carriers Eligible for Universal Service Support").

26. See id. ¶¶ 357-429 (Chapter VIII, "Support for Low-Income Consumers").

27. See id. ¶¶ 777-833 (Chapter XIII, "Administration of Support Mechanisms").

28. See Commentary, *Telecommunications Give Away by Clinton*, *Wash. Times*, Oct. 29, 1996, at A14.

29. See *In re Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, 1996 WL 656113, ¶ 555 (FCC).

30. See id. ¶¶ 485-573 (Chapter X.D, "Discount Methodology").

31. See id. ¶ 440.

for equipment, software, instruction, and content, all financed by off-budget, non-tax money is likely to grow.<sup>32</sup>

To summarize: Universal service is alive and well in the United States despite the acceleration of competition encouraged by the 1996 Telecommunications Act. It is often asserted that the increased efficiency and technological innovation attributed to competition will make the need for universal service support unnecessary. This assertion is superficial since universal service is not an issue of efficiency but of redistribution. Food production and distribution, for example, are highly competitive and efficient in the United States, and yet we support the food purchases of many in society. We should not confuse issues of production and resource efficiencies with those of distributional allocation. For telecommunications, such redistribution has a solid base in American politics.

## II. THE DISINTEGRATION OF COMMON CARRIAGE

In contrast to universal service, the institution of common carriage, historically the way telecommunications have been delivered, will not survive competition. To clarify: "Common carriers"—the misnomer often used to refer to telephone companies generically—will continue to exist as telecommunications companies, but the status under which they operate—required to offer service on a non-discriminatory basis, neutral as to use and user—will not.

This conclusion is reached with considerable reluctance. Common carriage, after all, is of substantial social value. It is an important element in establishing a free flow of information, neutral as to its content. But all is not lost by this change in status. In a competitive regime *interconnection* rights will achieve most goals previously achieved by common carriage, and these rights will provide an adequate substitute. Interconnection rules, however, only govern the relationship among carriers; individual users are not necessarily protected from discrimination. Subsequently, the question arises whether interconnection needs to be assured by regulation or whether it could be provided by market forces.

### A. *Origins and Nature of Common Carriage*

For centuries, common carriage principles have played an important role in the infrastructure services of transportation and communications. They intended to guarantee that no customer seeking service upon reasonable demand, willing and able to pay the established price, however set, would be denied lawful use of the service or would otherwise be discriminated against. For one hundred years, these principles, despite their often confused application and interpretation, have aided telecom-

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32. A McKinsey study estimated the total initial cost for the most modest Internet access model to be \$10.6 billion with another \$3.9 billion in ongoing costs over five years. See *id.* ¶ 507.

munications users' access, and thereby also stimulated the development of networks. In return for reduced discretion, a carrier obtained certain benefits, including limited liability for the consequences of its own actions, powers of eminent domain, use of public rights-of-way, and, often, protection against competition.

Precursors to common carriage go back to the Middle Ages and the legal obligations of shipowners, innkeepers and stable keepers.<sup>33</sup> In England, early common law placed certain duties on businesses which were considered "public callings."<sup>34</sup> Common or public occupations included those of bakers, brewers, cab drivers, ferrymen, innkeepers, millers, smiths, surgeons, tailors and wharfingers.<sup>35</sup> The meaning of "common" was general or open to the general public.<sup>36</sup>

In 1701, an English court found that "[i]f a man takes upon him a public employment, he is bound to serve the public as far as the employment extends; and for refusal an action lies, as against a farrier refusing to shoe a horse, against an innkeeper refusing a guest when he has room, against a carrier refusing to carry goods, when he has convenience, his wagon not being full."<sup>37</sup> With the coming of the industrial revolution and *laissez-faire* economics, common callings were generally limited to what we would today call infrastructure services in transportation and communications, together with associated facilities such as inns. Common carriage was applied to freight or carriage companies and inland and ocean water carriers. By common law, common carriers were: 1) required to serve upon reasonable demand, any and all who sought out their available services, 2) held to a high standard of care for the property entrusted to them, and 3) limited to incidental damages for breach of duty.

The concept of common carriage crossed the Atlantic and became part of the American legal system. Common carriage was broadly applied to railroads and later other transportation as well as communications media. In 1901, following many state courts, the U.S. Supreme Court held that at *common law*—i.e., even without a specific statute—a telegraph company is a common carrier and owes a duty of non-discrimination.<sup>38</sup> The concept of common carriage does not depend on public utility regulation, and a user's rights of service from a common carrier do not rely solely on statute. Thus, statutory public service regulation augmented common law common carriage rather than supplanted it.<sup>39</sup>

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33. See Charles F. Phillips, Jr., *The Regulation of Public Utilities: Theory and Practice* 90 (3d ed. 1993).

34. See *id.* at 91.

35. See *id.*

36. See *id.*

37. *Lane v. Cotton*, 91 Eng. Rep. 1332, 1336 (K.B. 1701) (Holt, C.J.).

38. See *Western Union Tel. Co. v. Call Publ'g Co.*, 181 U.S. 92, 99–104 (1901).

39. See generally *Trailways of New England, Inc. v. C.A.B.*, 412 F.2d 926 (1st Cir. 1969) (regarding an air carrier); *Hewitt v. New York, New Haven & Hartford R.R. Co.*, 29 N.E.2d 641 (N.Y. 1940) (involving discrimination charges against a rail carrier).

By the turn of the century state regulatory boards were replacing detailed legislative regulation.<sup>40</sup> The first independent, broadly empowered commissions to regulate common carriage facilities and utilities were set up in 1907 in Wisconsin and New York.<sup>41</sup> Soon, these public utility commissions regulated telecommunications, too.<sup>42</sup> On the federal level, the Interstate Commerce Act codified the duties of rail carriers in 1887, regulating liability and non-discrimination.<sup>43</sup> Interstate communications companies were included in the ICC's jurisdiction in 1911. In 1934, oversight of interstate and radio communications was transferred to the new Federal Communications Commission.

Subchapter II of the 1934 Communications Act<sup>44</sup> established regulated telecommunications common carriers. Common carriers were defined in a circular fashion, as "any person engaged as a common carrier for hire."<sup>45</sup> Common carriage was defined, as "[a]ny person engaged in rendering communication service for hire to the public."<sup>46</sup>

When does common carriage arise? For common carriage, service must be offered, on demand, to the public at large or to a defined group of people, and the carrier "must hold himself out as ready to engage in the transportation of goods for hire as a business, not as a casual occupation . . . ."<sup>47</sup> Whether a carrier is a common carrier "does not depend upon whether its charter declares it to be [such] . . . but upon what it does."<sup>48</sup>

The prohibition on unreasonable discrimination is the most important component of the common carrier obligation.<sup>49</sup> However, it is not absolute. Courts have recognized that some categorization of users is possible. "[A] specialized carrier whose service is of possible use to only a fraction of the population may nonetheless be a common carrier if he

40. See Phillips, *supra* note 33, at 132–33.

41. See *id.* at 133.

42. See N.Y. Public Service Law § 90 (McKinney 1989).

43. See 1 Bernard Schwarz, *The Economic Regulation of Business and Industry* 20 (1973).

44. 47 U.S.C. §§ 201–229 (1994).

45. 47 U.S.C. § 153(h) (1994) (current version at 47 U.S.C.A. § 153(10) (West Supp. 1997)).

46. 47 C.F.R. § 21.2 (1995).

47. Joseph Story, *Commentaries on the Law of Bailments* § 495, at 322 (Cambridge, Hillard and Brown 1832).

48. *United States v. Brooklyn E. Dist. Terminal*, 249 U.S. 296, 304 (1919). The following factors are important in determining common carriage: regularity of service; predictability of customers; whether the carrier solicits business from the general public, for example by advertising; and whether law and regulations define the responsibilities of the parties. For contract carriers, on the other hand, the following factors apply: frequency of service; identifiability and stability of clientele; whether carriers solicit business on a targeted and individualized basis; and whether contracts define parties' responsibilities.

49. See *People v. Public Serv. Comm'n*, 148 N.Y.S. 583, 585 (1914) (noting that the obligation to provide non-discriminatory service is "expressly required" by the statute in question).

holds himself out to serve indifferently all potential users."<sup>50</sup> The duty to carry does not mean that a carrier cannot refuse service, such as in circumstances of potential damage, unreasonably high risks, or beyond a reasonable capacity.

Carriers offering services only to a limited group of users have still been held to be common carriers for that limited group of users.<sup>51</sup> But where terms and conditions are too narrowly drawn, e.g., limiting the class to essentially a single customer, they can violate common carriage principles. For example, certain customized tariffs filed by AT&T (Tariff 12) were initially rejected by the FCC as permitting discrimination among similarly situated customers.<sup>52</sup> In interpreting the existence of common carriage, courts have not let the statutory definition be determinative, perhaps because of its circularity. Instead, they have applied common law principles to establish who is a common carrier.<sup>53</sup>

The common carrier system has served telecommunications participants well: It permitted society to entrust its vital highways of information to for-profit companies, without the spectre of unreasonable discrimination and censorship by government or private monopolies. It was an important element in establishing a free flow of information, neutral as to its content. It was an offset to the exercise of market power, assuring access to essential services, even to competitors. It reduced transaction costs. It lowered the administrative cost and the burden of liability of a carrier, since it needed not, at least in theory, inquire as to a user's background and intended use; and it protected the telephone industry from various pressure groups who would prevent it from offering service to their targets of protest or competition.

### B. *The Challenge to Common Carriage by Private Contract Carriers*

The challenge to common carriage is not by competition per se. MCI, Sprint, and other new long-distance carriers that compete with an established carrier such as AT&T are usually common carriers as indicated by the designation, "other common carriers" (OCCs) which they adopted. In Japan, similarly, the new entrants are known as "new common carriers" (NCCs). But if competition among common carriers is not a direct threat to common carriage, then what is?

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50. National Ass'n of Regulatory Util. Comm'rs v. FCC (*NARUC II*), 533 F.2d 601, 608 (D.C. Cir. 1976).

51. For example, telecommunications common carriers legally made service available only to: theater owners, see Theater Television Serv., 9 Rad. Reg. (P & F) 1528, 1538 (FCC 1953); stock exchange members, see Western Union Tel. Co. Sicom Serv., 11 F.C.C.2d 1, 9 (1967); television broadcasters, see TelePrompter Corp., 13 Rad. Reg. (P & F) 111, 111 (FCC 1955); the U.S. Postal Service, see Graphnet Sys. Inc., 73 F.C.C.2d 283, 298 (1979).

52. See Kellogg et al., Federal Telecommunications Law § 12.10.1 (1992).

53. See *NARUC II*, 533 F.2d at 608 ("[O]ne can be a common carrier with regard to some activities but not others.")

There are two fundamental and related challenges to common carriage. The first is the increasing overlap between the common carrier system and well-developed mass media private carriers such as cable television networks. The other is the emergence of systems integration. Neither operates as a "common" carrier. Instead, they are "private" or "contract" carriers. (The terms are interchangeable.)

It is often observed that different communications media operate on different legal principles. As telephone companies operated on common carriage, private publishers follow free-speech principles and broadcasters and cable companies operate on some not entirely free basis since they are licensed and regulated.<sup>54</sup> What happens when the walls separating these realms crumble?

The problem for common carriage is not other common carriers, but private carriers who do not to serve everybody on equal terms. Such private carriers are cable TV companies, telecommunications carriers providing private lines to large users, resellers of services, satellite companies, Internet service providers, and, generally, many new-generation carriers. In head-to-head competition between a common carrier and such a private contract carrier the former is at an inherent economic disadvantage. The reasons are simple but fundamental:<sup>55</sup>

*Differentiated pricing.* A common carrier cannot use differentiated pricing in the same way that a private carrier can, due to its non-discrimination obligation and because it cannot prevent arbitrage from low-priced to high-priced customers.

*Asymmetry.* A common carrier must provide service to a contract carrier, but not vice-versa. The transmission paths of a common carrier and a contract carrier are often substitutes. In some instances the common carrier might be the lower-cost provider. But the contract carrier could then simply use the common carrier's service as part of its system, and in effect become a reseller for it. Yet for those segments where the contract carrier has the cost advantage, it is under no similar obligation. "Heads" the contract carrier wins; "tails" the common carrier loses.

*Non-discrimination.* A contract carrier can pick customers, avoiding high-risk customers, or those that negatively affect its image. It can also impose conditions against resale and arbitrage.

*Competition among customers.* Unlike common carriers, contract carriers can manage the competition among their customers and benefit from it.

For all of the above reasons, therefore, a contract carrier will be economically more profitable than a common carrier.

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54. See Ithiel de Sola Pool, *Technologies of Freedom 2* (1983).

55. For a full discussion of these fundamental reasons, see Eli M. Noam, *Beyond Liberalization II: The Impending Doom of Common Carriage*, 18 *Telecommunications Pol'y* 435, 442-45 (1994).



A second type of challenge to common carriers comes from service providers that do not own their own facilities—as carriers do—but that bundle services of carriers and resell them. The private networks that are fashioned by the common carrier elements are not governed by common carriage principles. Whether the private network is that of Citicorp, Columbia University, the U.S. Government, Wall Street's clearing system, or the amazingly successful Internet, the user entity itself can determine who can use the system and under what terms.

Although the FCC originally determined that resellers are common carriers,<sup>56</sup> it subsequently reconsidered its approach to resale, and has forborne regulation.<sup>57</sup> The FCC has ruled that enhanced services are not common carrier activities.<sup>58</sup> The fact that such "system integrators" can therefore operate as contract carriers to their customers while the underlying carriers may have to serve as common carriers will have far-reaching implications. Essentially, the same dynamics that favor contract carriers over common carriers analysed above are at work here. The systems integrator can successfully compete against the underlying carriers in the provision of services to customers.

As a result of these advantages, systems integrators may well emerge in the future as service providers with costs lower than those of common carriers, even though they use the latter's underlying transmission facilities. The advantage of systems integrators is that they pay to competing carriers a price based only on the latter's short term marginal costs and can pass this low cost on to their customers. Yet a significant part of cost in a capital intensive industry such as telecommunications networks is fixed, and would not be fully compensated in such an arrangement. The long-term result might be a gradual disinvestment in networks, the reestablishment of monopoly, or price cartels and oligopolistic pricing. Thus, common carriage will not be sustainable in a competitive environment.

### C. *The Viability of a Mixed System*

Where alternatives are stark, the possibility of a mixed system would be a desirable option. Although there are several possibilities for a hybrid system, none is likely to work.

*Separate and unequal.* Under one scenario, some competitors would be common carriers while others would be contract carriers. Resellers could have intermediate obligations. As argued earlier, the common car-

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56. See *AT&T v. FCC*, 572 F.2d 17, 24 (2d Cir. 1978) (stating that "[a]t least since Mackay Radio and Telegraph Co., 6 F.C.C. 562 (1938), the FCC has held that the Communications Act covers [resellers] . . .").

57. See *In re Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities*, 91 F.C.C.2d 59, 61-63 (1982).

58. See Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 F.C.C.2d 384 (1980), *aff'd*, *Computer and Communications Indus. Ass'n v. FCC*, 693 F.2d 198, 209 (D.C. Cir. 1982).

rier would lose out. One would have to force it to remain under such a status, but this could not go on indefinitely.

*Hermaphrodite.* Another possibility would be internal hybridization within carriers themselves. Telephone companies, for example, might offer some services within and others outside of common carriage.<sup>59</sup> It seems unlikely, however, that "internal hybridization" can be stable. The advantages of resorting to contract carriage will continue to assert themselves, and thus will invariably lead a firm to expand contract carriage in a process of "creeping contractization." However, regulators may try to hold the line. For example, "old" services would be subject to common carriage, but all "new" services would be operated under contract carriage. Such an approach might work for a while, but eventually, the separation of two principles within the same carrier, the same facilities, and the same bit stream cannot work. Could switched voice be under common carriage, but not switched video? How ought one treat video phones? Or interactive video games?

*Distinguishing customers.* A carrier may structure its operations so that it is a common carrier for some customers but a private carrier for others. Such dual operations have been subject to limitations in a transportation context in the past, in order to prevent the avoidance of the carrier's legal duties as a common carrier. Thus, "common and contract carriage cannot be performed [simultaneously] in the same vehicle. . . ."<sup>60</sup> In a telecommunications setting it is difficult to distinguish different transactional uses of the same network. And concerns also arise over cross-subsidies between the regulated common carrier operations and the unregulated private carrier activities.

*The Berlin Wall.* Another possibility is to assign certain services a common carriage status across all carriers, in an attempt to level the playing field. But this, too, cannot be a stable solution. Services are not neatly separable into categories; they are dynamic, overlapping, use the same facilities, and consist largely of indistinguishable bit streams. Add the incentive for the provider of a common carrier service to modify its service slightly to get it out of common carriage, and one has all the prescriptions of a built-in regulatory quagmire.

*Common carrier rights-of-way.* This approach would be based on reciprocity and has been proposed by the author in the past.<sup>61</sup> A contract

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59. Historically, even if a carrier is cast as a common carrier, not all of its activities are covered. For example, railroads have long been active in real estate activities which have no relation to their common carrier obligations. Common carrier responsibilities of access and non-discrimination are not likely to attach to such "overhead operations" as personnel administration, real estate, and the like, or to "incidental services" such as the marketing of computers, because these are not a part of core telecommunications service. It is more difficult to classify the middle category of "operational services," for example: signaling channels, operator services, billing and collection, and directories.

60. William L. Grossman, *Fundamentals of Transportation* 149 (1959).

61. See Eli M. Noam, *The Superstructure of Infrastructure: Principles for a Future without a Public Network*, 13 *Comm. & Strategies* 103, 110 (1994).

carrier would not have to operate as a common carrier. But if it interconnects with or accesses other networks by taking advantage of common carriage access rights, then it must itself offer such rights reciprocally on part of its own capacity upstream. However, if the reciprocal rights are defined too extensively, their burden might be too high, and common carriage access by the contract carriers would not be undertaken. Instead, carriers would build or use contract carrier segments only. They would in effect "bypass" common carriage for purely regulatory reasons, or forgo offering the particular service altogether. The reciprocity approach is hence limited in its effectiveness for the long term, though it could serve as an interim arrangement.

The conclusion is that common carriage will erode in time, and that a hybrid co-existence will not be stable. This is not to say that the common carriers qua carriers will become extinct; many of them will remain significant players, but they will conduct their business as private carriers. This will not happen overnight, of course. Intermediate arrangements can buy several decades of transition time. But the basic dynamics will eventually assert themselves.

It is not likely that the common carriers will simply sit by as their competitors prevail. They will, therefore, in addition to operating their own systems integrators, also move to price-differentiation according to customers, partly based on the argument of "meeting competition." And that is, indeed, what is already happening, especially in long-distance service provision, where customer-specific pricing—official or unofficial—abounds.

This kind of erosion of common carriage is unavoidable. The only way to prevent it might be to force private carriers and resellers to become common carriers, a requirement which would inevitably have to be extended to most private networks, enhanced service providers, and system integrators. This seems neither doable nor desirable.

#### D. *The Treatment of Common Carriage by the 1996 Telecommunications Act*

Whereas the 1996 Act devotes considerable attention to the preservation and advancement of universal service in a competitive environment, it says little about common carriage. The two main inclusions are the following: First, universal service financial support is to be provided only to "eligible telecommunications carriers,"<sup>62</sup> that must, by a chain of definitions, be common carriers.<sup>63</sup> But this provision seems not so much to protect common carriage but rather to ensure the existence of carriers of last resort for universal service.

Second, the Act creates quasi-common carriage rules on the operator of an "Open Video System" (OVS).<sup>64</sup> Previously, local telephone com-

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62. See *supra* notes 16–17 and accompanying text.

63. See Telecommunications Act of 1996, 47 U.S.C.A. § 214(e)(1) (West Supp. 1997).

64. See *id.* § 573(b).

panies could provide, in the areas of their telephone franchises, video services primarily only under the FCC "video dialtone" rules,<sup>65</sup> which made them video common carriers. But these rules never became operational and were contested both by the cable television industry—which wanted to keep out telephone companies—and the LECs themselves—which argued, as one would expect under the analysis of this Article, that they could not compete under a video dialtone status with cable companies. The video dialtone rules were abolished by the 1996 Act.<sup>66</sup> Instead, a telephone company now has a choice of how to provide video programming: as a regular cable TV operator,<sup>67</sup> as a microwave "wireless cable" provider,<sup>68</sup> or as an OVS operator. If a telephone company chooses the OVS route it is subject to substantial common carrier obligations.<sup>69</sup> In practice, the OVS option is largely a statutory fig leaf for the retreat from common carriage. It is hard to imagine why any telephone company would voluntarily subject itself to onerous common carrier obligations if it had the choice to operate as a private carriage cable TV or wireless system instead. Indeed, this is a good illustration of the economic inferiority of common carriage to contract carriage.

### III. INTERCONNECTION AS A SUBSTITUTE FOR COMMON CARRIAGE

While common carriage has been left by the 1996 Telecommunications Act to a fate of steady decline, another set of rules came to the rescue, if only inadvertently—the Act's substantial strengthening of interconnection rights among carriers. This section argues that, in a competitive environment, such interconnection rights will achieve most goals previously achieved by common carriage.

The creation of interconnection rights and duties<sup>70</sup> is one of the central tenets of the Act.<sup>71</sup> It sets a general duty on all telecommunications carriers<sup>72</sup> to provide, directly or indirectly, interconnection with the facil-

65. See 47 C.F.R. § 63.54(d) (1995).

66. See Telecommunications Act of 1996, 47 U.S.C.A. § 302(b)(3) (West Supp. 1997) (repealing 47 U.S.C. § 533(b)).

67. See *id.* § 571(a)(3)(A).

68. See *id.* § 571(a)(1).

69. An operator of an OVS is prohibited from discriminating among video programmers with regard to carriage; rates, terms and conditions for carriage must be just and reasonable and not discriminatory, see *id.* § 573(b)(1)(A); and if demand exceeds the channel capacity, the operator may not select the programming services on more than one-third of the channels, see *id.* § 573(b)(1)(B).

70. See *id.* § 251.

71. Interconnection is one leg of the "competition trilogy," the others being the reform of universal service and access charges. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 61 Fed. Reg. 45,476, 45,480 (1996).

72. "Telecommunications carrier" is defined as any provider of "telecommunications service [ ]" which is defined as "the offering of telecommunications for a fee . . . to the public." 47 U.S.C.A. § 153(44), (46). Thus, for example, intra-organizational, non-profit networks would not have the duty to interconnect.

ities and equipment of other carriers.<sup>73</sup> All LECs, including new entrants, have additional duties to provide resale, number portability, dialing parity, access to rights-of-way and reciprocal compensation.<sup>74</sup> Incumbent LECs are burdened with further obligations which include the duty to negotiate with competitors, to interconnect at any technically feasible point within the carrier's network, to provide unbundled access to network elements to any requesting telecommunications carrier, to offer resale of telecommunications services at wholesale rates, and to provide for the physical or virtual collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the LEC.<sup>75</sup> However, as with universal service reform, much of the detail of interconnection was left to the FCC, which had to establish regulations for implementation within six months of the date of enactment.<sup>76</sup> The FCC went to work, and the result was a vast document of great detail.<sup>77</sup> It was promptly challenged by LECs and state commissions, primarily on the grounds of state jurisdiction and unconstitutional taking. Several of its provisions (including the controversial TELRIC pricing provision) were stayed by the Eighth Circuit.<sup>78</sup>

What is important for purposes of the present argument is the fact that the 1996 Telecommunications Act creates major interconnection rights and duties. The litigation is primarily a battle over prices and who can set them. Once the dust settles it will be possible for all telecommunications carriers directly or indirectly to interconnect with one another as a matter of right.

Two questions now arise: First, are the interconnection rights and duties created by the 1996 Act an effective and sufficient substitute for common carriage? And if not, is regulatory intervention necessary to ensure non-discrimination?

#### *A. Interconnection As a Substitute for Common Carriage*

Let us imagine a communications system based entirely on contract carriage and voluntary agreements among carriers. Assume a competitive market for carriage at each stage, without bottleneck power. (This assumption will subsequently be relaxed.) The anti-discrimination protection afforded by the 1996 Act's interconnection rights applies to telecommunications carriers rather than to individual users.<sup>79</sup> Even so, under an

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73. See *id.* § 251(a)(1). Rural telephone companies may be exempted from their duty to interconnect, or this duty may be suspended or modified. See *id.* § 251(f).

74. See *id.* § 251(b).

75. See *id.* § 251(c)(1)-(4), (6).

76. See *id.* § 251(d)(1).

77. The Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 61 Fed. Reg. 45,476 (1996), fills 143 pages of the Federal Register.

78. TELRIC stands for Total Element Long Run Incremental Cost. See *Iowa Utilities Bd. v. FCC*, 1996 WL 589204, at \* 1 (8th Cir. Oct. 15, 1996).

79. See 47 U.S.C.A. § 251(c)(2).

open and interconnected carrier system, users would obtain non-discrimination in *prices*. Competition and arbitrage would lead to such a result. If customer A is charged by network Z more than customer B, with no cost justification, A could switch to another carrier or connect indirectly through B.

On the other hand, when it comes to *content*, some problems may exist. A private carrier might not want to be identified with certain types of uses and users, and decline to serve them. Take as an example an abortion hotline of a birth control clinic. Faced with negative publicity and a potential boycott by opponents of abortion, a service provider that has discretion in the choice of customers may drop the controversial customer. Under common carriage it could not. It is of course likely that alternative carriers will emerge to serve such users. Yet this solves only part of the problem. A transmission travels across numerous interconnected carriers in order to connect the parties to a communication. This means that the restrictiveness of any one of the carriers in a transmission chain could require every other carrier to institute content and usage tests before they can hand over or accept traffic. If each network sets its own rules about which information is carried and which is not, information would not flow easily. Transaction costs would rise.

Let us now drop the assumption of full competition. Would interconnection be forthcoming without regulatory requirements? The experience with interconnection around the world shows that interconnection is not made available freely by an incumbent with market power to its competitors.<sup>80</sup> Even where interconnection among competitors is mandated, if its specific terms are left to the parties' negotiation, regulatory intervention is frequently necessary. This is not surprising, given the asymmetry in bargaining strength and in the urgency of need between the incumbent and the competitive entrant. Therefore, regulatory intervention in interconnection almost always exists whenever a pro-competition policy for telecommunications is implemented.<sup>81</sup>

Interconnection is readily initiated, however, among non-competing carriers such as carriers in different countries or areas. Monopolists which are precluded from invading each other's turf tend to cooperate willingly, because interconnection increases the reach of their network and hence its value to customers, at the minor cost of interconnection. More difficult than interconnection among collaborative monopolies is the situation of an incumbent and new entrant. While incumbents might offer interconnection voluntarily to escape regulation, this scenario will

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80. See, e.g., *Telecom Corp. of N.Z. Ltd. v. Clear Comm. Ltd.* [1995] 1 N.Z.L.R. 385 (dominant telecommunications firm demanding that a competitor desiring access pay an access levy and use an access code).

81. Even in New Zealand, which ostensibly is without telecommunications regulation, the courts and their interpretation of the laws of general competition are regulatory in everything but name. The difference is one of a general body or a specialized agency, and it is far from clear why a general body should be preferable.



not be frequent as regulation is rarely intolerable enough for a dominant firm to facilitate its own competition.<sup>82</sup>

If an incumbent firm can set its interconnection prices, it is likely to engage in price squeezes. In general, price squeezes are likely to occur in situations in which a monopolist sells a critical component both to themselves, as part of a service offered to the public, and to competitors. When the entrant offers a competing service the incumbent would offer interconnection under terms that would squeeze the entire profit of the interconnector. In the extreme, the incumbent would operate only its bottleneck, leaving the other functions to more efficient interconnectors, while appropriating their efficiencies. This means that some form of interconnection regulation is unavoidable where market power exists.

In a situation of some market power—the usual situation today—would interconnection still be a substitute for common carriage? Content<sup>83</sup> and users could be restricted by a carrier with market power, without their having ready access to alternatives. To deal with this problem and with the earlier identified issue of content tests for information flows across carriers does not, however, require common carriage or regulation. There is a simpler and less intrusive mechanism—the principle of third-party neutrality.

### B. *Third-Party Neutrality*

Third-party neutrality means that no carrier needs to provide access or interconnection to anybody. However, if it chooses to link up with another carrier, it cannot discriminate against that carrier's customers. If customer A wishes access to network Z but is rebuffed, and if network Y interconnects into Z, then Z cannot require Y to exclude A, or itself screen out A's communication. In turn, Z has no liability for A; only Y has. In short, A cannot be precluded from indirectly reaching network Z through Y. A could also gain access not through a network but through another end user of a network, for example a user B who takes the service of network Z (or Y) and provides A with linkage to them. This, in effect, creates access arbitrage which defeats discrimination. It is possible, of course, that no network will grant A access. If this is based on collusion it would be subject to general anti-monopoly rules. And where it is based on each network's independent business decision, it would not be sustainable.

Third-party neutrality has its parallels in other parts of the economy. Examples include the holder in due course doctrine in the law of negotiable instruments.<sup>84</sup> Similarly, in labor law, secondary boycotts are pre-

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82. In the United States the exclusion of the Bell companies from long distance service provided such a burden, and facilitated interconnection.

83. At issue is only the flow of *lawful* content. Restrictions on the flow of information through governmental content regulations comprise a separate issue.

84. See 2 James J. White & Robert S. Summers, *Uniform Commercial Code*, § 217-1, at 149-50 (4th ed. 1995).

vented.<sup>85</sup> In copyright law, the first sale doctrine prevents conditional transactions or reduces the possibility of conditional transactions of resale.<sup>86</sup> In banking, the notion of legal tender means that a payment must be accepted in legal tender, without conditions on how that legal tender was acquired.<sup>87</sup> What all these arrangements have in common is the desire to reduce transaction costs and to discourage conditional transactions.

Thus, third-party neutrality, by creating a system of arbitrage in content and price, makes discrimination difficult. It accomplishes the primary goals of traditional common carriage, but without most of the restrictiveness of detailed regulation of interconnection. Third-party neutrality ensures non-discriminatory flow of information in an environment where carriers can contract freely, as long as there is at least some access into the network systems that is not controlled by a monopolist.

#### CONCLUSION

The 1996 Telecommunications Act facilitates and accelerates competition by private contract carriers which will erode and replace common carriage in time. The Act shows no recognition of this issue, and there is no provision for the protection of common carriage. But the Act does provide for interconnection rights and duties which, in a competitive environment, act as a substitute for common carriage and achieve most of its goals. However, content discrimination may still be possible, both in situations of market power and full competition. But it is unnecessary to impose detailed regulation requiring non-discrimination. All that is required is a common law style principle of third-party neutrality which leaves a carrier free to contract with its customers but not to differentiate among its customers' customers.

The apparent threat that competition poses for the maintenance of universal service will not materialize. There is solid majority support for the provision and even expansion of redistributive universal service in the United States—support which is clearly evidenced in the 1996 Telecommunications Act.

None of this should be surprising. The policies behind universal service and common carriage go back far and run deep. Market structures come and go, but the goal of wide connectivity to information and to others remain. Only the techniques change.

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85. See Robert A. Gorman, *Labor Law* 240 (1976).

86. See Robert A. Gorman & Jane C. Ginsburg, *Copyright For The Nineties* 489 (4th ed. 1993) (citing H.R. Rep. No. 94-1476, at 62 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5675-76).

87. See Edward L. Symons & James J. White, *Banking Law* 47 (2d ed. 1984).