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Federal Communications Commission (F.C.C.)

Memorandum Opinion and Order
IN THE MATTER OF INDEPENDENT DATA COMMUNICATIONS MANUFACTURERS ASSOCIATION, INC.
Petition for Declaratory Ruling That AT&T's InterSpan Frame Relay Service Is a Basic Service; and
AMERICAN TELEPHONE AND TELEGRAPH COMPANY
Petition for Declaratory Ruling That All IXCs be Subject to the Commission's Decision on the IDCMA Petition

DA 95-2190

Adopted:
October 16, 1995

Released:
October 18, 1995

***13717** By the Chief, Common Carrier Bureau:

I. INTRODUCTION

1. On November 28, 1994, the Independent Data Communications Manufacturers Association, Inc. (IDCMA) filed a petition for declaratory ruling that AT&T's InterSpan Frame Relay Service (InterSpan) is a basic transmission service, subject to the tariffing and other requirements of Title II of the Communications Act of 1934, as amended (Act).[FN1] Thereafter, on December 5, 1994, AT&T filed a separate petition for declaratory ruling that the Commission's decision regarding InterSpan should apply to all other interexchange carriers' (IXC) frame relay services.[FN2] For the reasons stated below, we conclude that frame relay service is a basic service in accordance with the Commission's Rules and precedent. In addition, we conclude that AT&T provides both basic frame relay service and an enhanced service incorporating an underlying basic frame relay service. Accordingly, consistent with the Commission's prior decisions: (1) AT&T must provide the basic frame relay service under tariff, whether or not it provides that service in conjunction with enhanced protocol conversion, within 60 days of the effective date of this order; and (2) all other common carriers owning transmission facilities (facilities-based) used to provide basic frame relay service or an enhanced service in conjunction with an underlying basic frame relay service must file tariffs for the basic frame relay service.

II. BACKGROUND

2. The issue before us is whether AT&T and certain other carriers must offer frame relay service as a regulated telecommunications service, in accordance with the requirements of Title II of the Act and the Commission's Computer II and Computer III proceedings.[FN3] Although the Commission has addressed general packet-switching technology in the past, frame relay service is a recent offering. We discuss below the development of this technology, and the historical treatment of data communications services under the Commission's Computer II and Computer III proceedings.

A. Basic Data Communications and Protocol Processing

3. In contrast to voice communications, data communications between computers is generally thought of as “bursty” traffic. That is, rather than a continuous stream of data, computers communicate in bursts of data. Packet-switched networks were developed to take advantage of this characteristic of data communications. With packet switched data transmission, many users can share a single digital transmission channel. Each user's data are divided into small discrete packets.[FN4] Each packet con-

tains a header with address information that enables the network to route the packet to the proper destination. Packets belonging to one user are sent through the network separately, then reassembled at their destination. During transmission, packets belonging to one user can be interspersed among packets belonging to other users, allowing the channel to be more fully occupied than it would be if it were dedicated to a single user.

4. The synchronous X.25 interface protocol has traditionally been the most widely recognized protocol used to communicate over packet-switched networks.[FN5] Much of the ***13718** existing terminal equipment that customers use to originate and terminate data communications between their computers and other computers, however, historically has not been designed to support the X.25 protocol. This equipment often employs an asynchronous protocol, which is used to originate and terminate traffic over ordinary voice communications lines. Thus, data communicated under asynchronous protocols must be converted to data employing synchronous X.25 protocol in order to be transmitted over a packet-switched network. Moreover, as the number of networking and terminal protocols has increased over time, so has the need to provide conversion among these protocols.

5. Prior to its divestiture AT&T offered neither packet switching services nor protocol conversion. Independent vendors of packet switched communications services known as value-added-network service providers (VANs)[FN6] acquired common carrier facilities from AT&T and added "value" by providing such packet services.[FN7] The VANs resold the underlying transport services in conjunction with the packet switching services. Today, AT&T, the BOCs, and many other service providers (both facilities-based carriers and VANs) offer packet switched and protocol conversion services, such as asynchronous-to-X.25 conversion.

B. Frame Relay Technology

6. Frame relay is a relatively new, high-speed packet-switching technology used to communicate digital data between, among other things, geographically dispersed local area networks (LANs). In addition, frame relay technology often serves as the intermediary format for data traveling between different computer systems employing different communications protocols.

7. As the term suggests, frame relay networks communicate "frames" containing digital data. The format of a frame-defined by a specific interface protocol-consists of a beginning "flag," a "header," a variable length data field, a "trailer," and an ending "flag." The header contains routing and congestion control information, while the trailer holds an error control sequence enabling detection of errors within frames. Unlike the slower X.25 packet switching protocol, frame relay switches do not store frames until a positive acknowledgement is received from a destination switch. When a destination switch receives a frame with errors, it simply discards the frame, relying on higher-layer protocols of intelligent customer premises equipment (CPE) to note the omission and take corrective action by rerequesting transmission of the packet.[FN8] This streamlined operation allows frame relay networks to operate at significantly higher speeds than X.25 networks.

8. In a typical frame relay application, a LAN is linked to a device known as a "router" on the customer premises.[FN9] If the router supports frame relay protocol, it is connected to an access link which carries the frame relay traffic to a central office port. If the router does not support frame relay, a frame relay assembler/disassembler (FRAD) is located on a customer premise between the router and access link to convert the data transmitted from the router to frame relay format.[FN10] The central office frame relay switch establishes a permanent virtual circuit (PVC) connecting the access link to a communications line linking one switch to another. While the access link may operate at speeds from 56 to over 1,000 kilobits per second (kbs), the data relay rate across the network is limited by the transmission rate of the PVC, which varies according to

customer needs and budgets. The customer contracts with the service provider for a specified information transmission rate. If the customer attempts to transmit data at speeds that exceed the agreed-upon rate, the network tries to accommodate the higher rate if capacity is available. If the network is unable either to perform the transmission or temporarily buffer the data, the network discards excess frames beyond the agreed-upon rate. As with frames containing errors, frames discarded in this fashion must be tracked by CPE.

C. AT&T's InterSpan Frame Relay Service

9. According to AT&T's InterSpan Interface Specification, the "core aspects" of its InterSpan Service are: (1) provision of bidirectional frame transfer; (2) maintaining the frames across the network in the same sequence in which they were delivered to the network; (3) detection of errors; (4) transportation of user data transparently; and (5) no acknowledgement of frames (in contrast with X.25 protocol).[FN11] In addition to these core attributes, InterSpan provides protocol conversion for CPE that does not have a frame relay interface. [FN12]

10. Thus, the "core" of InterSpan service is the provision of frame transmission in the frame relay format between the point where a customer's data enters the public switched network and the point where it leaves the network. For those customers whose CPE is not equipped to provide the network with frame format data, AT&T provides a variety of protocol conversion functions permitting communication with the frame relay network. Some conversion ***13719** functions are performed at both ends of the network. That is, a customer may provide data to the network in a foreign protocol, the network converts the data into frame relay protocol, transmits the data across the network, and then converts the data back to the original foreign protocol before delivering the data out of the network. Other conversions take place only at the originating end of the transmission, or only at egress from the network.

D. Regulatory Framework

11. The regulatory treatment of data communications services is governed by the basic-enhanced service framework established in the Commission's Computer II proceeding.[FN13] In that proceeding, the Commission described basic communications services as providing "pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer-supplied information." [FN14] The use of packet switching and error control techniques "that facilitate the economical, reliable movement of [such] information [do] not alter the nature of the basic service."[FN15] Thus, for example, in subsequent decisions the Commission has determined that packet-switched networks following X.25 protocols provide a basic transport service under Commission Rules.[FN16]

12. In contrast, section 64.702(a) of the Commission's Rules defines enhanced services in pertinent part 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."[FN17] Thus, the Commission has traditionally treated carrier provision of protocol conversion (such as asynchronous-to-X.25 conversion) as an enhanced, and thus unregulated, service.[FN18]

13. Under the Commission's Computer II decision, those carriers that own common carrier transmission facilities and provide enhanced services must unbundle basic from enhanced services and offer transmission capacity to other enhanced service providers under the same tariffed terms and conditions under which they provide such services to their own enhanced service operations.[FN19] Section 202 of the Act also prohibits a carrier from discriminating unreasonably in its provision of basic services.[FN20] In addition, the Commission's Computer III decisions subject certain carriers to further unbundling requirements in offering an en-

hanced service.[FN21]

14. In the Computer III decisions, however, the Commission reaffirmed earlier decisions concluding that three types of protocol processing are not enhanced services within the meaning of the Commission's rules.[FN22] First, the Commission reaffirmed that the enhanced services definition applies only to end-to-end communications between or among subscribers.[FN23] Thus, communications between a subscriber and the network itself (e.g. for call setup, call routing, and call cessation) are not considered enhanced services.[FN24]

15. Second, the Commission determined that protocol conversions necessitated by the introduction of new technology are also outside the ambit of the enhanced services definition. This circumstance arises when innovative basic network technology is introduced into the network in a piecemeal fashion, and conversion equipment is used in the network to maintain compatibility with CPE.[FN25]

16. Third, the Commission reaffirmed that internetworking protocol conversions-those conversions taking place solely within the network that result in no net conversion between users-should be treated as basic services.[FN26] This final exemption applies in situations where a carrier uses the protocol conversions merely to facilitate provision of an overall basic service.[FN27] Thus, in a case where a carrier converts from X.25 to X.75 formatted data at the originating end within the network, and then converts the data back from X.75 to X.25 at the terminating end, the protocol conversion is treated as facilitating a basic X.25 service, rather than enhanced protocol conversion.[FN28] Accordingly, a carrier service providing one of these three exempted forms of protocol conversion is engaged in the provision of a basic service.

17. In the Computer III proceedings the Commission reaffirmed its treatment of protocol processing (except for the three exemptions) as an enhanced service. The Commission reasoned, in part, that deciding otherwise would remove the enhanced component of VAN services, thus eliminating their non-carrier status under what is termed the "contamination" theory and subjecting them to Title II regulation.[FN29]

***13720** 18. Under the contamination theory, VANs that offer enhanced protocol processing services in conjunction with basic transmission services have historically been treated as unregulated enhanced service providers. Under this theory, the enhanced component of their offerings is viewed as "contaminating" the basic component, and as a result, the entire offering is considered enhanced.[FN30]

III. IDCMA PETITION

19. IDCMA's petition requests that we declare AT&T's InterSpan service to be a basic data transport service that AT&T must offer under tariff. IDCMA argues that the protocol processing services associated with InterSpan-including conversion of customer data to frame relay protocol and asynchronous-to-X.25 conversions-are separate and distinct from the InterSpan service.[FN31] IDCMA notes that AT&T's rate structure highlights the fact that the frame relay and protocol conversion services are distinct offerings. AT&T's rates for frame relay service consist of flat-rate charges, assessed monthly. Protocol conversion services, in contrast, are charged on a per-minute basis.[FN32] IDCMA further contends that only ten percent of AT&T's frame relay customers also purchase protocol conversion services.[FN33]

20. IDCMA asserts that InterSpan provides a basic transmission service for customers providing the network with data already in frame relay protocol. Thus, IDCMA argues that InterSpan does not involve alteration of the format, content, code, or protocol of the subscriber's information because data enter and exit the network in frame relay protocol.[FN34] IDCMA analogizes InterSpan service to AT&T's basic packet switching service, which, according to IDCMA, involves even greater data manipulation than frame relay services.[FN35] ID-

CMA points out that several Bell Operating Companies (BOCs) have filed tariffs for basic frame relay services.[FN36]

21. IDCMA also argues that the "contamination" theory purportedly exempting VANs from Title II regulation is inapplicable to AT&T because the Commission has never applied it to AT&T.[FN37] Finally, IDCMA states that grant of the requested declaratory relief is in the public interest because AT&T's failure to tariff frame relay services subjects individual customers to the possibility of unjust, unreasonable, or discriminatory rates, and impairs competition in the CPE market by allowing AT&T to bundle frame relay service and CPE.[FN38]

22. For the reasons set forth below, we conclude that frame relay service is a basic service. We further find that AT&T's frame relay service in particular, underlying its InterSpan service, is a basic service that AT&T must unbundle from its enhanced offering. Finally, we conclude that AT&T is providing frame relay services on a common carrier basis, rather than as private carriage.

A. Frame Relay Service is a Basic Service

1. Comments

23. US West and Southwestern Bell state that they provide a basic frame relay service under tariff.[FN39] Motorola agrees with IDCMA that AT&T's frame relay service is provided by equipment separate and distinct from that performing protocol processing and, consequently, frame relay service without protocol processing should be treated as a regulated service.[FN40]

24. AT&T and BT North America (BTNA) contend that frame relay is an enhanced service because the discard function of frame relay service alters the data sent by the customers of frame relay service such that the received data are "different" from the transmitted data.[FN41] Similarly, AT&T, BTNA, and Home Depot assert that by marking certain frames "discard eligible" during transmissions that exceed agreed-upon rates, the network changes the content of the data sent by the customer, thereby providing another basis for concluding that frame relay service is enhanced.[FN42] BTNA further contends that modification of a frame location code in the frame's header also constitutes an enhancement.[FN43]

25. Motorola disputes the claim that the discard-related features of frame relay service render the service enhanced.[FN44] IDCMA similarly challenges AT&T's assertions regarding frame discards, arguing that higher level protocols ensure the arrival of customer data that is discarded. BTNA responds to IDCMA's argument by suggesting that the user's CPE, which is not part of the network, detects the discarded frames, and thus frame relay services modify user data unlike packet switched services (where equipment within the network detects erroneous frames and orders retransmission).[FN45]

***13721** 26. AT&T and other commenters also assert that characterizing frame relay service as basic would hinder development of this and other new technologies, such as asynchronous transfer mode (ATM).[FN46] A number of frame relay customers supplied comments urging the Commission to deny IDCMA's petition, contending that granting the petition would result in the loss of flexibility, and that the market for frame relay services was already competitive.[FN47] United Technologies expressed concern over the ramifications of granting the petition on existing contracts for frame relay, and the impact on other IXCs.[FN48]

27. The Ad Hoc Users Group urges the Commission to require carriers with market power to unbundle and tariff the basic elements of frame relay service, while allowing the carriers to purchase those basic elements for use as part of an integrated, enhanced, untariffed frame relay offering.[FN49]

2. Discussion

28. Under section 203 of the Act, common carriers are required to tariff their interstate communica-

tions services. Six of the seven BOCs currently maintain or have indicated they will file tariffs for their basic frame relay services provided without protocol processing. Those BOCs have filed Computer III Comparably Efficient Interconnection (CEI) Plans for their enhanced protocol processing services that use underlying basic frame relay service.[FN50] In contrast, AT&T makes a series of arguments challenging the basic nature of frame relay service. We conclude, however, that frame relay service is a basic service in accordance with the Commission's Rules and precedent.

29. Under section 64.702(a) of the Commission's Rules, frame relay service constitutes an enhanced service if it "employ[s] computer processing applications that act on the ... content ... of the subscriber's transmitted information, [or] provide[s] the subscriber ... different, or restructured information."AT&T contends that modifications to the frame header that occur during network transmission-such as changes in discard eligibility or location code-render the customer data that is delivered to the terminating customer through its frame relay service "different" from the data transmitted by the originating customer. We disagree.

30. Regardless of changes made to the frame header, the customer's data contained within the frame are not modified in any way as they travel through the network and arrive intact. Moreover, changes to the header information such as the location code, are in some instances responsible for the carriage of the customer's data through the network to the proper termination point and, hence, are part of a basic transmission service. Accordingly, we conclude that modifications to the frame header, without more, fail to alter the customer's data in a manner that results in the delivery of "different" data to the termination point.

31. As discussed above, however, frame relay networks may discard entire frames of customer data if errors are detected in the frame or if the customer's transmission rate exceeds the maximum rate permitted under its agreement. In contrast to X.25 transmission networks, the customer's CPE, not the network, must detect and compensate for such discards. Thus, AT&T and others assert that the customer receives "different" or "restructured" information within the meaning of section 64.702 if the network discards eligible frames in frame relay networks.

32. We conclude, however, that this is a misreading of the Rule. The functionality that AT&T relies on to argue that the data are "different" is designed to facilitate the overall transparency and efficiency of the frame relay service. Ultimately the data on the receiving end is thesame as what is transmitted. Thus, discarding data is not a "service" rendered to a customer within the meaning of section 64.702.

33. It is important to note that the only frames that are normally discard eligible (other than frames containing errors) are those transmitted in excess of the contracted-for data rate. Thus, the network normally delivers frames at the agreed-upon data rate without omission. It is only when the customer exceeds the agreed-upon rate that frames may be discarded, and only then if excess capacity is unavailable. Thus, the discard feature of frame relay networks allows the network to deliver unaltered customer data at rates exceeding minimum, contracted-for transmission rates. The use of such a feature to facilitate the economical, reliable movement of information in this manner does not alter the nature of the basic service.[FN51] Nor do we view this difference between existing basic packet-switched services (such as AT&T's ACCUNET Packet Service) and ***13722** frame relay technology as sufficient to justify disparate treatment under Commission Rules. As a result, we conclude that the discard feature does not render the frame relay service an enhanced service under the Commission's rules.

34. We, therefore, find that frame relay service offers a transmission capability that is virtually transparent in terms of its interaction with customer-supplied data. The service is designed to transport customer data transparently through the network, and the service is already provided pursuant to tariff in

this manner by all but one of the BOCs.[FN52] Accordingly, we decline to conclude that frame relay is an enhanced service.

35. The provision of frame relay as a basic service, and the availability of basic digital services in general, are consistent with policies established in Computer II and Computer III, and is in the public interest. Treating frame relay as a basic service provides competitive access to the underlying basic service of facilities-based carriers who are often better able to implement new communications technologies. This access allows competing enhanced service providers to more easily enter and compete in the market for such technologies. Thus, under the Computer II and Computer III decisions, competitive access has promoted the public interest by accelerating the development of emerging technologies such as frame relay.

B. AT&T Provides a Basic Frame Relay Service

1. Comments

36. AT&T and BTNA argue that because protocol conversion is an integral part of AT&T's frame relay service offering, InterSpan service should be classified as an enhanced service.[FN53] AT&T states that its separate protocol conversion service-Information Access Service (IAS)-converts data from asynchronous or SLIP protocols to X.25 protocol, and not to frame relay protocol as IDCMA contends. AT&T claims that the conversion from X.25 to frame relay protocol is a part of its frame relay service, and that this capability makes its frame relay service an enhanced service.[FN54]

37. Moreover, AT&T contends that the contamination theory applies to its frame relay services, rendering the entire service enhanced and outside the bounds of Title II of the Act.[FN55] AT&T claims that the theory applies to AT&T in the same way that it applies to other enhanced service providers.[FN56]

38. IDCMA asserts that AT&T possesses sufficient market power in the provision of frame relay service (IDCMA estimates a 35% market share) to warrant regulation.[FN57] IDCMA also claims that requiring AT&T to tariff its frame relay service will benefit consumers by increasing competition in the CPE market.[FN58] Likewise, Motorola contends that requiring AT&T to tariff frame relay will prevent AT&T from leveraging its unique position as the dominant domestic interexchange carrier and a major manufacturer of data networking equipment to distort the markets for CPE, frame relay and associated services, and reseller/system integrator services.[FN59]

39. US West argues that the contamination theory is a flawed vehicle for dealing with the issues raised in the IDCMA petition.[FN60] US West characterizes the theory as a contradiction, allowing certain entities to avoid regulation by combining basic and enhanced services, which is precisely what the Computer II decision forbids.[FN61] US West states that any attempt to revive the theory must treat the division between basic and enhanced services uniformly for all carriers, and that the current theory would not survive judicial review.[FN62] Thus, US West states that all carriers offering enhanced services must do so with the underlying transmission service offered pursuant to tariff.[FN63]

2. Discussion

40. We conclude that AT&T provides a basic frame relay service (alone or bundled with enhanced protocol processing) that must be offered under tariff. According to the InterSpan Interface Standard, AT&T provides transport of customer data “transparently” across the AT&T frame relay network.[FN64] IDCMA argues (and AT&T does not refute) that the vast majority of AT&T's frame relay customers terminate to, and receive from, the network frame relay data that do not require conversion to frame relay protocol. Since in these cases AT&T's frame relay service “provides a pure transmission capability in a communication's path,” without any protocol conversion, we find that this is a basic service.[FN65] We again note that six

Bell Operating Companies (BOCs) treat frame relay as a basic transport service.[FN66]

41. The assertion by AT&T and other commenters that the enhanced protocol conversion capabilities associated with AT&T's InterSpan service bring it within the definition of an enhanced service is beside the point. Under the Commission's Computer II and Computer III decisions, AT&T must unbundle the basic frame relay service, regardless ***13723** of whether the InterSpan offering also provides a combined, enhanced protocol conversion and transport service for those customers who require it.[FN67]

42. We also reject AT&T's contention that the contamination theory applies to its frame relay service and renders its entire InterSpan service offering an enhanced service. To date, the Commission has not applied the contamination theory to the services of AT&T or any other facilities-based carrier. Indeed, the Commission rejected that alternative in Computer III and other proceedings.[FN68]

43. The two orders cited by AT&T in support of applying the contamination doctrine to its services are inapposite. They do not require or even allude to application of the contamination doctrine to AT&T. The footnote cited by AT&T in the Async/X.25 Waiver Order contains a general definition of VANs.[FN69] Nothing in the footnote indicates that AT&T is included within the definition of a VAN. The footnote specifically defines VANs as service providers that acquire common carrier facilities from other carriers, and thus do not own facilities like AT&T. The second order cited by AT&T is a Commission order approving AT&T's amendment to its CEI plan, which provides customers with basic dial-out capabilities from AT&T's enhanced voice messaging service.[FN70] This order, however, refutes, rather than supports AT&T's interpretation of the contamination theory. The order approves the amendment because AT&T satisfies all of the CEI requirements, ensuring interconnection to the underlying basic service.[FN71] If the contamination theory applied to AT&T, as it argues, AT&T would not have had to satisfy any CEI requirements for the basic service.[FN72]

44. Moreover, application of the contamination theory to a facilities-based carrier such as AT&T would allow circumvention of the Computer II and Computer III basic-enhanced framework. AT&T would be able to avoid Computer II and Computer III unbundling and tariffing requirements for any basic service that it could combine with an enhanced service. This is obviously an undesirable and unintended result.[FN73]

45. Thus, in accordance with the Commission's previous decisions, we conclude that the contamination theory does not apply to AT&T, and we do not apply it to AT&T in this order. AT&T cannot avoid its Computer II and Computer III obligations under the auspices of the contamination doctrine, which applies only to nonfacilities-based service providers.

46. AT&T is free to continue its practice of packaging CPE and enhanced protocol processing with the basic frame relay service (purchased under tariff), so long as the underlying basic service is separately offered under tariff. Thus, AT&T may maintain its flexible approach to offering frame relay services. AT&T must file a tariff, however, for basic frame relay service within 60 days of the effective date of this order. We leave the issues of existing AT&T frame relay contracts and the specifics of the required tariff to the tariff-review process.

C. AT&T Acts as a Common Carrier in Offering Frame Relay Service

1. Comments

47. AT&T and EMI argue that because frame relay service providers do not hold themselves out indiscriminately to provide service, their provision of this service is a contract under private carriage, not a common carrier offering subject to the requirements of Title II.[FN74] AT&T contends that frame relay customers have unique needs, and that a long negotiation process is required to craft a custom

solution for each customer.[FN75]

48. Home Depot, echoing AT&T's claims, asserts that frame relay service providers devote substantial time to addressing the specific requirements of each customer.[FN76] Compuserve argues that it deliberately offers its frame relay service on a private carrier basis, consistent with judicial and Commission precedent.[FN77] Compuserve further states that it tailors its specialized offering to individual customer needs.[FN78] The Ad Hoc Users Committee suggests that frame relay services can be provided on either a common or private carriage basis by different carriers.[FN79]

49. IDCMA and Motorola assert that AT&T is under a legal obligation to provide a basic, wireline transport service like frame relay on a common carrier basis.[FN80] Motorola contends that the Commission has already rejected separation of AT&T's service offerings into common and private carriage, opting for contract carriage instead.[FN81]

2. Discussion

50. Generally, common carrier status attaches to carriers undertaking to provide a service indifferently to all potential ***13724** customers.[FN82] In contrast, private carriage is characterized by a carrier choosing its clients on an individual basis and determining in each particular case whether and on what terms to serve.[FN83]

51. In arguing that its frame relay services are provided on a private carriage basis, AT&T emphasizes the custom nature of each user's frame relay "solution." As discussed in the Background section above, customers contract for frame relay services on the basis of complex technical requirements, including various measures of switching and transmission speed. In addition, carriers currently providing the service on a nontariffed basis often bundle customer premises equipment and optional protocol conversion services with the underlying basic service.[FN84]

52. Complex communications technologies such as frame relay blur the line between common and private carriage. If the analysis of where to draw that line centered solely on the complexities of the technology itself, carriers could argue that virtually any technically complicated communications service-requiring customer-specific solutions-is provided through private carriage. A carrier cannot vitiate its common carrier status merely by entering into private contractual relationships with customers.[FN85] If, however, the analysis centers on the carrier's indifference to the identity and requirements of a customer-where the carrier merely tailors the technology to those requirements-a different result is obtained. Our analysis centers not on one or the other of these considerations, but addresses both factors in determining the "quasi-public character"[FN86] of the service offering. That is, the extent of customization required for a particular user may indicate that a carrier is not indifferent in providing the service.

53. For some time now, however, AT&T has provided, pursuant to tariff, other complex packet-switched services on a common carrier basis.[FN87] These packet services can be provided through contract carriage pursuant to the Commission's Competitive Interexchange Order,[FN88] providing AT&T with the flexibility to negotiate custom service arrangements that meet users' particular needs. Neither AT&T nor other commenters have shown that the differences between these other existing packet services and frame relay services justify the treatment of AT&T's frame relay offering as a private carriage offering.

54. In addition, the Frame Relay Interconnection Workshop recently released guidelines for negotiating test and acceptance procedures for frame relay interconnection.[FN89] The same organization is due to release uniform procedures for ordering frame relay interconnection in March 1996.[FN90] Such standardization indicates that frame relay services are being offered to customers on an increasingly indifferent basis. Moreover, according to IDCMA, AT&T supplies frame relay services to

roughly 35% of the market,[FN91] indicating that AT&T's frame relay service fits the needs of a large segment of customers. Therefore, we conclude that AT&T's basic frame relay service is a communications service offered on a common carrier basis. Accordingly, AT&T must unbundle that service and offer it pursuant to tariff.

IV. AT&T'S PETITION

55. AT&T requests in its petition that if the Commission finds that AT&T's frame relay service is a basic service subject to tariff, we declare that this ruling is equally applicable to the frame relay services offered by all other IXCs, including MCI, Sprint, and Wiltel. AT&T argues that because other IXCs offer frame relay services based on the same protocol standards as AT&T uses, these other IXC services should be governed by our decision regarding InterSpan.[FN92] Further, AT&T contends that, in accordance with the Supreme Court's decision in MCI v. AT&T,[FN93] the tariff filing requirements of section 203 of the Act apply to such other IXCs when they offer basic services.[FN94]

A. Comments

56. NYNEX concurs with AT&T's request and urges the Commission to apply its determination regarding frame relay services to all carriers, not just IXCs.[FN95] Similarly, Southwestern Bell contends that a Commission decision requiring only certain carriers to provide frame relay under tariff would give other carriers a competitive advantage, and would be arbitrary and capricious under the Administrative Procedures Act.[FN96]

57. Compuserve argues that even if the Commission finds that AT&T's frame relay service is a basic service, Compuserve's services (and those of other similarly situated VANs) are enhanced under the contamination theory.[FN97] ***13725** Compuserve and EMI contend that the theory applies to their frame relay services because protocol processing is typically performed as an integral part of those services.[FN98] Compuserve estimates that 90% of its customers are provided protocol conversions to frame relay format.[FN99] Finally, Compuserve urges the Commission not to refine the contamination theory in this proceeding because many VANs are not participating.[FN100]

58. As noted above, US West contends that the contamination theory is a flawed vehicle for dealing with the issues raised in the IDCMA petition.[FN101] Thus, US West states that all carriers offering enhanced services must do so with the underlying transmission service offered pursuant to tariff.[FN102]

B. Discussion

59. The requirements established in the Computer II proceeding are clear:

> [T]hose carriers that own common carrier transmission facilities and provide enhanced services, but are not subject to the separate subsidiary requirement, must acquire transmission capacity pursuant to the same prices, terms, and conditions reflected in their tariffs when their own facilities are utilized. Other offerors of enhanced services would likewise be able to use such a carrier's facilities under the same terms and conditions.[FN103]

Thus, having applied Commission Rules and found that frame relay service is a basic service, we conclude that, pursuant to the Computer II decision, all facilities-based common carriers providing enhanced services in conjunction with basic frame relay service must file tariffs for the underlying frame relay service and acquire that tariffed service in the same manner as resale carriers. This requirement applies independently of any additional requirements (such as CEI) under the Computer III proceedings.[FN104]

60. Some commenters argue that VANs must also file tariffs for basic frame relay services they take from facilities-based carriers in order to provide value added enhanced services. In the Computer III decision the Commission concluded that VANs were not required to file tariffs. Those parties commenting on the regulatory treatment of VANs in essence seek a reconsideration of the Commission's

earlier decision. This issue is beyond the scope of this proceeding, and we decline to revisit that decision in this proceeding.

V. Conclusion

61. We conclude that frame relay service is a basic service, and that AT&T must tariff this basic frame relay service whether or not it is provided in conjunction with enhanced protocol conversion. Thus, we grant IDCMA's petition to the extent discussed herein and require AT&T to unbundle and file with the Commission a tariff for basic frame relay service within 60 days of the effective day of this order. We also grant AT&T's petition to the extent that we require all other facilities-based common carriers to tariff their basic frame relay service.

VI. Ordering Clauses

62. Accordingly, IT IS ORDERED, pursuant to Section 5(d) of the Administrative Procedures Act, 5 U.S.C. § 554, and Section 1.2 of the Commission's Rules, 47 C.F.R. § 1.4, that the petition for declaratory ruling filed by the Independent Data Communications Manufacturers Association, Inc. IS GRANTED to the extent discussed herein.

63. IT IS FURTHER ORDERED, pursuant to Section 5(d) of the Administrative Procedures Act, 5 U.S.C. § 554, and Section 1.2 of the Commission's Rules, 47 C.F.R. § 1.4, that the petition for declaratory ruling by American Telephone and Telegraph Company IS GRANTED to the extent discussed herein.

64. IT IS FURTHER ORDERED that AT&T and all other facilities-based common carriers providing basic frame relay service file a tariff, in accordance with Commission Rules, for frame relay service within 60 days of the effective date of this order.

FEDERAL COMMUNICATIONS COMMISSION

Kathleen M.H. Wallman
Chief
Common Carrier Bureau

FN1. IDCMA Petition for Declaratory Ruling DA 94-1411 (Nov. 28, 1994) [hereinafter IDCMA Petition].

FN2. AT&T Petition for Declaratory Ruling (Dec. 5, 1994) [hereinafter AT&T Petition]. The IDCMA and AT&T petitions were consolidated for comment. Public Notice, Pleading Cycle Established for Comments on Petitions of IDCMA and AT&T for Declaratory Ruling Regarding Frame Relay Services, DA 94-1411 (Dec. 14, 1994).

FN3. Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision, 77 FCC2d 384 (1980) [hereinafter Computer II Final Order], recon., 84 FCC2d 50 (1980), further recon., 88 FCC2d 512 (1981), aff'd sub nom., Computer and Communications Indus. Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 9389 (1983); Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), Phase I, Report and Order, 104 FCC2d 958 (1986), modified on recon., 2 FCC Rcd 3035 (1987), further recon., 3 FCC Rcd 1135 (1988), second further recon., 4 FCC Rcd 5927 (1989); Phase II, Report and Order, 2 FCC Rcd 3072 (1987) [hereinafter Computer III Phase II Order], recon., 3 FCC Rcd 1150 (1988) [hereinafter Computer III Phase II Recon Order], further recon., 4 FCC Rcd 5927 (1989), rev'd on other grounds sub nom., California v. FCC, 905 F.2d 1217 (9th Cir. 1990), on remand, 6 FCC Rcd 7571 (1991), vacated in part and remanded, California v. FCC, 39 F.3d 919 (9th Cir. 1994).

FN4. A packet is a block of binary digits that is communicated through a network as an integrated unit.

FN5. “Protocol” refers to the ensemble of operating disciplines and technical parameters that must be observed and agreed upon by subscribers and carriers in order to permit the exchange of information among terminals interconnected in a particular communications network. A subscriber's digital transmission necessarily consists of two compon-

ents: information-bearing symbols and protocol-related symbols. The information-bearing symbols constitute a subscriber's message. The protocol-related symbols initiate various transmission control functions and also define the format in which the information-bearing symbols appear within the composite data stream. “Protocol processing” is a generic term, which subsumes “protocol conversion” and refers to the use of computers to interpret and react to the protocol symbols as the information contained in a subscriber's message is routed to its destination. “Protocol conversion” is the specific form of protocol processing that is necessary to permit communications between disparate terminals or networks.

FN6. VANs are not facilities-based carriers, but rather purchase transmission facilities (i.e. the transmission lines linking switches together) from facilities-owning carriers.

FN7. Petitions for Waiver of Section 64.702 of the Commission's Rules (Computer II), 100 FCC2d 1057, 1058 n.2 (1985) [hereinafter Asynch/X.25 Order].

FN8. Protocols like frame relay and X.25 are often described through comparison to the International Standards Organization's Open Systems Interconnection (OSI) Reference Model, which includes “physical,” “link,” and “network” bottom layers. Frame relay operates in only the bottom two physical and link layers, which do not allow for network recognition and correction of missing frames. X.25, however, uses all three bottom layers, including the network layer.

FN9. A router is a device that forwards frames within and among networks.

FN10. In both cases, network channel terminating equipment (NCTE) provides an appropriate interface between the router or FRAD and the access link.

FN11. AT&T InterSpan Frame Relay Service Interface Specification 5, Issue 1.0, April 2, 1992.

FN12. Id. at 6.

FN13. Computer II Final Order, 77 FCC2d 384 (1980).

FN14. Id. at 420.

FN15. Id.

FN16. Application of AT&T for Authority under Section 214 of the Communications Act of 1934, as amended, to Install and Operate Packet Switches at Specified Telephone Company Locations in the United States, 94 FCC2d 48, 55-57 (1983).

FN17. 47 C.F.R. § 67.702(a) (emphasis added).

FN18. SeeAsynch/X.25 Order, 100 FCC2d 1057.

FN19. Computer II Final Order, 77 FCC2d at 475; Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order on Recon., CC Docket No. 90-132, para. 40 (rel. Feb. 17, 1995).

FN20. 47 U.S.C. § 202.

FN21. See, e.g.,Computer III Phase II Order, 2 FCC Rcd 3072 (1987); see alsoFiling and Review of Open Network Architecture Plans, Memorandum Opinion and Order, 4 FCC Rcd 2449, 2453-54 (1988) (approving AT&T's plan involving a basic packet switching service underlying an enhanced protocol processing service); AT&T CEI Plan for Protocol Conversion and Storage Services with Packet Switching Services, Memorandum Opinion and Order, 5 FCC Rcd 651 (1990). The Commission's Interexchange Order also discusses AT&T's CEI requirements for enhanced services utilizing basic services.Competition in the Interstate Interexchange Marketplace, Report and Order, 6 FCC Rcd 5880 (1991) [hereinafter Interexchange Order].

FN22. Computer III Phase II Order, 2 FCC Rcd 3072.

FN23. Id. at 3081.

FN24. Id.

FN25. Id. at 3082.

FN26. Id.

FN27. Id.

FN28. SeePetitions for Waiver of Section 64.702 of the Commission's Rules and Regulations to Provide Certain Types of Protocol conversion Within Their Basic Network, Memorandum Opinion and Order, FCC 84-561 (Nov. 28, 1984).

FN29. Computer III Phase II Order, 2 FCC Rcd at 3080.

FN30. Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), Supplemental Notice, FCC 86-253, para. 43 n.52 (rel. June 16, 1986) [hereinafter Computer III Supplemental Notice].

FN31. IDCMA Petition at 16; IDCMA Reply Comments at 5 (Feb. 13, 1995).

FN32. IDCMA Petition at 16.

FN33. Id.

FN34. Id. at 18.

FN35. Id. at 19-20.

FN36. Id. at 20; IDCMA Motion for Leave to File Supplemental Comments/Supplemental Comments 16 (June 13, 1995) [hereinafter IDCMA Supplemental Comments].

FN37. Id. at 21-23.

FN38. Id. at 24.

FN39. US West Comments on IDCMA Petition for Declaratory Ruling at 2 (Jan. 23, 1995) [hereinafter US West Comments]; Southwestern Bell Comments on IDCMA Petition for Declaratory Ruling at 2 (Jan. 23, 1995) [hereinafter Southwestern Bell Comments]. US West does not provide protocol conversion as part of its basic frame relay service.

FN40. Motorola Reply Comments on IDCMA Petition for Declaratory Ruling at 4-5 (Feb. 13, 1995) [hereinafter Motorola Reply Comments].

FN41. AT&T Opposition to IDCMA Petition for Declaratory Ruling at 12 (Jan. 23, 1995) [hereinafter AT&T Opposition]; BT North America Reply Comments on IDCMA Petition for Declaratory Ruling at 4-5 (Feb. 13, 1995) [hereinafter BTNA Reply Comments].

FN42. AT&T Opposition at 12; BTNA Reply Comments at 4-5; Home Depot Comments on IDCMA Petition for Declaratory Ruling at 8 (Feb. 15, 1995) [hereinafter Home Depot Comments].

FN43. BTNA Reply Comments at 5.

FN44. Id. at 6.

FN45. BT North America Motion for Leave to File Supplemental Comments/Supplemental Comments at 6 (July 12, 1995) [hereinafter BTNA Supplemental Comments].

FN46. AT&T Opposition at 14; Home Depot Comments at 7; EMI Opposition to IDCMA Petition for Declaratory Ruling at 6-8 (Jan. 23, 1995) [hereinafter EMI Opposition]; EMI Reply Comments on IDCMA Petition for Declaratory Ruling at 5 (Feb. 13, 1995) [hereinafter EMI Reply Comments]; BTNA Reply Comments at 12; Ad Hoc Telecommunications Users Committee Reply Comments on IDCMA Petition for Declaratory Ruling at 3-7 (Feb. 13, 1995) [hereinafter Ad Hoc Reply Comments].

FN47. Comdisco Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 16, 1995); PPG Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 9, 1995); National Semiconductor Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 10, 1995); AMP Comments on

IDCMA Petition for Declaratory Ruling at 1 (Feb. 9, 1995); Welch Allyn Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 10, 1995); Bemis Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 8, 1995); Textron Comments on IDCMA Petition for Declaratory Ruling at 1 (Feb. 9, 1995); Home Depot Comments at 2-4.

FN48. United Technologies Comments on IDCMA Petition for Declaratory Ruling at 2 (Feb. 15, 1995).

FN49. Ad Hoc Users Comments at 11.

FN50. Amendment, The Bell Atlantic Companies Offer of CEI to Providers of Protocol Conversion Service (Mar. 13, 1995); Informational Amendment, BellSouth Plan for Comparably Efficient Interconnection for Synchronous Protocol Processing Services (Mar. 13, 1995); Pacific Bell and Nevada Bell Comparably Efficient Interconnection Plan for the Provision of Enhanced Protocol, Code, and Format Conversion Service (Mar. 13, 1995); Southwestern Bell Plan for Comparably Efficient Interconnection (Mar. 13, 1995); US West Plan for Comparably Efficient Interconnection (Mar. 13, 1995); NYNEX Comparably Efficient Interconnection Plan For Existing Electronic Information Services (Mar. 13, 1995)

FN51. SeeComputer II Final Order, 77 FCC2d at 420. In the context of protocol conversion, the Commission has found that the loss of data is not equivalent to a change in information content. Computer III Supplemental Notice, FCC 86-253 at 13, para. 22 n.30 ("We note that some protocol conversions, although intended to allow communications that are transparent with regard to information content, might result in the partial loss of information .... In such cases, the change in information content is generally both undesirable and unavoidable and is not intended to be a service rendered to a customer.").

FN52. Seesupra para. 28 and accompanying footnote.

FN53. AT&T Opposition at 10; BTNA Reply Comments at 3-4.

FN54. AT&T Opposition at 12; BTNA Reply Comments at 4-5.

FN55. AT&T Reply Comments on IDCMA Petition for Declaratory Ruling at 3 (Feb. 13, 1995) [hereinafter AT&T Reply Comments].

FN56. Id. at 3 n.5.

FN57. IDCMA Reply Comments at 17.

FN58. IDCMA Reply Comments at 20-22.

FN59. Motorola Reply Comments at 7-9.

FN60. US West Comments at 4.

FN61. Id. at 5.

FN62. Id. at 7-8.

FN63. US West Reply Comments on IDCMA Petition for Declaratory Ruling at 5 (Feb. 13, 1995) [hereinafter US West Reply Comments].

FN64. AT&T InterSpan Frame Relay Service Interface Specification 5, Issue 1.0, April 2, 1992.

FN65. AT&T provides similar basic packet switched services.See, e.g., AT&T Application for Authority Under Section 214 to Install Packet Switches at Specified Telephone Company Locations, Memorandum Opinion, Order and Authorization, 94 FCC2d 48, 55-57 (1983); AT&T CEI Plan for Protocol Conversion and Storage Services with Packet Switching Services, Memorandum Opinion and Order, 5 FCC Rcd 651 (1990).

FN66. See, e.g., Amendment, The Bell Atlantic Companies Offer of CEI to Providers of Protocol Conversion Service (Mar. 13, 1995); Informational Amendment, BellSouth Plan for Comparably Efficient Interconnection for Synchronous Protocol Processing Services (Mar. 13, 1995); seesupra note 50.

FN67. Seesupra para. 13 and accompanying footnotes.

FN68. In the Computer III proceeding, the Commission considered four alternative treatments (labelled A, B, C, and D) of protocol processing. The Commission rejected alternative D, which would have applied the contamination theory to AT&T and the BOCs' provision of protocol processing.Computer III Phase II Order, 2 FCC Rcd at 3077, 3111 n.25, 3112 n.62.

FN69. AT&T cites Asynch/X.25 Waiver Order, 100 FCC2d at 1058 n.2.

FN70. AT&T cites AT&T Comparably Efficient Interconnection Plan for Enhanced Services Complex, Memorandum Opinion and Order, 6 FCC Rcd 4839 (1991).

FN71. Id. at 4840.

FN72. Nor would AT&T have filed the CEI plan for packet switching services. SeeAT&T CEI Plan for Protocol Conversion and Storage Services with Packet Switching Services, Memorandum Opinion and Order, 5 FCC Rcd 651 (1990).

FN73. The Commission has stated that application of the contamination doctrine to the BOCs would result in “an improper policy result.” Computer III Notice, FCC 85-397, para. 32 (rel. Aug. 16, 1985) (citing Asynch/X.25 Waiver Order, 100 FCC2d 1057, at para. 77-79).

FN74. AT&T Opposition at 18-20; EMI Reply Comments at 7-9.

FN75. AT&T Opposition at 18-20.

FN76. Home Depot Comments at 8.

FN77. Compuserve Comments on IDCMA Petition for Declaratory Ruling at 9 (Jan. 23, 1995) [hereinafter Compuserve Comments]; Compuserve Reply Comments on IDCMA Petition for Declaratory Ruling at 3 (Feb. 13, 1995) [hereinafter Compuserve Reply Comments].

FN78. Compuserve Comments at 11.

FN79. Ad Hoc Users Reply Comments at 10.

FN80. IDCMA Reply Comments at 15; Motorola Reply Comments at 12.

FN81. Motorola Reply Comments at 10.

FN82. Southwestern Bell Tel. Co. v. FCC, 19 F.3d 1475, 1480 (D.C. Cir. 1994) [hereinafter Southwestern Bell] (quoting NARUC v. FCC, 533 F.2d 601, 608-09 (D.C. Cir. 1976) [hereinafter NARUC II] and NARUC v. FCC, 525 F.2d 630 (D.C. Cir.) [hereinafter NARUC I], cert. denied, 425 U.S. 992 (1976)).

FN83. Id. at 1481 (quoting NARUC II, 533 F.2d at 608-09 and NARUC I, 525 F.2d at 643).See also Competition in the Interstate Interexchange Marketplace, Notice of Proposed Rulemaking, 5 FCC Rcd 2627, 2645 & n.195 [hereinafter Competitive Interexchange Notice].

FN84. We note that facilities-based carriers will be able to continue this practice of bundling customer premises equipment with enhanced services offerings so long as the underlying basic transport service is also offered unbundled, pursuant to tariff.

FN85. Southwestern Bell, 19 F.3d at 1481.

FN86. NARUC I, 525 F.2d at 641-42.

FN87. See, e.g., AT&T Comparably Efficient Interconnection Plan for Protocol Conversion and Storage Services with Packet Switching Services, 5 FCC Rcd 651 (1990) (addressing AT&T's tariffed ACCUNET Packet Service and Private Packet Network Service).

FN88. Competitive Interexchange Order, 6 FCC Rcd at 5899.

FN89. Guidelines for Negotiating Test and Acceptance/Maintenance Procedures for Frame Relay In-

terconnection, Maintenance Subgroup, Frame Relay Interconnection Workshop, January 20, 1995.

FN90. Draft, An Interim Procedure for Ordering Frame Relay Interconnection, Frame Relay Interconnection Workshop, March 1, 1996.

FN91. IDCMA Petition at 12. AT&T does not dispute this number.

FN92. AT&T Petition at 3.

FN93. 114 S. Ct. 2223 (1994). In MCI v. AT&T, the Supreme Court struck down the Commission's forbearance policy for nondominant carriers, holding that the Commission's authority to “modify” the Act's requirements did not permit it to relieve carriers of their tariffing obligation.

FN94. Id.

FN95. NYNEX Comments on IDCMA Petition for Declaratory Ruling 2 (Jan. 23, 1995).

FN96. Southwestern Bell Comments at 2; see5 U.S.C. §§ 500-576.

FN97. Compuserve Comments at 4.

FN98. Id. at 6; EMI Reply Comments at 7.

FN99. Id.

FN100. Compuserve Reply Comments at 4-5.

FN101. US West Comments at 4.

FN102. US West Reply comments at 5.Seesupra para. 39.

FN103. Computer II, 77 FCC2d at 475, para. 231.

FN104. Competitive Interexchange Order at 19, para. 40.

APPENDIX: RECORD OF DA 94-1411

Petitions

IDCMA Petition for Declaratory Ruling DA 94-1411 (Nov. 28, 1994).

AT&T Petition for Declaratory Ruling (Dec. 5, 1994).

Comments/Oppositions

AT&T Opposition to IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

EMI Opposition to IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

US West Comments on IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

NYNEX Comments on IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

Southwestern Bell Comments on IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

Compuserve Comments on IDCMA Petition for Declaratory Ruling (Jan. 23, 1995).

***13726** Comdisco Comments on IDCMA Petition for Declaratory Ruling (Feb. 16, 1995).

PPG Comments on IDCMA Petition for Declaratory Ruling (Feb. 9, 1995).

National Semiconductor Comments on IDCMA Petition for Declaratory Ruling (Feb. 10, 1995).

Welch Allyn Comments on IDCMA Petition for Declaratory Ruling (Feb. 10, 1995).

AMP Comments on IDCMA Petition for Declaratory Ruling (Feb. 9, 1995).

Bemis Comments on IDCMA Petition for Declaratory Ruling (Feb. 8, 1995).

Textron Comments on IDCMA Petition for Declaratory Ruling (Feb. 9, 1995).

Home Depot Comments on IDCMA Petition for Declaratory Ruling (Feb. 15, 1995).

United Technologies Comments on IDCMA Petition for Declaratory Ruling (Feb. 15, 1995).

Reply Comments

BT North America Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

IDCMA Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

US West Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

Motorola Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

EMI Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

Compuserve Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

AT&T Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

Ad Hoc Telecommunications Users Committee Reply Comments on IDCMA Petition for Declaratory Ruling (Feb. 13, 1995).

Motions/Supplemental Comments

IDCMA Motion for Leave to File Supplemental Comments/Supplemental Comments (June 13, 1995).

Ad Hoc Telecommunications Users Committee Supplemental Comments (June 28, 1995).

AT&T Opposition to IDCMA's Motion for Leave to File Supplemental Comments (June 28, 1995).

EMI Opposition to IDCMA's Motion for Leave to File Supplemental Comments (June 28, 1995).

IDCMA Reply to AT&T Opposition to IDCMA's Motion for Leave to File Supplemental Comments (July 10, 1995).

BT North America Motion for Leave to File Supplemental Comments/Supplemental Comments (July 12, 1995).

Ex Parte

BT North America Ex Parte (Aug. 28, 1995).

IDCMA Ex Parte (Sept. 6, 1995).

BT North America Ex Parte (Sept. 22, 1995).

BT North America Ex Parte (October 10, 1995).

10 F.C.C.R. 13717, 10 FCC Rcd. 13717, 1 Communications Reg. (P&F) 409, 1995 WL 613619 (F.C.C.)

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