

**A CLOSER LOOK AT TELECOM DEREGULATION:  
THE EUROPEAN ADVANTAGE**

*Viktor Mayer-Schönberger\* and Mathias Strasser\*\**

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\* Assistant Professor of Public Policy, Kennedy School of Government, Harvard University.

\*\* LL.M., Harvard Law School (1999); Dr. iur., University of Vienna School of Law (1997); Mag. iur., University of Vienna School of Law (1996). Mathias Strasser can be reached at [mathias\\_strasser@gmx.net](mailto:mathias_strasser@gmx.net).

## I. INTRODUCTION

Over the past decade, the US and the European Union (the "EU") have liberalized their telecommunications markets.<sup>1</sup> At the same time, the telecommunication sectors on both sides of the Atlantic have experienced rapid growth<sup>2</sup> and diversification.<sup>3</sup> Undoubtedly, liberalization has unleashed vast new markets and permitted a whole array of fresh opportunities.<sup>4</sup>

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1. *See infra* Part III.

2. The development in the market for long-distance services, which was liberalized in 1984, *see infra* Part III.A.1, is most significant. While AT&T's revenues grew only modestly from \$ 35 billion in 1984 to \$ 39 billion in 1997, its competitors experienced significant increases in the same time period: MCI's revenues grew from almost \$ 2 billion to over \$ 17 billion; Sprint's revenues increased from approximately \$ 1 billion to approximately \$ 9 billion, and WorldCom's revenues sky-rocketed from \$ 110 million in 1989 to nearly \$ 6 billion in 1997. *See* JAMES ZOLNIEREK ET AL., LONG DISTANCE MARKET SHARES: FOURTH QUARTER 1998 at 13-14 (1999), *available at* <[http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/ixc.html](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/ixc.html)> [hereinafter LONG DISTANCE MARKET SHARES]. The development in the local services market, which was opened up in 1996, is less stunning but equally noteworthy. While the incumbent local exchange carriers reported \$ 94 billion in local service revenue in 1997, up from \$ 80 billion in 1993, the competitive local exchange carriers' revenue amounted to \$ 1.6 billion in 1997, up from less than \$ 200 million in 1993. *See* INDUSTRY ANALYSIS DIVISION, COMMON CARRIER BUREAU, FEDERAL COMMUNICATIONS COMMISSION, TRENDS IN TELEPHONE SERVICE at 19-5 to 19-6 (1999), *available at* <[http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/trends.html](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/trends.html)> [hereinafter TRENDS IN TELEPHONE SERVICE]. Between 1994 to 1998, the total value of the telecommunications industry in the United Kingdom — the European country that has most aggressively liberalized its telecommunications sector — increased by 35.8%. *See* KEY NOTE MARKET REPORT TELECOMMUNICATIONS, Nov. 23, 1998 [hereinafter KEY NOTE MARKET REPORT]. As of March 1998, it had a value of £ 20.42 million. *See id.* The International Telecommunications Union estimates that between 1990 and 1996, the world trade in telecommunications increased from \$ 50 billion to \$ 115 billion. *See id.*

3. In 1984, AT&T had a market share of 90% in the long distance services market. *See* LONG DISTANCE MARKET SHARES, *supra* note 2, at 16 (1999), *available at* <[http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/ixc.html](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/ixc.html)>. By 1997, that share had dropped to 44%. *See id.* MCI accounted for 19%, Sprint for 10%, and Worldcom for 7% of total long distance carrier revenues. *See id.* Other long-distance carriers increased their share to 20%. *See id.* The Hirschman-Herfindahl Index (HHI) for the relevant market, which is used to measure market concentration, has dropped from 8,155 in 1984 to 2,508 in 1997. *See id.* In the local exchange, the market share of competitive local exchange carriers has increased from 1% in 1996 to 1.6% in 1997, and the FCC estimates that at the time of this writing, it may have increased to as much as 5%. *See* TRENDS IN TELEPHONE SERVICE, *supra* note 2, at 9-1, 9-6.

4. The ongoing merger wave among telecom and media companies attract capital

While liberalization of the telecommunications sectors in Europe and the United States have been successful in absolute terms, many observers have asked about their relative success,<sup>5</sup> particularly in comparison with each other. Who has done the better job — Washington or Brussels? As of today, the most honest answer one can give is probably that one does not know. In the regulatory beauty contest, the jury is still out.

Two factors make it particularly difficult to identify a clear leader. First, the general approach that Congress and the Federal Communications Commission (“FCC”) has taken has not differed substantially from the approach taken by the European Commission (“Commission”), the Council of the European Union (“Council”), and the European Parliament (“Parliament”).<sup>6</sup> Both Washington and Brussels have realized that it is important that the markets in the telecommunications sector be opened up on all levels and that artificial barriers to market entry be removed.<sup>7</sup> As a result, one should not expect extreme differences in outcome. Second, while liberalization started decades ago, the regulatory frameworks have only recently been adapted to enable full facility-based competition in all telecommunications markets in the two jurisdictions — in the United States, this happened with the passage of the Telecommunications Act of 1996 (“1996 Act”)<sup>8</sup>; the EU followed suit in 1998.<sup>9</sup> Taking business

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and create opportunities to invest. See Doug Bartholomew, *No Sign of Slowing*, INSTITUTIONAL INVESTOR, Mar. 1999, at 116, 116–20. Moreover, the convergence of telecommunications and media sends the stock prices of Internet companies to record heights. See Mary Lowengard, *Home-run Hitters of 1998*, INSTITUTIONAL INVESTOR, Mar. 1999, at 71, 73 (reporting that America Online and Yahoo had returns of 172 and 511 percent, respectively, in 1997).

5. See REGULATORS’ REVENGE: THE FUTURE OF TELECOMMUNICATIONS DEREGULATION (Tom W. Bell & Solveig Singleton eds., 1998) [hereinafter REGULATORS’ REVENGE].

6. See *infra* Part III (discussing the development of telecommunications regulation on the two sides of the Atlantic). For an overview of the rules and responsibilities of the various governmental institutions of the European Union, see Treaty establishing the European Community, Mar. 25, 1957, Part V (art. 189 et seq.), 1997 O.J. (C 340) 145, available at <<http://europa.eu.int/eur-lex/en/treaties>>. In brief summary, the European Commission, to which each member nation contributes at least one commissioner (the larger nations contribute two each), acts as the executive; the European Council is composed of ministers of government of the member nations and acts in an advisory capacity to the Commission; and the European Parliament is a legislative body composed of elected members from each member nation.

7. See *infra* Part III.

8. Pub. L. No. 104-104, 110 Stat. 56.

9. See *infra* Part III.B.1 for an overview of the vast array of directives by which

planning cycles into account, it may well take another couple of years until we see distinct and lasting differences.

In this Article, we offer a few preliminary observations on the structural variations in the regulatory frameworks of the US and the EU which may become more and more visible as time goes by.

## II. "DE-REGULATION" — A MISNOMER

Telecom liberalization has been a lengthy process in the US, where it began in 1948.<sup>10</sup> In the EU, by contrast, it started in 1987.<sup>11</sup> The metaphor describing this process — "liberalization"<sup>12</sup> — connotes a desire to free the telecom sector from undue burdens and stifling regulations. Not surprisingly, the process of liberalization has also been called a "deregulation" of these markets.<sup>13</sup>

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the EU simultaneously obliged its Member States to gradually open up the various national markets and sought to establish a single European market. Full liberalization was due to be achieved by January 1, 1998. Except for voice telephony services and the requisite infrastructure, however, most had already been opened up by 1996 — in the same year as Congress passed the 1996 Act. *See infra* notes 55–62 and accompanying text.

10. In that year, the FCC decided that the Bell system could not subject terminal equipment produced by other companies to "foreign attachment" tariffs, provided that such equipment was functionally equivalent to Bell's own equipment. *See Use of Recording Devices in Connection with Telephone Service*, 11 F.C.C. 1033 (1948); *see also* GERALD W. BROCK, *TELECOMMUNICATION POLICY FOR THE INFORMATION AGE: FROM MONOPOLY TO COMPETITION* 80–84 (1994). For a discussion of the regulatory history of the US telecommunications sector, *see* Jim Chen, *The Legal Process and Political Economy of Telecommunications Reform*, 97 COLUM. L. REV. 835 (1997).

11. *See* Towards a dynamic European economy: Green Paper on the development of the common market for telecommunications services and equipment, COM(87) 290 final.

12. *See* Commission's Guidelines on the Application of EEC Competition Rules in the Telecommunications Sector, 1991 O.J. (C 233) 2.

13. *See, e.g.*, Telecommunications Competition and Deregulation Act, S. 652, 104th Cong. § 3 (1995) ("It is the purpose of this Act to increase competition in all telecommunications markets and provide for an orderly transition from regulated markets to competitive and deregulated telecommunications markets consistent with the public interest, convenience, and necessity."); Thomas M. Lenard, *Why Electricity Deregulation Failed* (visited May 19, 1999) <<http://www.pff.org/electricity.html>> (noting that "successful deregulation implies reducing — not increasing — the role of the regulator"); *see also generally* Daniel F. Spulber, *Deregulating Telecommunications*, 12 YALE J. ON REG. 25 (1995). For Europe, *see* Commission's Guidelines, *supra* note 12, at 4 (describing the liberalization process as "a wide deregulation process propagated in the Community with various degrees of intensity").

While the term “liberalization” may have been necessary to brand this development as politically favorable, the term “deregulation” is misleading. Indeed, if all that governments had to do was deregulate — i.e., to void existing regulations — the deregulatory process would not only be easy and quick but foolproof as well. Governments would simply have to repeal the existing regulatory framework and let the market take care of the rest. In such a paradigm, there would be no variation among de-regulating governments. As a result, different market outcomes that one might encounter in real life would have to be explained solely by external factors — for example, market structure — rather than by the regulatory framework.

Clearly, such a view seems utopian at best. Stephen Vogel<sup>14</sup> and others<sup>15</sup> have demonstrated that processes of ostensible deregulation are actually attempts to supplant one regulatory framework with another.<sup>16</sup> In such cases, an existing monopolistic (or oligopolistic) framework is replaced by one fostering markets and competition. In essence, legislatures liberalize an economic sector by “re-regulating” rather than deregulating it.<sup>17</sup> Such re-regulation serves two distinct purposes. First, heavily regulated markets — like those in the telecommunications sector — are often characterized by a few dominant players who routinely divide up the market among themselves. In many cases, they owe their dominance to the existing regulatory framework, which typically bars competitors from entering the market and hence has allowed the incumbents to grow. And yet, the situation would hardly improve if the existing framework were simply abolished. Limiting regulatory intervention to the abolition of the existing framework would induce the incumbent players to use their entrenched power to marginalize new market entrants, for example by cross-subsidizing competitive markets with monopoly revenues.<sup>18</sup> Hence, mere

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14. See STEVEN K. VOGEL, *FREER MARKETS, MORE RULES: REGULATORY REFORM IN ADVANCED INDUSTRIAL COUNTRIES* (1996).

15. See, e.g., JILL HILLS, *DEREGULATING TELECOMS: COMPETITION AND CONTROL IN THE UNITED STATES, JAPAN AND BRITAIN* (1986); MICHAEL MORAN, *THE POLITICS OF THE FINANCIAL SERVICES REVOLUTION: THE USA, UK AND JAPAN* (1991).

16. But see VOGEL, *supra* note 14, at 3 (noting that in some cases, such as in the airline industry, deregulation did lead to the abolishment of the existing regulatory framework rather than to the adoption of new regulations).

17. VOGEL, *supra* note 14, at 17.

18. Similar concerns motivated Judge Harold H. Greene in ordering the breakup of AT&T. See *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 142 (D.D.C. 1982) (“[T]he proposed decree would complement . . . structural changes by various restrictions which are said to be designed . . . to avoid a recurrence of the type of discrimination and cross-subsidization that were the basis of the AT&T lawsuit.”), *aff’d*

deregulation would permit the incumbent players to continue their dominant position. To avoid this result, a specific regulatory framework has to be put in place that favors market entry and allows effective competition by preventing incumbents from exerting their power. Despite its interventionist nature, this approach is acceptable during periods of transition from a highly regulatory system to one based on competitive markets.<sup>19</sup>

The second purpose of re-regulation is the re-enforcement of the market mechanism itself. Antitrust law, which we usually rely on to ensure competition, is an ex-post review mechanism. Regulation, by contrast, intervenes ex ante.<sup>20</sup> Assuming that markets generally yield efficient results and that market failure is the exception, one might prefer ex-post review to ex-ante intervention as the former interferes to a lesser degree and thus minimizes market distortions. However, in markets such as those in the telecommunications sector, where market failure is particularly likely to occur, ex-ante intervention may be the more efficient option.

With liberalization being more a process of re- than of de-regulation, governments do much more than void existing rules — they set up entire frameworks of new rules. By necessity, there will be variations in their re-regulatory approaches, and some may be relatively more successful than others. This insight provides the theoretical support for what one can witness in practice: Distinct re-regulatory approaches do make a difference. This finding must worry governments since it implies that it is not sufficient for them to muster the political support for the liberalization of a specific sector. They need also to determine which regulatory framework to choose. Moreover, the success of a regulatory framework depends on the specific market it seeks to regulate. Hence, the fact that a regulatory

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*mem. sub nom.*, Maryland v. United States, 460 U.S. 1001 (1983).

19. *But see* Lenard, *supra* note 13 (pointing to “the mistakes of the 1996 Telecommunications Act[, which] failed to clear federal barriers to competition, and instead empowered the Federal Communications Commission (FCC) to ‘manage competition’ through a nebulous transitional period”); Elizabeth A. Nowicki, Note, *Competition in the Local Telecommunications market: Legislate or Litigate?*, 9 HARV. J.L. & TECH. 353, 368–73 (1996) (arguing in favor of complete deregulation of the telecommunications industry except for ordinary antitrust enforcement).

20. Nonetheless, they both have the same purpose. *See* STEPHEN BREYER, REGULATION AND ITS REFORM 156–61 (1982); *see also* Nowicki, *supra* note 19, at 362 (comparing the interconnection requirements of § 251(c) of the 1996 Act to the Sherman Act).

approach is successful in one country does not automatically imply that it is suitable for another.<sup>21</sup>

Consequently, a comparative evaluation of different approaches to re-regulate the telecom sector not only furthers our understanding of what has taken place, but also provides governments with a tool for assessing the relative merits of their respective approaches.

### III. DE-REGULATING TELECOMMUNICATIONS — THE TRANSATLANTIC HISTORY IN A NUTSHELL

In this section, we will take a closer look at the development of re-regulation both in the US and in the EU. As we shall see, there are similarities in the chronological order in which the various markets in the telecommunications sector were opened up and the substantive mechanisms on which the regulators relied. At the same time, however, there are differences in detail and structure which may not be obvious at first glance.

#### *A. Telecommunications Regulation in the U.S.*

##### 1. History

For the most part of this century, American Telephone & Telegraph (“AT&T”) enjoyed a monopoly over virtually all aspects of telecommunications. It was the dominant provider of telecommunications services and of the equipment that customers needed to make use of these services, such as telephones, modems, fax machines, and answering machines, or so-called “terminal equipment.” By the 1970s, as a result of earlier limited liberalization efforts by the FCC<sup>22</sup> and new technological developments — such as the invention of coaxial cable and microwave transmissions — the markets for terminal

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21. This is conceded even by strong advocates of comparative analysis. See, e.g., Pablo T. Spiller & Carlo G. Cardilli, *The Frontier of Telecommunications Deregulation: Small Countries Leading the Pack*, in REGULATORS’ REVENGE, *supra* note 5, at 39.

22. Starting in 1948, the FCC began to issue licenses for the use of non-Bell terminal equipment. See Use of Recording Devices in Connection with Telephone Service, 11 F.C.C. 1033 (1948). In 1959, it authorized private users to use microwave transmissions for point-to-point communications. See Allocation of Frequencies in the Bands Above 890 Mc., 27 F.C.C. 359 (1959). For an excellent overview of the regulatory development in the US, see Chen, *supra* note 10.

equipment<sup>23</sup> and long-distance services<sup>24</sup> had become modestly competitive. The local exchange, by contrast, remained under the control of AT&T. The primary reason for this uneven development is the Communications Act of 1934 ("1934 Act"),<sup>25</sup> which barred the FCC from regulating the local exchange and instead put its regulation in the hands of the states.<sup>26</sup> The states regulated the local exchange as a public utility, granting their respective incumbent local exchange carriers ("ILECs"), which were mostly AT&T branches, exclusive franchises.<sup>27</sup>

Against this setting, the Department of Justice, in 1974, charged AT&T<sup>28</sup> with violations of sections 2 and 4 of the Sherman Act.<sup>29</sup> The Justice Department argued that the local exchange was an "essential facility" for the provision of telecommunications services and alleged that AT&T had used its leverage over the local exchange to monopolize those telecommunications markets that had already been opened up. In 1984, the lawsuit culminated in the so-called Modification of Final Judgment ("MFJ"),<sup>30</sup> which ordered the break-up of AT&T.<sup>31</sup> While

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23. See BROCK, *supra* note 10, at 79–101.

24. See generally BROCK, *supra* note 10, at 102–21. In 1969, Microwave Communications, Inc., obtained a license from the FCC to provide microwave services. See Applications of Microwave Communications, Inc., FCC 69-870, 18 F.C.C.2d 953 (1969). A year later, 33 companies applied for licenses to build a total of 1713 stations for microwave transmissions, which was more than one-third of those operated by Bell. See *In re MCI Telecomms. Corp.*, FCC 76-622, 60 F.C.C.2d 25, 36 (1976), *rev'd*, 561 F.2d 365 (D.C. Cir. 1977).

25. Ch. 652, 48 Stat. 1064.

26. See *id.* § 2(b), 48 Stat. at 1065 (codified as amended at 47 U.S.C. § 152(b)).

27. There were essentially two reasons why the states regarded the local exchange as a public utility. First, the local exchange was commonly thought to be a natural monopoly. The concept of "natural monopoly" refers to a market in which one firm can satisfy the entire demand of the market at less cost than two or more firms. See Spulber, *supra* note 13, at 31 (citing JOHN S. MILL, PRINCIPLES OF POLITICAL ECONOMY 132–54 (W.J. Ashley ed., Augustus M. Kelly 1961) (1848)). Second, states feared that competition in the local exchange might mean higher residential rates. See Glen O. Robinson, *The "New" Communications Act: A Second Opinion*, 29 CONN. L. REV. 289, 308 (1996).

28. See *United States v. American Tel. & Tel. Co.*, 427 F. Supp. 57 (D.D.C. 1976).

29. 15 U.S.C. §§ 2, 4 (1994). Specifically, AT&T was charged with violating the "essential facilities" doctrine, which forms part of the general rules on refusals to deal.

30. *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd mem. sub nom.*, *Maryland v. United States*, 460 U.S. 1001 (1983).

31. See generally ROBERT W. CRANDALL, AFTER THE BREAKUP: U.S. TELECOMMUNICATIONS IN A MORE COMPETITIVE ERA (1991) (discussing the breakup of the Bell System and its impact on the telecom sector); see also BROCK, *supra* note 10, at 149–72; Paul W. MacAvoy & Kenneth Robinson, *Losing by Judicial*

AT&T was allowed to continue to provide long-distance telecommunications services, it had to divest its local exchange facilities to seven Regional Bell Operating Companies ("RBOCs").<sup>32</sup> Significantly, the MFJ prohibited the RBOCs from providing long-distance services and from manufacturing terminal equipment. These business-line restrictions were considered necessary as the RBOCs continued to benefit from exclusive franchises in the local exchange.<sup>33</sup> Had the MFJ allowed the RBOCs to expand into other telecom markets, it would have created exactly the same antitrust problems that had sparked the divestiture of AT&T. The original plan was to periodically review and eventually lift the business-line restrictions.<sup>34</sup> However, the dominance of the RBOCs in the local exchange remained problematic, and only one business-line restriction was revoked during the 12-year life of the MFJ. This occurred in 1993, when the RBOCs were allowed to provide information services.<sup>35</sup>

Finally, in 1996, in an attempt to remedy the lack of local competition, Congress enacted the Telecommunications Act of 1996.<sup>36</sup> The 1996 Act abolishes the status of the RBOCs as public utilities and revokes the exclusive franchises that they had enjoyed under state law. Moreover, it recognizes that the removal of legal obstacles is one step, while the introduction of effective competition in the local exchange is another. Accordingly, it affirmatively facilitates the entry of new competitors by requiring all telecommunications carriers to

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*Policymaking: The First Year of the AT&T Divestiture*, 2 YALE J. ON REG. 225 (1985).

32. The RBOCs were Ameritech, Bell Atlantic, BellSouth, Nynex, Pacific Telesis, Southwestern Bell, and US West.

33. See Spulber, *supra* note 13, at 29.

34. See *United States v. AT&T*, 552 F. Supp. at 194.

It is probable that, over time, the Operating Companies will lose the ability to leverage their monopoly power into the competitive markets from which they must now be barred. This change could occur as a result of technological developments which eliminate the Operating Companies' local exchange monopoly or from changes in the structures of the competitive markets. In either event, the need for the restrictions . . . will disappear, and the decree should therefore contain a mechanism by which they may be removed.

*Id.*

35. See *United States v. Western Elec. Co.*, 993 F.2d 1572, 1575-76, 1582 (D.C. Cir. 1993).

36. Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 18 & 47 U.S.C.). The 1996 Act is divided as follows: Title I: Telecommunication Services; Title II: Broadcast Services; Title III: Cable Services; Title IV: Regulatory Reform; and Title V: Obscenity and Violence.

interconnect, and by imposing additional obligations on ILECs, such as requiring them to provide unbundled access to their network elements and offer collocation of facilities.<sup>37</sup> In order to prevent the bottleneck situation that led to the antitrust case against AT&T from recurring, the 1996 Act conditions the ILECs' entry into long-distance upon competition in the local exchange.<sup>38</sup> The general expectation was that competition in the local exchange would begin almost immediately and that the restrictions on the ILECs could soon be removed.<sup>39</sup> Experience has shown, however, that the introduction of competition into a formerly regulated market is a slow process.<sup>40</sup> To date, not one ILEC has been granted an FCC license to provide long-distance services, although, at the time of writing, Bell Atlantic is on the verge of obtaining a license.<sup>41</sup>

## 2. The Institutional Framework

Institutionally, the 1996 Act not only brought "liberalization" to the telecom sector, but also entailed the "federalization" of telecommunications law. Under the 1934 Act, the authority to regulate telecommunications was split between the FCC and the state Public

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37. See 47 U.S.C. §§ 251(a)–(c), 252 (Supp. III 1997).

38. See 47 U.S.C. § 271 (Supp. III 1997).

39. This expectation was widely shared by the participants in the antitrust trial that led to the breakup of AT&T. See *United States v. AT&T*, 552 F. Supp. at 194 ("[T]he Department of Justice has undertaken to report to the Court every three years concerning the continuing need for the restrictions imposed by the decree."); see also *supra* note 34; J. Gregory Sidak, *Telecommunications in Jericho*, 81 CAL. L. REV. 1209, 1209 (1993) (reviewing MICHAEL K. KELLOGG ET AL., *FEDERAL TELECOMMUNICATIONS LAW* (1992) & PETER W. HUBER ET AL., *THE GEODESIC NETWORK II: 1993 REPORT ON COMPETITION IN THE TELEPHONE INDUSTRY* (1992)) ("American telecommunications regulation is about to collapse like the walls of Jericho.").

40. See, e.g., Robinson, *supra* note 27, at 308 n.55 (replying to the Jericho visualization employed by Sidak, *supra* note 39, by noting that "[e]ven if the walls come down, they will not just collapse; more likely they will have to be removed stone by stone.").

41. On April 14, 1999, Bell Atlantic filed a document with the New York Public Service Commission in which it attempted to demonstrate its compliance with the 14-point checklist mandated by the 1996 Act. See *N.Y. PSC to Begin Bell Atlantic Hearings May 23*, COMM. DAILY, Apr. 15, 1999. The proceedings are scheduled to be completed by the end of June. See *Bell Atlantic Will File 271 With FCC in June*, NETWORK WK., Apr. 15, 1999. For updated information, see Bell Atlantic's Investor Information website, available at <<http://BEL-ir.com/BELemail/newslist.cgi>> (visited May 19, 1999).

Utility Commissions ("PUCs").<sup>42</sup> Matters of interstate communications fell within the jurisdiction of the FCC, while intrastate communications were subject to the sole regulatory authority of the state PUCs. This distinction was not only highly artificial, since the lines and switches that are used to transmit intrastate communications are the same as those used for interstate communications, but it also prevented the FCC from opening up the local exchange, which was still regulated by the state PUCs.

The 1996 Act resolves this problem in favor of the FCC. At first glance, it may seem as if the Act upholds the distinction between interstate and intrastate traffic. The Supreme Court's decision in *AT&T Corp. v. Iowa Utilities Board*,<sup>43</sup> however, makes clear that this distinction is now largely irrelevant since the 1996 Act expressly empowers the FCC to implement the Act's local-competition provisions.<sup>44</sup>

The reduction of state power, however, has not been mirrored by a proportionate increase in the regulatory powers of the FCC. Instead, Congress chose to exercise much of this power itself. By attempting to anticipate the answers to many policy questions in the 1996 Act and by regulating them in great detail, Congress limited the discretion that the FCC would otherwise enjoy.<sup>45</sup> Consequently, the FCC's ability to adapt to changing technological and economic circumstances is confined.

Ironically, in those areas in which the 1996 Act does give discretion to the FCC, it also exposes it to judicial attacks. *Iowa Utilities Board* provides an apt example. Six months after the passage of the 1996 Act, the FCC issued its First Report and Order, with which it implemented

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42. See Communications Act of 1934, Ch. 652, § 2(b), 48 Stat. 1064, 1065 (codified as amended at 47 U.S.C. § 152(b)).

43. 525 U.S. 366 (1999).

44. See *id.* at 377–78.

Section 201(b), a 1938 amendment to the Communications Act of 1934, provides that '[t]he Commission may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act.' Since Congress expressly directed that the 1996 Act, along with its local-competition provisions, be inserted into the Communications Act of 1934, the Commission's rulemaking authority would seem to extend to implementation of the local-competition provisions.

*Id.* (citations omitted).

45. For example, §§ 251–261, 271–276 of the 1996 Act provide detailed guidelines determining the content of the FCC's subsequent orders. See 47 U.S.C. §§ 251–261, 271–276 (Supp. III 1997).

the 1996 Act's local competition provisions.<sup>46</sup> Soon thereafter, a number of state commissions and ILECs from all over the country challenged the FCC Order in court. They alleged that the implementation of the local competition provisions fell within the jurisdiction of the states, and that by adopting the First Report and Order, the FCC had unlawfully encroached upon the jurisdiction of the state commissions.<sup>47</sup> The suits were eventually consolidated in the Eighth Circuit, which agreed with the plaintiffs and vacated a number of the provisions contained in the First Report and Order.<sup>48</sup> A divided Supreme Court later reversed on the jurisdictional question and reinstated the FCC Order.<sup>49</sup> The Court of Appeals' reading of the 1996 Act stands in marked contrast to that of the Supreme Court,<sup>50</sup> which is, in part at least, attributable to the many vague and ambiguous provisions in the 1996 Act. So far, these legislative shortcomings have delayed the full effectiveness of the local competition provisions by three years, and there is a fear of continued uncertainty.

### *B. Telecommunications Regulation in Europe*

#### 1. History

The path that telecom liberalization took in Europe is similar to that in the US, with the important difference that it took much longer for the reform process to start and that, once started, it was completed within a shorter time period. When the telephone was invented, most European countries were monarchies. In the absence of a constitutionally guaranteed freedom of professional activity, it was the Crown that owned and operated much of the economy's infrastructure. Hence, the provision of telecommunications infrastructure, of telephony

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46. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, FCC 96-325, 11 F.C.C.R. 15,499 (1996) (seeking to guide state agencies and federal courts in interpreting the 1996 Act).

47. See *Iowa Utils. Bd.*, 525 U.S. at 374-75..

48. See *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *aff'd in part, rev'd in part*, 525 U.S. 366 (1999).

49. See *Iowa Utils. Bd.*, 525 U.S. at 367-68..

50. See, for example, the controversy over the correct interpretation of the jurisdictional provisions of 47 U.S.C. § 152(b). While the Court of Appeals equated that provision to a fence that is "hog tight, horse high, and bull strong, preventing the FCC from intruding on the states' intrastate turf," 120 F.3d at 800, the Supreme Court found that "[s]uch an interpretation would utterly nullify the 1996 amendments, which clearly 'apply' to intrastate service, and clearly confer 'Commission jurisdiction' over some matters." *Iowa Utils. Bd.*, 525 U.S. at 380.

services, and of terminal equipment naturally fell within the responsibility of the Crown. At the beginning of the 20th century, things changed both politically and economically, but the state's dominance of the telecommunications sector was never openly challenged.<sup>51</sup>

For most of the century, therefore, every European country had one telecommunications organization (a "TO"). In some countries, the TO was a public agency; in others, it was a state-owned enterprise. Whatever the legal status of these TOs, their unifying characteristic was that they enjoyed state-sanctioned monopolies over virtually all aspects of telecommunications. Not only were they charged with the distribution of terminal equipment and the provision of both local and long-distance services, they also enjoyed regulatory powers. Therefore, at a time when the markets for terminal equipment and long-distance services had been opened up in the US, the European markets were still predominantly closed-shop monopolies.

In the 1980s, however, things began to change at an ever increasing pace. At first, some European countries — with the United Kingdom taking the lead — began to individually liberalize their telecommunications sectors. At that time, telecommunications was not on the EU's deregulatory agenda, mainly because it was unclear whether and to what extent the competition rules of the Treaty establishing the European Community ("EC Treaty")<sup>52</sup> applied to regulated sectors. In 1985, however, the European Court of Justice ("Court") set the stage for liberalization by making clear that the competition rules did apply to the telecommunications sector.<sup>53</sup> In 1987, the European Commission ("Commission") adopted a Green Paper ("1987 Green Paper"), which stated that it was vital to liberalize the European telecommunications sector to ensure the continued competitiveness of Europe.<sup>54</sup>

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51. Likewise, up to an amendment in 1994, Article 87 of the German Constitution obliged the federal government of Germany to provide universal postal services, including telecommunications services. See GRUNDGESETZ [Constitution] art. 87 (F.R.G.).

52. See Treaty establishing the European Community, Mar. 25, 1957, 1997 O.J. (C 340) 145, available at <<http://europa.eu.int/eur-lex/en/treaties>>.

53. See Case 41/83, Italy v. E.C. Comm'n (United Kingdom intervening), 1985 E.L.R. 510, [1985] 2 C.M.L.R. 368 (1985).

54. See Towards a dynamic European economy, *supra* note 11. The 1987 Green Paper was followed by a series of papers, resolutions, communications and recommendations that elaborated on particular aspects discussed therein, some of which we will discuss.

In 1988, the Commission adopted a directive ("Terminal Equipment Directive")<sup>55</sup> which obliged the Member States to abolish all special or exclusive rights granted to TOs in the terminal equipment market.<sup>56</sup> Subsequently, it adopted a directive ("Services Directive")<sup>57</sup> which mandated the opening-up of the markets for value-added services by 1991 and data services by 1993.<sup>58</sup> The Services Directive also required Member States to separate the regulatory functions from the operational aspects of telecommunications, which had until then been combined in the TOs.<sup>59</sup> Member States reacted by establishing independent national regulatory authorities. A later directive mandated that in cases where a Member State continued to control organizations providing telecommunications networks and/or services, the organizations had to be independent.<sup>60</sup> Satellite and mobile communications were liberalized by 1994<sup>61</sup> and 1996 respectively.<sup>62</sup> Up to that point, the market for voice telephony services had been exempt from the Commission's deregulatory efforts out of fear that premature liberalization might threaten the financial stability of the TOs and thus prevent them from providing universal service. Moreover, it was recognized that because most TOs charged prices which did not correspond to costs, immediate liberalization might induce new competitors to target highly profitable services. Given the success of its regulatory efforts, however, the Commission changed its policy in 1996,<sup>63</sup> and by 1998, ten years after the first directive had been adopted, all markets were opened up.<sup>64</sup> The

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55. See Commission Directive 88/301 on competition in the markets in telecommunications terminal equipment, 1988 O.J. (L 131) 73 [hereinafter Terminal Equipment Directive].

56. See *id.* art. 2, at 76.

57. See Commission Directive 90/388 on competition in the markets for telecommunications services, 1990 O.J. (L 192) 10 [hereinafter Services Directive].

58. See *id.* arts. 2, 3, at 15–16.

59. See *id.* art. 7, at 16.

60. See Commission Directive 97/51 amending Council Directives 90/38 and 92/44 for the purpose of adaptation to a competitive environment in telecommunications, art. 5a, 1997 O.J. (L 295) 23, 27–28.

61. See Commission Directive 94/46 amending Directive 88/301/EEC and Directive 90/388/EEC in particular with regard to satellite communications, art. 2, 1994 O.J. (L 268) 15, 19–21.

62. See Commission Directive 96/2 amending Directive 90/388/EEC with regard to mobile and personal communications, art. 1, 1996 O.J. (L 20) 59, 63–65.

63. See Commission Directive 96/19 amending Commission Directive 90/388/EEC with regard to the implementation of full competition in telecommunications markets, art. 1, 1996 O.J. (L 74) 13, 21–24. In recital 5, the Commission noted that "the exception granted with respect of voice telephony is no longer justified." *Id.* at 14.

64. In 1997, the Commission set up the so-called "1998 Joint Team", bringing

re-regulation of the respective infrastructure occurred on the way at the same pace as the respective service markets were opened up, with liberalization being completed in 1998.

Parallel to the abolishment of legal obstacles to entry into the various telecommunications markets, the EU adopted substantial re-regulatory measures as part of its Open Network Provision ("ONP") program. The goal of ONP is twofold. On the one hand, it ensures that new market entrants have adequate access to the existing infrastructure. Its purpose hence resembles that of the local competition provisions of the 1996 Act in the US. On the other hand, however, ONP seeks to accomplish a specifically European task: the combination of the various telecommunications markets of the Member States into a single European market. Accordingly, a significant part of ONP is devoted to the harmonization of network interfaces, usage conditions, and tariff principles across the EU. The need to ensure open access to networks was first identified in the Commission's 1987 Green Paper. In 1990, the EU adopted the ONP Framework Directive,<sup>65</sup> which outlined general ONP principles (objectivity, transparency, and non-discrimination) and a timetable for their implementation. Subsequently, a number of specific directives<sup>66</sup> and recommendations<sup>67</sup> applying the ONP principles to particular markets were adopted on the basis of the ONP Framework Directive. In response to changing market conditions, these directives

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together antitrust and telecommunications experts, to ensure that all the Member States fully opened up their markets by the required deadlines. For the current status of implementation, *see* the Commission's XXVIIIth Report on Competition Policy (1998), *available at* <<http://europa.eu.int/comm/dg04/public/en/repo.htm>>.

65. *See* Council Directive 90/387 on the establishment of the internal market for telecommunications services through the implementation of open network provision, 1990 O.J. (L 192) 1 [hereinafter ONP Framework Directive].

66. *See* Council Directive 92/44 on the application of open network provision to leased lines, 1992 O.J. (L 165) 27 [hereinafter Leased Lines Directive]; Parliament and Council Directive 95/62 on the application of open network provision (ONP) to voice telephony, 1995 O.J. (L 321) 6 [hereinafter Voice Telephony Directive].

67. *See* Council Recommendation 92/382 on the harmonized provision of a minimum set of packet-switched data services (PSDS) in accordance with open network provision (ONP) principles, 1992 O.J. (L 200) 1; Council Recommendation 92/383 on the provision of harmonized integrated services digital network (ISDN) access arrangements and a minimum set of ISDN offerings in accordance with open network provision (ONP) principles, 1992 O.J. (L 200) 10.

were later revised<sup>68</sup> or replaced<sup>69</sup> by new directives. This underscores the notion that re-regulation is a process requiring continuous adaptation. Another part of the ONP program is the directive on interconnection,<sup>70</sup> which, among other things, determines the categories of carriers that are obliged to interconnect and specifies the ground rules for the financing of universal service. Recently, the Commission has issued recommendations regarding the pricing and accounting of interconnection.<sup>71</sup>

## 2. The Institutional Framework

The primary legal instrument by which the EU regulates the telecommunications sector is the directive. Unlike regulations, which are directly applicable in the Member States, directives oblige Member States to transpose certain goals into national laws.<sup>72</sup> While these goals may be set out in greater or lesser detail, their implementation is entirely within the Member States' discretion.

The fact that telecommunications regulation in the EU depends primarily on directives offers two important institutional insights. First, it affords the Commission a great deal of power. The Commission alone is competent to adopt directives that require Member States to open up their markets by abolishing the exclusive rights enjoyed by the national TOs. Its power to adopt such directives stems from its

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68. See Parliament and Council Directive 97/51 amending Council Directives 90/387/EEC and 92/44/EEC for the purpose of adaptation to a competitive environment in telecommunications, 1997 O.J. (L 295) 23 (revising the ONP Framework Directive and the Leased Lines Directive).

69. See Parliament and Council Directive 98/10 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment, 1998 O.J. (L 101) 24 (replacing the Voice Telephony Directive) [hereinafter New Voice Telephony Directive].

70. See Parliament and Council Directive 97/33 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP), 1997 O.J. (L 199) 32, as amended by Parliament and Council Directive 98/61 amending Directive 97/33/EC with regard to operator number portability and carrier pre-selection, 1998 O.J. (L 268) 37 [hereinafter ONP Interconnection Directive].

71. See Commission Recommendation 98/322 on interconnection in a liberalised telecommunications market, 1998 O.J. (L 228) 30 (Part 1 — Interconnection pricing), 1998 O.J. (L 141) 6 (Part 2 — Accounting separation and cost accounting).

72. See Treaty establishing the European Community, *supra* note 6, art. 249 ("A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods.").

competence to enforce competition law.<sup>73</sup> But the Commission is also involved in the adoption of so-called “harmonization” directives. Harmonization directives, such as the ONP Framework Directive, are directives by which the EU re-regulates markets once they have been opened up to competition. While the power to formally adopt such directives is vested in the Council and the Parliament, the Commission has the exclusive right to propose their content.<sup>74</sup> Moreover, so long as the legislative process is not finalized, the Commission remains free to withdraw its proposals at any time.<sup>75</sup>

By systematically requiring Member States to open up their national markets, the Commission can set the pace at which the re-regulatory process advances and force the Council and the Parliament to cooperate in the creation of a legal framework for these markets. Moreover, by virtue of its right to put forward proposals, the Commission can shape the substantive content of that framework. In theory, the Commission’s grip on the process may be less firm since the Council is free to amend the proposals made by the Commission. Such amendments, however, require a unanimous vote by the Council.<sup>76</sup> Given the Council’s political and regional diversity, the Commission’s proposals are rarely amended in practice.

The second institutional implication is linked with what might be called a structural dimension of the much talked-about “principle of subsidiarity.”<sup>77</sup> As mentioned above, most of EU re-regulation legislation is enacted in the form of directives. Compared to other means of legislation, Member States have discretion in determining the manner in which they want to achieve the goals set forth in a directive, thus structurally granting Member States important flexibility in transposing directives into national laws. In the area of telecommunications, this is reflected in the relative brevity of the

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73. See *id.* art. 86 (“The Commission shall ensure the application of the provisions of this Article [pertaining to competition law] and shall, where necessary, address appropriate directives or decisions to Member States.”).

74. See *id.* art. 251(2).

75. See *id.* art. 250(2).

76. See *id.* art. 250(1).

77. See David Lazer & Viktor Mayer-Schönberger, *Addressing the “Where” and the “How” of Regulation: An Examination of Two Dimensions of a “Rational” Regulatory Policy Process in the U.S. and the European Union*, in KALYPSO NICOLAIDIS ET AL., *RETHINKING FEDERALISM IN THE US AND THE EU: THE CHALLENGE OF LEGITIMACY* (forthcoming 2000).

various directives, which are restricted to laying out general framework principles and rely on the Member States for their implementation.<sup>78</sup>

The institutional structure of the EU has thus permitted the reform process to be carried out on a harmonized but decentralized basis. For the national regulatory authorities, this meant that they could engage in competition with one another and experiment with various regulatory parameters, provided, of course, that they complied with the framework guidelines that had been determined at the EU level.

#### IV. COMPETITIVE VS. COMPETING MARKETS

The process of market re-regulation in the US and the EU has been, as we have noted, remarkably similar in its basic approach. Markets — it was contended on both sides of the Atlantic — have to be opened by establishing a regulatory framework which ensures not only robust competition but also an environment that is conducive to new entrants.

Market liberalization was taken one step at a time, starting with the market for terminal equipment and ending with the market for local-loop voice telephony. The regulatory framework that was put into place was not only designed to facilitate the transition to competition but also addressed such issues as universal service<sup>79</sup> and number portability.<sup>80</sup> Despite this superficial resemblance, the most recent and arguably the most important steps taken so far — the 1996 US Telecom Act and the 1995 EC Directive on Voice Telephony<sup>81</sup> — have created quite different telecom landscapes.

The jury is still out on whether the 1996 Telecom Act has been a success or a failure, and both supporters and critics have had no shortage of ammunition. A certain level of dissatisfaction probably had to be expected. After all, the 1996 Act is a blend of many different

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78. When Member States in the Council could not agree on the text of re-regulation directives, the Commission repeatedly threatened to re-regulate by enacting directives with much less discretion given to the Member States. The threat worked: A compromise could be attained in the Council and the directives continued to permit implementation flexibility to Member States.

79. See Chapter II of the New Voice Telephony Directive, *supra* note 69 at 29 (setting forth a defined set of services which may be funded in the context of universal service) and the ONP Interconnection Directive, *supra* note 70; see also the First Monitoring Report on Universal Service in Telecommunications in the European Union, COM(98)101 final.

80. See art. 12(5) of the ONP Interconnection Directive, *supra* note 70 at 42.

81. See Voice Telephony Directive, *supra* note 66, superseded by New Voice Telephony Directive, *supra* note 69.

ideas. Public Choice theorists might indeed see it as an apt mirror image of the power play at work at its creation.<sup>82</sup>

But not only is the 1996 Act the result a delicate political compromise, it has also created homogeneity within the United States by “federalizing”<sup>83</sup> much of the regulatory framework. Each player in the various telecommunications markets is now subjected to the same regulations throughout the United States. While the Act may hence contain bright and shady spots, representing successes and failures in regulatory reform, the overall picture is one of a homogenous gray landscape.<sup>84</sup>

In the EU, on the other hand, each of the fifteen Member States had to individually transform the more general directives into national law. Some of the national regulatory frameworks that were thus created turned out to be very successful, sparking an abundance of new market opportunities and providing consumers with more affordable telecom services.<sup>85</sup> Others have done less well.<sup>86</sup> At the macro level, therefore, the European regulatory landscape may look uniform in the sense that the regulatory authorities in the various Member States apply the same re-regulatory principles. The implementation of these principles, however, varies from one Member State to the next, creating — metaphorically speaking — a checkered quilt of differently shaded patches. Precisely this contrast between a uniform regulatory framework in the US and a harmonized but still varied set of regulations in Europe, we suggest, warrants further attention.

In Europe, many governments saw the issue of telecom liberalization as more than merely a chance to create an economic stimulus, attract foreign investment, and induce the building up of a modern information infrastructure. Particularly small and medium-sized Member States, such as Austria, Belgium, Finland, Ireland, and the

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82. For a public choice analysis of interest group influence on law-making, see, e.g., KAY LEHMAN SCHLOZMAN & JOHN T. THIERNEY, *ORGANIZED INTERESTS AND AMERICAN DEMOCRACY* (1986); MANCUR OLSON, JR., *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965).

83. See *supra* Part III.A.2.

84. See BROCK, *supra* note 10, at 27–48 for a description of pre-1996 decentralized policy processes in the US.

85. For an overview of the distinct criteria to evaluate the success of markets, see Thomas Kiessling & Yves Blondeel, *The Impact of Regulation on Facility-Based Competition in Telecommunications: A Comparative Analysis of Recent Developments in North America and the European Union*, COMM. & STRATEGIES, 2nd Quarter 1999, at 19.

86. See, e.g., *id.* (comparing the UK with the German approach for fostering facilities-based competition).

Netherlands, viewed the reform process as a rare chance to improve their relative competitiveness vis-à-vis their larger neighbors.<sup>87</sup>

Accordingly, several of these countries have seized the opportunity and may even have implemented a more market-driven framework than the various directives would have required. They assumed, rightly so, that in highly dynamic sectors like telecommunications, companies are very perceptive to the differences between regulatory frameworks and quickly re-adjust their investment strategies.<sup>88</sup>

Regulatory competition was further facilitated by the fact that the UK — one of the five large Member States of the EU and the only one pushing<sup>89</sup> for liberalization well before the EU started its process<sup>90</sup> —

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87. The example of Austria and Germany shows how even the smallest Member States of the EU can gain a competitive advantage vis-à-vis their larger neighbors simply by adopting a different regulatory approach. The German regulator is sometimes criticized for making access to the incumbent's network too easy, which has the effect that "the only new telcos making money in Germany are those that do not build infrastructure and do not innovative services." *Deutsche Telekom Hits Out at Regulators*, NETWORK BRIEFING, Sept. 10, 1998 (quoting Ron Sommer, CEO of Deutsche Telekom). This is not just a thorn in the flesh of the incumbent operator but it also threatens to "delay the introduction of new technologies and slow down convergence . . . ." See Vineeta Shetty, *Interconnection: A Red Rag to a Bull*, COMM. INT'L, Nov. 1998, at 15, available at <<http://www.totaltele.com/cilive>>. The Austrian regulator appears to be more successful. The recent formation of tele.ring, a second provider of telecom infrastructure, suggests that there will soon be true facilities-based competition in that country. In an interview given in 1998, Oliver Schmalholz, the then-managing director of the Austrian subsidiary of European Telecom International, a San Francisco-based company, noted that "[c]ompared with other countries in Europe, Austria has a lot more potential for an innovative company to expand market share and significantly impact the industry[.]" See *Dynamic Liberalization in Austrian Telecommunications: Opportunities for New Providers and Products*, PR NEWSWIRE, June 3, 1998. Schmalholz's view is backed by findings made by the European Information Technology Observatory, which recently estimated a 8.9% growth rate for the Austrian telecommunications sector in 1998, one of the highest in Europe. See *id.*

88. See Joel P. Trachtman, *International Regulatory Competition, Externalization, and Jurisdiction*, 34 HARV. INT'L L.J. 47, 51 (1993); see generally, INTERNATIONAL REGULATORY COMPETITION AND COORDINATION: PERSPECTIVE ON ECONOMIC REGULATION IN EUROPE AND THE UNITED STATES (William Bratton ed., 1996).

89. BT and Mercury used to be the only carriers that the UK government allowed to operate local, national, or international fixed-link networks. In 1991, however, that policy was abandoned, and markets were opened up.

90. In the UK, the deregulatory process was initiated in 1981 with the sale of government shares in Cable & Wireless and the separation of postal and telecommunications services. In 1984, British Telecom was privatized, and in the same year, Mercury Communications Ltd. obtained a national Public Telecommunications Operator license. See KEY NOTE MARKET REPORT, *supra* note 2.

continued its drive for competition at all levels.<sup>91</sup> As a result, the British managed to establish facilities-based competition at a time when the Germans were still struggling to institute service and resale competition. Arguably, as facilities-based competition is essential to create truly competing infrastructures — and not just resale markets<sup>92</sup> in which arbitrageurs exploit pricing differences among existing networks — this commitment pushed the British a step ahead.

An example of how the EU actively induces regulatory competition is its treatment of the issue of carrier pre-selection. The relevant directive imposes an obligation to offer carrier pre-selection only on those fixed local access providers with significant market power.<sup>93</sup> Whether or not providers that lack such power are equally subjected to carrier pre-selection requirements falls within the discretion of the Member States. In effect, this enables Member States to engage in regulatory competition: they can either exempt new entrants into the facilities market from the directive's requirements — thereby encouraging investments in infrastructure — or treat all providers in the same way.<sup>94</sup> If only one national regulatory agency ("NRA") takes advantage of the regulatory discretion that the EU affords the Member States, it may be a matter of time until other NRAs feel the pressure of

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91. The emergence of long run average incremental cost ("LRAIC") as the standard methodology for calculating the cost of universal service is instructive. The LRAIC methodology was initially developed in the United Kingdom by the Office of Telecommunications ("OFTEL"), the British national regulatory agency for telecommunications. Later, the Commission recommended that methodology as the standard accounting method for all the EU Member States. See Commission Communication on Assessment Criteria for National Schemes for the Costing and Financing of Universal Service in Telecommunications and Guidelines for the Member States on the Operation of such Schemes, COM(96)608 final.

92. Cable is certainly not the only threat to the hegemony of copper wire. In the UK, BT who owns much of the existing infrastructure, is currently coming under increased pressure from fixed radio link technology employed by companies such as Ionica and ScottishPower Telecommunications to serve the residential market. See KEY NOTE MARKET REPORT, *supra* note 2.

93. See preamble, Parliament and Council Directive 98/61, *supra* note 70, at 37.

94. Historically, the EU's limitation of the pre-selection requirement to providers with significant market power appears to go back to an earlier decision by OFTEL to give new entrants in the facilities market all revenues from end-to-end calls and to let them decide the routing of calls in the long-distance and termination network. Carrier pre-selection would have shifted this decision to the customer and hence would have jeopardized the privilege. See William Lehr & Thomas Kiessling, *Telecommunication Regulation in the United States and Europe: The Case for Centralized Authority*, in COMPETITION, REGULATION, AND CONVERGENCE 105–20 (Sharon Eisner Gillett & Ingo Vogelsang eds., 1999) (discussing OFTEL's influence on the EU directive).

more competitive regulatory frameworks and revise their own regulatory setup.

In essence then, the layered approach of liberalization taken by the EU — general competition and harmonization directives to be transformed into national regulatory frameworks with enough leeway to allow the Member States a variety of slightly different regulatory jurisdictions — has not only created competitive telecom markets, but competitive markets for regulatory frameworks.<sup>95</sup>

To be sure, these markets for regulations are constrained by external factors. Telecom infrastructures, for example, cannot easily be moved from one country to another just because the regulatory environment has changed. On the other hand, the terminal equipment and services markets can react rapidly to regulatory adjustments as the transaction costs of moving operations to more fitting jurisdictions within the EU are relatively low.

Nevertheless, even the facilities market will sooner or later respond to changes in the regulatory framework, particularly in the current early phase of re-regulation, in which transnational telecom companies are adjusting their investment strategies. The ability to offer a relatively more attractive regulatory environment may provide the key for EU countries seeking to attract foreign investment to their respective telecom infrastructures.

Obviously, the Member States of the EU need not necessarily adopt the most effective regulatory framework at the outset to become quite successful in relative terms. Much of a country's success in the regulatory game depends on the ability of its government to learn from prior regulatory experience — its own and that of others. By looking to the collective experience of the Member States in implementing the EU guidelines, each Member State may individually choose the most effective approach and thereby avoid costly regulatory dead-ends.

It seems obvious to us that governments that are capable of swiftly adapting their regulatory regimes will fare substantially better than less flexible governments. By blocking legislation that is necessary to adapt the applicable framework, interest groups may serve the aims of their constituencies, but they may cause their countries to fall behind in the intra-EU regulators' competition. William Lehr and Thomas Kiessling<sup>96</sup> have pointed out that those states which have created independent and

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95. For an overview of the functioning of regulatory markets, see David Lazer, *Regulatory Interdependence and International Governance* (forthcoming, on file with the *Harvard Journal of Law & Technology*).

96. See Lehr & Kiessling, *supra* note 94.

powerful regulatory authorities with flexible mandates generally do better than nations with less independent watch-dogs. This observation, we suggest, is but another way of expressing the desirability of regulatory competition. Independent authorities with broad, flexible mandates are able to adjust regulatory frameworks much faster than legislatures, which must comply with lengthy statutory amendment procedures. This head start in adjustment time that independent authorities enjoy may in turn provide the basis for the relative advantage in regulatory competition noted by Lehr and Kiessling.

Interestingly, the EU combines both regulatory competition among the Member States *and* a powerful central institution that oversees the process. While the Member States can quickly adjust their regulatory frameworks so long as they comply with the guidelines established at the level of the EU, the Commission can alter these guidelines whenever that becomes necessary. In fact, the Commission periodically revises its directives (in co-operation with the Council and the Parliament where required), including such centerpieces as the ONP Directive, precisely because it seeks to maximize their effectiveness. In essence, then, regulatory competition and a powerful central institution that guides the process are just two sides of the same coin. In combination, they ensure that the EU framework remains responsive to changing circumstances.<sup>97</sup>

This brings us to a final question: If regulatory competition confers a relative advantage on a country that is re-regulating its telecom sector, could the same model be used as a powerful tool to improve a country's regulatory framework in other areas as well?

## V. "STRUCTURAL" REGULATORY COMPETITION—QUALITIES AND LIMITATIONS

Regulatory competition is possible in the EU because of its unique institutional structure — specifically the division of powers between the EU and its Member States. At the heart of this division is the fact the EU regulates primarily through directives, which afford the Member States discretion when they implement them in their national legal

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97. See, e.g., Towards an information society approach: Green Paper on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation, COM(97)623 final (emphasizing that regulations must remain adaptable since they might otherwise "result in the same service falling under more than one regulatory regime [even though that may be unjustified] . . . or lead to discrimination by allowing similar networks or services to be regulated differently").

orders. This structural expression of the principle of subsidiarity, which requires the EU to regulate only to the extent that a desired regulatory end cannot be equally well or better achieved at the level of the Member States, permits Member States to create similar but not identical regulatory regimes. Hence, they stimulate a competitive atmosphere conducive to successful re-regulation. The European advantage, then, is neither deliberate nor limited to the telecom sector but one of design and part of the very structure of the EU itself. One might assume, therefore, that this structure could prove useful in other liberalization attempts as well.

However, the regulatory history of the EU does not offer such a clear and unambiguous proof, particularly when compared to the US. The success of the European model, which is based on a balanced allocation of the regulatory power to the Commission, the Council, and the Parliament, as well as to the Member States, seems — at first glance at least — limited to the telecom sector.

One might argue, of course, that cases in which the EU appears to have achieved sub-optimal results do not necessarily imply a fault in its structural model. After all, structural flexibility can only provide the basis for experimentation and adjustment; it does not guarantee success. Yet, to put the blame entirely on the politicians and their inability to make adequate use of the regulatory tools at hand begs the question: If they cannot use the structural advantage in areas outside the telecommunications sector, how were they able to use it within the telecom sector?

To us, the reason the regulatory reform of the telecom sector may have been more successful than similar efforts in other areas seems linked to a number of inter-connected factors. Each of these factors has an influence on how well the reform process works. In the area of telecommunications, they act together to increase the likelihood that re-regulation becomes a success. Making these factors explicit will not only provide us with some preliminary insights into the advantages of regulatory competition, it may also help us predict whether we should expect an equal rate of success in other regulatory areas.

Probably the most obvious factor is the delicate balance between, on the one hand, the necessity of general harmonization at the level of the EU and the desire for limited flexibility at the level of its Member States, and, on the other hand, the legislative framework and the implementation of that legislation at a subordinate level. Seen through this lens, harmonization at some higher level is not just a political goal, but an essential ingredient for regulatory competition. In the absence of harmonization, the transaction costs that companies would have

incur to switch from one regulatory framework to another would be prohibitively high, and regulatory competition could not function. At the same time, however, harmonization must be sufficiently general so as to allow for variations at the implementation stage. Otherwise, the regulatory differences would risk becoming too insignificant to cause a noticeable effect.

Two factors may have made it easier to achieve such a balance in the EU. In the vertical relationship, the principle of subsidiarity, which has been expressly embodied in the EC Treaty,<sup>98</sup> operates to ensure that the EU does not harmonize in such detail that the Member States' freedom to experiment with different implementations is being removed in praxis. If a Member State believes that the EU has violated the principle of subsidiarity or otherwise exceeded its jurisdiction, it may bring an annulment action against the particular measure before the Court.<sup>99</sup> But the EU is not toothless, either. If a Member State fails to implement a directive that the EU has adopted, the Commission may sue the respective Member State.<sup>100</sup> In special circumstances, the Court may even impose penalty payments upon that state.<sup>101</sup>

Horizontally, at the level of the EU, the balance between harmonization and liberalization is further benefitted by the division of labor between the Commission on the one hand and the Council and the Parliament on the other. The Commission, which is more removed from daily political pressures, has shown the power and ability to push for unqualified liberalization. As seen above, the Council and the Parliament cannot block the Commission's competition directives, and they are de facto forced to cooperate in the adoption of harmonization directives. The EU institutions are hence in an intricate double-bind.

Furthermore, some economic sectors may be more conducive to this type of re-regulation than others. Lawrence Lessig has suggested that human behavior can be regulated not only through laws and societal norms, but also by what Lessig calls "architecture" — physical constraints imposed by the laws of nature.<sup>102</sup> Such constraints are implicit, for example, in the technical standards of telecommunications networks. Lessig's view is not one of techno-determinism. Rather, like

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98. See Treaty establishing the European Community, *supra* note 6, art. 5. See also *supra* part III.B.2.

99. See Treaty establishing the European Community, *supra* note 6, art. 230.

100. See *id.* art. 226.

101. See *id.* art. 228.

102. See Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661 (1998) (offering the example: "That it takes 24 hours to drive to the closest abortion clinic is a constraint on a woman's ability to have an abortion.").

William Mitchell's work,<sup>103</sup> it is built on the notion that technology delimits the outer border of permissible human interaction with it.

This implies that economic sectors based on technologies that transcend jurisdictional borders even though rooted in one territory closely resemble the regulatory structure of the EU described above. The better the fit — to speak in Lessig's terms — between the regulated sector and the regulatory means, the more effective the regulation. Consequently, the EU model of regulatory competition should work better with transnational networks, which are built on the premise of shared standards and interoperability — the harmonization equivalent — while, as infrastructures, they remain grounded in a specific territory.

## VI. CONCLUSION

The liberalization of the US and EU telecom sectors has replaced the ancient regulatory frameworks favoring one or a handful of dominant players with an environment that fosters robust competition and open markets on all levels. Thus the historical setting and the goals of re-regulation were similar on both sides of the Atlantic.

Yet, the implementation of these goals was quite different. While the US, in adopting the 1996 Act, chose to "federalize" the matter and disempowered the state PUCs the EU took just the opposite approach: it confined itself to setting forth a limited set of basic principles at the European level and permitted its Member States to engage in limited regulatory competition at the implementing stage. This possibility for regulatory competition, we argued, may have made the European telecom framework more flexible and more adaptable to external changes and has encouraged the search for the best regulatory mix. Moreover, we maintain that this adaptability, although rooted in the EU's legislative design, may not provide a general advantage for regulatory reform. Instead, its relative success in the telecommunications sector may have been influenced by a number of factors, including the specific qualities of the subject-matter of regulation.

However, more work will have to be done in the coming years — once additional data has become available — to further explore and solidify the foundation of our approach of structural comparison of the regulatory frameworks, particularly by looking at the development of

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103. WILLIAM J. MITCHELL, *CITY OF BITS: SPACE, PLACE, AND THE INFOBAHN* 111 (1995).

telecom investment patterns in the smaller and larger Member States of the EU.