

## **THE SECOND COMPUTER INQUIRY AND THE RECORD CARRIER COMPETITION ACT OF 1981: THEIR EFFECT UPON THE WORLD INFORMATION ORDER**

On March 3, 1983, the Federal Communications Commission (the Commission)<sup>1</sup> addressed the issue of whether certain international communications service offerings, such as store-and-forward and Telex/TWX services,<sup>2</sup> would be detariffed pursuant to the Second Computer Inquiry<sup>3</sup> or tariffed pursuant to the Record Carrier Competition Act of 1981.<sup>4</sup> In order to understand both the decision of the Commission<sup>5</sup> and the implications of that decision upon the world information order, it is necessary to retrace the Commission's steps in the treatment of various communications service offerings, both domestic and international, in light of man's rapidly changing communications technology.

In 1970, the Commission commenced the "First Computer Inquiry" in order to address the regulatory and policy problems which resulted from the interdependence of computer technology, its market applications, and communications common carrier services.<sup>6</sup> Given the fact that the transmission of data involves the utilization of the telephone lines, the most pressing issue that confronted the Commission in the First Computer Inquiry concerned the extent to which it was appropriate for a common carrier to

---

1. See Communications Act of 1934, 47 U.S.C. § 151 (1976).

2. Store-and-forward refers to the interruption of data flow from the originating terminal to the designated receiver by storing the information enroute and forwarding it at a later time. TWX (Teletypewriter Exchange) and Telex services refer to dial-up telegraph services enabling their subscribers to communicate directly and temporarily among themselves by means of start-stop apparatuses and of circuits of the public telegraph network. TWX and Telex services operate world-wide. Computers can be connected to TWX and Telex networks.

3. Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 F.C.C.2d 384 (1980)[hereinafter cited as the Second Computer Inquiry].

4. Record Carrier Competition Act of 1981 § 2, 47 U.S.C. §§ 222 (Supp. V 1981) [hereinafter cited as the Act].

5. Interconnection Arrangements Between and Among Domestic and International Record Carriers: Store-and-forward and TWX/Telex Conversion, 53 RAD. REG. 2d (P & F) 703 (1983)[hereinafter cited as Interconnection].

6. Regulatory & Policy Problems Presented by the Interdependence of Computer & Communications Services & Facilities, 28 F.C.C.2d 291 (1970) (Tent. Decision); 28 F.C.C.2d 267 (1971) (Final Decision).

utilize a portion of its communications switching plant to offer data processing service.<sup>7</sup>

The Commission was wary of the potential for such common carriers to "favor their own data processing activities through cross-subsidization, improper pricing of common carrier services, and related anti-competitive practices which could result in burdening or impairing the carrier's provision of other regulated services."<sup>8</sup> As a means of preventing such anti-competitive behavior on the part of the various common carriers, the Commission in the First Computer Inquiry adopted a policy of "maximum separation" whereby a communications common carrier had to furnish any data processing services through a separate corporate entity.<sup>9</sup>

The First Computer Inquiry offered policy decisions based upon the technological state of the art as it existed at that time.<sup>10</sup> However, the technological advances which took place after 1970, particularly in the areas of large-scale integrated circuitry and microprocessor technology,<sup>11</sup> forced the Commission to take a second look at the relationship between computer technology and

---

7. In other words, the issue concerned whether communications common carriers, such as the various telephone companies, should be permitted to market data processing services, and if so, what types of safeguards should be established to insure that the carriers would not engage in discriminatory practices.

8. Second Computer Inquiry, *supra* note 3, at 390.

9. 47 C.F.R. § 64.702(c)-(d) (1982) sets forth the separation requirements for the data processing entity. The separate data processing entity had to have separate books of accounts, separate officers, separate operating personnel and separate equipment and facilities devoted to the provision of data processing services. This maximum separation requirement was not applicable, however, to carriers with an annual revenue of less than one million dollars.

10. A major policy issue which arose in the First Computer Inquiry concerned the extent to which a regulatory dichotomy could be drawn between data processing, and message or circuit switching. It was held that where message-switching was offered as an incidental feature to a primarily data processing system, there would be "total regulatory forbearance" with respect to the total system. However, where the communications system was designed to satisfy the particular message-switching needs of the subscriber, and the data processing function was incidental to the message-switching performance, the entire system would be deemed a "communications service" and become subject to regulation. Second Computer Inquiry, *supra* note 3, at 391.

11. The advances in the areas of large-scale integrated circuitry and microprocessor technology have permitted the production of "mini-computers, micro-computers, and other special purpose devices, which are capable of duplicating many of the data-manipulative capabilities which were previously available only at centralized locations housing large scale general-purpose computers." *Id.* The result of this technological advance in distributed processing was that computers and terminals could perform both data processing and communications control applications within the same network and at the customer's premises. *Id.*

the communications common carriers. This "second look" by the Commission, known as the "Second Computer Inquiry", involved the resolution of three predominant issues.

The Second Computer Inquiry first addressed whether the so-called "enhanced services", which were provided over common carrier telecommunications facilities, should be subject to regulation.<sup>12</sup> In making its determination, the Commission created a "basic service/enhanced service" distinction, stating that a common carrier's basic service was to be limited to the offering of "transmission capacity for the movement of information,"<sup>13</sup> whereas a common carrier's "enhanced service" combined basic service with "computer processing applications [that] act on the [format], content, code, protocol and other aspects of the subscriber's [transmitted] information,"<sup>14</sup> or provide the subscriber "additional, different, or restructured information,"<sup>15</sup> or "involve subscriber interaction with stored information."<sup>16</sup>

The Commission held that although a common carrier's offering of basic service was, in fact, a communications service and regulated as such pursuant to Title II of the Communications Act of 1934, the regulation of a common carrier's offering of enhanced services was not required.<sup>17</sup> The Commission felt that significant public benefits would accrue to both the providers of basic and enhanced services, and to consumers under its deregulated scheme since "the absence of traditional public utility regulation of enhanced services offers the greatest potential for efficient utilization and full exploitation of the interstate communications network."<sup>18</sup>

---

12. *Id.* at 417.

13. *Id.* at 419. "Thus, in a basic service, once information is given to the communication facility, its progress towards the destination is subject only to those delays caused by congestion within the network or transmission priorities given by the originator." *Id.* at 420. In other words, basic service provides a "transparent" communications path in terms of its interaction with customer supplied information. *Id.*

14. *Id.*

15. *Id.*

16. *Id.*

17. *Id.* at 428. Title II of the Communications Act of 1934 authorizes the Commission to regulate interstate communications service (and also foreign communications service which originates and/or is received within the United States) offered by common carriers.

18. *Id.* at 428-29. Thus, service vendors would benefit from the deregulation of enhanced services because there would be "no restriction on the types of services they may provide, except those imposed by the demands of their customers." *Id.* Consumers will benefit because "services which depend on the electronic movement of information can be custom tailored to individual subscriber needs." *Id.* at 429.

The second issue of the Second Computer Inquiry was whether the continuation of traditional regulation of terminal equipment was in the public interest, in light of the competitive and technological evolution of customer-premises equipment.<sup>19</sup> The Commission held that the continuation of a tariff-imposed regulation over common carrier-provided customer-premises equipment "neither recognize[d] the role of carriers as competitive providers of CPE [customer-premises equipment]," nor did it reflect the severability of customer-premises equipment from transmission services.<sup>20</sup> The Commission went on to hold that customer-premises equipment was a separate and distinct commodity from transmission services and that regulation of customer-premises equipment was not required.<sup>21</sup>

The third issue of the Second Computer Inquiry concerned the role of communications common carriers in the provision of enhanced services and customer-premises equipment.<sup>22</sup> The issue was whether certain common carriers could continue to offer terminal equipment as part of an end-to-end service. In other words, this third issue concerned whether these common carriers should be required to offer enhanced services on a resale basis through a separate corporate entity, and whether customer-premises equipment should likewise be marketed through an entity separate from that providing basic services.<sup>23</sup> The Commission held that there was "little need to subject carriers to the resale structure if

---

19. *Id.* at 436. Terminal equipment includes any device which terminates a communications channel and adapts that channel for use by a user, the user being either a person or a machine. Telephone sets, switchboards, data sets, teletypewriters, answering sets, etc., are examples of terminal equipment. Customer premises equipment includes all telecommunications and terminal equipment located on the customer premise both state and interstate, except coin-operated telephones, and encompassing everything from the basic black telephone to the most advanced data terminals and PBX's (Private Branch Exchanges).

20. *Id.* at 446. The Commission stated the following:

Trends in technology enable CPE to function as an enhancement to basic common carrier services and many enhanced service applications involve interaction with sophisticated terminal equipment. The uses to which these devices may be put are under the user's, not the carrier's, control. The structure we are adopting for network services separates the costs of service enhancements from the underlying transmission service.

*Id.*

21. *Id.*

22. *Id.* at 452.

23. The "resale" of communications services is the subscription to those services and facilities by one entity and the reoffering of communications services and facilities to the public (with or without "enhancing" those services) for profit.

such entities lack significant potential to cross-subsidize or to engage in other anti-competitive conduct."<sup>24</sup> Consequently, the Commission found that only American Telephone & Telegraph (AT&T), and General Telephone & Electronics (GTE) presented a sufficiently substantial threat that would justify separate corporate entities for the provision of enhanced services and customer-premises equipment.<sup>25</sup> In effect, then, the Commission removed the "maximum separation" requirements established by the First Computer Inquiry for all common carriers except those under the direct or common control of AT&T or GTE.<sup>26</sup>

The Commission declined the opportunity to address the issue concerning the extent to which its findings in the Second Computer Inquiry would apply to international record carriers.<sup>27</sup> The reasoning behind this avoidance of the international communications service issue was twofold. First, the Commission felt that any decision which it made in regard to international communications service would be premature since it had already indicated an appropriate notice, that would initiate a proceeding to assess the international communications issue, would be forthcoming.<sup>28</sup>

Second, the need to determine the role of international record carriers in light of the Second Computer Inquiry rationale was, to some extent, mitigated by a number of recent Commission decisions directed at the market power of the international record carriers.<sup>29</sup> At the time of these decisions, the Commission stated that

24. *Id.* at 388-89.

25. *Id.* at 389.

26. It was later held by the Commission that GTE's market share of the communications services industry was not significant enough to warrant corporate separation. *See* Amendment of Section 64.702 of the Commission's Rules and Regulations, 84 F.C.C.2d 50, 75 (1980).

27. *See* Second Computer Inquiry, *supra* note 3, at 489. More specifically, the international issue to be addressed was whether the resale structure set forth in the Second Computer Inquiry should apply to the international record carriers. International record carriers provide overseas/international telecommunications services, other than voice communications, e.g., teletypewriter, facsimile and data. *See* Act, *supra* note 4.

28. Second Computer Inquiry, *supra* note 3, at 489.

29. *See* Preliminary Audit and Study of Operational International Carriers and Their Communications Services, 75 F.C.C.2d 726 (1979); *In re* AT&T, 75 F.C.C.2d 682 (1979); *W. Union Tel. Co.*, 75 F.C.C.2d 461 (1979); *ITT v. Consortium Int'l, Inc.*, 76 F.C.C.2d 15 (1979); *W. Union Int'l*, 76 F.C.C.2d 166 (1979). All of these decisions were directed at "fostering a competitive environment in the domestic segment of international telecommunications services and minimizing the potential that the prevailing market power in the international segment [would] distort the competitive evolution of the domestic portion." AT&T, 75 F.C.C.2d at 694.

their combined effect would be "an improved international communications system with more choices for consumers, more diverse service offerings, and lower rates."<sup>30</sup>

In an effort to further develop the competitive nature of the domestic and international record carrier industries that the Commission established in both the Second Computer Inquiry, and its administrative decisions affecting the international record carrier industry, Congress enacted the Record Carrier Competition Act of 1981.<sup>31</sup> The Act amended section 222 of the Communications Act of 1934 which governed competition among record carriers. The intent of the Act was to eliminate various provisions relating to mergers of telegraph and record carriers, and to create a fully competitive marketplace in international record carriage.<sup>32</sup> Congress wished to ensure that consumers could obtain record communications service and facilities (including terminal equipment), the variety and price of which would be governed by industry competition.<sup>33</sup>

The Act became law on December 29, 1981. In addition to eliminating a long-standing barrier to increase competition in the international record market,<sup>34</sup> the Act contains a number of important provisions:

- (a) Section 222(c)(1)(A)(i), directs the Commission to "require each record carrier to make available to any other record carrier, upon reasonable request, full interconnection with any facility operated by such record carrier, and used primarily to provide record communications service."
- (b) Section 222(c)(1)(B)(i), states that record carriers which engage both in the offering for hire of domestic and international record communications services must be treated as separate domestic, and international, record carriers for purposes of administering interconnection requirements.

---

30. *Id.* at 695.

31. 47 U.S.C. § 222.

32. 47 U.S.C. § 221(b)(1).

33. *Id.*

34. 47 U.S.C. § 222(c)(5). The passage of the Act was originally a result of attempts by the major domestic carrier, Western Union, to enter into interconnection negotiations with the primary existing international record carriers. The Act was a Congressional attempt to eliminate barriers of entry into the international record carrier market for domestic record carriers, such as Western Union.

- (c) Section 222(c)(1)(B)(ii), declares that where a separate domestic record carrier furnishes interconnection to a separate international record carrier with which it was not previously joined, such interconnection is required to be (A) equal in type and quality; and (B) made available at the same rates and upon the same terms and conditions as those offered to the international record carrier from which it has been separated.<sup>35</sup>
- (d) Section 222(c)(1)(B), states that the rules set forth in subsections (i) and (ii) do not apply to a record carrier which does not have a significant market share for record communications services.<sup>36</sup>
- (e) Section 222(c)(3)(B), requires all terms and conditions upon which required interconnection is made available to be "just, fair, [and] reasonable." The same section of the Act directs the Commission to preside over interconnection negotiations between domestic and international carriers in order to enforce this required standard of fairness.
- (f) Section 222(e)(1), states that at the end of the 36-month period following the date of the enactment of the Act, the provisions of Section 222(c) of the Act, other than paragraph (1)(B) of such section, shall cease to have any force or effect.<sup>37</sup>

---

35. Section 222(c)(1)(B)(iii) conversely applied subsection (c)(1)(B)(ii) to separated international record carriers.

36. The term "significant share", as it relates to dominant record carriers, has several meanings depending on the subject with which the issue of dominant record carriers is being associated. In legislative proposals to rewrite or amend the Communications Act of 1934, the term was used to describe a carrier having control over a majority of the transmission facilities used for exchange and interexchange telecommunications. A dominant record carrier would be subject to special restrictions, usually including a requirement to establish a fully separated subsidiary for offering other than basic services. Federal Communications Commission Docket No. 79-252, relating to dominant record carriers, defined a dominant carrier as one having significant market power. This included AT&T and all the independent telephone companies in the voice market, and Western Union in the domestic record market. These record carriers were subject to more stringent rules regarding tariffs and regulatory oversight. The Second Computer Inquiry defined dominant record carriers as including only AT&T. This meant that only AT&T would have to offer enhanced services and customer premises equipment through a fully separated subsidiary because of this designation.

37. Congress viewed many aspects of the Act as transitional and subject to "sunsetting" in three years. At the end of the three year sunsetting period, all interconnections bet-

The passage of the Record Carrier Competition Act of 1981 was a legislative attempt to apply the competitive scheme set forth by the Commission in the Second Computer Inquiry to the international communications services arena. Confusion has already arisen, however, in trying to distinguish the jurisdictional boundaries of the Second Computer Inquiry and the Record Carrier Competition Act of 1981.<sup>38</sup> For example, various international communications services, such as store-and-forward offerings, can be considered either enhanced services or basic service offerings since they have traditionally been offered in association with switched record services.<sup>39</sup> If such international communications services are enhanced services, their regulation (or lack thereof) would be governed by the provisions of the Second Computer Inquiry. If, on the other hand, these international communications services are traditional record service offerings, then their regulation would be governed by the Record Carrier Competition Act of 1981.

The Commission's March 3, 1983 decision addressed the issue of whether such "hybrid" international communications service offerings would be detariffed pursuant to the Second Computer Inquiry (since they would qualify as enhanced services) or tariffed pursuant to the Record Carrier Competition Act of 1981 (since they would qualify as record service offerings).<sup>40</sup> The Commission limited its decision to only store-and-forward and TWX/Telex con-

---

ween domestic and international record carriers would be governed by the Commission's overall Second Computer Inquiry policies and by the portions of the Act which were not subject to sunseting pursuant to § 222(e)(1). See *Interconnection*, *supra* note 5, at 716.

38. *Id.* at 715.

39. *Id.* at 714. The Commission used the example of "book" messages to illustrate an instance in which the jurisdictional boundaries of the Second Computer Inquiry and the Record Carrier Competition Act of 1981 could overlap. *Id.* In the case of "book" messages, a common text is transmitted along with a list of addresses. The Commission illustrated the "book" message example as follows:

If the common text alone were transmitted to each addressee, the service would probably represent a use store-and-forward technology to support basic service. But often, each specific addressee's name and address information is appended to the common text when the message is sent to the addressee. In such case, the message which is delivered is reformatted by the store-and-forward facilities. Subject to pending proceedings . . . this would represent an enhanced service, both by providing "additional, different or restructured information" and by acting on the "format, content, code, protocol or similar aspects of the subscriber's transmitted information."

*Id.*

40. *Id.*

version services.<sup>41</sup> The Commission ultimately held that the Record Carrier Act of 1981 established a limited exception (for no more than three years) from the normal ineligibility for tariffing of enhanced services set forth by the Second Computer Inquiry for certain store-and-forward offerings and TWX/Telex conversions by record carriers.<sup>42</sup>

Although the Commission's recent inquiry into the jurisdictional boundary between the Second Computer Inquiry and the Record Carrier Competition Act of 1981 has answered some questions, it has by no means settled the issue concerning the extent to which the Second Computer Inquiry's competitive scheme will apply to the international communications services arena in the future. The Record Carrier Competition Act of 1981 supplies only a limited solution. After the three year time period for which the Record Carrier Competition Act of 1981 offers an exception to the ineligibility for tariffing of enhanced services,<sup>43</sup> the Commission will be forced to reexamine the position of "hybrid" international communications services in its competitive scheme.

*David Zuckerbraun*

---

41. See *supra* note 2.

42. Interconnection, *supra* note 5, at 715. In order for a communication service to fall within the exception offered by the Act, it must meet a three part test: (1) the services involved in the offering must be switched teletypewriter or telegraph services (and not high-speed data services, or voice services); (2) the service offering must have been made prior to the Act's enactment (The Commission wishes to guard against the simple "repackaging" of traditional record services that are subject to the Act under the guise of a "new service."); and (3) if a service crossover offering is involved (e.g., conversion between TWX and Telex), both services involved in such crossover, and the crossover offering itself, must have been offered prior to the enactment of the Act. *Id.*

43. See *supra* note 37.