IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Department of Justice Antitrust Division 1401 H Street, N.W., Suite 8000 Washington, DC 20530, Plaintiff, v. WORLDCOM, INC., 500 Clinton Center Drive Clinton, MS 39056, and SPRINT CORPORATION, 2330 Shawnee Mission Parkway Westwood, KS 66205, Defendants.	)	Civil Action No.

COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil action to enjoin WorldCom, Inc. from acquiring Sprint Corporation and alleges as follows:

1. For most of the twentieth century, the provision of long distance telecommunications services and many other telecommunications services in the United States was monopolized by AT&T. In the 1970s, this monopoly was challenged by new entrants, supported by changes in Federal Communications Commission ("FCC") regulations designed to

promote competition and by the government's antitrust case challenging AT&T's actions to preserve its monopoly. These efforts ultimately succeeded in bringing competition to long distance services.

2. In the 1980s and 1990s, two companies -- and only two companies -- emerged as major competitors to AT&T, and to each other. MCI (which merged with WorldCom in 1998) and Sprint each constructed national and international fiber optic networks, developed sophisticated systems for handling many millions of customer accounts, hired and trained large workforces capable of providing a wide range of high-quality telecommunications services to customers throughout the nation, and invested billions of dollars over many years to establish widely known and trusted brands.

3. Many other carriers have entered on a much smaller scale, but none has produced beneficial effects on competition comparable in magnitude to the effects produced by competition between WorldCom and Sprint, and between those companies and AT&T. Those two companies, together with AT&T, dominate the provision of long distance services to residential and small/home office consumers, the provision of international services between the United States and many countries throughout the world for customers in the United States, and the provision of key data network services and custom network services used by many large business customers. In addition, WorldCom has attained (primarily through a series of acquisitions) a commanding position in the ownership and operation of the "backbone" networks that connect the thousands of smaller networks that constitute the Internet, and Sprint is WorldCom's largest competitor in that market.

4. In particular, the Defendants are:

- the largest and second-largest of a small group of top-tier providers of Internet "backbone" network services in the United States and the world;
- the second- and third-largest of three providers who collectively dominate long distance telecommunications within the United States, and between the United States and numerous overseas destinations;
- the largest and third-largest of three providers who collectively dominate international private line services to business customers;
- two of three providers who collectively dominate various data network services to large business customers; and
- two of three providers who collectively dominate custom network telecommunications services to large business customers.

5. The proposed merger of WorldCom and Sprint will cause significant harm to competition in many of the nation's most important telecommunications markets. By combining two of the largest telecommunications firms in these markets, the proposed acquisition would substantially lessen competition in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18. For millions of residential and business consumers throughout the nation, the merger will lead to higher prices, lower service quality, and less innovation than would be the case absent its consummation. The United States therefore seeks an order permanently enjoining the merger.

I.

JURISDICTION AND VENUE

6. This Complaint is filed under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, and Section 4 of the Sherman Act, 15 U.S.C. § 4, to prevent and restrain the violation by the Defendants, as hereinafter alleged, of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

7. WorldCom and Sprint are engaged in interstate commerce and in activities substantially affecting interstate commerce. The Court has jurisdiction over this action and over the parties hereto pursuant to 15 U.S.C. §§ 22, 25 and 28 U.S.C. §§ 1331, 1337.

8. WorldCom and Sprint each transact business and are found in the District of Columbia. Venue is proper under 15 U.S.C. § 22 and 28 U.S.C. § 1391(c).

II.

THE DEFENDANTS AND THE TRANSACTION

A. WorldCom, Inc.

9. WorldCom, Inc., formerly known as MCI WorldCom, Inc., is a corporation organized and existing under the laws of the State of Georgia, with its principal place of business in Clinton, Mississippi. It is one of the largest global telecommunications providers, with operations in more than 65 countries in the Americas, Europe, and the Asia-Pacific region, and more than 22 million residential and business customers worldwide. WorldCom's 1999 annual revenues totaled approximately $37 billion.

10. WorldCom's UUNET subsidiary is by far the largest provider of Internet backbone

services in the world, whether measured by traffic or revenues. UUNET's backbone network extends from North America to Europe and Asia, and serves more than 70,000 businesses in 114 countries. UUNET offers a wide range of retail and wholesale Internet backbone services, including "dial-up" (i.e., through shared modem banks) and dedicated Internet access (i.e., through direct connections to the customer), as well as value-added services such as Internet protocol virtual private networks ("IP/VPNs"), website hosting, collocation at data centers, applications hosting, and Internet security services.

11. WorldCom is the second-largest domestic long distance telecommunications carrier in terms of revenues. Its broad fiber optic network reaches nearly every corner of the United States and numerous markets abroad. As measured by revenues, it is also the second-largest provider of various data network services, and the second-largest of only three meaningful competitors in the market for custom network telecommunications services for large U.S. business customers.

12. WorldCom is the second-largest provider of international long distance services to U.S. customers and the largest provider of U.S.-connected international private voice and data lines. It provides service to virtually every country and territory in the world and has operations in more than 65 countries. In 1999, WorldCom's U.S.-billed international voice and data services revenues totaled more than $6.6 billion. WorldCom's extensive international facilities and ownership or control of capacity in approximately 100 submarine cables, along with its direct bilateral connections with 213 carriers in 157 countries, give it one of the strongest and most ubiquitous international networks of any U.S. carrier.

13. WorldCom has achieved its current competitive position in large part through the

acquisition of more than 60 competitors and other companies. For example:

(a) In January 1995, WorldCom acquired the network services operations of Williams Telecommunications Group and its 11,000-mile fiber optic nationwide network for $2.5 billion.

(b) In December 1996, WorldCom acquired MFS Communications Company, Inc. ("MFS"), the largest competitive local access provider in many U.S. and Western European metropolitan areas, for $12.5 billion in stock. Through the MFS acquisition, WorldCom gained control of UUNET, the world's leading Internet backbone provider, which MFS had itself acquired in August 1996.

(c) In January 1998, WorldCom acquired another large local access provider, Brooks Fiber Properties, Inc. ("BFP"), for approximately $1.2 billion in stock.

(d) Also in January 1998, WorldCom acquired Compuserve Corp., one of the nation's leading Internet and data network services providers, for approximately $1.3 billion.

(e) In a related transaction, WorldCom bought ANS Communications, Inc. ("ANS") from America Online ("AOL") for approximately $500 million. ANS served as one of AOL's primary Internet backbone networks, and as part of the ANS transaction, WorldCom secured a long-term contract to provide AOL with Internet backbone services. WorldCom has subsequently renewed this contract and will continue to be AOL's principal supplier of Internet backbone services through at least December 31, 2004.

(f) WorldCom has also acquired other Internet backbones, including GridNet, Unicom-Pipex, InNet, NL Net, and Metrix-Interlink.

(g) In August 1998, WorldCom acquired control of Embratel Participaçőes S.A. ("Embratel"), Brazil's leading long distance telecommunications provider.

(h) Finally, in September 1998, WorldCom completed the acquisition of MCI Communications Corp. ("MCI"), the United States' second-largest provider of long distance telecommunications and a leading Internet backbone services provider. As a result of actions taken by the U.S. Department of Justice, the FCC, and the Commission of European Communities, MCI divested its internetMCI ("iMCI") assets to Cable & Wireless PLC ("C&W") pursuant to conditions designed to ensure the continued competitive vigor and vitality of the divested business. Shortly after acquiring the iMCI assets, C&W initiated legal and arbitration proceedings regarding WorldCom's implementation of its divestiture agreement with C&W. WorldCom settled this litigation earlier this year by paying $200 million to C&W. In connection with the settlement, WorldCom required that C&W agree not to continue to publicly state that it was impossible to successfully divest an integrated Internet business without weakening the new entity's competitive strength and thereby harm competition in the market.

B. Sprint Corporation

14. Sprint Corporation is a corporation organized and existing under the laws of the State of Kansas, with its principal place of business in Westwood, Kansas. It is one of the largest telecommunications providers in the United States, serving more than 17 million residential and business customers. Sprint built the first nationwide, all-digital, fiber optic network; operates the nation's second-largest Internet backbone; and competes head-to-head against WorldCom in many markets in which the two companies operate. Sprint had revenues of approximately $17

billion in 1999. Sprint also is an incumbent local exchange carrier, serving about 8 million local lines in 18 states.

15. Sprint operates SprintLink, the second-largest Internet backbone provider in the nation in terms of traffic and revenues, and provides dedicated Internet access to more than 4,000 corporate and ISP customers. Sprint also operates the International Connections Management Backbone Network ("ICM"), which was originally established for the National Science Foundation to provide international Internet connectivity and now provides service to foreign-based research and educational customers, and DialNet, a separate network used by Internet service providers ("ISPs") such as such as America Online and EarthLink to provide dial-up Internet access to their customers. Through these networks, Sprint offers retail and wholesale Internet backbone services, including dial-up and dedicated access as well as value-added services such as IP/VPNs, website hosting, and managed network security services.

16. Sprint is the third-largest domestic long distance telecommunications carrier, based on revenues. Like WorldCom and AT&T, Sprint's fiber optic network reaches nearly every corner of the United States. In terms of revenues, Sprint is also one of only two significant providers of data network services in the United States using the X.25 protocol (the other being WorldCom), one of the three largest providers of data network services overall, and the third-largest of only three meaningful competitors in the market for custom network telecommunications services for large U.S. business customers.

17. Sprint is the third-largest provider of international long distance services to U.S. consumers and U.S.-connected international private lines, with outbound traffic to more than 200 countries and international service revenues of approximately $1.7 billion in 1999. Sprint has a

strong international network, with ownership rights or control of capacity in approximately 75 international cables, and direct bilateral connections with 150 carriers in at least 120 countries.

C. The Proposed Transaction

18. On October 4, 1999, WorldCom entered into an Agreement and Plan of Merger with Sprint pursuant to which Sprint will be merged into WorldCom by means of a stock-for-stock transaction, initially valued at $129 billion. The merged company will be named "WorldCom, Inc."

19. On November 17, 1999, the Defendants filed an application for the transfer of control of various licenses issued by the FCC to Sprint that are necessary for it to conduct its business. Unless and until their FCC application is granted, the Defendants cannot consummate the merger. The transaction is also subject to review and approval by the Commission of European Communities.

III.

"TIER 1" INTERNET BACKBONE SERVICES MARKET

A. Relevant Product Market

20. The Internet is a vital conduit for commerce and communication for millions of Americans, and it is fast becoming as much a part of daily life as the television and the telephone. This global network of public and private networks, i.e., the Internet, enables end users to communicate with each other and access large amounts of information, data, and educational and entertainment services. Until April 30, 1995, the Internet was administered by the National Science Foundation ("NSF"), an independent federal agency. Thereafter, the NSF relinquished its

role, which allowed the development of the current commercial Internet to occur.

21. The end users of the Internet -- individuals, business customers, content providers, governments, and universities -- obtain access either through a "dial-up" modem or other consumer Internet access connection (e.g., cable modem or digital subscriber line service), or through a dedicated high-speed facility accessing the Internet ("dedicated access") through one of thousands of Internet service providers ("ISPs"). ISPs provide access to the Internet on a local, regional, or national basis. ISPs operate their own networks of varying size, but most have limited facilities.

22. An ISP can connect any customer on its network to any of the other customers on its network. In order to allow its customers to communicate with the many end users connected to other networks, however, an ISP must establish direct or indirect interconnections with those other networks. Because the Internet comprises thousands of separate networks, direct interconnections between each of those networks and all other networks would be impractical. Instead, the Internet has developed a hierarchical structure, in which smaller networks are interconnected with one of a few large Internet "backbone" networks, which operate high-capacity long-haul transmission facilities and are interconnected with each other. In a typical Internet communication, for example, an ISP sends data from one of its customers to the large network that the ISP uses for backbone services, which in turn sends the data to another backbone network, which then delivers it to the ISP serving the end user to whom the data is addressed.

23. Internet backbone providers ("IBPs") and ISPs can generally exchange traffic directly through one of two interconnection arrangements: "transit" or "peering." Through

"transit" service, an ISP, small IBP, or other corporate customer purchases a dedicated access facility linking it directly to the transit provider's Internet backbone network. That transit service provides the purchaser full Internet connectivity, i.e., the ability to send and receive traffic through the purchaser's IBP to any other network or destination on the Internet. Under a transit arrangement, the customer pays a fee for the connection in addition to the fee paid for transit service. A transit provider does not pay any fee for access to its transit customers' networks.

24. Networks, including IBPs and ISPs, may also exchange traffic with other networks through "peering" arrangements whereby each "peer" will only accept traffic that is destined either for its own network or for one of its own transit customers. Peers do not accept traffic destined for non-customer networks, i.e., transit traffic. Unlike transit, peering is typically a settlement-free, or "bill and keep," arrangement under which neither party pays the other for terminating traffic. Each peer typically pays for one half the cost of the connections between their networks.

25. Interconnection arrangements between networks are voluntary and consensual in nature, and are not subject to governmental regulation. Internet networks exchange traffic either at private interconnection sites or at public interconnection sites known as Network Access Points ("NAPs") or Metropolitan Area Exchanges ("MAEs"). The NSF established the first public interconnection facilities, which were to be operated by private parties, to enable any two ISPs or IBPs who chose to peer with each other to do so at a NAP or MAE. UUNET operates three of the largest and busiest public interconnection points (MAE-East, MAE-West, and MAE-Central) and four smaller regional MAEs. Similarly, Sprint operates another of the busiest NAPs that is located in the New York City area in Pennsauken, New Jersey. Together, the Defendants will

control four of the seven primary public interconnection points.

26. The explosive growth of the Internet overwhelmed these NAPs and MAEs, and despite the addition of new public access points to accommodate this growth, the public interconnection facilities remain chronically congested. In an effort to avoid these congested facilities, some networks have established private bilateral interconnection facilities with their peers. Today, large IBPs exchange most of their traffic with other IBPs at private interconnection sites at various points throughout their networks. Many smaller networks, however, still rely solely or substantially upon public access points. These networks have been unable to provide high-quality Internet access to their customers.

27. There are a small number of large, powerful IBPs -- referred to as "Tier 1" IBPs -- that sell transit service to substantial numbers of ISPs and sell dedicated Internet access directly to corporate customers or other enterprises. Tier 1 IBPs have large nationwide or international networks capable of transporting large volumes of data. These Tier 1 IBPs typically maintain private peering relationships with all other Tier 1 IBPs on a settlement-free basis, as opposed to purchasing Internet connectivity (e.g., transit) from any other IBP. Most Internet communications are carried over the networks of these Tier 1 IBPs, and either originated or terminated, or both, with end users that obtain Internet access directly from a Tier 1 IBP, or from an ISP or other network that purchases transit from a Tier 1 IBP (i.e., a Tier 1 IBP's customer).

28. Smaller IBPs, often referred to as "Tier 2" or "Tier 3" IBPs, may also sell transit to smaller ISPs or IBPs and sell dedicated Internet access to end users. However, these Tier 2 or Tier 3 IBPs typically purchase transit from (rather than peer with) one or more Tier 1 IBPs, and/or rely substantially upon exchanging traffic at the inferior public interconnection facilities.

Lower-tier IBPs that must purchase a significant amount of connectivity from other IBPs operate at substantial cost disadvantages compared to Tier 1 IBPs, which rely exclusively on peering.

29. Tier 1 IBPs also have significant competitive advantages compared to lower tier IBPs in terms of their ability to provide higher-quality service through their direct and private interconnections, rather than relying on indirect transit service or on the inferior and congested public interconnection points. Generally, network operators seek the most direct routing for their Internet communications -- i.e., over routes with the fewest possible number of cross-network connections or "hops" -- because of the greater risk that data will be lost or its transmission delayed as the number of interconnection points increases. Lower-tier IBPs that must rely on transit typically reach other networks indirectly through their transit provider's network, adding "hops." Because Tier 1 IBPs provide direct connections to large numbers of ISPs and to other Tier 1 IBPs that collectively handle most Internet traffic, Tier 1 IBPs can offer higher quality services than can lower-tier IBPs. Many important ISPs and business customers will not purchase Internet connectivity from an IBP unless that IBP maintains direct, private peering connections with most, if not all, Tier 1 IBPs.

30. Because of these differences, the provision of Tier 1 backbone services is distinguished from that provided by other IBPs. Typically, Tier 1 IBPs charge higher prices for Internet access than do lower-tier IBPs because they offer distinct value to their customers and are not significantly constrained by the competition of lower-tier IBPs. The provision of connectivity to Tier 1 IBPs is a line of commerce and a relevant product market for purposes of Section 7 of the Clayton Act. There are no substitutes for this connectivity sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

B. Relevant Geographic Market

31. Tier 1 IBPs provide connectivity to their networks throughout the United States. Because providing customers with Tier 1 IBP connectivity in the United States requires domestic operations, such customers are unlikely to turn to any foreign providers that lack these domestic operations in response to a small but significant and nontransitory increase in price by domestic Tier 1 IBPs. The United States is the relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

32. WorldCom's wholly owned subsidiary, UUNET, is by far the largest Tier 1 IBP by any relevant measure and is already approaching a dominant position in the Internet backbone market. Based upon a study conducted in February 2000, UUNET's share of all Internet traffic sent to or received from the customers of the 15 largest Internet backbones in the United States was 37%, more than twice the share of Sprint, the next-largest Tier 1 IBP, which had a 16% share. These 15 backbones represent approximately 95% of all U.S. dedicated Internet access revenues. UUNET's and Sprint's 53% combined share of Internet traffic is at least five times larger than that of the next-largest IBP. The Herfindahl-Hirschman Index ("HHI"), the standard measure of market concentration (defined and explained in Appendix A), indicates that this market is highly concentrated. The HHI in terms of traffic is approximately 1850; post-merger, the HHI will rise approximately 1150 points to approximately 3000. (Note: Throughout the Complaint, market share percentages have been rounded to the nearest whole number, but HHIs have been estimated using unrounded percentages in order to accurately reflect the concentration of the various markets.)

33. The proposed merger threatens to destroy the competitive environment that has created a vibrant, innovative Internet by forming an entity that is larger than all other IBPs combined, and thereby has an overwhelmingly disproportionate size advantage over any other IBP.

34. The proposed transaction would produce anticompetitive harm in at least two ways. First, it would substantially lessen competition by eliminating Sprint, the second-largest IBP in an already concentrated market, as a competitive constraint on the Internet backbone market. The elimination of this constraint will provide the combined entity with the incentive and ability to charge higher prices and provide lower quality of service for customers.

35. Second, the combined entity ("UUNET/Sprint") will have the incentive and ability to impair the ability of its rivals to compete by, among other things, raising its rivals' costs and/or degrading the quality of its interconnections to its rivals. As a result of the merger, UUNET/Sprint's rivals will become increasingly dependent upon being connected to the combined entity, and the combined entity will exploit that advantage. Such behavior will likely enhance the market power of the combined firm, and ultimately facilitate a "tipping" of the Internet backbone market that will result in a monopoly.

36. As is true in network industries generally, the value of Internet access to end users becomes greater as more and more end users can easily be reached through the Internet. The benefit that one end user derives from being able to communicate effectively with additional users is known as a "network externality."

37. When the networks that constitute the Internet operate in a competitive market, this network externality creates powerful incentives for each individual network to seek and

implement efficient interconnection arrangements with other networks. Efficient interconnection has many requirements, including the physical connection to exchange traffic and the effective implementation of cross-network protocols or standards. For example, providers in competitive network industries have strong incentives to cooperate in the development of new cross-network protocols or quality of service ("QoS") standards that would enable new services or applications to be used across interconnection points on multiple providers' networks. By securing efficient interconnection, an ISP or IBP makes its services more valuable to its existing and potential customers. End users can enjoy the benefits of network externalities regardless of which network they belong to so long as their cross-network communications are of similar quality to communications "on-net," or purely within their provider's network. Thus, a failure to secure efficient interconnection arrangements places any given network at a significant competitive disadvantage when such customers can turn to a competing network that is efficiently interconnected to other networks.

38. The explosive growth of Internet traffic, which has been doubling in volume every three to four months, and the introduction of new applications that depend upon the transmission of large quantities of data, have made it necessary for IBPs to constantly increase the capacity, i.e., bandwidth, of their own networks, and of the facilities through which they interconnect with other networks. A network that upgrades bandwidth within its own network in an adequate and timely manner can maintain the quality of its customers' Internet experience with regard to communications that originate as well as terminate on that network. In order to maintain the quality of its customers' Internet experience with regard to communications that originate or terminate on another network, however, a network must constantly upgrade the capacity of its

interconnections with other networks, as well as upgrade capacity within its own network.

39. Any failure to keep pace with the growing demand for increased interconnection capacity -- or, worse yet, any degradation in the quality of existing interconnections with other networks -- would adversely affect the quality of an Internet user's experience regardless of the capacity and efficiency of an IBP's own network. Due to the Internet's growth rate, any failure to make adequate and timely upgrades of interconnection capacity is tantamount to a degradation of the quality of interconnection. When networks operate in competitive markets, they have mutual incentives to avoid such degradation.

40. Similarly, when operating in competitive markets, networks have incentives to negotiate reasonable prices for interconnection arrangements. An IBP that sells transit to another network will have incentives to charge reasonable prices for that service in order to prevent a transit customer from taking its business to a rival IBP. Furthermore, two networks will have incentives to enter into peering arrangements when, for each, the cost of terminating the other's traffic is roughly comparable to the benefit of having its own traffic terminated by the other, taking into account, among other factors, whether the networks have comparable traffic levels, similar geographic scope, and a roughly comparable input/output ratio at each interconnection point. As long as there are a sufficient number of Tier 1 IBPs of roughly comparable size, there exist sufficient incentives for all Tier 1 IBPs to peer privately with each other at the necessary capacity levels. In turn, this enhances both Internet connectivity and competition among Tier 1 IBPs. Nevertheless, an IBP makes peering decisions on a discretionary basis, and may refuse to peer or may terminate a peering relationship with any other IBP on short notice or without cause if it determines that doing so is in its self-interest.

41. When a single network grows to a point at which it controls a substantial share of the total Internet end user base and its size greatly exceeds that of any other network, network externalities may cause a reversal of its previous incentives to achieve efficient interconnection arrangements with its rival networks. In this context, degrading the quality or increasing the price of interconnection with smaller networks can create advantages for the largest network in attracting customers to its network. Customers recognize that they can communicate more effectively with a larger number of other end users if they are on the largest network, and this effect feeds upon itself and becomes more powerful as larger numbers of customers choose the largest network. This effect has been described as "tipping" the market. Once the market begins to "tip," connecting to the dominant network becomes even more important to competitors. This, in turn, enables the dominant network to further raise its rivals' costs, thereby accelerating the tipping effect. As a result of an increase in their costs, rivals may not be able to compete on a long-term basis and may exit the market. If rivals decide to pass on these costs, users of connectivity will respond by selecting the dominant network as their provider. Ultimately, once rivals have been eliminated or reduced to "customer status," the dominant network can raise prices to users of its own network beyond competitive levels. Once this occurs, restoring the market to a competitive state often requires extraordinary means, including some form of government regulation.

42. If the merger is allowed to proceed, the Defendants will be in a commanding position vis-à-vis all of their Tier 1 IBP rivals. With a majority of all Internet traffic on its own network, UUNET/Sprint and its customers will derive relatively less benefit from being efficiently connected to smaller networks than will the customers of these smaller networks derive from

being efficiently connected to UUNET/Sprint. Whereas in a competitive environment Tier 1 IBPs have roughly equal incentives to peer with each other, the merged entity will be so large relative to any other IBP that its interest in providing others efficient and mutually beneficial access to its network will diminish. Because other Tier 1 IBPs will have a relatively greater need to be connected to UUNET/Sprint, in the absence of a peering relationship, they will be forced to purchase transit services from UUNET/Sprint to maintain adequate interconnection capacity.

43. Whereas in a competitive environment Tier 1 IBPs have incentives to charge reasonable prices for transit, the merged entity will be so large relative to other IBPs that its interest in providing reasonable prices or terms for transit service will diminish. Ultimately, there is a significant risk that, as a result of the merger, the combined entity will be able to "tip" the Internet backbone services market and raise prices for all dedicated access services.

44. The proposed transaction will substantially enhance the risk that UUNET/Sprint will have the power to engage in anticompetitive behavior. Such behavior may involve refusing to peer with other Tier 1 IBPs for interconnection, and either failing to augment (e.g., by denying, withholding, or "slow-rolling" requested upgrades) or otherwise degrading the quality of interconnection capacity between peers.

45. The Defendants already require both their transit customers and peers to enter into strict nondisclosure agreements ("NDAs") as a condition of doing business. The NDAs prohibit these customers and peers from disclosing the nature or existence of the interconnection agreements and, in the case of customers, the prices charged. By enforcing secrecy, these NDAs will enhance the Defendants' ability to price discriminate (i.e., charge different prices) among their customers and to grant or deny peering on an arbitrary basis.

46. Another way in which a combined UUNET/Sprint will be able to limit rivals' abilities to compete will be by refusing to cooperate with other Tier 1 IBPs in implementing interconnection arrangements required for the development of new Internet-based services, such as voice over Internet protocol ("VoIP"), video conferencing, live video transmission, or Internet protocol virtual private networks ("IP/VPNs"). These new services are becoming increasingly important to Internet users and require specialized arrangements for effective transmission across two or more backbone networks. For example, cross-network QoS standards that are required for two individual networks to share in providing certain Internet-based services have not yet been adopted on an industry-wide basis. UUNET/Sprint will be able to take advantage of its size to enhance its market power by implementing a QoS standard "on net" while refusing to cooperate in the implementation of cross-network QoS standards. Because UUNET/Sprint will have such a large percentage of traffic on net, customers seeking to use these services over as much of the Internet as possible will have little choice but to migrate to or select it as their provider. UUNET/Sprint will also have the incentive and ability to exploit its unmatched scale and scope to control the development of these new services so that only its own customers will have access to them.

D. Entry

47. Entry into the Tier 1 Internet backbone services market would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm. In the current market environment, entry barriers are already high, and the proposed transaction will substantially raise barriers to entry. An entrant into the Tier 1 Internet backbone market must establish and maintain adequate peering interconnections to provide Internet connectivity. Entry

into the Tier 1 Internet backbone market requires that an IBP peer privately, on a settlement-free basis, with all other Tier 1 IBPs, as well as interconnect with other IBPs without having to purchase any significant amount of Internet connectivity. Incumbent Tier 1 IBPs only grudgingly grant private peering to another IBP when it has a sufficiently large customer base such that other Tier 1 IBPs will be able to derive sufficient positive network externalities from interconnection with it. In a classic "Catch-22," without adequate peering interconnections a rival cannot gain customer traffic and without sufficient customer traffic a rival cannot gain peering connections.

48. UUNET/Sprint would be able to control and inhibit successful entry by refusing to interconnect with new entrants or by limiting those connections in order to control the growth of its rivals. By degrading the quality of interconnection and raising its rivals' costs, UUNET/Sprint would further prevent entry and expansion by other IBPs. Moreover, through its control of public interconnection facilities (e.g., MAE-East, MAE-West, New York NAP) and its refusal to upgrade these facilities, UUNET/Sprint would be able to limit opportunities for existing rivals and new entrants to build their traffic volumes through public peering.

49. Entry into the Tier 1 Internet backbone services market also requires substantial time and enormous sums of capital to build a network of sufficient size and capacity, and to attract and retain the scarce, highly skilled technical personnel required for its operations.

IV.

MASS MARKET DOMESTIC LONG DISTANCE TELECOMMUNICATIONS SERVICES

A. Relevant Product Market

50. Consumers need and want to communicate with others over large distances as well as locally. "Long distance" telecommunications services enable consumers to complete communications from their local area to locations throughout the world. Throughout much of the twentieth century, AT&T possessed a monopoly in the provision of long distance telecommunications services in the United States and in the provision of local telecommunications services in most of the country. In 1982, by means of a consent decree entered in *United States v. American Telephone & Telegraph Co.*, AT&T was divided into a long distance telecommunications carrier, AT&T, and seven regional Bell Operating Companies ("BOCs") that provide local telephone service. The decree also divided the nation into 193 local access and transport areas, known as "LATAs." It permitted the BOCs to offer *intra*LATA services, but prohibited them from offering *inter*LATA services. The prohibition was substantially preserved by the Telecommunications Act of 1996, but Section 271 of the Act provided for the removal of the prohibition on a state-by-state basis if a BOC satisfied certain requirements.

51. Domestic long distance services allow consumers to make *inter*LATA telephone calls that originate in one LATA and terminate in a different LATA within the United States. International long distance services allow consumers to make telephone calls that originate in (or are billed in) a U.S. LATA and are carried over terrestrial links, submarine cables, or satellite connections to a termination point in a foreign country.

52. Long distance telecommunications services are used by millions of individual consumers, as well as small, medium, and large businesses of all kinds. Different types of customers have diverse needs that influence their respective purchasing decisions. The service offerings of long distance providers are tailored to meet the needs of particular types of customers, and services are marketed and priced differently for each type of customer.

53. Residential and small/home office telecommunications consumers (the "mass market") comprise one such type of long distance customer, and constitute a market distinct from long distance services sold to other types of customers (e.g., larger businesses). They typically purchase all or most of their domestic and international long distance services by "presubscribing" to a specific carrier (the presubscribed interexchange carrier or "PIC"). Presubscribed long distance (interLATA and international) offerings are commonly known as "dial-1" or "1+" toll services. Such offerings permit the customer to call from a presubscribed telephone line to any other telephone in the world for per-minute or per-call charges that are billed monthly.

54. In addition to dial-1 service, mass market consumers can also select a long distance carrier at any time from their presubscribed line by dialing a carrier's access code (e.g., 10-10-321) before dialing the called party's telephone number. This long distance service, known as "dial-around," allows consumers to bypass their PIC when making a specific call. Dial-around service is also typically billed on a monthly basis with per-minute or per-call charges.

55. The rates charged by a long distance carrier for interstate interLATA calls generally are the same, regardless of the location of the called party. (Because of differences between the regulation of intrastate and interstate communications, rates for *intra*state interLATA calls may differ from rates for *inter*state interLATA calls.)

56. Similarly, with few exceptions, the rates charged by a long distance carrier are generally the same for all calls from the United States to a particular foreign country, regardless of the location of the called party within that foreign country. However, rates for calls to one foreign country may vary greatly from rates to another foreign country, and rates for international calls are usually much higher than rates for domestic calls. Dial-1 and dial-around services generally include the capability to make both domestic interLATA (intrastate and interstate) and international long distance calls, but a substantial proportion of mass market consumers are infrequent users of international long distance services, and for them, the rates charged for calls to a specific foreign country or to all foreign countries are not a significant factor in choosing a dial-1 long distance carrier. For mass market consumers who make frequent calls to a specific country, however, the rates for calls to that country will often be a significant or decisive factor in choosing a long distance carrier. *See infra* Section V.

57. Long distance communications may originate from wireline telephones (i.e., telephones connected by wires to the local telephone network) or from mobile wireless phones. The vast majority of mass market consumers use wireline telephones to make long distance calls. While a growing percentage of mass market customers also subscribe to mobile wireless telephone service and may make wireless long distance calls, wireless long distance only accounts for a small percentage of total long distance calling. Wireline long distance service generally provides higher-quality and more reliable communications than does wireless service. The prices for long distance calls charged by wireless carriers usually are substantially different from the prices paid by consumers for long distance calls over wireline telephones. Long distance communications originating from wireless phones are not a close substitute for long distance calls

originating from wireline phones; the price of the former is not a significant competitive constraint on the price of the latter.

58. All of the BOCs except Bell Atlantic in New York are currently prohibited from providing long distance services to their local telephone service customers, but local telephone companies other than the BOCs may do so. In some cases, these local telephone companies have become significant competitors in the provision of mass market long distance within their limited local service areas, but none (with the exception of Sprint) is a significant competitor outside its local service area. These local telephone companies, other than Sprint, collectively have an insignificant share of the nation's mass market long distance customers.

59. Domestic wireline interLATA telecommunications services provided on a dial-1 or dial-around basis to mass market residential and small/home office consumers ("mass market long distance services") is a line of commerce and a relevant product market for purposes of Section 7 of the Clayton Act. There are no substitutes for mass market long distance services sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

B. Relevant Geographic Market

60. The "Big 3" -- AT&T, WorldCom, and Sprint -- and many fringe carriers offer their services to mass market consumers located throughout the United States, and each generally charges the same price for interstate interLATA calls and international calls, regardless of the consumers' locations within the United States.

61. At present, in most parts of the country mass market customers have substantially the same alternatives in choosing among long distance carriers. The Defendants, AT&T, and many of the other competitors offer mass market long distance services throughout the United

States and the prices of their services are substantially the same throughout the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

62. The market for the provision of mass market long distance services is highly concentrated, and will become substantially more concentrated as a result of the proposed combination of WorldCom and Sprint. AT&T, WorldCom, and Sprint each provide long distance telephone services by carrying voice and data communications over their broad national and international fiber optic networks, and collectively the Big 3 have continuously dominated mass market long distance for many years. For example, in 1999 more than 80% of residential lines in the United States that are presubscribed to one of the Big 3 as their long distance carrier, with approximately 19% of residential lines subscribing to WorldCom and approximately 8% subscribing to Sprint. In Sprint's local exchange territories, substantially more than 8% of the lines subscribe to Sprint; outside of its local exchange territories approximately 7% of the lines subscribe to Sprint. The Big 3 in 1999 also accounted for approximately 80% of interLATA revenue, including dial-1 and dial-around, with WorldCom accounting for approximately 21% and Sprint for approximately 9%. Again, Sprint has captured substantially more than 9% in its local exchange territories, and slightly less outside of its local exchange territories. According to the HHI, the standard measure of market concentration (defined and explained in Appendix A), this market is highly concentrated. The HHI for this market measured in terms of residential lines is approximately 3500; post-merger, the HHI will rise approximately 300 points to approximately 3800, and the combined company will have a share of approximately 27%. Measured in terms of revenue, including dial-1 and dial-around, the HHI is approximately 3500; post-merger, the HHI

will rise approximately 400 points to 3900, and the combined company will have a share of approximately 30%.

63. The Big 3 each have substantial competitive advantages in serving the mass market because of their respective powerful brand equity and recognition, as well as the scale and scope of their respective operations, including near ubiquitous facilities-based networks, broad customer bases, storehouses of technological expertise and service experience, and corps of highly skilled, experienced personnel.

64. Over the years, the Defendants and AT&T have collectively invested billions of dollars to market their long distance services and to establish, maintain, and enhance their brand images with mass market consumers. Brand recognition is often a deciding factor in mass market consumers' choices when they face complex price decisions such as those often presented by competing long distance plans.

65. The Defendants and AT&T are the only telecommunications providers whose broad networks and operations reach virtually every corner of the United States without significant reliance upon the facilities of other long distance carriers, and who benefit from widely recognized and firmly established brand names. Both WorldCom's and Sprint's fiber optic networks have local interconnection points of presence ("POPs") in LATAs reaching more than 99% of U.S. households.

66. Apart from the Big 3, there are many smaller competitive "fringe" long distance carriers that offer services to mass market consumers. A large number of these smaller domestic carriers have few or no network facilities of their own and purchase capacity from the Defendants and AT&T to provide them with access to network facilities on a wholesale basis. As a result,

"resellers" and other fringe carriers are handicapped in any competitive response, not only by their little-known brands, but also because their networks are often dependent upon the provision of wholesale services by the Big 3 and others. In addition, many of the competitive fringe carriers confine their marketing activities to local or regional areas, or to targeted ethnic or other niche groups. The Defendants and AT&T have been the only mass market long distance carriers since AT&T's divestiture of the regional BOCs in the mid-1980s to garner more than a two to three percent nationwide market share.

67. Competition from Sprint provides a significant constraint on the prices charged by WorldCom. A disproportionate number of mass market consumers who leave WorldCom for a new long distance provider switch to Sprint. The proposed acquisition, by eliminating this competition from Sprint, will permit the merged entity profitably to charge higher prices than it could profitably charge absent the merger.

68. Similarly, competition from WorldCom provides a significant constraint on the prices charged by Sprint. A disproportionate number of mass market consumers who leave Sprint for a new long distance provider switch to WorldCom. The proposed merger will permit the merged entity profitably to charge higher prices for the Sprint products than it could profitably charge absent the merger.

69. The merger will also facilitate coordinated or collusive pricing or other anticompetitive behavior by the merged entity and AT&T. If the merger is consummated, AT&T and WorldCom/Sprint will collectively control approximately 80% of the market, while their next largest competitor will have a market share of no more than 3%.

70. The merged entity would be able to raise prices without losing sufficient sales to

the "competitive fringe" carriers to cause the price increase to be unprofitable. Despite the fact that for many years a large number of long distance carriers have been competing and, in many cases, have offered materially lower prices than the Big 3, none has ever successfully attracted a substantial share of the nationwide mass market.

71. Competition from the fringe carriers will be insufficient to prevent coordinated pricing or other anticompetitive behavior based on the strength of the Big 3's brand names and to some extent on the superior capacity and coverage of their networks.

72. Allowing the Defendants to merge will remove the competitive pressure directly exerted by the merging Defendants on each other, and on AT&T. This will harm consumers through higher prices.

D. Entry

73. Entry into this market will not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm to consumers. Barriers to sufficient entry in this market are high, and the market is not growing rapidly. Although it is possible to enter on a small scale and serve ethnic or geographic niche markets, in order to offer sufficient competition for mass market consumers, a carrier must be able efficiently to handle long distance traffic and manage millions of customer relationships. It must also develop substantial brand equity and recognition, which requires a heavy capital investment over a substantial period of time.

74. Although there are numerous generic fringe carriers, each with a very small share of the market, all of these carriers face significant barriers to expansion and their presence is unlikely to mitigate the anticompetitive effects of the proposed transaction.

75. BOC entry into long distance, as envisioned by the Telecommunications Act of

1996 ("the 1996 Act"), also will not be timely, likely, or sufficient to remedy the proposed merger's anticompetitive harm to mass market long distance consumers.

76. The 1996 Act authorized the BOCs to offer long distance services in states where they were not the incumbent local telephone company. No BOC has succeeded in selling mass market long distance services on a significant scale in states outside its region, and no BOC is likely to do so in the foreseeable future. The 1996 Act authorized the BOCs to offer interLATA service originating in any state within their respective regions only after applying for and receiving FCC approval pursuant to Section 271 of the Act. In order to receive FCC approval to enter in-region long distance markets, the 1996 Act required the BOCs to, among other things, take numerous steps to demonstrate that their monopoly markets for local telephone service had been sufficiently opened to competition from other local carriers and establish that their entry into long distance is in the public interest.

77. Since passage of the 1996 Act, only one BOC, in only one state, has taken the steps required for and obtained FCC approval of a Section 271 application, thereby obtaining the ability to provide long distance services to its local telephone service customers. Five other BOC applications have been denied by the FCC and one other application -- by SBC Communications, Inc. in Texas -- is pending.

78. Successful BOC entry into mass market long distance services, to the extent it occurs, will occur over time on a state-by-state basis, and such entry is unlikely to have a significant impact on mass market competition in time to prevent the anticompetitive effects of this merger for large sections of the country, or for the country as a whole.

79. In any event, each of the BOCs has stated well before the announcement of this

merger that it intended eventually to provide mass market long distance service, and presumably will do so regardless of whether the proposed merger occurs. Thus, whatever the extent or timing of BOC entry, consummation of the merger will result in the loss of an important competitor, and would undermine the goals of the 1996 Act, whose passage reflected the judgment of Congress and the President that it would be very valuable to add a fourth major competitor to the long distance market. Even assuming that BOC entry occurs as quickly and as potently as the Defendants' have claimed, the merger would take us back to only three major mass market competitors in those territories where such BOC entry occurs.

V.

MASS MARKET INTERNATIONAL LONG DISTANCE TELECOMMUNICATIONS SERVICES

A. Relevant Product Markets

80. As with domestic long distance services, there are millions of customers, including residential customers and business customers of all sizes who want to complete calls internationally to foreign countries. Different types of international services customers have diverse needs and their purchasing decisions are influenced by different considerations. The service offerings of international long distance telecommunications providers are tailored to meet the needs of particular types of customers, and services are marketed and priced differently to different types of customers.

81. The residential and small/home office consumers (the "mass market") are one such type of international long distance customer, and constitute a market distinct from international

long distance services sold to other types of customers (e.g., larger businesses). Mass market consumers typically purchase all or most of their international long distance services by presubscribing to a particular carrier or on a call-specific basis, such as dial-around (e.g., 10-10-321) services. The rates charged to mass market consumers in the United States for international long distance calls to a particular foreign country are generally the same regardless of the location of the calling party. However, prices charged by a carrier for calls to a particular foreign country reflect competitive conditions on that U.S.-foreign country route and, therefore, differ from prices for calls to other foreign countries.

82. As mentioned, *supra,* most mass market international long distance services are sold to presubscribed consumers as a bundle with domestic mass market long distance services. However, there are many mass market consumers for whom calls to a particular foreign country constitute an important portion of their total long distance usage. For these customers, the rates charged for calls to a particular foreign country are a significant, if not driving, factor in their choice of a presubscribed dial-1 or a dial-around long distance carrier. For mass market consumers who call only infrequently to foreign countries, the rates for such calls are not a significant factor in their choice of a presubscribed carrier. *See supra* Section IV.

83. Mass market international long distance services between the United States and other countries are provided on a per-minute basis over terrestrial links, submarine cables, or satellites. In some foreign countries, U.S. carriers are legally prohibited from owning telecommunications facilities. For calls to such countries, a U.S. facilities-based carrier usually delivers its traffic to a virtual mid-point on an international circuit serving the route and contracts with a foreign carrier in the destination country to carry the traffic from the mid-point to its final

destination. In this type of relationship, the U.S. facilities-based carrier owns the U.S. half-circuit, i.e., the part of the circuit originating in the United States and terminating at the virtual mid-point, while the foreign carrier owns the corresponding foreign half-circuit. Payments to the foreign carrier (the "settlement rate") generally constitute a large percentage of a U.S. carrier's total costs for providing these calls.

84. In other countries, a U.S. carrier may legally own its own facilities. Although the U.S. carrier may still choose to deliver its traffic as described above, often it is less costly for a carrier to use its own facilities to deliver traffic to the foreign country and then contract with a foreign carrier in the destination country for local termination. In this type of arrangement, a U.S. facilities-based carrier may own the whole international circuit between the United States and the foreign country with no hand-off at a virtual mid-point.

85. As with domestic mass market long distance, *see supra* Section IV, international long distance calling using mobile wireless telephones accounts for only a small percentage of total mass market international long distance calling. For this reason and those described, *supra*, international long distance communications originating from wireless phones are not a close substitute for international long distance calls originating from wireline phones; the price of the former is not a significant competitive constraint on the price of the latter.

86. International wireline long distance telecommunications services provided between the United States and each of the foreign countries listed in Appendix B to mass market consumers are lines of commerce and relevant product markets for purposes of Section 7 of the Clayton Act. There are no substitutes for mass market international long distance services sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

B. Relevant Geographic Market

87. The Defendants, as well as most of their competitors in the provision of mass market international long distance services, offer such services throughout the entire United States and each generally charges the same rates for those services throughout the United States regardless of the consumers' locations.

88. At present, in most parts of the country mass market customers have substantially the same alternatives in choosing among international long distance providers. The Defendants, AT&T, and many of the other competitors offer mass market international long distance services throughout the United States and the prices of their services are generally the same throughout the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

89. The relevant markets for the provision of mass market international long distance telecommunications services between the United States and each of the countries listed in Appendix B are highly concentrated according to the HHI, the standard measure of market concentration (defined and explained in Appendix A). The merger would substantially increase concentration in each of these markets. On seven of these U.S.-foreign country routes, the combined market share of WorldCom and Sprint would be 50% or greater. *See* Appendix B.

90. For mass market international long distance services, the best publicly available data is the FCC's report on international message telecommunication service ("IMTS") revenues, which includes data on outbound voice services to both businesses and mass market consumers. Based on FCC data for 1998, the most recent year for which the data is available, the merger will

substantially increase concentration in many markets. For example, WorldCom had a 26% share of the IMTS revenues of carriers that had their own facilities on the U.S.-Brazil route, and Sprint had an 8% share. The Big 3 combined accounted for 98% of revenues on the U.S.-Brazil route. The pre-merger HHI is 4868; post-merger, it will increase by 389 points to 5257. Similarly, on the U.S.-India route in 1998, WorldCom had a 39% market share and Sprint's share was 7%. The Big 3's combined share was 89%. The pre-merger HHI is 3481; post-merger, it will increase by 533 points to 4014. On the U.S.-Israel route, WorldCom had a 22% market share, and Sprint had a 14% share. The Big 3's combined market share was 99%. The pre-merger HHI is 4580; post-merger, it will increase 625 points to 5205. On the U.S.-Vietnam route, WorldCom and Sprint accounted for 34% and 13% of the 1998 U.S.-billed IMTS revenues, respectively. The Big 3's combined market share was 92%. The pre-merger HHI is 3379; post-merger, it will increase 913 points to 4292.

91. The Defendants and AT&T have a dominant share of IMTS revenues and minutes on each of the U.S.-foreign country routes listed in Appendix B. No other U.S. carrier has more than 4% of total IMTS revenues (all routes combined) for service that is provided by carriers using their own facilities.

92. Competition from Sprint provides a significant constraint on the prices charged by WorldCom for calls between the United States and each of the countries identified in Appendix B. The proposed acquisition, by eliminating competition from Sprint, will permit the merged entity profitably to charge higher prices for these calls than WorldCom could profitably charge absent the merger.

93. Competition from WorldCom provides a significant constraint on the prices

charged by Sprint for calls between the United States and each of the countries identified in Appendix B. The proposed acquisition will permit the merged entity profitably to charge higher prices for these calls than Sprint could profitably charge absent the merger.

94. The merger would also facilitate coordinated or collusive pricing or other anticompetitive behavior by the merged entity and AT&T. If the merger is consummated, AT&T and WorldCom/Sprint would collectively control at least 80% of facilities-based revenues on each of the country-pair routes identified in Appendix B, and more than 90% on over two-thirds of those routes.

95. The merged entity would be able to raise prices without losing sufficient sales to smaller carriers to cause the price increase to be unprofitable.

D. Entry

96. Entry into the relevant markets for mass market international long distance telecommunications services would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm to consumers.

97. International long distance services may be provided by firms that do not own their own facilities but that resell services provided over the international facilities owned by others, including the Defendants. Because they lack ownership or control of facilities, resellers are handicapped in many cases in their competitive responses by cost and quality of service disadvantages compared to facilities-based carriers such as the Defendants and AT&T. Facilities-based entry requires a significant investment in capacity and equipment and requires substantial time in order to make arrangements to terminate traffic in foreign countries. For these reasons, competition from resellers does not adequately constrain the prices of the Big 3.

98. In many countries international long distance services are provided by a state-sanctioned monopolist. In order to provide facilities-based services directly to these countries, a U.S. carrier needs to establish bilateral or correspondent arrangements with the foreign monopolist. In other countries, the number of carriers allowed to provide facilities-based service is still significantly restricted by law, so that obtaining a correspondent relationship with one of the few foreign carriers in that country is a practical requirement for U.S. facilities-based carriers to provide service to that country. Countries where long distance services are provided by a monopoly collectively represent approximately 37% of U.S.-billed IMTS revenues, and countries where facilities-based entry is restricted by law represent approximately 10% of U.S.-billed IMTS revenues. AT&T, WorldCom, and Sprint each already have such arrangements with carriers in most foreign countries. For potential entrants, however, obtaining a correspondent relationship on these routes is often a difficult and time-consuming process.

99. For example, delays are particularly likely on the U.S.-Brazil route, where WorldCom has a controlling interest in Embratel, the incumbent Brazilian long distance carrier. Competing U.S. carriers are not free to establish their own facilities in Brazil because competition in facilities-based long distance (both domestic and international) services is limited by Brazilian law. The Brazilian long distance market is now a duopoly of Embratel, the dominant carrier, and one other new provider.

100. In order to provide facilities-based services to liberalized foreign countries that no longer accord special rights to one carrier or to a limited group of carriers, bilateral agreements may no longer be legally required for the termination of traffic. A U.S. carrier may choose to send traffic to the foreign country directly over its own facilities if such an arrangement has been

approved by U.S. and foreign regulators, thereby bypassing the above-cost settlement rate and more effectively controlling the quality and cost of the call. Even on such liberalized routes, however, important barriers to entry often still exist. Such barriers include, but are not limited to, limitations on the share of foreign facilities that can be owned by a U.S. carrier, delays by the foreign country in enacting legislation to implement liberalized telecommunications policies, failure of foreign regulatory agencies to enforce the implementing legislation, difficulties in obtaining operating licenses and other necessary regulatory approvals, and delays in the foreign carriers' provision of interconnection to local networks.

101. The need to establish brand equity constitutes a further barrier to entry into mass market international long distance telecommunications services. The Big 3's brand-name power in these markets is underscored by the higher prices each is able to charge on international routes relative to the rates charged by its smaller competitors. The Defendants have continued to possess higher market shares than non-Big 3 competitors despite these higher prices, even on those routes for which the destination country has permitted competition in termination of calls from the United States.

VI.

INTERNATIONAL PRIVATE LINE SERVICES

A. Relevant Product Markets

102. Private line services are dedicated circuits provided to a customer to use in any manner and with any hardware that the customer chooses. Private lines are used predominantly for data traffic although they can carry voice communications as well. A private line comprises a

specific amount of bandwidth that is exclusively available to a customer for point-to-point communications. As with international long distance services, international private line services between the United States and a particular country are provided on the basis of U.S. half-circuits or -- in those foreign countries that allow U.S. carriers to own their own facilities and hand off traffic directly to the foreign local exchange carrier -- whole circuits. As explained above, *see supra* Section V, on some routes U.S. carriers are legally prohibited from owning facilities on the foreign-end and can own only the U.S. half-circuits, so that traffic is handed off to a foreign carrier at a virtual mid-point on an international circuit serving the route.

103. A private line comprises a specific amount of bandwidth that is exclusively available to a customer for point-to-point communication. Private lines provide maximum security and dependability but, because of their expense, are economical only if the transmission capacity is fully utilized. Private lines are typically preferred by customers who have a need for very large and steady data transmission 24 hours a day, 7 days a week.

104. The provision of private lines between the United States and each of the foreign countries listed in Appendix C, including U.S.-connected half-circuits and whole circuits but excluding foreign half-circuits, are lines of commerce and relevant product markets for purposes of Section 7 of the Clayton Act. There are no substitutes for international private line services sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

B. Relevant Geographic Market

105. International private line services offered from the United States to a particular country are generally similar regardless of the U.S. location of the customer, although the prices for domestic connections to an international private line may differ depending on where the

customer is located. The Defendants, as well as most of their competitors offer international private line services to customers throughout the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

106. The markets for the provision of international private line services between the United States and each of the countries listed in Appendix C are highly concentrated. According to the HHI, the standard measure of market concentration (defined and explained in Appendix A), a merger between WorldCom and Sprint would substantially increase the concentration in many markets for international private line services.

107. For example, on the U.S.-Israel route in 1998, WorldCom had a 69% share of international private line revenues, and Sprint had a 20% share. The Big 3 combined account for 100% of the market. The HHI for the U.S.-Israel route is 5251; post-merger, it would increase by 2697 points to 7948. On the U.S.-Brazil route, where WorldCom owns a controlling interest in Embratel, the incumbent Brazilian long-distance carrier, WorldCom's share is 59%, and Sprint's is 14%. The Big 3 combined have a 97% share. The HHI is 4274; post-merger, the HHI would increase 1662 to 5936. On the U.S.-Kuwait route, WorldCom has a market share of 92%, and Sprint has an 8% share, yielding a combined market share of 100%. The pre-merger HHI is 8456; post-merger, the HHI would increase 1544 points to 10000.

108. The Defendants and AT&T collectively have a dominant share of international private line revenues in the relevant markets set forth in Appendix C. Unlike the markets for mass market international long distance telecommunications services, in which AT&T is still the largest carrier on an aggregate basis for all routes, WorldCom has the predominant share of revenues in

the markets for international private line services on an aggregate basis for all routes, as well as in most of the individual markets listed in Appendix C.

109. On many U.S.-foreign country routes, WorldCom and Sprint are the predominant providers of international private line services. The merger will result in increased concentration in markets that are already highly concentrated. Furthermore, this merger will result in the merged entity holding a market share in excess of 50% on more than 60 U.S.-foreign country routes. *See* Appendix C. On 29 U.S.-foreign country routes listed in Appendix C, this transaction will reduce the number of competitors from three to two, and on 12 routes, this transaction will reduce the number of providers from two to only one (i.e., the merged entity will hold a 100% market share).

110. Competition from Sprint provides a significant competitive constraint on the prices charged by WorldCom for private lines connecting the United States to each of the countries identified in Appendix C and in several of these markets provides the only direct competitive constraint. The proposed merger will eliminate competition from Sprint, and will permit the merged entity profitably to charge higher prices for these private lines than WorldCom could charge absent the merger.

111. Competition from WorldCom provides a significant competitive constraint on the prices charged by Sprint for private lines connecting the United States to each of the countries identified in Appendix C and in several of these markets provides the only direct competitive constraint. The proposed merger will permit the merged entity profitably to charge higher prices for these private lines than Sprint could charge absent the merger.

112. The merger will also facilitate coordinated or collusive pricing behavior between

the merged entity and AT&T in these markets, threatening to result in higher prices than those firms could charge absent the merger. Competition from smaller carriers will be insufficient to prevent such coordinated pricing because of the superior capacity, coverage, and reliability of the Big 3's international networks, and their superior access to foreign carriers for the completion of international circuits.

D. Entry

113. Entry into the relevant markets for international private line services would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm to consumers, as explained with regard to mass market international long distance telecommunications services. *See supra* Section V.

VII.

MARKETS FOR INTERLATA PRIVATE LINE SERVICES AND INTERLATA X.25, ATM, AND FRAME RELAY DATA NETWORK SERVICES

A. Relevant Product Markets

114. Private line services and data networks using various technologies -- X.25, asynchronous transfer mode ("ATM"), and frame relay -- are each used to transmit data files between computers connected to a local area network ("LAN") or a wide area network ("WAN"). Data networks may be restricted to computers within an organization (e.g., an Intranet). Data networks may also connect with authorized users outside an organization who have a continuing relationship with that organization, such as a manufacturer's network of independent dealers or vendors (e.g., an Extranet). In addition, data networks may allow

"packets" of data to be transmitted to any other computer connected to the Internet.

115. Private lines are dedicated circuits provided to a customer to use in any manner and with any hardware and software the customer chooses. A private line comprises a specific amount of bandwidth that is exclusively available to a customer for point-to-point communication. Private lines provide maximum security and dependability but, because of their expense, are economical only if the transmission capacity is fully utilized. Private lines are typically preferred by customers who have a need for very large and steady data transmission 24 hours a day, 7 days a week. The overall U.S. private line market is valued at over $9.5 billion.

116. Data networks utilizing the X.25 protocol were introduced in the mid-1970s and still comprise a nearly $495 million U.S. market. X.25 networks typically use a dial-up access facility to connect the originating computer to a point-to-point virtual circuit that allows it to communicate with the destination computer. These networks provide a secure, error-free, inexpensive, but relatively slow means of transmitting data files and are primarily used today for intermittent, "bursty" data transmissions (e.g., credit-card authorization and point-of-sale terminal applications, automatic-teller machines, and computerized reservation networks). Because X.25 networks that are operated by different vendors can be easily interconnected, X.25 is often the service of choice for data communications between the United States and countries in which the newer forms of data networks may not be ubiquitously deployed.

117. Frame relay data network technology was introduced in the mid-1980s and constitutes a market valued at over $3.5 billion in the United States. Frame relay networks use dedicated access facilities to connect the originating computer to a point-to-point virtual circuit that allows it to communicate with the destination computer on a secure basis. Frame relay

networks typically cost more than X.25 networks but provide a better means for relatively high-speed transmission of data files on a continuous basis. Frame relay is also capable of providing very high-quality service due to its ability to provide committed information transmission rates with very little, if any, data packet loss and very little delay or "latency." Frame relay is a superior application for business customers who wish to transmit data between a headquarters and numerous remote locations (e.g., hub-and-spoke networks) on a regular and secure basis. Frame relay is ideal for data but currently is less well-suited to deliver high-quality multimedia files (e.g., voice and video). Today, frame relay is the dominant type of data network in the United States and in many other industrialized nations.

118. ATM networks were introduced in the mid-1990s and provide their users with extremely high-speed data transmissions as well as excellent video and voice transmission capabilities. Thus, ATM networks are ideal for such applications as voice, live video-streaming, video conferencing, conferencing with imaging, or interactive learning. For example, ATM networks are used in the medical context to enable doctors to consult colleagues in other cities by conferencing them into consultations and showing them CT scans, MRIs, and the like, in real time. ATM network services typically cost more than frame relay network services. The overall U.S. ATM data network market is valued at approximately $423 million.

119. As discussed in Section IV, *supra*, the BOCs are permitted to provide intraLATA services, but, except in New York, cannot yet offer interLATA services in their local service regions. Many data customers require interLATA networks. For those customers, the BOCs are not among the providers who can service their needs.

120. Carriers compete to provide each of the interLATA data network services

described above to customers who seek to create new networks, enlarge existing networks, or change suppliers of existing networks.

121. For each of the interLATA data network services described above, the Defendants and other carriers are capable of discriminating, and in fact do discriminate, in the prices, terms, and conditions of sale for such network services based on the specific circumstances of the customer. Business customers with more than approximately 1,000 employees and U.S. interLATA telecommunications expenditures in excess of $30,000 per month ("high-end customers") face substantially the same competitive conditions for the purchase of each of the interLATA data network services described above. These customers typically have complex data network needs, require a high level of network reliability, and have numerous and widely dispersed data network locations.

122. Based on the foregoing, a high-end customer for interLATA data network services often has clear preferences for one type of network based on, among other things, the customer's particular needs in terms of technical network features, geography, security, transmission speed, and network costs. In these circumstances, there are no sufficiently close substitutes for each of these data network services to defeat or discipline a small but significant nontransitory increase in price. For other needs of high-end customers, however, one type of network may be a close substitute for another, and purchasing decisions may be influenced by the relative prices of the different types of data network services. *See infra* Section VIII.

123. The provision of interLATA data network services by means of private lines and by means of X.25, ATM, and frame relay networks, respectively, to high-end business customers are each lines of commerce and relevant product markets for purposes of Section 7 of the Clayton

Act.

B. Relevant Geographic Markets

124. Because linking a high-end customer's U.S. data network sites requires extensive domestic operations, such customers are unlikely to turn to any foreign providers that lack these domestic operations in response to a small but significant and nontransitory increase in price by providers of domestic data network services. Therefore, although the services provided in the markets for private lines and X.25, ATM, and frame relay network services, respectively, may include some international as well as domestic interLATA transmission of data, these markets are properly defined in terms of the provision of those services to high-end customers in the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

125. Each of the particular markets for interLATA data network services is highly concentrated and would become substantially more concentrated as a result of the proposed merger.

126. In the market for the provision of private line services to high-end customers, WorldCom has a revenue share of at least 27% and Sprint a share of at least 9%. WorldCom and Sprint would have a combined post-merger market share of 36%, leaving only AT&T as a serious rival. According to the HHI, the standard measure of market concentration (defined and explained in Appendix A), combining WorldCom and Sprint would substantially increase the already high concentration in this market. The HHI for the private line data network services market is at least 2800; post-merger, it would increase by nearly 500 points to approximately

3300.

127. In the market for the provision of X.25 data network services to high-end customers, WorldCom has a revenue share of at least 25% and Sprint a share of at least 50%. The HHI for the X.25 data network services market is at least 3300; post-merger, it would increase by at least 2700 points to approximately 6000.

128. The Defendants dominate the market for X.25 data network services, especially since the withdrawal of AT&T at the end of 1999. Thus, by acquiring Sprint, WorldCom would eliminate its only meaningful competitor in this market, which would lead to higher prices and lower service quality than would prevail absent the merger.

129. In the market for the provision of ATM data network services to high-end customers, WorldCom has a revenue share of at least 37% and Sprint a share of at least 33%. The HHI for the ATM data network services market is at least 3000; post-merger, it would increase by approximately 2500 points to approximately 5500.

130. The Defendants dominate the market for ATM data network services. The merged entity will have a market share of over 70%. By acquiring Sprint, WorldCom would eliminate its biggest competitor in this market, which would lead to higher prices and poorer service than would prevail absent the merger.

131. In the market for the provision of frame relay data network services to high-end customers, WorldCom has a revenue share of at least 36% and Sprint a share of at least 19%. The HHI for this market is at least 3100; post-merger, it would increase by 1400 points to approximately 4500.

132. The merged entity will have a combined share of more than 50% of the frame relay

services market. By acquiring Sprint, WorldCom would eliminate one of its principal rivals in this market, which would lead to higher prices and lower service quality than would prevail absent the merger.

133. In the aforementioned markets for the provision of private line services, and ATM, and frame relay data network services, respectively, the Defendants and AT&T are the only large and important participants. In each of these markets, the Defendants' products are regarded by customers as close substitutes.

134. The merger will facilitate coordination between the merged entity and AT&T in each of the markets for private lines and ATM and frame relay data network services, respectively. Indeed, the merged entity and AT&T will be the only firms capable of providing a full range of services to high-end customers across the country and around the world in each of these markets, except that for X.25 data network services, which the merged entity alone will dominate.

135. Because each of these networks depends upon the ability of the provider to connect sites at diverse locations throughout the United States and, in some cases, around the world, the provider must possess a vast network of optical fiber, POPs, nodes, switches, routers, and other associated facilities. Because WorldCom and Sprint are two of only three such providers in the United States, the effect of the merger will be to eliminate one of the very few carriers that possesses the full range of facilities required to compete in these markets. Although it is technically feasible to interconnect data networks belonging to different suppliers, the Defendants and AT&T have refused to provide quality of service guarantees in cases where data networks of different vendors are interconnected. Without these quality of service guarantees,

customers are reluctant to rely on interconnected data networks to transmit important business data.

D. Entry

136. Entry into each of the markets for the provision of private line services and X.25, ATM, and frame relay data network services, respectively, to high-end customers would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm. Entry would take at least several years and require a large capital investment in equipment and facilities.

137. To successfully compete in these markets over the long run, a carrier must own or control fiber and POPs in all parts of the United States where customers may wish to connect to a data network, as well as nodes, routers, switches, and other associated facilities. The construction of such network facilities is very costly and time-consuming. In addition, a carrier must maintain a large, highly trained marketing and technical staff to operate the network and to obtain and service clients. Thus, entry barriers are very high in each of the data network services markets.

138. The market for X.25 data network services is a declining market. Companies such as AT&T have recently exited the market rather than incur the costs of Y2K compliance. It is therefore highly unlikely that any new provider would make the investment necessary to compete successfully against WorldCom or Sprint, the dominant providers of X.25 data network services.

139. Post-merger, the Defendants will be able to further raise entry barriers to rival networks by, among other things, making it more difficult for them to interconnect with the Defendants' networks and by refusing to cooperate in providing inter-network connections that would allow them to compete for some portion of a high-end customer's data network

requirements.

VIII.

INTERLATA DATA NETWORK SERVICES MARKET

A. Relevant Product Market

140. Internet protocol virtual private networks ("IP/VPNs") are data networks that use the same protocol -- known as "TCP/IP" -- that is commonly used over the public Internet. Unlike other data networks, *see supra* Section VII, IP/VPN data networks may use either public Internet transmission facilities, private lines, or ATM or frame relay data networks as means of transmission. When used on public Internet facilities, however, transmissions over IP/VPNs are subject to the same delay and data losses as other Internet transmissions and may also be subject to unauthorized access or threats of denial of service, such as occurred in April 2000 to CNN.com, Yahoo!, and other popular Internet sites. In order to provide more secure and reliable delivery of data, network providers now offer IP/VPNs that encapsulate IP data packets into frame relay frames or ATM cells and route the IP packets over frame relay or ATM networks. This enables a vendor to offer IP/VPN services with the higher quality of service typically associated with frame relay and ATM networks (and far above the public Internet's typical quality levels) provided, however, that the transmissions stay on the vendor's own network. Recent improvements will enhance IP/VPN security by permitting the encryption of IP data packets, so that they may be securely transmitted over public Internet facilities. Two of the largest and most important providers of IP/VPNs are WorldCom's UUNET subsidiary and Sprint.

141. As mentioned, *see supra* Section VII, the needs of many high-end customers are

best served by only one type of particular data network and other data networks are not close substitutes. For other needs, high-end customers may choose data networks based largely or exclusively on price, and two or more of the above-mentioned network solutions -- i.e., private lines and X.25, frame relay, ATM, and IP/VPN data networks -- may be close substitutes for each other. In response to a small but significant nontransitory increase in price that applied to only one type of data network, these customers can and would switch to another type of data network.

142. The provision of interLATA data network services, consisting of all the particular data network services, plus IP/VPNs, for those high-end customers whose needs may be satisfied by two or more types of data network services, *see supra* Section VII, is a line of commerce and a relevant product market for purposes of Section 7 of the Clayton Act. There are no substitutes for interLATA data network services sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

B. Relevant Geographic Market

143. As discussed, *see supra* Section VII, although the market for the provision of high-end customer data network services may include some international as well as domestic transmission of data, the relevant market is properly defined in terms of the provision of services to high-end customers in the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

144. The market for data network services combined sold to high-end customers is highly concentrated and is dominated by the Defendants and AT&T. WorldCom has a market share of approximately 30%, and Sprint has a market share of approximately 14%. The HHI is

approximately 2650; post-merger, it will increase approximately 800 points to 3450.

145. Combining WorldCom and Sprint will reduce the combined entity's incentives to lower prices, increase quality, and pursue innovation in the interLATA data network services market.

146. Because it is necessary to possess a vast network of fiber, POPs, nodes, switches, routers, and other associated facilities to compete effectively in this market, the elimination of Sprint will leave only two carriers, WorldCom and AT&T, and allow them to dominate the market. The merger would facilitate coordination between the merged entity and AT&T in this market.

D. Entry

147. For the same reasons discussed, in relation to the individual interLATA data network services markets, *see supra* Section VII, entry into the market for the provision interLATA data network services to high-end customers would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm. Entry would take at least several years and require a large capital investment in equipment, facilities, and personnel.

IX.

CUSTOM NETWORK SERVICES MARKET

A. Relevant Product Market

148. Large businesses typically have extensive and complex telecommunications needs for both internal and external voice and data communications. Their needs include simple services (e.g., outbound long distance voice service) and the most advanced and complex services (e.g.,

managed data networks that connect hundreds of business locations with exacting quality-of-service guarantees, or enhanced toll-free voice services with automatic call-management features). Large businesses also often require sophisticated and consolidated billing and accounting systems, as well as provision and maintenance of diverse customer premises equipment. Moreover, for many of these customers, voice and data network services are critical to the daily operations of their enterprises.

149. Large businesses typically purchase a substantial majority of their telecommunications services in a bundle of custom network services ("CNS") that is tailored to meet their particular needs. Although the requirements of these large businesses vary, most large business customers require several of the following types of telecommunications services: (1) "outbound" domestic long distance voice; (2) "in-bound" toll-free voice services (both advanced and plain "1-800"); (3) data network services (e.g., private lines and X.25, ATM, frame relay, and IP/VPN); (4) ancillary services such as teleconferencing and broadcast fax; (5) Internet services such as dedicated Internet access; and (6) international voice and data services. Most large businesses purchase the majority of the aforementioned services from one of the Defendants or AT&T pursuant to a CNS agreement, typically through a single, multiyear contract, sometimes referred to as a "primary" contract. Advantages of contracting this way include the administrative convenience of having a single point of contact with the primary carrier and the ability to obtain significant volume discounts by acquiring large amounts of multiple services from a single carrier.

150. Because shortcomings or failures in the provision of CNS can produce costly and even catastrophic consequences for large businesses, many of these customers place a high premium on the reputation and proven quality of a provider and are unwilling to entrust to

carriers other than the Defendants and AT&T the mission-critical aspects of their CNS. By contrast, smaller business customers tend to have simpler telecommunications requirements and are therefore more willing and likely to deal with carriers other than the Defendants and AT&T.

151. In addition to CNS, large business customers may purchase a limited number of additional services -- typically standard services (e.g., simple outbound voice services) that are not mission-critical -- from carriers others than the Defendants and AT&T. These services are typically purchased under "secondary" or "backup" contracts, as distinguished from the "primary" contracts that cover CNS. Businesses use secondary contracts to promote flexibility and redundancy in services and to take advantage of the lower prices offered by second- and third-tier carriers.

152. The CNS market includes only retail sales to large businesses, not the provision of wholesale capacity to other telecommunications carriers for resale. The needs of wholesale customers are significantly different from the needs of large business retail customers. Among other differences, wholesale customers purchase standardized wholesale products and have far fewer support and service requirements than do large business retail customers.

153. While CNS often include some international services, the majority of the traffic carried and locations served pursuant to CNS agreements are within the United States. Contracts that cover primarily the provision of services between the United States and foreign countries have supply characteristics that are very different from those of CNS agreements and, therefore, are not in the relevant product market.

154. Providers of CNS discriminate in the prices, terms, and conditions of sale among their customers for CNS based upon the specific circumstances of each customer. While each

customer could be viewed as a relevant product market, customers who face the same competitive conditions for CNS can conveniently and usefully be aggregated for purposes of analyzing the competitive effects of the merger. Nearly all large business customers who spend $5 million or more per year on interLATA U.S. telecommunications services face the same competitive conditions and therefore are such a group. These customers typically have more complex needs, buy more customized products, and have more numerous and widely dispersed locations. In these circumstances, there are no substitutes for CNS sufficiently close to defeat or discipline a small but significant nontransitory increase in price.

155. The provision of CNS in the United States to large business customers (i.e., those purchasing $5 million or more per year on U.S. interLATA CNS) is a line of commerce and a relevant product market affected by this transaction for purposes of Section 7 of the Clayton Act.

B. Relevant Geographic Market

156. Because providing a customer's CNS needs in the United States requires extensive domestic operations, such customers are unlikely to turn to any foreign providers that lack these domestic operations in response to a small but significant and nontransitory increase in price by providers of CNS in the United States. Therefore, although CNS may include some international as well as domestic services, the market is properly defined in terms of the provision of CNS to large business customers in the United States. The United States is a relevant geographic market for purposes of Section 7 of the Clayton Act.

C. Market Concentration and Anticompetitive Effects

157. Although published market share statistics for the CNS market are unavailable, there are only three meaningful CNS competitors -- the Defendants and AT&T -- and the market is therefore highly concentrated. Other carriers have won no more than a handful of CNS contracts.

158. Nearly all large businesses look to AT&T, WorldCom, and Sprint for competitive CNS bids, and a significant number are unwilling to give serious consideration to any carrier other than the Big 3. The proposed transaction will reduce these customers' competitive alternatives from three to two.

159. By acquiring Sprint, WorldCom will eliminate one of only two serious competitive constraints to its CNS business. Each is disciplined in pricing and service offerings by competition from the other because it fears that large businesses will contract with the other instead. Post-merger, WorldCom/Sprint will no longer be so constrained and will have the incentive and ability to charge higher prices, provide lower quality customer service, and offer less innovation than it would absent the merger.

160. The likely harm to large business customers is exacerbated by the fact that, among the Big 3, WorldCom and Sprint are frequently the low-priced carriers. The merged entity will be able to raise prices without losing sales because large business customers do not contract with emerging carriers for CNS to any significant degree.

161. The merger also will facilitate coordination between the merged entity and AT&T. The loss of Sprint will substantially increase the likelihood of increased interactive pricing between the merged entity and AT&T in the CNS market. Competition from smaller carriers is

insufficient to prevent this coordinated pricing due to both the superior scope of the Big 3's networks and product offerings and CNS customers' requirement that their providers have a proven track record of reliably delivering CNS to comparable large business customers.

D. Entry

162. Entry into the CNS market would not be timely, likely, or sufficient to remedy the proposed merger's likely anticompetitive harm.

163. No carriers other than the Big 3 currently provide all of the services and features that meet large business customers' CNS requirements. In order to provide such services and features, carriers other than the Big 3 must obtain the ubiquitous facilities-based networks, technological expertise, account management and sales staff, and advanced operational support systems that are required to compete in the CNS market. These carriers must also hire the numerous highly skilled personnel needed to provide the level of customer support that most large business customers require of their CNS carriers. End-to-end managed services as well as rapid trouble-shooting and recovery from network failures is deemed by large businesses to be important in insuring a high quality of service.

164. CNS customers demand that their carriers have a reputation for reliability. Smaller carriers cannot get experience and references without winning CNS contracts, but their lack of experience and references prevents many large business customers from purchasing CNS from these carriers. The only way a potential entrant can surmount this hurdle is to establish a track record of reliability on secondary contracts for large businesses and, over time, develop a reputation sufficient for a large business to award it a CNS contract. This is a difficult process that usually requires several years of effort. Indeed, WorldCom and Sprint were able successfully

to enter the CNS market only after many years of sustained effort in this regard.

X.

VIOLATIONS ALLEGED

165. The United States hereby incorporates paragraphs 1 through 164.

166. Pursuant to an Agreement and Plan of Merger dated October 4, 1999, WorldCom and Sprint intend to consolidate or merge their businesses.

167. The effect of the proposed acquisition of Sprint by WorldCom would be to lessen competition substantially in interstate trade and commerce in each of the relevant markets alleged above in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

168. The transaction will likely have the following effects, among others:

(a) competition in the development, provision, and sale of services in each of the relevant markets will be eliminated or substantially lessened;

(b) actual and future competition between WorldCom and Sprint, and between these companies and AT&T, in development, provision, and sale of services in each of the relevant markets will be eliminated or substantially lessened;

(c) prices for services in each relevant product market will likely increase to levels above those that would prevail absent the merger;

(d) innovation and quality of service in each relevant product market will likely decrease to levels below those that would prevail absent the merger; and

(e) barriers to entering each of these important relevant product markets will be increased.

XI.

REQUEST FOR RELIEF

Plaintiff prays:

1. That WorldCom's proposed consolidation and merger with Sprint be adjudged to violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;

2. That a permanent injunction be issued to prevent and restrain the Defendants and all persons acting on their behalf from consummating the merger agreement described in Paragraph 18 or from going forward with any other plan or agreement by which WorldCom would merge with or acquire Sprint, its capital stock, or any of its assets;

3. That the United States be awarded the costs of this action; and

4. That the Court impose such additional equitable relief as it deems necessary and proper.

Dated: June 26, 2000

Respectfully submitted,

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APPENDIX A

Herfindahl-Hirschman Index

"HHI" means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30%, 30%, 20%, and 20%, the HHI is 2600 ($30^2 + 30^2 + 20^2 + 20^2 = 2600$). (Note: Throughout the Complaint, market share percentages have been rounded to the nearest whole number, but HHIs have been estimated using unrounded percentages in order to accurately reflect the concentration of the various markets.) The HHI takes into account the relative size distribution of the firms in a market and approaches zero when a market consists of a large number of small firms. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1000 and 1800 points are considered to be moderately concentrated, and those in which the HHI is in excess of 1800 points are considered to be highly concentrated. *See Horizontal Merger Guidelines* ¶ 1.51 (revised Apr. 8, 1997). Transactions that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the guidelines issued by the U.S. Department of Justice and Federal Trade Commission. *See id.*

APPENDIX B

U.S. Foreign-Country Markets for Mass Market International Long Distance Services

Route	Market Shares (IMTS Revenues)					HHIs/Change in HHI		
	AT&T	WCom	Sprint	Merged	Big 3	Pre-HHI	Post-HHI	Change
Albania	19.10%	56.94%	4.99%	61.93%	81.03%	3790	4359	569
Algeria	46.55%	36.16%	5.43%	41.59%	88.14%	3545	3938	393
Antigua & Barbuda	49.57%	30.82%	16.93%	47.75%	97.32%	3698	4742	1044
Argentina	59.76%	25.07%	11.02%	36.10%	95.85%	4324	4877	553
Bangladesh	43.84%	33.27%	5.80%	39.07%	82.90%	3166	3552	386
Barbados	63.64%	29.17%	6.08%	35.25%	98.88%	4938	5292	354
Benin	31.01%	23.11%	31.89%	55.00%	86.01%	2584	4057	1473
Bermuda	69.05%	22.02%	8.38%	30.39%	99.45%	5324	5692	368
Bolivia	63.81%	27.22%	7.65%	34.87%	98.67%	4871	5288	417
Brazil	64.44%	25.61%	7.61%	33.22%	97.66%	4868	5257	389
Bulgaria	49.95%	36.58%	5.62%	42.20%	92.14%	3883	4294	411
Burkina	46.66%	31.06%	10.05%	41.11%	87.77%	3298	3923	625
Canada	58.89%	31.63%	8.96%	40.59%	99.48%	4549	5116	567
Chile	52.26%	27.51%	13.71%	41.23%	93.48%	3691	4446	755
Colombia	63.22%	27.43%	6.60%	34.03%	97.25%	4794	5157	363
Cuba	46.47%	43.78%	6.36%	50.13%	96.60%	4120	4676	556
Dominica	48.59%	29.59%	8.94%	38.53%	87.12%	3400	3929	529
Egypt	59.27%	26.70%	9.83%	36.53%	95.81%	4328	4853	525
El Salvador	52.04%	27.21%	9.48%	36.68%	88.72%	3582	4098	516
Ethiopia	57.36%	25.85%	13.01%	38.86%	96.22%	4135	4807	672
Finland	52.00%	35.73%	8.66%	44.39%	96.40%	4062	4681	619
French Overseas Dep'ts	3.49%	84.46%	5.33%	89.79%	93.27%	7190	8090	900
Gambia, The	54.23%	27.75%	7.94%	35.70%	89.93%	3830	4270	440
Greece	59.81%	33.89%	4.70%	38.60%	98.40%	4749	5068	319
Grenada	56.71%	28.89%	13.28%	42.17%	98.89%	4228	4995	767
Guinea	55.23%	30.72%	6.60%	37.32%	92.56%	4056	4462	406
Haiti	43.79%	40.85%	10.19%	51.04%	94.83%	3703	4535	832
Hong Kong	51.07%	21.55%	21.07%	42.62%	93.69%	3526	4434	908
India	43.64%	38.65%	6.89%	45.54%	89.18%	3481	4014	533
Indonesia	58.16%	28.69%	7.64%	36.32%	94.49%	4276	4714	438
Israel	62.47%	21.66%	14.43%	36.09%	98.55%	4580	5205	625
Italy	55.46%	37.77%	6.03%	43.80%	99.26%	4539	4995	456
Jamaica	64.27%	21.90%	11.32%	33.23%	97.50%	4742	5238	496
Japan	60.09%	20.57%	11.35%	31.92%	92.01%	4176	4643	467
Korea, South	55.59%	30.14%	11.00%	41.14%	96.73%	4121	4784	663
Mexico	53.65%	34.99%	8.26%	43.25%	96.90%	4173	4751	578
Montserrat	58.15%	30.67%	9.87%	40.54%	98.69%	4421	5026	605
Nicaragua	61.53%	25.12%	10.16%	35.28%	96.81%	4522	5033	511

Route	Market Shares (IMTS Revenues)					HHIs/Change in HHI		
	AT&T	WCom	Sprint	Merged	Big 3	Pre-HHI	Post-HHI	Change
Nigeria	37.73%	52.33%	3.62%	55.95%	93.69%	4189	4568	379
Panama	66.55%	23.94%	7.30%	31.24%	97.79%	5057	5406	349
Peru	58.84%	31.43%	6.10%	37.53%	96.37%	4491	4875	384
Portugal	63.13%	28.28%	7.03%	35.31%	98.45%	4836	5233	397
Rwanda	2.70%	61.29%	15.52%	76.81%	79.51%	4185	6088	1903
Saint Lucia	63.06%	23.99%	9.20%	33.19%	96.25%	4641	5082	441
Saint Vincent & The Grenadines	50.37%	32.79%	13.49%	46.27%	96.64%	3799	4683	884
Senegal	46.01%	15.89%	27.34%	43.22%	89.24%	3173	4041	868
South Africa	56.69%	22.49%	16.27%	38.76%	95.45%	3989	4721	732
Sri Lanka	41.01%	31.76%	11.25%	43.02%	84.02%	2869	3584	715
Sweden	54.70%	24.92%	9.36%	34.29%	88.99%	3750	4217	467
Taiwan	59.38%	22.89%	11.36%	34.25%	93.64%	4188	4708	520
Trinidad & Tobago	56.81%	32.62%	8.61%	41.23%	98.03%	4366	4928	562
Turkey	57.70%	36.13%	4.78%	40.91%	98.61%	4658	5004	346
United Kingdom	57.55%	28.96%	10.33%	39.29%	96.84%	4259	4857	598
Venezuela	63.28%	25.63%	6.67%	32.29%	95.57%	4709	5051	342
Vietnam	45.12%	33.91%	13.45%	47.36%	92.48%	3379	4292	913
Yemen	39.84%	30.09%	13.90%	43.99%	83.83%	2773	3609	836

APPENDIX C

U.S. Foreign-Country Markets for Private Line Services

Route	Market Shares (IPLC Revenues)					HHIs/Change in HHI		
	AT&T	WCom	Sprint	Merged	Big 3	Pre-HHI	Post-HHI	Change
Argentina	24.72%	51.09%	9.46%	60.55%	85.27%	3409	4376	967
Armenia	0%	68.03%	31.97%	100.00%	100.00%	5650	10000	4350
Australia	49.30%	40.86%	8.29%	49.14%	98.45%	4170	4847	677
Austria	1.35%	91.17%	5.94%	97.11%	98.46%	8352	9434	1082
Bahamas, The	40.96%	55.07%	2.70%	57.76%	98.72%	4719	5015	296
Bahrain	46.19%	29.32%	24.49%	53.81%	100.00%	3593	5029	1436
Belarus	0%	78.81%	21.19%	100.00%	100.00%	6660	10000	3340
Belgium	15.00%	62.43%	10.84%	73.27%	88.27%	4274	5627	1353
Brazil	24.29%	58.99%	14.08%	73.07%	97.36%	4274	5936	1662
Canada	36.09%	30.97%	25.83%	56.80%	92.89%	2949	4549	1600
Cayman Islands	22.31%	74.96%	2.72%	77.69%	100.00%	6125	6533	408
Chile	18.52%	46.43%	16.75%	63.17%	81.69%	2899	4454	1555
China	52.60%	26.39%	20.39%	46.78%	99.39%	3880	4956	1076
Cyprus	4.85%	13.46%	81.69%	95.15%	100.00%	6878	9076	2198
Czech Republic	36.48%	21.71%	41.81%	63.52%	100.00%	3550	5366	1816
Egypt	1.26%	61.90%	33.71%	95.61%	96.87%	4979	9153	4174
El Salvador	19.56%	25.64%	29.71%	55.36%	74.92%	2552	4076	1524
Ethiopia	0%	37.60%	62.40%	100.00%	100.00%	5308	10000	4692
France	14.51%	55.29%	27.51%	82.80%	97.32%	4031	7074	3043
Georgia	0%	19.99%	80.01%	100.00%	100.00%	6802	10000	3198
Germany	24.23%	54.73%	19.43%	74.16%	98.40%	3961	6088	2127
Guatemala	38.91%	47.32%	10.78%	58.10%	97.01%	3879	4899	1020
Haiti	4.87%	84.01%	11.13%	95.13%	100.00%	7204	9074	1870
Hong Kong	31.99%	53.76%	9.41%	63.17%	95.16%	4014	5025	1011
Hungary	0%	52.98%	43.04%	96.01%	96.01%	4675	9234	4559
India	18.59%	68.95%	12.46%	81.41%	100.00%	5255	6974	1719
Indonesia	22.30%	58.92%	18.78%	77.70%	100.00%	4322	6534	2212
Ireland	24.18%	65.09%	10.74%	75.82%	100.00%	4936	6334	1398
Israel	11.61%	68.79%	19.60%	88.39%	100.00%	5251	7948	2697
Italy	40.77%	36.23%	23.00%	59.23%	100.00%	3504	5170	1666
Jamaica	41.10%	34.83%	24.08%	58.90%	100.00%	3482	5159	1677
Japan	43.16%	38.79%	9.40%	48.19%	91.35%	3474	4203	729
Jordan	0%	86.29%	13.71%	100.00%	100.00%	7634	10000	2366
Korea, South	35.31%	42.48%	21.74%	64.23%	99.54%	3525	5372	1847
Kuwait	0%	91.57%	8.43%	100.00%	100.00%	8456	10000	1544
Lithuania	0%	45.88%	54.12%	100.00%	100.00%	5034	10000	4966
Luxembourg	20.03%	20.91%	59.07%	79.97%	100.00%	4327	6797	2470
Malaysia	63.30%	33.38%	3.32%	36.70%	100.00%	5132	5354	222

Route	Market Shares (IPLC Revenues)					HHIs/Change in HHI		
	AT&T	WCom	Sprint	Merged	Big 3	Pre-HHI	Post-HHI	Change
Mauritius	0%	17.51%	82.49%	100.00%	100.00%	7111	10000	2889
Mexico	45.97%	39.13%	11.82%	50.94%	96.92%	3787	4712	925
Netherlands	33.83%	48.03%	17.54%	65.57%	99.39%	3758	5443	1685
Netherlands Antilles	12.03%	69.57%	18.39%	87.97%	100.00%	5324	7883	2559
New Zealand	13.30%	10.35%	75.40%	85.75%	99.05%	5970	7531	1561
Nicaragua	3.52%	57.55%	38.92%	96.48%	100.00%	4840	9320	4480
Nigeria	8.91%	38.32%	52.76%	91.09%	100.00%	4332	8376	4044
Norway	19.30%	60.62%	20.08%	80.70%	100.00%	4451	6885	2434
Oman	0%	16.48%	83.52%	100.00%	100.00%	7247	10000	2753
Pakistan	3.75%	74.26%	21.98%	96.25%	100.00%	6012	9278	3266
Peru	14.86%	75.91%	7.74%	83.65%	98.51%	6044	7219	1175
Philippines	25.67%	57.87%	16.30%	74.16%	99.83%	4273	6159	1886
Poland	6.29%	88.18%	5.54%	93.71%	100.00%	7845	8822	977
Portugal	7.28%	63.17%	15.03%	78.21%	85.48%	4480	6380	1900
Qatar	0%	7.60%	92.40%	100.00%	100.00%	8596	10000	1404
Saint Kitts & Nevis	0%	92.87%	7.13%	100.00%	100.00%	8675	10000	1325
Saudi Arabia	48.26%	50.21%	1.53%	51.74%	100.00%	4852	5006	154
Singapore	41.25%	42.82%	13.71%	56.52%	97.77%	3727	4901	1174
South Africa	45.91%	26.10%	26.93%	53.03%	98.95%	3516	4922	1406
Sri Lanka	0%	91.89%	8.11%	100.00%	100.00%	8510	10000	1490
Switzerland	32.89%	51.71%	12.83%	64.54%	97.43%	3924	5250	1326
Taiwan	55.98%	25.78%	18.24%	44.02%	100.00%	4131	5072	941
Thailand	51.08%	33.89%	15.03%	48.92%	100.00%	3984	5002	1018
Turkey	23.84%	51.49%	24.67%	76.16%	100.00%	3828	6369	2541
Ukraine	39.39%	57.88%	2.73%	60.61%	100.00%	4909	5225	316
United Arab Emirates	30.15%	65.40%	4.46%	69.85%	100.00%	5206	5788	582
Uruguay	17.45%	50.25%	32.30%	82.55%	100.00%	3873	7120	3247
Venezuela	19.35%	52.31%	15.47%	67.77%	87.12%	3444	5062	1618
Vietnam	15.78%	39.81%	44.41%	84.22%	100.00%	3806	7342	3536