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# A Comparative Study of the Regulatory Treatment of Enhanced Services in the United States and the European Community

#### I. Introduction

The telecommunications industry and the data processing industry have become integral parts of the world economy. Furthermore, over the years, these services have come to complement each other. The result has been the development of services which are made up of both communications and data processing components. For example, the *LEXIS* and *Westlaw* services enable lawyers to use the telecommunications network to interact with information stored in computer memories. Automatic teller machines also provide a combination of communications and data processing services. Other examples are mass calling services where computers are programmed to call several telephone numbers and play a recorded message, and electronic mail services, such as AT&T's "Custom Calling II" service, which enable people to store messages that others can pick up by phone later.

The Federal Communications Commission ("FCC") refers to these services as "enhanced services." An enhanced service allows information to be sent through the telecommunications network from one kind of computer to another, or it enables people to interact with information stored in a computer at another location by means of the telecommunications network. Essentially, an enhanced service is a computer processing function which can be performed anywhere in the telecommunications network rather than at the site of a centrally located mainframe computer.<sup>1</sup>

Telecommunications common carriers often are able to take advantage of significant "economies of scope" in offering enhanced services. "Economies of scope" refers to the efficiencies gained by one common

<sup>&</sup>lt;sup>1</sup> The FCC defines enhanced services as services "which employ computer processing applications that act on the format, content, code, protocol, or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information." 47 C.F.R. § 64.702(a)(1986).

carrier offering both enhanced services and basic telephone services rather than two common carriers providing these services separately. Therefore, the consumer benefits, since telecommunications companies can offer both basic and enhanced services at a lower cost. Market forces adequately regulate the enhanced services industry.<sup>2</sup> The telecommunications industry, however, is not adequately regulated by market forces, and so it must be regulated by a government agency.<sup>3</sup> Where a company is allowed to engage in both regulated and unregulated businesses, consumers can be harmed.

Consumer harm occurs under either United States regulation or Western European regulation, because consumers become the victims of predatory pricing, and bear the increased costs of the telecommunications industry. The most common method of telecommunications regulation in the United States is the "rate of return" method.<sup>4</sup> Under this method, the carrier may charge rates high enough to allow the carrier to cover its costs, and to receive a fair rate of return on its capital. This "cost plus" system encourages the carrier to conduct its business so that its costs are higher than they would be otherwise. As a result, the common carrier participating in both regulated and unregulated markets can manipulate its accounting records so that costs the carrier incurred in its unregulated business will appear as though they were incurred in the carrier's regulated business. This is called "cross-subsidization." The practice of cross-subsidization increases the prices the captive telecommunications consumer must pay. In addition, it allows the carrier to engage in predatory pricing to the detriment of competitors in the enhanced services market.<sup>5</sup> In Western Europe, most telecommunications services are government-owned monopolies. Government-owned carriers also engage in predatory pricing in order to keep foreign enhanced service providers out of their markets.6

Furthermore, allowing some common carriers with monopoly power in telecommunications services to participate also in enhanced

<sup>&</sup>lt;sup>2</sup> See Computer I, Tentative Decision, 28 F.C.C.2d 291, 298 (1970); Green Paper on the Development of the Common Market for Telecommunications Services and Equipment, COM(87)290 final (Brussels, June 30, 1987)[hereinafter Green Paper].

<sup>&</sup>lt;sup>3</sup> W. BAUMOL & A. BLINDER, ECONOMICS; PRINCIPLES AND POLICY, 497, 808 (1982).

<sup>&</sup>lt;sup>4</sup> For a good description of rate of return regulation, see L. SCHWARTZ, J. FLYNN, & H. FIRST, FREE ENTERPRISE AND ECONOMIC ORGANIZATION: GOVERNMENT REGULATION, 409-17 (6th ed. 1985).

<sup>&</sup>lt;sup>5</sup> A carrier engages in predatory pricing when it sets its prices below its costs in an attempt to drive other carriers out of the market. If this attempt is successful, this carrier will be left with a monopoly, and will be able to charge monopoly prices. This will allow the carrier to recoup the losses it incurred during the period when it engaged in predatory pricing.

<sup>6</sup> Green Paper, supra note 2, at 77.

services permits those carriers to abuse that power, and the problem of cross-subsidization arises. In the United States and in Western Europe, usually one common carrier operates the telecommunications network in a given area. This carrier controls the equipment which other carriers use to offer enhanced services to consumers in that area. In other words, one carrier has control of "bottleneck" facilities. If this carrier is allowed to provide enhanced services to consumers, then it will have an incentive to use its bottleneck facilities to exclude other enhanced service providers from the market. The exclusion of other enhanced services providers increases the monopoly power of the carrier with control of the bottleneck facilities, and exacerbates the problems of predatory pricing.

For the past twenty years, the FCC has struggled to develop rules that will allow common carriers in the United States to take advantage of their economies of scope while preventing or minimizing the pernicious effects of cross-subsidization and bottlenecks.<sup>7</sup> As a result, complicated rules, and definitions attempting to draw a line between basic and enhanced services have evolved. In addition, the operators of bottleneck facilities have been prohibited from offering many enhanced services.

More recently, the Commission of the European Economic Community ("EEC") has published the *Green Paper on Telecommunications*, which proposes rules in this area, and attempts to integrate the EEC's enhanced services and data processing markets across its Member States' national boundaries. One of the effects of the *Green Paper* probably will be that the Member States will base their definitions of basic and enhanced services on characteristics of the markets for those services, such as the level of demand for the service and the availability of economies of scale and scope, rather than the FCC method of basing the definitions on characteristics of the services themselves, such as how much the services alter the form or content of the consumer's information. The other effect of the *Green Paper* probably will be that the operators of bottleneck facilities will be allowed to offer most enhanced services.

Section II of this comment will summarize the FCC rules. Section III will summarize the *Green Paper*, and Section IV will describe telecommunications regulation in the EEC in general. Section V will compare the FCC rules with the proposed Common Market rules to determine which rules strike the most appropriate balance between promoting common carrier participation in the enhanced services market

<sup>7</sup> Computer I, Tentative Decision, 28 F.C.C.2d at 291.

<sup>&</sup>lt;sup>8</sup> Green Paper, supra note 2. In this paper, the Commission of the European Communities will be referred to as the "EEC" in order to avoid confusion with the Federal Communications Commission.

and protecting telecommunications consumers and enhanced services competitors. Section VI will conclude that the FCC was mistaken in finding that its policy goal of reducing regulatory uncertainty would be more difficult to achieve under the EEC method of distinguishing between basic and enhanced services. It will also conclude that the EEC was mistaken in finding that its policy goal of integrating the European telecommunications system across national boundaries would be more difficult to achieve if enhanced services providers are required to divest control of bottleneck facilities, as is done in the United States.

#### II. DESCRIPTION OF FCC RULES

The rules governing the provision of enhanced services and customer premises equipment ("CPE") in the United States have evolved over several years. They moved from rigidly separating the provision of basic services from that of enhanced services to almost completely relaxing the separation. Throughout this evolution, however, the owners of bottleneck facilities have been severely limited in the enhanced services they are allowed to provide.

#### A. Early Attempts at Preventing Cross-Subsidization

The first step in this evolution was the 1956 Consent Decree,<sup>9</sup> which resulted from an antitrust suit brought by the Justice Department of the United States in 1949.<sup>10</sup> The Justice Department alleged that the American Telephone and Telegraph Company ("AT&T") used its control of bottleneck facilities to keep other companies out of the telephone equipment manufacturing market in violation of the Sherman Act.<sup>11</sup> The Justice Department wanted AT&T to divest its stock ownership of its manufacturing subsidiary, Western Electric, in order to separate telephone manufacturing from the provision of telephone service. The Defense Department was worried that this divestiture would eliminate Western Electric's ability to conduct research, since Western Electric's research had led to many discoveries with defense applications in the years prior to the Consent Decree.<sup>12</sup> The result was a compromise between the Justice Department and the Defense Department. Under the

<sup>&</sup>lt;sup>9</sup> United States v. Western Electric, 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. Jan. 24, 1956)[hereinafter 1956 Consent Decree or Consent Decree].

<sup>10</sup> Id. at 71,136.

<sup>11</sup> Id. at 71,143. Sherman Act, 15 U.S.C. § 1 (1982). See also United States v. AT&T, 552 F. Supp. 131, 135 (D.D.C. 1982); aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983)[hereinafter Modified Final Judgment or MFJ].

<sup>12</sup> See MFJ, 552 F. Supp. at 135-38 (description of the Defense Department's efforts on behalf of and in collusion with AT&T).

Consent Decree, Western Electric and AT&T were left together, but Western Electric was limited to manufacturing equipment for the Bell System, <sup>13</sup> and AT&T was limited to providing common carrier communication services and "businesses or services incidental to the furnishing of" these services. <sup>14</sup> AT&T also was required to make patents available to all parties who asked for them and who were willing to pay reasonable royalties. <sup>15</sup> The order requiring AT&T to share patents with other companies was supposed to enable these other companies to compete with AT&T in the equipment market.

After the Consent Decree, little happened in this area until the FCC started to promulgate rules in 1970. In that year, the FCC published the First Computer Inquiry, otherwise known as Computer I. Computer I was the FCC's first attempt to develop rules that would allow common carriers to participate in the enhanced services and CPE markets, and that would prevent cross-subsidization and predatory pricing. The FCC promulgated Computer I because advances in computer technology made it necessary to address the regulatory treatment of enhanced services and CPE. 17

In Computer I, the Commission developed the "Maximum Separation" policy, and held that all common carriers could offer enhanced services if the services were offered under this policy. The Maximum Separation policy required carriers which offered enhanced services to do so through a separate subsidiary. The subsidiary was required to have separate officers and operating personnel, to maintain separate equipment and facilities devoted exclusively to the provision of noncarrier services, and to file separate books of account with the FCC. Relations between carriers and their separate subsidiaries were heavily regulated. All arrangements between the carrier and its subsidiary were to be filed with the FCC, and neither the carrier nor the subsidiary were allowed to do any advertising on behalf of the other. In addition, carriers and their affiliates were required to charge the same prices in transactions

<sup>13 1956</sup> Consent Decree, 1956 Trade Cas. (CCH) ¶ 68,246 at 71,137-38.

<sup>14</sup> Id. at 71,138.

<sup>15</sup> Id.

<sup>16</sup> Regulatory & Policy Problems Presented by the Interdependence of Computer & Communications Services & Facilities, Tentative Decision, 28 F.C.C.2d 291(1970)[hereinafter Computer I, Tentative Decision], modified in Final Decision, 28 F.C.C.2d 267(1971)[hereinafter Computer I, Final Decision], aff'd in part sub nom. GTE Service Corp v. FCC, 474 F.2d 724 (2nd Cir. 1973). This proceeding was actually initiated in 1966. Computer I, Tentative Decision, 28 F.C.C.2d at 291.

<sup>17</sup> Computer I, Tentative Decision at 291.

<sup>18</sup> Id.

<sup>19</sup> Id. at 302-04.

<sup>20</sup> Id. at 303.

with each other as they would in transactions with any other entity.<sup>21</sup> The Commission found that the Maximum Separation policy did not apply to AT&T because, under the limitations placed on it in the 1956 Consent Decree, AT&T was not allowed to offer any enhanced services.22

The Commission assumed that these restrictions and the competition among carriers to attract more consumers would be enough to prevent carriers from discriminating against non-affiliated enhanced service providers.<sup>23</sup> The Commission concluded, "[w]e expect that under no circumstances will carriers give any preferential treatment to their data processing affiliates and that carriers will scrupulously administer the terms and conditions of tariffs in making their facilities and services available to affiliates and non-affiliates on a non-discriminatory and nonpreferential basis."24 However, if the Commission's assumption turned out to be wrong, and competitive pressure did not force carriers to make their networks accessible to as many enhanced service providers as possible, the Commission promised to establish rules to rectify this problem.<sup>25</sup>

In summary, by 1970 most carriers could offer enhanced services if they complied with the Maximum Separation policy announced in Computer I, but AT&T was prohibited from offering enhanced services by the 1956 Consent Decree.

# Relaxation of Rules Governing AT&T

The level of technology at the time of Computer I required that all data processing services be performed by a centrally located mainframe computer.<sup>26</sup> The development of terminals with data processing capabilities during the 1970s made much of Computer I obsolete, and forced the Commission to promulgate new rules and definitions in Computer II in 1980.27

<sup>&</sup>lt;sup>22</sup> Id. The Tentative Decision was reaffirmed in Computer I, Final Decision, 28 F.C.C.2d 267 (1971). In the Final Decision the FCC created more rules to govern the carrier-subsidiary relationship:

a. The carrier may not dispose of excess computer capacity on the open market,

b. The carrier may not obtain data processing services from its subsidiary, and
 c. The subsidiary may not make any use of its parent carrier's logo.

<sup>23</sup> Computer I, Tentative Decision, 28 F.C.C.2d at 304.

<sup>24</sup> Computer I, Final Decision, 28 F.C.C.2d at 283.

<sup>25</sup> Computer I, Tentative Decision, 28 F.C.C.2d at 303.

<sup>26</sup> Computer I, Final Decision, 28 F.C.C.2d at 283.

<sup>&</sup>lt;sup>27</sup> Second Computer Inquiry, 77 F.C.C.2d 384, 391 (1980); modified on reconsideration, 84 F.C.C.2d 50 (1980); further modified on reconsideration, 88 F.C.C.2d 512 (1981); aff'd sub nom

Under Computer II, the Maximum Separation policy developed in Computer I remained essentially the same. However, in addition to the restrictions promulgated in Computer I, the subsidiary was required to keep its own books of account and to have separate officers.<sup>28</sup> The subsidiary was also required to employ separate operating, marketing, installation, and maintenance personnel, and to use separate computer facilities in the provision of enhanced services.<sup>29</sup> The parent and subsidiary could not share computer capacity and could not develop software jointly.<sup>30</sup> Some transfers of information between the parent and the subsidiary were to be filed with the FCC.<sup>31</sup> In addition, the subsidiary was not allowed to construct, own, or operate its own transmission facilities.<sup>32</sup> However, the parent and subsidiary would be allowed to share some administrative expenses, such as legal fees.<sup>33</sup>

The most significant change in Computer II was that it further limited the number of carriers who had to comply with the Maximum Separation policy.<sup>34</sup> In justifying this change, the Commission noted that maximum separation forced some inefficient and costly duplication of capital expenditures. The FCC was concerned that this inefficiency would result in undesirable and unnecessary increases in consumer prices, and that the increased capital costs might be large enough to keep small carriers out of the market.<sup>35</sup> Since the main benefit of separation results from the prevention of cross-subsidization and predatory pricing, the Commission reasoned that the Maximum Separation policy should be applied only to those carriers with enough market power to engage in cross-subsidization and predatory pricing.<sup>36</sup> The Commission concluded that the only carrier with this market power was AT&T,<sup>37</sup> and that by forbidding AT&T's subsidiary from owning transmission facilities, it was

Computer and Communication Indus. Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied 461 U.S. 938 (1983)[hereinafter Computer II].

<sup>28</sup> Id. at 391.

<sup>29</sup> Id. at 486.

<sup>30</sup> Id.

<sup>31</sup> Id.

<sup>32</sup> Id. at 474.

<sup>33</sup> Id. at 486.

<sup>&</sup>lt;sup>34</sup> Under *Computer I*, the Maximum Separation policy was only applied to carriers with annual revenues over \$1,000,000. *Computer I, Tentative Decision*, 28 F.C.C.2d at 302-03.

<sup>&</sup>lt;sup>35</sup> Computer II, 77 F.C.C.2d at 466. AT&T argued that another cost of separation was a decreased level of innovation. The Commission doubted that there was a causal connection between size and innovation. Id. at 464-65.

<sup>36</sup> Id. at 463.

<sup>&</sup>lt;sup>37</sup> Id. at 474. Originally, the Commission applied Maximum Separation to GTE, but removed it in a later proceeding. See Reconsideration Order, 84 F.C.C.2d 50, 72 (1980).

adequately ensuring equal access to all enhanced service providers.<sup>38</sup>

Of course, by applying the Maximum Separation policy to AT&T, the Commission allowed AT&T to enter the enhanced services market for the first time and arguably contradicted the 1956 Consent Decree. The FCC resolved this apparent contradiction by interpreting section V(g) of the Consent Decree, which allowed AT&T to participate in "businesses or services incidental to" common carrier services, as allowing the provision of enhanced services.<sup>39</sup>

This interpretation of section V(g) infuriated the Justice Department, since, historically, the Consent Decree was always interpreted to limit AT&T to the provision of services the charges for which are subject to public regulation.<sup>40</sup> The Justice Department also said that since the District Court retained jurisdiction for purposes of construing the Consent Decree,<sup>41</sup> the FCC did not have the authority to interpret section V(g).<sup>42</sup> As a result, the Justice Department said it would ignore the FCC's interpretation.<sup>43</sup> The FCC contended that, absent a definitive ruling by the Judgment Court, it was free to interpret the Consent Decree in any way necessary to fulfill its responsibilities under the Communications Act of 1934.<sup>44</sup>

Two years later, Judge Harold H. Greene of the United States District Court for the District of Columbia resolved the dispute. At that time, Judge Greene was presiding over another antitrust suit by the Justice Department against AT&T. The Justice Department filed this suit in 1974, because it felt that the 1956 Consent Decree was not able to prevent AT&T from unreasonably restraining competition in the equipment market or in the long distance service market. AT&T fought this suit for eight years. However, because of the uncertainty in regulatory structure resulting from *Computer II*<sup>46</sup> and the proposal of two bills in Congress that could have amended the Communications Act, AT&T

<sup>38</sup> Computer II, 77 F.C.C.2d at 474 Consent Decree, 1956 Trade Cas. (CCH) § 68, 246 at 71,138.

<sup>39</sup> Computer II, 77 F.C.C.2d at 490.

<sup>40</sup> Id. at 491.

<sup>&</sup>lt;sup>41</sup> Consent Decree, 1956 Trade Cas. (CCH) ¶ 68,246 at 71,143.

<sup>42</sup> Computer II, 77 F.C.C.2d at 491.

<sup>43</sup> Id

<sup>44</sup> Id. at 492. See also 47 U.S.C. § 151 (1982).

<sup>45</sup> MFJ, 552 F. Supp. at 139 n.18.

<sup>&</sup>lt;sup>46</sup> The Computer and Communications Industry Association had appealed *Computer II* to the Court of Appeals for the D.C. Circuit, and after the New Jersey District Court affirmed the FCC's construction of the 1956 Consent Decree, the Justice Department appealed that decision to the Court of Appeals for the Third Circuit. Both cases were pending at the time of the MFJ. *See MFJ*, 552 F. Supp. at 138 n.17.

<sup>&</sup>lt;sup>47</sup> S. 898, 97th Cong., 1st Sess. (1981); H.R. 5158, 97th Cong., 1st Sess. (1981).

agreed to a settlement which became known as the Modified Final Judgment ("MFJ").<sup>48</sup>

Stripped down to its basic components, the MFJ was an arrangement in which AT&T agreed to divest itself of the local Bell Operating Companies ("BOCs") in exchange for having the 1956 Consent Decree overturned, leaving it free to compete in any industry.<sup>49</sup> The only restrictions placed on it were that it was not allowed to reacquire the BOCs,<sup>50</sup> and it was prohibited from entering the electronic publishing market for seven years.<sup>51</sup>

The restrictions placed on the BOCs were far greater than those placed on AT&T. The BOCs were not allowed to enter the long distance service market, or the "information service" market. Nor were they permitted to manufacture CPE. <sup>52</sup> "Information services" were defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information which may be conveyed via telecommunication." These restrictions were imposed because under the MFJ the BOCs maintained control of the bottleneck facilities. To have allowed the BOCs to participate in these restricted markets would have enabled them to limit their competitors' access to consumers. <sup>54</sup> The Court also demanded that the BOCs phase in new interconnection equipment so that competitors would eventually be assured access to consumers equal to that of AT&T. <sup>55</sup>

# C. Relaxation of Rules Governing Bottleneck Facilities

The result of the MFJ was that the control of the bottleneck facilities was taken away from AT&T and given to the BOCs. Since one of the reasons the *Computer II* rules were placed on AT&T was to limit its

<sup>&</sup>lt;sup>48</sup> MFJ, 552 F. Supp. at 131. See generally Hillman, Telecommunications Deregulation: The Martyrdom of the Regulated Monopolist, 79 Nw. U.L. REV. 1183 (1985).

<sup>&</sup>lt;sup>49</sup> MFJ, 552 F. Supp. at 170.

<sup>50</sup> Id. at 170 n.166.

<sup>51</sup> Id. at 185-86. Electronic publishing was defined as:

the provision of any information which a provider or publisher has, or has caused to be originated, authored, compiled, collected, or edited, or in which he has a direct or indirect financial or proprietary interest, and which is disseminated to an unaffiliated person through some electronic means.

Id. at 181.

<sup>&</sup>lt;sup>52</sup> Id. at 188-91. The MFJ restriction against manufacturing CPE does not prohibit the BOCs from buying and reselling CPE. Id. at 191-93. Nor does the MFJ restrict the BOCs in foreign ventures. Southwestern Bell owns 50% of an electronic publishing company in Israel. Hudson, Baby Bells Pushing to Expand Overseas, but Face Obstacles Abroad and at Home, Wall St. J., Oct. 26, 1987, at 12, col. 2.

<sup>53</sup> MFJ, 552 F. Supp. at 179.

<sup>54</sup> Id. at 188-89.

<sup>55</sup> Id. at 195-96.

ability to abuse its control of its bottleneck facilities,<sup>56</sup> it would have made sense to apply the *Computer II* rules to the BOCs to prevent them from abusing their control of bottleneck facilities. In fact, one probably would have assumed that the "information services" restriction placed on the BOCs in the MFJ would forbid them from offering enhanced services, since Judge Greene said that enhanced services and information services were "essentially equivalent."<sup>57</sup> However, shortly after the MFJ, the FCC noted the differences in the definitions of "enhanced services" and "information services",<sup>58</sup> and decided that, given this ambiguity, the BOCs could offer some enhanced services.<sup>59</sup> The Commission went on to establish structural separation rules for the BOCs similar to, but less restrictive than, the *Computer II* rules. The BOCs and their separate subsidiaries were allowed to share billing costs and marketing costs in addition to the shared costs allowed AT&T in *Computer II*.<sup>60</sup>

The FCC relaxed the Computer II rules as they applied to the BOCs in the area of protocol conversion as well.<sup>61</sup> In the Asynchronous/X.25 Protocol Conversion Waiver,<sup>62</sup> the Commission waived the requirement that the BOCs and their separate subsidiaries maintain separate equipment and facilities in the provision of protocol conversion services.<sup>63</sup> This separate facilities requirement was waived because the FCC realized that prohibiting the BOCs from relocating their protocol conversion services made many other computer processing services more expensive for consumers without any improvement in quality of service.<sup>64</sup> However, the waivers were made dependent on the BOCs satisfying certain conditions designed to prevent them from cross-subsidization and predatory pricing.<sup>65</sup> The first condition was that the BOCs must give equal treatment to the interoffice communications channels supporting their

<sup>56</sup> Computer II, 77 F.C.C.2d at 462.

<sup>57</sup> MFJ, 552 F. Supp. at 178 n.198.

<sup>58</sup> See supra notes 1 and 53 and accompanying text.

<sup>&</sup>lt;sup>59</sup> BOC Structural Separation Order, 95 F.C.C.2d 1117, 1127 (1983).

<sup>60</sup> Id. at 1140-43.

<sup>61</sup> Protocol conversion allows consumers to use "packet switched" networks instead of "circuit switched" networks. Packet switched networks break a consumer's message into discrete units, or "packets", and send each packet to its destination along any network route that is not being used for another message. Circuit switched networks route a consumer's message once, then keep that route open for that consumer whether or not he is sending any information. Therefore, packet switched networks are more convenient for computer processing consumers, because the packet switched networks do not require that the consumer "tie up the line" for the entire time that he is using the computer service.

<sup>62 100</sup> F.C.C.2d 1057 (1985).

<sup>63</sup> Computer I, Tentative Decision, 28 F.C.C.2d at 303.

<sup>64</sup> Asynchronous/X.25 Protocol Conversion Waiver, 100 F.C.C.2d at 1059-60.

<sup>65</sup> Id. at 1061.

packet switching services involving asynchronous/X.25 protocol conversion and the channels used by others.<sup>66</sup> Secondly, the BOCs must price their protocol conversion services separately from their basic services.<sup>67</sup> Finally, consumers using other enhanced services that require packet switching must have equal access to the BOCs' and others' protocol conversion services.<sup>68</sup> The FCC required the BOCs to file proof that they would be able to meet these conditions before it would grant the waiver.<sup>69</sup>

Soon after the Computer II separation rules were applied to the BOCs, the FCC published the Computer III Notice, 70 which announced the Commission's intention to revise or eliminate the Computer II rules for services while keeping the rules for CPE intact. The Commission proposed several regulatory frameworks to replace Computer II, and asked for comments from the general public regarding these proposals. 71 The Commission stated that Computer II needed to be revised, because the MFJ made much of Computer II obsolete, 72 and because the Computer II definition of "enhanced service" had become ambiguous due to advancements in technology. 73 In addition, because the waiver process in the Asynchronous/X.25 Protocol Conversion Waiver was used for other types of protocol conversion, 74 an ad hoc, case-by-case regulatory approach resulted which gave rise to regulatory uncertainty. 75

The most interesting proposal the Commission made in the Computer III Notice was the proposal it made in Part II of the Notice.<sup>76</sup> The Part II Proposal was a three-pronged test to determine whether a service should be regulated. If a carrier wanted to offer a basic service, then the FCC would regulate that service directly.<sup>77</sup> If a carrier wanted to offer a non-communications service,<sup>78</sup> then that service would be completely unregulated.<sup>79</sup> Finally, if a carrier wanted to offer a service "ancillary to

<sup>66</sup> Id. at 1099-1100.

<sup>67</sup> Id. at 1100.

<sup>68</sup> Id.

<sup>69</sup> Id. at 1104.

<sup>&</sup>lt;sup>70</sup> Third Computer Inquiry, Notice of Proposed Rulemaking, 50 Fed. Reg. 33,581 (Aug. 16, 1985)[hereinafter *Computer III Notice*].

<sup>71</sup> Id. at 33,605.

<sup>72</sup> Id. at 33,584.

<sup>73</sup> Id. at 33,583.

<sup>74</sup> Protocols Decision, 95 F.C.C.2d 584 (1983).

<sup>75</sup> Computer III Notice, 50 Fed. Reg. at 33,582.

<sup>76</sup> Id. at 33,589-91.

<sup>77</sup> Id. at 33,589.

<sup>&</sup>lt;sup>78</sup> Id. at 33,587.

<sup>79</sup> Id. at 33,590.

communications," such as enhanced services or CPE, 80 then the Commission would examine the structure of the market for that service. If that service could be provided with unlimited economies of scale and/or scope, so that one could not expect to have multiple vendors of the service, then the Commission would regulate the service. 81 On the other hand, if a carrier wanted to offer an ancillary service with limited economies of scale and scope, then the question of whether or not to regulate would turn on whether or not the carrier was "dominant," or had control of bottleneck facilities. If the carrier was not dominant, or did not control bottlenecks, then the service should be treated like a non-communications service. 82 If the carrier was dominant or did control bottlenecks, then some sort of separation would be appropriate to prevent anticompetitive conduct. 83

The Part II Proposal was never implemented. The Commission agreed with the commentators who said it would be too difficult to establish unambiguous definitions of such terms as "market power," "competition," "bottleneck," and "dominant carrier." The Commission described its new regulatory framework in the *Computer III Order*. The order allowed AT&T and the BOCs to provide enhanced services on an unseparated basis if they filed a Joint Cost Allocation plan, and developed what the Commission called "Comparably Efficient Interconnection" ("CEI"). Eventually, the Commission expected CEI to lead to "Open Network Architecture" ("ONA"). Unless AT&T and the BOCs developed CEI/ONA, the Commission would continue to enforce the *Computer II* separation rules.

The Joint Cost Allocation plan in Computer III was intended as an interim measure until the Joint Cost Order was issued.<sup>88</sup> The Joint Cost Order or replaced the separate books requirement of Computer II for cap-

<sup>80</sup> Id. at 33,587.

<sup>81</sup> Id. at 33,589.

<sup>82</sup> Id.

<sup>83</sup> Id. at 33,589-90.

<sup>&</sup>lt;sup>84</sup> Third Computer Inquiry, Report and Order, 104 F.C.C.2d 958, 1015, 1017 (1986)[hereinafter Computer III Order].

<sup>85 104</sup> F.C.C.2d 958.

<sup>86</sup> Id. at 1070.

<sup>87</sup> Id. at 1020.

<sup>&</sup>lt;sup>88</sup> See id. at 1069. The interim Joint Cost Allocation rules were taken from *In re* Separation of Costs of Regulated Telephone Service From Costs on Nonregulated Activities, Notice of Proposed Rulemaking, 104 F.C.C.2d 59 (1986).

<sup>&</sup>lt;sup>89</sup> In re Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, Report and Order, 2 F.C.C. Rcd. 1298, 62 Rad. Reg. 2d (P & F) 163 (Feb. 6, 1987)[hereinafter Separation of Costs, Report and Order].

ital depreciation costs, 90 and was expected to expose cross-subsidization. 91 Instead of forcing carriers to attribute all depreciation costs to the regulated business, the *Joint Cost Order* allowed carriers to attribute a percentage of the costs to both the regulated and the unregulated businesses. The percentages would be equal to the relative demand for the regulated and unregulated services when total demand was at its peak. 92 Dominant carriers were also required to undergo independent audits. 93

Although the FCC said the Joint Cost Allocation rules were important,94 it considered CEI/ONA to be the "focal point" of Computer III.95 The fundamental requirement of CEI is that a BOC that uses its own basic services to provide an enhanced service must make those same basic services available to its competitors.<sup>96</sup> Specifically, the basic services provided by BOCs must meet several standards. The carrier must provide standardized hardware and software specifications to its competitors.<sup>97</sup> It must maintain transmission quality similar to that which it uses itself.98 Furthermore, installation, maintenence, and repair schedules for its competitors' basic services facilities must be the same as the schedules for the basic services the carrier uses for its own enhanced operations.<sup>99</sup> In addition, the final consumers must receive the same service from either the carrier or a competitor. 100 Finally, a carrier making a new enhanced offering must make the necessary basic services available to its competitors at the same time. 101 The Commission required that a CEI plan be submitted for each enhanced service offered by AT&T and the BOCs. 102

The Commission expected that the individual CEI plans eventually would be replaced with ONA. In ONA, the network would be designed so that all competitors would have equal access without the need for constant, service-by-service monitoring.<sup>103</sup> After reviewing several BOCs' efforts to develop ONA plans,<sup>104</sup> the Commission decided not to impose

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90 Id. at 1300, 62 Rad. Reg. 2d (P & F) ¶ 6, at 171.
91 Id. at 1299.
92 Id. at 1318, 62 Rad. Reg. at 214.
93 Id. at 1299.
94 Computer III Order, 104 F.C.C.2d at 1070.
95 Id. at 1020.
96 Id. at 1036.
97 Id. at 1039.
98 Id. at 1041.
99 Id.
100 Id.
101 Id.
102 Id. at 1063.
103 Id.
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104 Id. at 1059-63.

any particular ONA proposal on AT&T and the BOCs. <sup>105</sup> Instead, the FCC demanded that AT&T and the BOCs submit a reasonable ONA plan by February 1, 1988, <sup>106</sup> and it promised to remove the CEI filing requirements upon approval of the plan. <sup>107</sup> The Commission said that it would refuse to consider a company's CEI plans if they were submitted after February 1, 1988, unless the company submitted an ONA plan by that date. <sup>108</sup> Later, however, the FCC relaxed this time requirement. <sup>109</sup>

In the Computer III Reconsideration Order, AT&T would argue that it was unfair to impose CEI/ONA requirements on it since AT&T no longer had any control over bottleneck facilities. 110 Although the Commission found that AT&T's argument had some merit, the Commission also found that it was necessary to maintain some ONA requirements on AT&T because of its strong position in the market for long distance basic services. 111 As a result, the Commission partially relaxed the unbundling requirements it placed on AT&T. 112 However, AT&T was still required to file a "modified ONA" plan by February 1, 1988, 113 and comply with the service specific CEI requirements of the Computer III Order. 114 In another ruling published the same day, the Computer III, Phase II, Order, the FCC further modified the CEI/ONA requirements as they applied to protocol conversions, and restored the guidelines the FCC established in the Asynchronous/X.25 Waiver Order. 115

# D. Reestablishment of Rules Governing Bottleneck Facilities After the Computer III Order, the BOCs petitioned Judge Greene to

<sup>105</sup> Id. at 1064

<sup>106</sup> *Id.* at 1067. A "reasonable" ONA plan is one that meets all the CEI requirements for all enhanced services, and offers basic services to enhanced service providers on an individualized, "unbundled" basis. *Id.* at 1064-66.

<sup>107</sup> Id. at 1067.

<sup>108</sup> Third Computer Inquiry, Memorandum Opinion and Order on Reconsideration, 62 Rad. Reg. 2d (P & F) 1594, ¶ 156 at 1647 (May 22, 1987)[hereinafter Computer III Reconsideration Order].

<sup>109</sup> The BOCs were allowed to submit ONA plans that did not include some services, then update the plans in subsequent years. Furnishing of Enhanced Services and Customer-Premises Equipment by Communications Common Carriers, 53 Fed. Reg. 8630, 8631 (1988).

<sup>110</sup> Computer III Reconsideration Order, 62 Rad. Reg. 2d (P&F), ¶¶ 32-33 at 1610.

<sup>111</sup> Id. ¶ 45 at 1614.

<sup>112</sup> Id.

<sup>113</sup> In the modified ONA plan, AT&T would have to describe, (1) its capabilities available to transport the basic service elements of local exchange carriers, (2) its arrangements for providing such transport in a nondiscriminatory manner, (3) its procedures for responding to requests of the local exchange carriers for new forms of transport for other basic functions, and (4) its implementation of the CEI and other non-structural safeguards for its enhanced services. *Id.* at 1610.

<sup>114</sup> Id

<sup>115</sup> Computer III Order, Phase II, 62 Rad. Reg. 2d (P & F) 1662, 1683, (Released May 22, 1987).

remove the restrictions placed on the BOCs in the MFJ.<sup>116</sup> Judge Greene denied these petitions in the case of *United States v. Western Electric* ("September 10 Decision").<sup>117</sup> In the MFJ, Judge Greene said that he would not remove the MFJ restriction unless the BOCs could show that there was no substantial possibility that the BOCs could use their monopoly power to impede competition in the markets they seek to enter.<sup>118</sup> Specifically, Judge Greene reaffirmed the restrictions against interexchange services<sup>119</sup> and manufacturing equipment.<sup>120</sup> The restrictions against the BOCs provision of information services also were maintained,<sup>121</sup> but the BOCs were permitted to acquire the infrastructure necessary for the transmission of information services generated by others.<sup>122</sup> This was done to encourage the development of a "videotex" industry similar to that which has developed in France.<sup>123</sup>

The BOCs based part of their arguments for the removal of the MFJ restrictions on the *Computer III Order*, since the BOCs believed that CEI/ONA would prevent them from using their monopoly power to impede competition.<sup>124</sup> The Court found that since ONA had not been fully defined or tested, it would be impossible to rely on ONA to keep the BOCs from using their monopoly power to impede competition.<sup>125</sup> The Court also found that, since ONA did not address problems that may arise with new technology, and since it seemed unlikely that the BOCs

<sup>&</sup>lt;sup>116</sup> United States v. Western Electric, 673 F. Supp. 525, 528 (D.D.C. 1987)[hereinafter September 10 Decision].

<sup>117</sup> Id. at 535.

<sup>118</sup> Id. at 532. See also MFJ, 552 F.Supp. at 195 n.267.

<sup>119</sup> September 10 Decision, 673 F. Supp. at 552.

<sup>120</sup> Id. at 562.

<sup>121</sup> Id. at 567.

<sup>122</sup> Id. at 597. Shortly after this decision, the BOCs entered into several agreements with information service providers to take advantage of the removal of this restriction. Roberts, Baby Bells and Data Services Are Seeking to Join Forces, Wall St. J., Nov. 30, 1987, at 6, col. 1.

<sup>123</sup> A videotex service uses a packet-switched network and a very simple computer terminal which enables consumers to access the network. Independent companies supply information to the network, such as financial market news or teleshopping services, which consumers can access for a monthly fee. September 10 Decision, 673 F. Supp. at 588-89.

Judge Greene developed guidelines for videotex infrastructure provision in United States v. Western Electric, 1988-1 Trade Cas. (CCH) ¶ 67,918 at 57,619 (D.D.C. 1988)[hereinafter March 7 Decision]. As part of the provision of videotex infrastructure, the BOCs were allowed to offer an "electronic white pages," but not a "yellow pages" directory arranged by type of service. Id. at 57,628-29. The BOCs also could offer a "help" capability, and voice storage and electronic mail services. Id. at 57,629. Finally, the BOCs were allowed to bill for information srvice providers on local telephone bills. Id. at 57,629-30.

<sup>124</sup> September 10 Decision, 673 F. Supp. at 575.

<sup>125</sup> Id. at 576-77. A prominent lawyer in the telecommunications field expects the BOCs to control bottlenecks effectively until at least the year 2020. Wenner, *Phone Companies Ought to "Bundle"*, Wall St. J., Oct. 15, 1987, at 32, col. 3.

could ever comply with the ONA requirements, it would be difficult to rely on ONA to protect consumers. 126

The state of the regulatory treatment of enhanced services and CPE in the United States today is that the controllers of bottleneck facilities cannot provide long distance service or "information services." Nor can they manufacture CPE. They may provide some enhanced services, either on a separated basis or with an approved CEI plan.

#### III. DESCRIPTION OF THE GREEN PAPER

The Commission of the EEC published the *Green Paper* <sup>127</sup> because it saw the unification and modernization of European telecommunications as fundamental to the continued health of the entire European economy. <sup>128</sup> The *Green Paper* does not carry the same weight in Europe as an FCC order would in the United States. In the United States, the FCC has been empowered by Congress to "execute and enforce" rules governing the telecommunications industry. <sup>129</sup> Because of this, an FCC order carries the force of law in the United States. The authority of the Commission of the European Community is limited to developing policies and attempting to persuade individual Member States to adopt them. <sup>130</sup> Therefore, the *Green Paper* is more like a set of guidelines for telecommunications regulation than an administrative ruling. Nonetheless, the *Green Paper* may represent the structure of future European telecommunications regulations. The EEC would like its Member States to adopt the *Green Paper* proposals by 1992. <sup>131</sup>

In Common Market countries, telecommunications services are usually provided by national Ministries of Posts, Telegraphy, and Telephony ("PTTs"). <sup>132</sup> Most PTTs are government owned monopolies, which control and operate the telecommunications network, i.e. the bottleneck fa-

<sup>126</sup> September 10 Decision, 673 F. Supp. at 576 n.232, 577, 579. Later, Judge Greene would accuse the FCC of "exhorting" the BOCs to ignore the MFJ. See United States v. Western Electric, 675 F. Supp. 655, 660-61 (D.D.C. 1987); Davis, AT&T Case Judge Berates Regulators, Reaffirms Manufacturing Ban on Bells, Wall St. J., Dec. 4, 1987, at 2, col. 3.

<sup>127</sup> Green Paper, supra note 2.

<sup>128</sup> Id. at 18.

<sup>129</sup> Wire or Radio Communication Act, 47 U.S.C. § 151 (1934).

<sup>130</sup> Hengig, The European Community's Bicephalous Political Authority: Council of Ministers-Commission Relations, in Institutions and Policies of the European Community 12 (J. Lodge ed. 1983).

<sup>131</sup> Green Paper, supra note 2, at Forward opposite 1. The EEC has scheduled the removal of trade barriers in several other areas by 1992. See Tully, Europe Gets Ready for 1992, FORTUNE, Feb. 1, 1988, at 81.

<sup>132</sup> In this paper, "PTT" will be used as an abbreviation of "Ministry of Posts, Telegraphy, and Telephony." The term "PTT" denotes all European basic service providers, whether or not they are government owned.

cilities, in their countries. Many PTTs at this time also provided long distance service. The EEC said it was important that the "integrity of the network infrastructure" be maintained. The EEC wanted to ensure that the financial viability of the PTTs would not be damaged by the adoption of any of its proposals. Therefore, the EEC proposed that the PTTs exclusively continue to provide the network infrastructure. The EEC argued that it should not allow competition in long distance telephone service, as was done in the United States, because the twelve EEC Member States are not nearly as coordinated as the networks of the seven Regional Holding Companies in the United States, even after the MFJ. The EEC feared that forcing a breakup of the PTTs would only fragment their networks further. The result of this decision is that, under the *Green Paper* proposals, the owners of bottleneck facilities would be allowed to provide enhanced services.

In order to protect the profitability of the PTTs, the *Green Paper* proposed to allow some cross-subsidization.<sup>138</sup> The EEC said that cross-subsidization is permissible in general, but becomes unacceptable when used as a means to engage in predatory pricing.<sup>139</sup> The EEC called for "transparency," or accounting and reporting requirements that force the PTTs to reveal what profits are being used to set off losses in other sectors.<sup>140</sup> This would not really prevent predatory pricing. It would merely force the Member States to tell each other when and to what extent they are engaging in predatory pricing. The *Green Paper* did not specify how much cross-subsidization would be allowed, or what form the accounting and reporting requirements would take.<sup>141</sup>

One of the ways the *Green Paper* proposed to introduce competition into the European enhanced services market<sup>142</sup> while maintaining the financial health of the PTTs was to stop distinguishing between basic serv-

<sup>133</sup> Green Paper, supra note 2, at 72. Green Paper on the Development of the Common Market for Telecommunications Services and Equipment, COM(87) 290 final (Brussels, Supp. June 30, 1987) at 130 [hereinafter Green Paper Supplement].

<sup>134</sup> Green Paper, supra note 2, at 74.

<sup>135</sup> Id. at 72.

<sup>136</sup> Id. at 71-72.

<sup>137</sup> Id.

<sup>138</sup> Id. at 77.

<sup>139</sup> Id.

<sup>140</sup> Id. The European usage of the term "transparency" should not be confused with the usage of that term in the United States. In the United States, "transparency" means that a message transmitted through the telecommunications network is not altered by that transmission. Third Computer Inquiry, Supplemental Notice of Proposed Rulemaking, Rad. Reg. (P&F), Current Service, 79:355, at 79:363 n.30 (May 15, 1986)(hereinafter Computer III Notice, Phase II).

<sup>141</sup> Computer III Notice, Phase II, id.

<sup>142</sup> The Green Paper referred to enhanced services as "value-added" services. Green Paper, supra

ices and enhanced services. Instead, the *Green Paper* proposed to distinguish between "reserved" services and "competitive" services.<sup>143</sup> Reserved services would be services that are reserved for exclusive provision by the PTTs, and competitive services would be all other services.<sup>144</sup> The EEC felt that reserved services should be roughly the same as basic services, but should be limited to the lowest number of services that will ensure the financial viability of the PTTs.<sup>145</sup> The *Green Paper* recommended that reserved services be limited to voice telephony.<sup>146</sup>

In addition to these proposals, the *Green Paper* specified three changes as essential to the establishment of a competitive common market in telecommunications:<sup>147</sup>

- 1) the PTTs must give up exclusive provision of terminal equipment;
- 2) they must interconnect with and provide access for trans-border service providers; and
- 3) the Government-owned PTTs must separate their regulatory from their operational functions.

## A. Terminal Equipment

The Green Paper said that the PTTs must allow other companies to provide terminal equipment to its customers, in order to promote competition in this market. The move towards a competitive market has been accelerated by agreements on standardized specifications and interfaces. Since then, the EEC has issued a Directive demanding that PTTs abandon their monopoly control of the terminal equipment markets in their countries. The Green Paper advocated an agreement requiring PTTs to open at least 10% of their equipment supply contracts to bids from companies in other Member States. 151

note 2, at 35. However, in this Comment, they will be called "enhanced" services in order to be consistent.

<sup>143</sup> Id. at 65.

<sup>144</sup> Id.

<sup>145</sup> Id. at 66.

<sup>146</sup> Id.

<sup>147</sup> Id. at 73-74.

<sup>148</sup> Id. at 61.

<sup>&</sup>lt;sup>149</sup> Id. at 62. See also Council Directive 86/361/EEC, Council Decision 87/95/EEC, and Council Recommendation 86/659/EEC.

<sup>150</sup> Commission Directive of May 16, 1988, on competition in the markets in telecommunications terminal equipment, 88/301/EEC, 31 O.J. EUR. COMM. (No. L 131) 73, 4 Common Mkt. Rep. (CCH) ¶ 10,988.

<sup>&</sup>lt;sup>151</sup> Green Paper, supra note 2, at 62. See also Council Recommendation 84/550/EEC, 27 O.J. EUR. COMM. (No. L 298) 51 (1984).

#### B. Trans-Border Access

Trans-border access for enhanced services is desirable, because it enables the consumer to choose from a wide variety of enhanced services providers and it increases the likelihood that the consumer will find the services he wants. In addition, as the EEC pointed out, Article 59 of the Treaty of Rome guarantees trans-border access.<sup>152</sup> Therefore, the Community has a way to abolish the restrictions a Member State might put on access to consumers.<sup>153</sup>

Article 59 is subject to exceptions, and basic services would fall under one of those exceptions. <sup>154</sup> The EEC suggested that reserved services be defined narrowly, and that the definition be made similar among Member States, in order to reduce the possibility of conflict among Member States. <sup>155</sup> In fact, the EEC suggested that reserved services be restricted to voice services. <sup>156</sup>

The *Green Paper* also called for Community Directives to establish guidelines for what the EEC called "Open Network Provision" ("ONP"). <sup>157</sup> Vague ONP guidelines, such as standardized interfaces, limited number of reserved services, and some form of unbundling, were included in the *Green Paper*. <sup>158</sup>

In summary, if the *Green Paper* proposals are adopted, the controllers of the bottleneck facilities, the PTTs, would be allowed to participate in any telecommunications or enhanced services market on an unseparated basis, subject to requirements of transparency. The PTTs would be expected to work together to try to develop an ONP plan.

## C. Separating Regulatory and Operational Function

The Green Paper did not make any specific recommendations in this area. The method of separating the PTTs' regulatory and operational functions was left to the Member States. The method chosen in Great Britain was to privatize its basic services provider and establish a new government agency to regulate it. <sup>159</sup> Denmark has retained government ownership of its basic services provider, but created a separate agency to regulate it. <sup>160</sup> Belgium, <sup>161</sup> the Netherlands, <sup>162</sup> and Portugal, <sup>163</sup> were at

<sup>152</sup> Green Paper, supra note 2, at 68.

<sup>153</sup> Id.

<sup>154</sup> Id. at 68-69.

<sup>155</sup> Id. at 69.

<sup>156</sup> Id.

<sup>157</sup> Id.

<sup>158</sup> Id. at 70.

<sup>159</sup> Green Paper Supplement, supra note 133.

<sup>160</sup> Id. at 9.

the time of the *Green Paper* considering proposals similar to that adopted in Denmark. It is difficult to predict what method will be adopted in the other Member States.

# IV. DESCRIPTION OF TELECOMMUNICATIONS REGULATIONS IN THE MEMBER STATES PRIOR TO THE GREEN PAPER

In May 1988, the EEC issued a Commission Directive demanding that the Member States open their terminal equipment markets to competition. The directive marks a first step towards one of the *Green Paper* recommendations. The EEC, however, has yet to make progress in the areas of trans-border access, and separation of regulatory and operational functions. The *Green Paper* will lose its importance as an indication of the future structure of European telecommunications regulation if no Member State adopts its recommendations. To assess which Member States are likely to adopt these recommendations, it is necessary to examine the regulatory treatment of enhanced services and CPE in the Member States prior to the *Green Paper*. Recent changes in regulatory treatment in each Member State also provide a basis for estimating the probability of whether that Country will adopt the *Green Paper* recommendations by the EEC's self imposed 1992 deadline.

This section mainly focuses on West Germany, France, and Great Britain, because they are the three largest Member States, <sup>165</sup> and because they represent a good cross-section of Nations in terms of adopting *Green Paper* proposals. The analysis reveals that West Germany will probably adopt few if any proposals. France has adopted some of the proposals that are in the *Green Paper*, and is likely to adopt more. Finally, Great Britain's regulations already comply with the *Green Paper*.

<sup>161</sup> Id. at 5.

<sup>162</sup> Id. at 38-39.

<sup>163</sup> Id. at 47.

<sup>164</sup> Commission Directive of May 16, 1988, on competition in the markets in telecommunications terminal equipment, 88/301/EEC, 31 O.J. EUR. COMM. (No. L 131) 73, 4 Common Mkt. Rep. (CCH) ¶ 10,988 (1988).

<sup>165</sup> The 1984 Gross Domestic Product (GDP) of West Germany (in 1984 dollars U.S.) was approximately \$616 billion. The 1984 GDP of France was \$491 billion, and the 1984 GDP of Great Britain was \$425 billion. The next largest GDP was that of Italy, with \$351 billion. (Figures taken from U.N. DEP'T OF INT'L ECONOMIC & SOCIAL AFFAIRS, STATISTICAL Y.B., 1983/84, at 95-99, U.N. DOC. ST/ESA/STAT/SER.S /10, U.N. Sales No. E/F .85XVII.1. Exchange rates for 1984 taken from COUNCIL OF ECONOMIC ADVISORS, ECONOMIC REPORT OF THE PRESIDENT 373 (1986).)

West Germany, France, and Great Britain also control the three largest telecommunications networks in the Common Market. West Germany has about 37.9 million telephones connected to its system, France has about 34.3 million telephones, and Great Britain has about 31.7 million. *Green Paper*, supra note 2, at Figure 5(b) facing p.59.

#### A. West Germany

In Germany, both the postal and telecommunications services are provided by Deutsche Bundespost ("DBP"). Telecommunications are regulated by the Administrative Council, made up of the Minister of Posts and Telecommunications, members of the Bundestag and Bundesrat, and communications and finance experts. Since the Minister of Posts and Telecommunications is also the head of the DBP, the DBP is responsible for both the regulation and the operation of the telecommunications system. The Basic Law, Articles 73 and 87, forbids the German Government from withdrawing from any telecommunications area, but the Basic Law does not forbid private companies from entering these areas if the DBP permits them to. Other than the Basic Law, the DBP does not operate under any statutory guidelines.

Competition in services is unlikely in the near future.<sup>171</sup> The DBP is required to provide universal service, and it is required to make a profit. These requirements have resulted in a system in which long distance service subsidizes local phone service, postal service, and the Federal Budget.<sup>172</sup> In spite of the fact that this tariff system is tremendously wasteful, and forces long distance consumers to suffer most of the costs, it probably will not be changed for political reasons. Any increase in local tariffs which are offset by decreases in long distance tariffs would be seen as a regressive transfer of wealth from poor home owners and apartment dwellers to rich businessmen.<sup>173</sup> The German public fears that an introduction of competition in services would destroy this cross-subsidization arrangement.<sup>174</sup>

Competition in equipment is allowed.<sup>175</sup> In fact, IBM recently entered into an arrangement with Siemens, A.G., a West German equipment manufacturer, to manufacture compatible equipment.<sup>176</sup> The

<sup>166</sup> Green Paper Supplement, supra note 133, at 16.

<sup>167</sup> Id.

<sup>168</sup> Id.

<sup>169</sup> Id. at 19, GRUNDGESETZ [GG] arts. 73(7), 87.

<sup>170</sup> M. Snow, Telecommunications: Regulation and Deregulation in Industrialized Democracies 145 (1986).

<sup>171</sup> Id. at 141.

<sup>172</sup> Id. at 145.

<sup>173</sup> Id. at 145-46.

<sup>174</sup> Id. at 140. In August, 1987, a West German commission made up of representatives from telecommunications trade unions, industry, and the government proposed separating postal services from other telecommunications services. Even this weak first step towards the Green Paper goals met with fierce domestic opposition. Pope, Report on German Telecommunications Is Unlikely to Satisfy Trade Partners, Wall St. J., Aug. 19, 1987, at 19, col. 2.

<sup>175</sup> M. Snow, supra note 170, at 141-42.

<sup>176</sup> Wall St. J., Oct. 22, 1987, at 16, col. 4.

extent to which competition is allowed varies for each type of equipment, and depends on a case-by-case political determination. Some people want to exclude the DBP from almost all terminal equipment markets to allow other companies to establish themselves, and other people want to allow the DBP to participate in any market in which it can achieve economies of scope.<sup>177</sup> Therefore, whether or not competition will develop in equipment depends on West Germany's political future.

In summary, West Germany's equipment market may become competitive, but the popularity of its cross-subsidization scheme will probably prevent any competition in enhanced services. In addition, the *Basic Law* prohibition against the DBP leaving the telecommunications industry makes the separation of regulatory and operational functions unlikely.<sup>178</sup> As a result, it seems doubtful that Germany will adopt the *Green Paper* proposals by 1992.

#### B. France

In France, the common carrier branch of the PTT is the Direction Général des Télécommunications ("DGT").<sup>179</sup> The DGT has set up Compagnie Général des Communications ("COGECOM") as a holding company for all its subsidiaries.<sup>180</sup> Among these subsidiaries are Transpac, a company that operates and markets a packet-switched data network, and Télésystèmes, a computer services and software company.<sup>181</sup> The DGT uses its Transpac network to provide videotex service under the name of the "Télétel" system.<sup>182</sup>

DGT manufactures none of its own equipment. Instead, it procures equipment from the private sector through general procurement procedures. DGT installs equipment, but also authorizes private firms to install equipment if they meet certain standards. It also subcontracts some of its own installation work out. Therefore, even though the French equipment market appears to be rigidly controlled by the Government, several companies actually compete in the market. The several companies actually compete in the market.

The official Government monopoly in services ended in October

<sup>177</sup> M. Snow, supra note 170, at 141-42.

<sup>178</sup> In principle, there is no reason why these functions could not be split into two separate government agencies, but in practice it seems redundant to regulate a government-owned corporation. M. SNOW, *supra* note 170, at 137.

<sup>179</sup> Green Paper Supplement, supra note 133, at 11.

<sup>180</sup> Id. at 15.

<sup>181</sup> M. SNOW, supra note 170, at 108.

<sup>182</sup> September 10 Decision, 673 F. Supp. at 588.

<sup>183</sup> M. SNOW, supra note 170, at 109.

<sup>184</sup> Id. at 110-11.

<sup>185</sup> There has been competition in the French equipment market since the 1920s. Id. at 114.

1987.<sup>186</sup> Some French companies offered services before October, even though they were illegal at that time.<sup>187</sup> At the present, there are no plans to separate the regulatory and operational functions of the DGT. France, however, appears well on its way to meeting the standards set in the *Green Paper*.

## C. United Kingdom

In 1981, Great Britain started to denationalize its telecommunications system, British Telecom. The British Government now owns 49% of British Telecom stock, and the other 51% is held by private investors. Since 1981, a regulatory body, the Office of Telecommunications ("OFTEL"), was established to license carriers and regulate prices. A competing carrier, Mercury Communications Limited, has been allowed to enter the British local network market, but OFTEL has announced that it will not license any other carriers for this market until 1990. Mercury is completely privately owned. 190

Great Britain has introduced competition to both its services and equipment markets. Basic services are provided by British Telecom and Mercury. OFTEL limits British Telecom's price increases in basic services to the Retail Price Index minus three percent ("RPI-3"). Pritish Telecom may also provide enhanced services in competition with Mercury or any other company having a license from OFTEL allowing it to lease lines from either British Telecom or Mercury. Almost all CPE may be purchased either from British Telecom or private suppliers.

Given the extensive liberalization of the equipment and the services markets, and the privatization of British Telecom, Great Britain might

<sup>186</sup> Browning, France Intends to Curb IBM in New Market, Wall St. J., Sept. 23, 1987, at 26, col. 5.

<sup>187</sup> Id.

<sup>188</sup> Green Paper Supplement, supra note 133, at 49.

<sup>189</sup> M. Snow, supra note 170, at 157.

<sup>190</sup> Green Paper Supplement, supra note 133, at 49.

<sup>191</sup> Id. at 50.

<sup>192</sup> Id. at 51-52. M. SNOW, supra note 170, at 159-60. The FCC recently proposed applying price cap regulation similar to OFTEL's system to AT&T. Price caps are popular among telecommunications scholars, because they do not offer the same incentives for cross-subsidization as rate-of-return regulation. Bhattacharyya and Laughhunn, Price Cap Regulation: Can We Learn From the British Experience?, Pub. Util. Fort., Oct. 15, 1987, at 22. However, this proposal has met with resistance from Congress. FCC Proposal for Phone Deregulation is in Trouble, Wall. St. J., Feb. 12, 1988, at 4, col. 1.

<sup>193</sup> M. Snow, supra note 170, at 159-60.

<sup>194</sup> At the moment, British Telecom still maintains a monopoly in payphones, but all other equipment is subject to competition. *Green Paper Supplement, supra* note 133, at 57.

meet the *Green Paper* standards today, and probably will meet them by 1992.

### D. Other Member States

Most of the other Member States are likely to adopt the *Green Paper* proposals by 1992. Belgium<sup>195</sup> and the Netherlands<sup>196</sup> have appointed committees to study the organization of their telecommunications systems. In both countries the committees have suggested reforms similar to those called for in the *Green Paper*. Before the publishing of the *Green Paper*, the legislatures of Denmark<sup>197</sup> and Ireland<sup>198</sup> had passed new telecommunications regulations which conformed to the *Green Paper* recommendations. Luxembourg,<sup>199</sup> Portugal,<sup>200</sup> Italy,<sup>201</sup> and Spain<sup>202</sup> were considering new telecommunications legislation when *Green Paper* was published. The EEC expects this new legislation to adopt most recommendations called for in the *Green Paper*. In addition, the Spanish telephone monopoly, Telefónica, has opened its equipment industry to foreign participation by entering a joint venture with AT&T,<sup>203</sup> and a company owned by Siemens, A.G. and GTE has started to provide public switching services in Italy and Belgium.<sup>204</sup>

Currently, Greece is rebuilding and modernizing its existing telecommunications infrastructure.<sup>205</sup> It has no plans to change its regulatory system.<sup>206</sup> Nevertheless, all the Member States except Greece and West Germany are likely to adopt all or most of the *Green Paper* recom-

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195 Id. at 1-5.
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<sup>196</sup> Id. at 35-40.

<sup>197</sup> Id. at 6-10.

<sup>198</sup> Id. at 25-27.

<sup>199</sup> Id. at 33-34.

<sup>200</sup> Id. at 45-48.

<sup>201</sup> Id. at 28-32.

<sup>202</sup> Id. at 41-44.

<sup>203</sup> Hudson, AT&T Is Seen Entering Spain In Joint Venture, Wall St. J., Oct. 20, 1987, at 33, col.

<sup>204</sup> New Company To Oversee Joint Venture with GTE, Wall St. J., Jan. 6, 1988, at 8, col. 4.

<sup>205</sup> Green Paper Supplement, supra note 133, at 23-24.

<sup>&</sup>lt;sup>206</sup> *Id.* at 24. However, the EEC has recently agreed to grant Greece funds under the STAR program, which is designed to improve the telecommunications network in the more remote regions of the Community. Commission Decision 88/55/EEC, 31 O.J. Eur. Comm. (No. L 30) 33 (1988). Similar grants were given to Spain, Commission Decision 88/56/EEC; France, 88/57/EEC; Ireland, 88/58/EEC; Italy, 88/59/EEC; Portugal, 88/60/EEC; and Great Britain, 88/61/EEC. 31 O.J. Eur. Comm. (No. L 30) 34-39 (1988).

It is possible that this grant will enable Greece to consider reforming its regulatory system earlier than it would be able to otherwise, and in that case perhaps it may adopt the *Green Paper* proposals by 1992.

mendations. The *Green Paper*, therefore, represents a fairly accurate picture of the future structure of European telecommunications regulations.

## V. COMPARISON OF THE FCC RULES TO THE GREEN PAPER

The regulatory approaches of the FCC in Computer III and the EEC in the Green Paper are similar. Both schemes appreciate the benefits of allowing common carriers to participate in CPE and enhanced services markets. Both have rejected structural safeguards in favor of accounting and reporting requirements, and both are working toward some sort of ONA arrangement.

Some differences do exist. For example, the FCC continues to distinguish between basic and enhanced services based on the characteristics of the services. The EEC distinguishes between basic and enhanced services based on the nature of the markets for the services. The other major difference is the degree to which the owners of bottleneck facilities are allowed to provide enhanced services.

The EEC's method of distinguishing between basic and enhanced services seems more practicable. The FCC's distinctions, no matter how flexible, become outdated after five years of technological innovation. It would seem better for the FCC, like the EEC, to decide whether to regulate those services based on how well market forces control the prices.

The FCC considered such a plan in Part II of the Computer III Notice, but rejected it later because the Commission believed it was not practicable. To rely on market forces to distinguish basic and enhanced services was too ambiguous and ad hoc, and risked creating bureaucratic impediments to innovation and progress.<sup>207</sup> The Commission noted that, in order to distinguish between services that can be regulated by market forces and services that cannot, workable definitions of concepts like "dominant carrier", "competition", "bottleneck", and "market power" would be necessary.<sup>208</sup> The Commission then concluded that workable definitions of these concepts were not possible.

The Part II Proposal was not as ambiguous or as ad hoc as the Commission claimed it to be. Workable definitions of these concepts are possible. In the early 1980s, the FCC developed a definition of "dominant carrier" in its Competitive Common Carrier proceeding.<sup>209</sup> The proceeding was intended to identify the carriers with the greatest ability to abuse their market position so that the FCC would be able to devote its

<sup>207</sup> Computer III Order, 104 F.C.C. at 1017.

<sup>208</sup> Id. at 1015.

<sup>209 85</sup> F.C.C.2d 1 (1980).

time and budget to enforcing regulations against only those carriers.<sup>210</sup> The definition of "dominant carrier" developed in the *Competitive Common Carrier* proceeding would work to distinguish between regulated and unregulated services. "Dominant carrier" was defined as a carrier with "market power," which, in turn, was defined as the ability to control prices.<sup>211</sup> These definitions are unambiguous and workable, and the FCC should not need to develop new definitions of "dominant carrier" or "market power."

"Bottleneck" also seems easy to define. The following definition would suffice: "Any facility or piece of equipment through which all or almost all messages sent through the Telecommunications Network must be routed to reach any particular message receiver, or any facility or piece of equipment that cannot be bypassed without great expense."

"Competition" would be difficult to define, but a definition would not be necessary for the Part II proposal to work. Part II would only require a determination of which services can be offered with either substantial economies of scale or scope. While economies of scale or scope can be very difficult to quantify, it should not be difficult to determine whether or not substantial economies exist.

The FCC is correct in asserting that this market-based analysis would have to be conducted on a case-by-case basis. The analysis, however, would not need to be a "fairly complex economic analysis on a service-by-service, market-by-market, and carrier-by-carrier basis." The "dominant carrier" determination already would have been made, and the "bottleneck" and "economies of scale" determinations would require little administrative delay or expense. The administrative delay and expense would seem minor compared to the review required of a CEI plan submitted by AT&T or a BOC. [G]iven the difficulties in the Commission's multi-year task of forging cost-based local exchange access charges in order to achieve parity between AT&T and other interexchange carriers vis-a-vis unaffiliated local telephone companies, implementing CEI/ONA will constitute an even more burdensome endeavor."

The other major difference between Computer III and the Green Paper is the degree to which the operators of bottleneck facilities would be allowed to provide enhanced services. In the United States, the BOCs

<sup>210</sup> Id. at 4.

<sup>211</sup> Id. at 30.

<sup>212</sup> Computer III Order, 104 F.C.C.2d at 1015.

<sup>213</sup> See supra notes 96-101 and accompanying text.

<sup>&</sup>lt;sup>214</sup> Frieden, The Third Computer Inquiry: A Deregulatory Dilemma, 38 Feb. Com. L.J. 383, 391 (1987).

are not allowed to provide any data processing services, and may provide only some enhanced services, either on a separated basis or with an approved CEI plan.<sup>215</sup> In Europe, the PTTs will be allowed to provide any "competitive service," i.e., any data processing or enhanced service.<sup>216</sup>

The EEC gave them broad power in hopes of integrating telecommunications systems across national boundaries.<sup>217</sup> At the moment, the system is fragmented among the twelve Member States, and the EEC feared that creating any separation requirements would further fragment the system.<sup>218</sup>

By preserving what little integration exists, the EEC has erected a tremendous obstacle to further integration. The PTTs, because of their control of bottlenecks, will continue to engage in discriminatory behavior by denying other carriers access to consumers. By allowing the PTTs to compete with these carriers for these consumers, the EEC has given the PTTs a strong incentive to engage in this discriminatory behavior. This discriminatory behavior will severely limit trans-border integration.

The EEC probably was aware of the danger of discriminatory behavior occurring, but it may have assumed that a good ONP plan would prevent discriminatory behavior. One could argue that the EEC should not have made such an assumption. Whether its assumption was reasonable depends on what the EEC had in mind when discussing the development of ONP. If the EEC meant something similar to the FCC's conception of ONA, that the local networks be redesigned so that there is a built-in equal access,<sup>219</sup> then the assumption was not unreasonable. However, there is no guarantee that an ONA plan will ever be developed, or that if it is, how long it will take. Given this uncertainty, it seems unreasonable for the EEC to assume that consumers and competitors will be adequately protected by an ONA plan against discriminatory behavior.<sup>220</sup>

If the EEC meant something similar to the FCC's conception of CEI, then it may be reasonable to assume that ONP would prevent discriminatory behavior, but it is also likely that the consumers would not benefit from it. As Frieden points out, the FCC never determined the actual costs and benefits of CEI. Frieden also discusses the possibility of

<sup>215</sup> Which enhanced services are allowed depends on the definition of "information services." See supra note 58 and accompanying text.

<sup>216</sup> See supra notes 142-46 and accompanying text.

<sup>217</sup> Green Paper, supra note 2, at 73-74.

<sup>218</sup> Id. at 71-72.

<sup>219</sup> Computer III Order, 104 F.C.C.2d at 1063.

<sup>220</sup> Frieden, supra note 214, at 392.

a long, complicated proceeding to determine the specifics of CEI.<sup>221</sup> Furthermore, CEI requires extensive filing and reporting.<sup>222</sup> At least some of the expenses will be borne by the consumer, and they tend to counteract any savings that would result through achieving economies of scale or scope.<sup>223</sup> Therefore, it is possible that a CEI-type plan would ensure equal access, but that the savings would be swallowed up by administrative expenses rather than be passed on to the consumer.

As a result, under the *Green Paper* proposals, no one can be certain whether ONP will enable trans-border integration to take place, how long the process will take, or whether, if trans-border integration occurs, the consumer would receive as much benefit from it as he should. On the other hand, if each PTT was split into two entities, one to operate the bottleneck facilities and the other to provide long distance and enhanced services, then the bottleneck operator would have little incentive to engage in discriminatory behavior. Trans-border integration, therefore, could take place more quickly and with little administrative expense.

In summary, the FCC would be more likely to achieve its goal of reducing regulatory uncertainty surrounding the introduction of new enhanced services if it adopted the market-based definition of basic and enhanced services which will be used in Europe. In addition, the EEC would be more likely to achieve its goal of integrating its telecommunications systems across national boundaries if it prohibited the owners of bottleneck facilities from providing enhanced services as is currently done in the United States.

#### VI. CONCLUSION

The problems presented in determining the proper regulatory treatment of enhanced services and CPE are difficult. The FCC and the EEC have arrived at similar solutions for many, but not all, of these problems. The FCC would be more likely to achieve its goal of removing bureaucratic impediments to innovation and progress<sup>224</sup> if it were to adopt a market based definition of enhanced services, similar to that proposed in the *Green Paper* and Part II of the *Computer III Notice*.<sup>225</sup> The EEC would be more likely to achieve its goal of integrating the European telecommunications market across national boundaries if it were to break up its PTTs into long distance and enhanced services providers and bottle-

<sup>221</sup> Id. at 391-92

<sup>222</sup> Computer III Order, 104 F.C.C.2d at 1055-56.

<sup>223</sup> Competative Common Carrier Proceeding, 85 F.C.C.2d at 5.

<sup>224</sup> Computer III Order, 104 F.C.C.2d at 985.

<sup>225</sup> Green Paper, supra note 2, at 65; Computer III Notice, 50 Fed. Reg. 33,581, 33,589-91.

neck facilities operators, similar to what the United States did in the MFJ.

The September 10 Decision, retained most of the restrictions placed on the owners of bottleneck facilities. The Court, however, did allow the owners of bottleneck facilities to provide protocol conversion services and the infrastructure necessary for videotex. Since these services seem to have natural monopoly characteristics, <sup>226</sup> it is appropriate that the owners of bottleneck facilities are allowed to provide these services. If the FCC allows the owners of bottleneck facilities to offer other enhanced services, then the treatment of bottleneck operators in the United States will begin to resemble the treatment of European bottleneck operators. Consumers in the United States will risk suffering from the discriminatory behavior of the BOCs in the exchange for a low probability of reduced prices or improved service.

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<sup>226</sup> In the September 10 Decision, Judge Greene wrote that "the broad scale and the reasonable cost criteria necessary for a successful system can be met only by permitting the Regional Companies to provide the necessary infrastructure components for efficient videotex services . . . ." September 10 Decision, 673 F. Supp. at 591.