

DSL footprint has been credited with making DSL highly competitive with cable due to the attractiveness of AOL's content.³²⁷

116. Thus far, AOL has been unable to offer AOL Plus over cable, though the company has sought a presence on that platform through negotiations with cable companies and its past advocacy of "open access."³²⁸ The merger would enable AOL to offer its high-speed Internet access services to Time Warner's nearly 13 million cable subscribers as soon as Time Warner's exclusive contract with Road Runner expires.³²⁹ AOL's access to this customer base would not be significantly slowed by technical obstacles, as eighty-five percent of Time Warner's cable plant has already been upgraded to two-way, 750 MHz hybrid fiber/coaxial (HFC) networks.³³⁰ AOL has indicated that it would offer AOL Plus to Time Warner cable customers at the earliest possible juncture.³³¹

117. Because the proposed transaction would give AOL ownership of a cable network, the merged firm could maximize its profits by maximizing the number of Time Warner cable subscribers receiving AOL's residential high-speed Internet access services over Time Warner's cable facilities instead of DSL. This conclusion follows from the simple fact that customers in Time Warner service areas who received AOL's high-speed Internet access services over cable would pay the merged firm for Internet access, for content, and for transmission, whereas customers in the same service areas who received AOL's services over DSL would pay the merged firm only for the first two components.³³² Every customer in a Time Warner service area who elected to receive AOL's high-speed Internet access services over DSL instead of cable, in other words, would cost the merged firm one stream of revenue.

118. For this reason, commenters fear that AOL -- which played an important role in promoting DSL before the proposed merger -- would "withdraw support" from that platform post-merger and steer customers who could receive its high-speed Internet access services over either DSL or cable to

³²⁷ See Consumers Union Comments at 27-28 (citing Nico DeTourn, *Industry News: AT&T Reaches Out*, THE MOTLEY FOOL'S INTERNET REPORT, July 10, 1999, at 10). Additionally, in *AT&T-MediaOne*, we noted that ISPs lacking direct access to provide broadband services over cable systems were entering into alliances with alternative broadband providers, thereby accelerating the deployment of these technologies. *AT&T-MediaOne Order*, 15 FCC Rcd at 9867-68 ¶ 117.

³²⁸ Applicants' March 21 Supplemental Information at 30 (citing AOL Time Warner Filing S-4, Feb. 11, 2000 at 37); see also Applicants' Second Response at 13; Kinetic Strategies, Inc., *America Online's Broadband Coup*, CABLE DATACOM NEWS, at http://www.cabledatcomnews.com/best_of/bocdn110.html (visited Aug. 14, 2000); Confidential Appendix IV-A-2, Note 2; see also *Applications for Consent to Transfer of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, to AT&T Corp., Transferee*, CC Docket No. 99-251, AOL Comments at 12-17 (comments of AOL in previous merger supporting government-mandated "open access" to cable systems); *Applications for Consent to the Transfer of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor, to AT&T Corp., Transferee*, CS Dkt. No. 98-178, AOL Comments at 30-39 (same).

³²⁹ Kinetic Strategies, Inc., *America Online's Broadband Coup*, CABLE DATACOM NEWS, at http://www.cabledatacomnews.com/best_of/bocdn110.html (visited Aug. 14, 2000). According to a press release issued by Time Warner on December 18, 2000, the exclusivity arrangement between Time Warner and Road Runner will be terminated by April, 2001. See Time Warner Dec. 18 Press Release.

³³⁰ Time Warner Inc., *Time Warner Cable, Overview*, at <http://www.timewarner.com/corp/about/cablesys/index.html> (visited July 31, 2000).

³³¹ See Confidential Appendix IV-A-2, Note 11.

³³² SBC Comments at 21.

the latter.³³³ AOL could withdraw its support from DSL in a number of ways. Most dramatically, it could refuse to offer AOL Plus over DSL altogether. Alternatively, as SBC contends, AOL could restrict the availability of AOL Plus over DSL to geographic markets where that service could not be delivered over Time Warner's cable facilities.³³⁴ If it sought a more subtle means to withdraw support from DSL, AOL could continue to offer its Internet access services over that platform, but do so at higher prices or on less favorable terms than would be available over Time Warner cable.

119. In response to commenters' concerns, AOL asserts that it intends to offer its residential high-speed Internet access services across all platforms, in keeping with its "AOL Anywhere" strategy.³³⁵ AOL Chairman Steve Case stated at the en banc hearing in this proceeding that it is "in [AOL Time Warner's] interest to work as forcefully as we can to establish arrangements with all the cable companies to deploy cable broadband, as well as [with] all the DSL companies, satellite companies, [and] wireless companies, so we really have a national footprint, with a tapestry of broadband solutions."³³⁶ AOL claims that it must provide its services over as many distribution platforms as possible in order to reach the greatest number of consumers;³³⁷ maximizing the number of consumers that view AOL content, the company maintains, will increase subscription revenue, advertising revenue and revenue from e-commerce transactions.³³⁸ AOL further contends that if it failed to offer AOL Plus on multiple broadband platforms within Time Warner service areas, consumers would likely subscribe to an ISP other than AOL in lieu of being forced onto cable.³³⁹ The Applicants observe that within Time Warner franchise areas, "a substantial percentage of consumers" do not subscribe to cable, and that refusing to offer AOL Plus over alternative platforms could foreclose AOL from signing up these potential subscribers.³⁴⁰

120. Although the record supports AOL's general commitment to offering its services over DSL, we nonetheless conclude that the merged firm would have a clear economic incentive to favor cable as its platform of choice with respect to customers in Time Warner service areas who could obtain residential high-speed Internet access services over either conduit.³⁴¹ The record does not support a conclusion that AOL Time Warner would discriminate against DSL by refusing to offer high-speed Internet access services over that platform altogether. On the contrary, as the Applicants' aver, it would

³³³ *Id.* at 20. SBC claims that the proposed merger would give AOL "a strong incentive generally to favor cable over DSL or satellite throughout the country"; it claims that "the incentive will be overwhelming in all geographic markets where AOL/Time Warner is itself the local provider of cable service." *Id.* at 20-21.

³³⁴ *Id.*

³³⁵ Applicants' March 21 Supplemental Information at 18.

³³⁶ Testimony of Steve Case, Chairman and CEO, America Online, Inc., FCC En Banc Hearing, CS Docket No. 00-3- (July 27, 2000), Tr. at 43 ("Case En Banc Testimony").

³³⁷ Applicants' Second Response at 10-11; *id.* at 13 ("A merged AOL Time Warner will continue the same strategy of seeking to make the AOL ISP service available over as many platforms as possible.").

³³⁸ Applicants' March 21 Supplemental Information at 17; *see also* Jeff Camp et al., *The Broadband Report: Reaping What You Sow: ROI in the Broadband Market*, Morgan Stanley Dean Witter, May 2000, at 57 ("We expect that AOL Time Warner will offer to sell content over DSL and satellite systems, as well as cable.").

³³⁹ Applicants' Second Response at 11.

³⁴⁰ Applicants' March 21 Supplemental Information at 19.

³⁴¹ Should the Applicants enter into an agreement with AT&T to be the favored or exclusive ISP over AT&T cable systems, additional incentives would be created which could encourage the Applicants to steer customers to the cable platform rather than DSL. *See Confidential Appendix IV-A-2, Note 4.*

be consonant with AOL Time Warner's economic interest to offer such services over DSL in order to reach as many "eyeballs" as possible.³⁴² However, the merged firm's incentive to offer "AOL Anywhere" would not negate its incentive to steer customers to the platform the Applicants would own where customers could choose that platform.

121. If AOL Time Warner acted upon this latter incentive and withdrew its full-fledged support from the DSL platform in Time Warner cable service areas, the result would be to retard the growth of DSL as a competitor to cable.³⁴³ We believe such a result would be against the public interest. Robust competition between cable and DSL platforms is important to "promote the continued development of the Internet,"³⁴⁴ to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services,"³⁴⁵ and to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans."³⁴⁶ We are convinced that a decision by AOL Time Warner to withdraw support from DSL -- even if it were limited to Time Warner cable service areas, and even if its ultimate effect were only to slow DSL's continued growth -- would amount to a public interest harm.

122. Nonetheless, we are satisfied that this harm will be adequately ameliorated by the requirements in the FTC Consent Agreement. As earlier mentioned, these requirements, augmented by the conditions we impose in this proceeding, will allow unaffiliated ISPs to offer residential high-speed Internet access services over Time Warner cable on a non-discriminatory basis. With unaffiliated ISPs able to market their services over AOL Time Warner's cable platform as well as DSL, the merged firm will have an incentive to offer its Internet access services over DSL in order to provide prospective customers with the same range of conduit options its competitors do. AOL Time Warner will likewise have an incentive to offer its Internet access services over DSL in order to replace ISP customers lost to unaffiliated ISPs on its cable platform.

123. The FTC Consent Agreement also addresses the possibility that AOL Time Warner will withdraw support from DSL in Time Warner cable service areas more directly: by requiring the merged firm to market its Internet access service over DSL in the same manner and at the same retail price in Time Warner service areas where AOL or affiliated ISP service *is* available over cable as in Time Warner service areas where AOL or affiliated ISP service is *not* available over cable.³⁴⁷ These requirements effectively forbid AOL Time Warner from steering customers toward the cable platform in Time Warner cable service areas, and ensure that the merged firm's support for DSL service will not vary where cable and DSL platforms compete head to head.

³⁴² See Applicants Sept. 19 Ex Parte at 2.

³⁴³ We do not find that this would cause a specifically quantifiable level of harm to DSL. As noted above, numerous incumbent and competitive LECs have invested heavily in DSL. These include companies with whom AOL has ongoing contracts to market high-speed service, and those without agreements with AOL, and it is not clear that these companies will pull back from aggressively promoting DSL. However, as we note, we do believe that by favoring the cable platform, AOL Time Warner could hinder DSL's growth to some extent.

³⁴⁴ 47 U.S.C. § 230(b)(1).

³⁴⁵ *Id.* § 230(b)(2).

³⁴⁶ 47 U.S.C. § 157 nt.

³⁴⁷ FTC Consent Agreement at IV.A-B; FTC Press Release at 4.

124. We are not persuaded that further requested remedies are appropriate. Memphis, Light, Gas and Water Division ("MLG&W") and Memphis Networkx (jointly referred to as "Memphis Commenters") ask the Commission to condition its license transfer approval on the Applicants taking a "neutral stance to the entry of facilities-based network providers in areas in which Time Warner provides telecommunications and cable services."³⁴⁸ MLG&W is a division of the City of Memphis, Tennessee, that supplies electricity, natural gas and water to approximately 400,000 customers.³⁴⁹ Through a joint venture with a third party, MLG&W formed Memphis Networkx to build a physical network that will provide, among other things, residential high-speed Internet access services.³⁵⁰ The Memphis Commenters allege that Time Warner, which holds the cable franchise in Memphis, has sought to prevent Memphis Networkx from building its competitive network, and has "gone to extraordinary lengths to protect its dominant position in the Memphis broadband market."³⁵¹ The Applicants respond that Time Warner's concerns about Memphis Networkx's proposed network predate the proposed merger, and would be unaffected by a combination of the firms.³⁵² Time Warner also argues that its concerns about Memphis Networkx's proposed network are legitimate, and that to the extent the Memphis Commenters object to the manner in which Time Warner has acted upon its concerns, such objections should be addressed to local decision-makers.³⁵³

125. MLG&W's undertaking may promote competition for high-speed Internet access services and facilitate the deployment of these services to under-served areas.³⁵⁴ Nevertheless, the Memphis Commenters have not demonstrated that Time Warner's opposition to their plan is anticompetitive or unlawful. They have also failed to demonstrate that the proposed merger would increase the likelihood of anticompetitive or unlawful behavior by the Applicants. As we have previously noted, where a "merger is not the cause of . . . [a] competitive threat . . . the . . . license transfer proceeding is not the appropriate forum" to address the issue.³⁵⁵

3. Conditions

126. Commenters argue that the MOU is insufficient to prevent the proposed merger from harming the public interest because it is unenforceable and vague with respect to how the principle of non-discrimination will be implemented.³⁵⁶ Although we commend the Applicants for proffering the MOU, as we have earlier explained we agree with the commenters that the MOU by itself affords insufficient protection against the potential harms to the public interest that could result from the proposed merger.³⁵⁷ The FTC Consent Agreement, on the other hand, substantially addresses these

³⁴⁸ Memphis Networkx Comments at 7.

³⁴⁹ MLG&W Comments at 3.

³⁵⁰ *Id.* at 3.

³⁵¹ *Id.* at 3; *see also* Memphis Networkx Comments at 3.

³⁵² Applicants' Reply Comments at 52.

³⁵³ *Id.*

³⁵⁴ In addition to creating an alternative platform, one of Memphis Networkx's corporate goals is closing the digital divide by providing residential high-speed Internet access to under-served consumers, particularly in rural areas and central cities. MLG&W Comments at 5.

³⁵⁵ *See AT&T-MediaOne Order*, 15 FCC Rcd at 9878-79 ¶ 143.

³⁵⁶ SBC Comments at 20; BellSouth Reply Comments at 22-23.

³⁵⁷ At least one competitive ISP has claimed that the MOU is not being implemented as promised. A spokesman for
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harms, as we have already described. The conditions we impose below are narrowly tailored to augment that decree by preventing AOL Time Warner from utilizing certain indirect means to disadvantage unaffiliated ISPs on its cable systems due to their lack of affiliation.

A. *Choice of ISPs:* AOL Time Warner shall not restrict the ability of any current or prospective ISP customers to select and initiate service from any unaffiliated ISP which, pursuant to a contract with AOL Time Warner, has made its service available over AOL Time Warner's cable facilities ("Participating ISP"). AOL Time Warner shall allow customers to select a Participating ISP by a method that does not discriminate in favor of AOL Time Warner's affiliates on the basis of affiliation. At a minimum, AOL Time Warner shall allow customers to obtain a list of Participating ISPs by calling their local AOL Time Warner cable system and requesting such a list. Whenever a customer requests a listing of Participating ISPs, AOL Time Warner shall provide the list in a reasonable and timely manner.³⁵⁸ Such list shall not discriminate in favor of AOL Time Warner's affiliates on the basis of affiliation. AOL Time Warner shall not prohibit ISPs from marketing their services to AOL Time Warner cable customers.³⁵⁹

B. *First Screen:* AOL Time Warner shall permit each Participating ISP to determine the contents of its subscribers' first screen and shall not require a Participating ISP to include any content as a condition of obtaining access to AOL Time Warner cable systems; provided that AOL Time Warner and any Participating ISP may agree that the ISP will include specified content or links on its first screen.³⁶⁰ AOL Time Warner shall not require any high-speed Internet access cable customer to go through an affiliated ISP to reach any Participating ISP from which the customer purchases service.

C. *Billing:* AOL Time Warner shall permit each ISP to have a direct billing arrangement with those high-speed Internet access subscribers to whom the ISP sells service. AOL Time Warner may offer a billing service to any Participating ISP, but shall not require any ISP to purchase this service as a condition of obtaining access.

D. *Technical Performance:* All contracts between AOL Time Warner and unaffiliated ISPs for access to Time Warner's cable systems shall contain a clause warranting that, to the extent AOL Time Warner provides any Quality of Service mechanisms, caching services, technical support customer services, multicasting capabilities, address management and other technical functions of the cable system that affect customers' experience with their ISP, AOL Time Warner shall provide them in a manner that does not discriminate in favor of AOL Time Warner's affiliated ISPs on the basis of affiliation.

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EarthLink recently said that Time Warner has offered such unfriendly terms for access to its cable plant that it is "difficult, if not impossible" for competing ISPs to enter the cable access market. Specifically, EarthLink alleged that Time Warner requires unfair revenue sharing, requires a substantive presence on the ISP's start page, and does not allow unaffiliated ISPs full access to their customers for billing and other purposes. COMM. DAILY (Sept. 29, 2000). See also Aaron Pressman, *Lost Lessons at Time Warner*, THE STANDARD, Sept. 29, 2000, <http://www.thestandard.com/article/display/0,1151,18993,00.html?nl=dnt> (visited Sept., 2000). EarthLink has since entered an agreement with AOL Time Warner for access to the latter's cable networks.

³⁵⁸ The use of "AOL Time Warner" in this sentence refers to the division of AOL Time Warner that operates its cable systems.

³⁵⁹ This provision ("Choice of ISPs") is not intended to restrict AOL Time Warner's ability to market its own products to prospective or current ISP customers.

³⁶⁰ For purposes of this paragraph, the "first screen" is the screen that comes up first when the user initiates interaction with his or her ISP, for example by clicking on the ISP's desktop icon or accessing the ISP via the World Wide Web.

E. *Rights to Disclose Contracts to the Commission:* AOL Time Warner shall not enter into any contract with any ISP for connection with AOL Time Warner's cable systems that prevents that ISP from disclosing the terms of the contract to the Commission under the Commission's confidentiality procedures.

F. *Enforcement:* With respect to any dispute concerning AOL Time Warner's compliance with these conditions, the following procedures shall apply. These procedures are designed to resolve any disputes within sixty (60) days of the filing of the Complaint and to have them resolved by the Chief, Cable Services Bureau ("Chief").

1. No less than ten (10) business days before filing a complaint with the Commission, the complainant shall notify AOL Time Warner of its intention to file the complaint. This is intended to afford the parties a final opportunity to resolve their dispute without resort to our processes.
2. Within twenty (20) days after public notice of the filing of the complaint, any interested party shall file an answer. Within ten (10) days after the filing of the answer, the complainant may file its reply. The complainant and AOL Time Warner shall each, with its first filing, furnish a detailed report, technical or otherwise, describing the conduct or events that are the subject of the filing. All filings shall be made with Commission Secretary and shall be concurrently served on the Chief.
3. In resolving these filings, the Chief shall apply the following principles: (a) The general pleading rules set forth in Parts 1 and 76 of our rules shall apply to the extent they are consistent with the specific requirements of the proceedings provided for herein;³⁶¹ (b) complaints of misconduct by AOL shall be filed within one year of the occurrence of the alleged misconduct; (c) discovery shall be at the discretion of the Chief and may be requested by a party in one of its filings provided for above; and (d) the complainant shall bear the burden of proof in the proceeding it commences.³⁶²
4. The Chief shall sustain or dismiss the complaint within sixty (60) days of the filing of the complaint.

127. We conclude that these requirements, in conjunction with the FTC Consent Agreement, adequately address the potential harms to the public interest raised by the proposed merger.³⁶³ If and when the Commission adopts any rules of general applicability concerning ISPs' access to cable system facilities, any such rules will apply to AOL Time Warner to the extent they do not conflict with the conditions set forth herein.³⁶⁴ AOL Time Warner may file a petition at any time after the issuance of such

³⁶¹ 47 C.F.R. pts. 1, 76.

³⁶² See *Implementation of the Satellite Home Viewer Improvement Act of 1999: Retransmission Consent Issues: Good Faith Negotiation and Exclusivity*, CS Docket No. 99-363, First Report and Order, 15 FCC Rcd 5445, 5477-83 (2000).

³⁶³ In particular, we decline to mandate "open access" to AOL Time Warner's cable systems or to require that the merged firm divest itself of Road Runner, as requested by Consumers Union and other commenters. See Consumers Union Comments at 157; see also BellSouth Reply Comments at 22-23 (requesting that Commission condition merger approval on "open access" requirement); SBC Comments at 29, 32, 35-36 (requesting that Commission condition merger approval on "open access" requirement and divestiture of Road Runner).

³⁶⁴ In the event of any conflict between these conditions and any rules of general applicability the Commission may
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rules, or after the issuance of any Commission finding on market definition that is contrary to the findings set forth herein, seeking modification or termination of these conditions. The Commission may, on its own motion, modify or terminate the conditions set forth above at any time if it finds such requirements are no longer necessary to mitigate or prevent potential public interest harms.³⁶⁵

B. Instant Messaging and Advanced IM-Based High-Speed Services.

128. In this section we analyze Instant Messaging ("IM"), new IM-based services, and advanced IM-based high-speed services ("AIHS")³⁶⁶ from the perspective of our well-settled statutory obligations. Based on the following analysis, and to ensure the public interest as set forth in 47 U.S.C. §§ 230(b) and 157 and elsewhere in the Communications Act is protected, we impose conditions on the merged parties.

129. We conclude the market in text-based instant messaging is characterized by strong "network effects," *i.e.*, a service's value increases substantially with the addition of new users with whom other users can communicate, and that AOL, by any measure described in the record, is the dominant IM provider in America. We further find AOL has consistently resisted interoperability with other non-licensed IM providers.³⁶⁷ AOL's market dominance in text-based messaging, coupled with the network effects and its resistance to interoperability, establishes a very high barrier to entry for competitors that contravenes the public interest in open and interoperable communications systems, the development of the Internet, consumer choice, competition and innovation.³⁶⁸ We also find that a Names and Presence Database ("NPD") is currently an essential input for the development and deployment of many, if not most, future high-speed Internet-based services that rely on real-time delivery and interaction.

130. Given these findings, the combination of Time Warner's high-speed information transmission assets and its programming content with AOL's current IM market dominance, substantially increases the probability that AOL's dominance in the narrowband text-messaging world will persist in the world of high-speed interactive services. For these reasons, we impose conditions to ensure that the

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promulgate, these conditions will govern unless otherwise specified by the Commission.

³⁶⁵ The conditions set forth above are not intended to require AOL Time Warner to offer any ISP connection to its cable systems, but instead to ensure that if and when the merged firm does agree to offer ISPs such connection, it does so in conformity with the requirements we delineate herein.

³⁶⁶ IM-based services are relatively new but have shown enormous growth in popularity in recent years. Their key characteristics are the capabilities to detect whether other users of the system (whose names are kept in a Names and Presence Database) are present online and to exchange messages with them in real time. These features, besides being useful in their own right, are predicted to have vast potential as a "platform" for the development of additional applications in the future, particularly as users obtain high-speed Internet access.

³⁶⁷ Users of AOL's IM service cannot currently send or receive messages to or from those who use other IM services — *i.e.*, the services are not "interoperable." AOL contends its historical resistance to interoperability is rooted in its belief that it currently cannot adequately protect its customers' privacy and security. *See infra* para. 170.

³⁶⁸ Recent literature suggests that near monopoly outcomes in markets exhibiting strong network effects are "tipped markets." *See, e.g.,* Andrew Watson, *Predatory Pricing in the Software Industry*, 23 RUTGERS L. REC. 1 (1998) (citing David S. Evans and Richard Schmalensee, *A Guide to the Antitrust Economics of Networks*, 10 Spring ANTITRUST 36, 36-37 (1996)). Because our public interest authority is informed by market analysis but not determined by it, we express no opinion whether the factual conclusions in this *Order* can be characterized as amounting to a tipped market or not.

factors described in paragraph 129 above regarding narrowband text-messaging will not be reproduced and compounded by this merger.

131. We find that the public interest is served by interoperability among NPD-based services, first and foremost because interoperability will bring concrete and significant improvements to all consumers. With interoperability, communication between users that was inconvenient becomes convenient, communication that was impossible becomes possible, and new entrants are enabled to bring their innovations and creativity promptly to the largest possible number of users. Interoperability of NPD-based services will open new possibilities for communication for persons who are deaf or hard of hearing, persons with speech and/or learning disabilities, persons with cognitive limitations, and others for whom voice communication is problematic – who may come to rely on IM as a basic means of communication. They will be able not only to use new services, but also to interact with the perhaps 150 million users of IM all over the world. These improvements, in turn, will make these services more valuable to previously uninterested persons, drawing them to become users.³⁶⁹ As we explain in detail below, the network effects of the business, instead of entrenching the largest incumbent, will work to the benefit of all users. The rewards of success in the marketplace will go to the provider who offers the most value to consumers rather than automatically to the first provider who amassed a large body of users. Alternately, if a single provider achieves dominance by relying on network effects and refusing to interoperate, actual and potential competing providers will be driven from and kept out of the market, resulting in a loss in competition, innovation, and consumer welfare. Interoperability would also continue the long-standing tradition of the Internet being open and interoperable. In sum, interoperability will benefit consumers and be in the public interest because (i) it enables each user to communicate with the largest number of other users through one source, thus maximizing efficiency; (ii) it leads to more product and service choices and convenience for users; (iii) it leads to more competition, thus avoiding the need for regulation; and (iv) it leads to more innovation.

132. We begin with a description of current and anticipated Instant Messaging and NPD-based services and of our authority to examine the impact of the proposed merger on these services in reviewing the applications in this case. We then explain the "network effects" characteristics of these services, and the conditions under which an unregulated market is and is not likely to lead to interoperability among competing providers. We then find that the proposed merger would give AOL Time Warner substantial, and perhaps insurmountable, advantages in providing advanced IM-based services over the high-speed Internet platform.

133. While we recognize a number of factors that signal caution here, including the relative novelty of the services and the need to resolve security and privacy concerns, we must also weigh the danger of inaction where the window of opportunity to preserve competition and protect the other policies of the Communications Act may be narrow because the markets are changing rapidly. On balance, we find it appropriate to impose a narrow condition specifically tailored to address the potential harm to Communications Act objectives created by the combination of assets that will be permitted by granting the pending license transfer applications.

³⁶⁹ See Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 ("Instant messaging proponents claim the technology could be as pervasive and influential as the telephone if a common communication standard is established."), attached to Letter from Peter D. Ross, Esq., Wiley, Rein & Fielding, Counsel for AOL, to Magalie Roman Salas, Secretary, FCC, dated Nov. 17, 2000 ("AOL Nov. 17 Ex Parte").

1. Background

134. IM, in its simplest form, enables the almost instantaneous exchange of short, private, individualized text messages over the Internet between two users who are online simultaneously and are either in a “chat room”³⁷⁰ or on each other’s “buddy lists.”³⁷¹ Each Internet user may maintain a “buddy list” consisting of the IM names of the other users with whom he or she may wish to communicate via IM. A user may have several IM names or identities, such as one for work and another for business. Typically, when a user turns on her Internet access service, a box appears on the screen containing the names of those users who are on her buddy list and are also online.

135. A typical exchange begins when a user (“the sender”) sees from her buddy list that another user (“the recipient”) is online. The sender then brings up the IM box on her computer screen, types the recipient’s IM name, types a message (“Hi, how are you this morning?”), and then clicks “Send” or an analogous command that sends the message to the recipient over the Internet. An instant later, the sender’s IM name and message appear on the recipient’s Internet screen and the recipient may reply. The general purpose and effect of IM is to allow almost instantaneous communication between two persons, each of whom sees the other’s IM name on her screen and also sees that the other is online. IM enables them to communicate by exchanging personalized text messages privately and with a degree of informality and immediacy much like that of a face-to-face conversation or telephone call. Because IM messages are in text and are typically short, the speed (or “latency”) demands of the service are relatively modest and well within the narrowband “best efforts” Internet of today.

136. IM is especially beneficial to persons who are deaf or hard of hearing, persons with speech and/or learning disabilities, persons with cognitive limitations, and persons for whom voice communication is otherwise problematic. As a mass medium for the almost instantaneous exchange of text messages, as opposed to voice messages, IM can be as useful to these persons as telephone service is to persons who do not have such limitations.³⁷²

137. Following AOL’s pioneering efforts, IM became a mass market product in the late 1990s.³⁷³ In the short time since then, IM has mushroomed into a highly popular service, with an estimated 150 million users worldwide on AOL’s IM services alone.³⁷⁴ More than 30 million individuals

³⁷⁰ Typical “chat rooms” are groups of persons who have joined a group because of a common interest and who are online at the same time. Each person in a room may send a text message, which almost immediately appears on the screens of all persons in the room. Usually, ISPs limit the number of persons in a chat room at the same time in order to keep that chat manageable. IM, in the context of a chat room, occurs when one person in it wishes to exchange text messages with another person in it, but privately and without the others in the chat room.

³⁷¹ Tribal Voice Comments at 2.

³⁷² Testimony of Ross Bagully, President and CEO, Tribal Voice, FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000) (“Bagully En Banc Testimony”), Tr. at 151 (“[T]here are 28 million deaf and hearing impaired American citizens who rely on instant messaging services, much like most of us use the telephone, . . .”); Letter from Nancy J. Bloch, Executive Director, National Association of the Deaf, to William E. Kennard, Chairman, FCC, dated July 26, 2000.

³⁷³ Letter from George Vradenburg III, Senior Vice President, Global and Strategic Policy, AOL, to Deborah Lathen, Chief, Cable Services Bureau, FCC, dated Sept. 29, 2000, at 3 (“AOL Sept. 29 Ex Parte”).

³⁷⁴ Some observers put the total number of registered IM service users under AOL’s control at over 150 million. Tribal Voice Comments at 1-2 (120 million); Julia Angwin, *Instant Messaging Services at AOL Quietly Linked*, WALL ST. J., Oct. 26, 2000, at B-1, B-4 (138 million); Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000) (more than 150

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use IM at least once a month, and AOL transmits almost five times as many IMs a day as it does e-mails.³⁷⁵ From all appearances, the market is nowhere near saturation.

138. An essential input³⁷⁶ to an IM service is the provider's NPD.³⁷⁷ The names and presence indication, as displayed on the sender's and recipient's buddy lists and screens, enable each to know the other's IM name and when he or she is online or available. The actual NPD consists, first, of a database of the users' unique IM names and addresses and, second, of a "presence detection" function, which is the IM provider's knowledge, and its ability to inform others, that a certain user is online and therefore available to engage in instant messaging. The NPD is more than simply a customer list. It is a working part of an electronic communications network for persons who have requested participation in the network and actually use it to exchange communications in real time with other users.

139. Each IM provider has its own NPD, which constitutes the total universe of persons with whom that provider's users can engage in instant messaging. Until recently, IM providers did not share access to their NPDs with other providers. Some providers are starting to do so. Such sharing makes possible "interoperability," which is the ability of users of one IM service to engage in instant messaging with users of another IM service.

140. Many new services and applications based on "simple text" IM are being developed.³⁷⁸ A few companies, including AOL, are already providing them to their IM users.³⁷⁹ Many experienced industry observers believe that these new services, including AIHS, will be popular.³⁸⁰

141. The new IM-based services include sending, along with a text message, attachments such as documents; using IM as a way to access shopping, personal homepages, and calendars;³⁸¹ using

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million users); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28 (154 million registered users).

³⁷⁵ *IM Interoperability: The Need for Minimum Safeguards* at 2, White Paper filed herein ("First IM White Paper") under Letter from Ross Bagully, President and CEO, Tribal Voice, and Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Sept. 5, 2000 ("Tribal Voice and iCast Sept. 5 Ex Parte"); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28.

³⁷⁶ An essential input is a component of a service or product without which the service or product cannot be created and provided to others. For example, a channel tuner is an essential input to a television set and a compressor is an essential input to a refrigerator.

³⁷⁷ See, e.g., Letter from Karen B. Possner, Vice President – Strategic Policy, BellSouth Corp., to Magalie Roman Salas, Secretary, FCC, dated Oct. 10, 2000, Attachment (BellSouth's Views on the Effect of the Proposed America Online-Time Warner Merger on Instant Messaging and Related Capabilities) at 1.

³⁷⁸ Confidential Appendix IV-B-1, Note 1.

³⁷⁹ AOL provides IM in basically three ways. First, it includes IM in its basic proprietary Internet access service. Second, AOL Instant Messenger, or "AIM," is available at no charge to subscribers to other Internet access services. Third, AOL acquired an IM company called ICQ, which it has kept separate from its other services. See Confidential Appendix IV-B-1, Note 2.

³⁸⁰ See Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 ("Instant messaging proponents claim the technology could be as pervasive and influential as the telephone if a common communication standard is established."), attached to AOL Nov. 17 Ex Parte; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000) ("IM can drive up a site's traffic and brand awareness. It will be an important feature of interactive television; it . . . can add real-time customer services to a site."). See Confidential Appendix IV-B-1, Note 3.

presence detection as a trigger to perform "intelligent agent" functions such as selective message routing and instant alerts, automatic responses, filtering out unwanted messages,³⁸² sending individual users advertising, and time-sensitive personalized information such as news bulletins on pre-chosen subjects,³⁸³ stock quotes, and travel arrangements;³⁸⁴ and ordinary web surfing.³⁸⁵ Some of these new services are appearing on wireless devices such as cellphones and Personal Digital Assistants such as "Palm Pilots" and "Pocket PCs."³⁸⁶ These new services are also expected to be included in interactive television to allow, among other things, text chatting (for example, among faraway friends watching the same football game), obtaining information (for example, getting the statistics of a football player who has just come on the field) and shopping on the Internet (for example, for a team mascot or some other souvenir of a football game).³⁸⁷

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³⁸¹ iCast Comments n.5; Tribal Voice Comments at 2; Disney July 25 Ex Parte at 21-22; Ariana Eunjung Cha, *AOL Unmoved in Software Dispute*, WASH. POST, Aug. 24, 2000, at A-1, -14; Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000).

³⁸² eWeek, Dennis Fisher, *Small Talk Goes Big Bucks*, ZDNet, at <http://www.zdnet.com/eweek/stories/general/0,1101,2631584.00.html> (visited Oct. 30, 2000).

³⁸³ See, e.g., Tribal Voice Comments at 6-7; iCast Comments at 8 and nn.17-18; America Online, Inc., *America Online and Time Warner Announce New Content and Promotional Agreements* (press release), Feb. 16, 2000 (visited Aug. 1, 2000) (ICQ and "CNN Interactive will develop a co-branded news offering to be distributed through ... the ICQ client.").

³⁸⁴ iCast Comments at 8 and nn.17-18. The presence detection aspect of IM would enable an IM provider, for example, to send the latest news to an IM user who has just come online or to advise a user with a ticket on a 7 o'clock flight that a seat on a 6 o'clock flight has just become available and can be reserved if the user replies within the next minute. See, e.g., Randall E. Stross, *America's Bad Call: We're Way Behind Others When It Comes to Web Phones*, U.S. NEWS & WORLD REP., Sept. 4, 2000, at 2000 WL 7718658 ("Japanese 'Web phones,' like high-speed PCs, appear always on and offer a daily cartoon, weather reports, horoscopes, train schedules, bank account information, and stock quotes Japan Airlines already sells 20,000 tickets a month on the service, a feat enabled by designers who figured out ways to let users get to schedules in two clicks. By contrast, an American punching a Web phone needs seven [clicks] just to get a flight number").

³⁸⁵ See Barbara Darrow, *Instant Messaging Market in Flux*, TECHWEB, Dec. 5, 2000, at <http://www.techweb.com/wire/story/TWB200011204S0018> (visited Dec. 5, 2000) ("a group of buddies can cruise websites together"); William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000.

³⁸⁶ See, e.g., Irene M. Kunii, *Look Who's Going Courting in Japan*, BUSINESS WEEK, Aug. 7, 2000, at 2000 WL 24484561 ("The speculation is that AOL content could be available on i-mode phones if a deal is reached, possibly in August. . . . [AOL] sees wireless gadgets overtaking the PC as the most popular way to access the Net in the coming years. . . . AOL has developed unique services that could be transplanted to the wireless Net, such as instant messaging, which could be used as a locator device in the future. It could enable delivery of AOL's international content to i-mode users. . . ."). In addition, IM will be available via wireless devices. See, e.g., Neil Irwin, *AOL Debuts E-Mail/IM Pager*, WASHTECH.COM, Dec. 1, 2000, at <http://washtech.com/news/media/5560-1.html> (visited Dec. 1, 2000); *New Media*, COMM. DAILY, Oct. 20, 2000 ("Sprint PCS unveiled plans to make AOL Instant Messenger available on its Internet-enabled phones, providing text-to-text messaging service, nearly 2 days after AT&T Wireless announced similar plans for short-message service Announcements mark first forays by U.S. carriers into instant text-messaging on wireless phones, service that has seen particularly rapid growth in Asia and Europe.").

³⁸⁷ See also Letter from Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Oct. 10, 2000 ("iCast Oct. 10 Ex Parte"), Attachment (Testimony of Ms. Heffernan before the House

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142. Some of these new IM-based services -- and perhaps the most important ones in the long term -- are bandwidth-intensive and therefore will work best with high-speed Internet access. These AIHS include time-sensitive, "latency-dependent" applications such as talking (e.g., a Talk Feature that enables users to engage in live conversation online and is included in AIM 4.1), game-playing (e.g., features in AOL's New Windows AIM 4.3,³⁸⁸ buddies jointly 'playing along' with popular quiz shows such as Jeopardy! or Who Wants to Be a Millionaire?, or enacting their own versions of those shows online, independent of television broadcasts), and buddies sending each other brief music and video clips.

143. Even more bandwidth-intensive will be video conferencing via IM,³⁸⁹ which at least one study group predicts will be a major success in the marketplace.³⁹⁰ Also, many kinds of streaming video broadband content will likely be delivered via IM to both home and business users in forms such as long video entertainment and business documents in video form.³⁹¹ Finally, AIHS on interactive television

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Subcommittee on Telecommunications, Trade and Consumer Protection, Oct. 6, 2000) at 2 ("Heffernan House Testimony"); Letter from Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Oct. 5, 2000 ("iCast Oct. 5 Ex Parte"), Attachment (Instant Messaging Is an Important Platform for Both Current and Next Generation Internet Applications) ("Instant Messaging Is an Important Platform") *passim*; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000); Holly Becker and Kevin Sullivan, *America Online*, Lehman Brothers June 29 Report, at 42.

³⁸⁸ America Online, Inc., *AOL Instant Messenger, New Windows AIM 4.3 - Available Now*, at <http://www.aol.com/aim/home.html>, (visited Nov. 17, 2000) ("Play online games against your AIM Buddies"); Letter from Peter D. Ross, Esq., Wiley, Rein & Fielding, counsel for AOL, to Magalie Roman Salas, Secretary, FCC, dated Oct. 19, 2000 ("AOL Oct. 19 Ex Parte"), Attachment (Microsoft "Windows Me" web page ("With MSN Messenger Service in Windows Me, you can: . . . Invite a friend to play a DirectPlay® game directly from within MSN messenger Service.")).

³⁸⁹ AOL Oct. 19 Ex Parte, Attachment (Microsoft "Windows Me" web page ("With MSN Messenger Service in Windows Me, you can: . . . Go instantly from a text chat to a video conversation with NewMeeting® 3.1.")); Stephanie Sanborn, *Novell Updates Instantme, Net Publisher*, INFOWORLD DAILY NEWS, Aug. 1, 2000, at 2000 WL 22975572 ("Available as a free download on Aug. 4, instantme 2.0 . . . includes the option of extending IM communications with audio and video IM technology from CuSeeMe Networks. . . . The inclusion of audio and video IM technology will give businesses users the chance to 'do a quick video conference' on a point-to-point basis, Gailey said."); *Instant Messaging Is an Important Platform* at 1 ("IM is a natural platform for . . . video-based conferencing . . ."), Attachment to iCast Oct. 5 Ex Parte. See also Kate Gerwig, *Akamai Targets Content Delivery At Business Users*, CMP TECHWEB, June 7, 2000, at 2000 WL 2666827 ("Akamai's conference casting pairs traditional telephony with Internet-based streaming media technology to deliver what is designed to be a more cost-effective way to provide audio and video conferencing. . . . The service also has features such as on-demand replay, instant messaging, and polling, which are not available in traditional audio or video conference calls."); Steve Gillmor and Jeff Angus, *Exchange 2000 Finally Delivers Collaboration*, INFORMATION WEEK, Dec. 13, 1999, at 1999 WL 21900099 ("The addition of a spectrum of collaborative features may be the most important change in the new Exchange. . . . Beta 3 has instant messaging and real-time data and video conferencing services that can be deployed across the intranet."); *Instant Messaging Is an Important Platform* at 2 ("Lotus and Novell . . . also plan to add . . . video . . . versions thereby allowing business to hold meetings with multiple people instant messaging each other."), Attachment to iCast Oct. 5 Ex Parte.

³⁹⁰ *Some 28 Pct of World Mobile Subscribers Seen Using 3G Services by 2010 - Study*, AFX NEWS, Oct. 11, 2000, ("[A]ccording to a study published online today by the UMTS Forum[,] . . . six service categories that will generate the majority of revenues in 3G's early years . . . include . . . access to multimedia instant messaging services . . . and 'rich voice' services such as video conferencing and voice over IP.").

³⁹¹ See *Instant Messaging Is an Important Platform* at 1 ("IM is a natural platform for . . . video-related services and applications . . ."), 2 ("as broadband technology is more widely deployed, 'video' services could also, in a

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could include IM chat buddies jointly seeing streaming video highlights of a football player's best plays.³⁹²

144. Quality of Service ("QoS") will be especially important for AIHS.³⁹³ This is because delivering AIHS, compared to simple text IM, is relatively complicated and susceptible to degradation; and because slow or choppy delivery can degrade the value of an AIHS seriously or totally.

145. Despite the quantum leap that all these new services represent beyond IM, they are like IM in one respect. That is, a provider of AIHS depends on its NPD as much as a provider of IM does.³⁹⁴ Absent interoperability, an AIHS provider's database of users' names is the total universe with whom one user can swap video clips, engage in video conferencing, and so on.

2. Discussion

146. *Authority. The Public Interest.* We are obligated under the Communications Act to ensure that the transfer of control of Time Warner's cable licenses serves the public interest.³⁹⁵ We determine the public interest with reference to the policies and goals of the Communications Act and related statutes. Thus, as stated in Section II, Public Interest Framework, we examine whether a

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competitive market, be expected to be available over the IM platform." (footnote omitted), Attachment to iCast Oct. 5 Ex Parte; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000) ("So what does the future hold for IM? . . . [S]treaming media . . ."); William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000 (IM "can support . . . the ability to drag and drop video . . . files"); First IM White Paper at 2, Attachment to Tribal Voice and iCast Sept. 5 Ex Parte; Letter from Johnny Scarborough, Jr., Vice President, Advanced Technology, iCast, to Magalie Roman Salas, Secretary, FCC, dated July 25, 2000, Untitled Attachment at 5 ("IM enables richer communication . . . video, file sharing") and 7 ("Tomorrow . . . Content licensing (music, news, video)") ("iCast July 25 Ex Parte").

³⁹² AOL itself is promoting many kinds of streaming video, especially on high-speed platforms (xDSL, high-speed cable modems, etc.), as part of its latest and upcoming offerings of Internet access. The offerings include IM, although AOL is not specifically touting streaming video in connection with it. See, e.g., *AOL and RealNetworks Announce Strategic Agreement to Deliver Streaming Digital Media Through AOL Services*, NEW MEDIAMUSIC.COM HEADLINES TODAY, July 13, 2000, at <http://www.newmedia...71300.html> ("high-quality streaming digital media," "compelling audio and VHS video quality") (visited Dec. 27, 2000); John Townley, *AOL Plus Provides Enhanced Streaming Broadband*, INTERNETNEWS - ISP NEWS, April 4, 2000, at http://www.internetnews.com/isp-news/article/0,,8_333621,00.html (streaming video news coverage from Fox News and Sports, "streaming, dynamic mapping images from weather.com," streaming video sports highlights, "streaming market analysis and video wrap-ups") (visited Dec. 27, 2000); John Townley, *AOL to Deploy Akamai Servers*, INTERNETNEWS - STREAMING MEDIA NEWS, Feb. 16, 2000, at http://www.newmediamusic.com/ps/real_aol_71300.html ("large audio and video streaming events") (visited Dec. 7, 2000).

³⁹³ "QoS" refers to all indicia of quality in interconnection and access arrangements, including: the good faith with which they are described, offered and made available by their possessor (in this case, AOL Time Warner); their technical capacity and functionality; their reliability; their performance characteristics, including security from any change in content or display; any price; and the promptness of their installation, maintenance, repair, and disconnection.

³⁹⁴ An NPD used for AIHS could also perform functions not needed in IM, such as advising a user wanting a video conference with another user about the other user's video conferencing equipment and whether their equipment is compatible.

³⁹⁵ 47 U.S.C. § 310(d).

transaction would substantially frustrate the Commission's implementation or enforcement of, or interfere with the objectives of, the Communications Act or related statutes. Accordingly, in conducting our public interest analysis, we do not examine those issues that are not communications-related.³⁹⁶ But where an issue may be said to be fairly related to the policies and goals set forth in the Communications Act and related statutes, as is the effect of the merger of AOL and Time Warner on advanced IM services, we are required to satisfy ourselves that the public interest would be served by our approval of the transaction before us.

147. Our authority to examine the public interest effects associated with the combination of AOL's NPD and Time Warner's assets and to place any necessary conditions on our approval of the transfer of Time Warner's licenses rests on several statutory grounds. Sections 214(a) and 310(d) of the Communications Act require the Commission to determine whether the Applicants have demonstrated that the public interest would be served by transferring control over Time Warner's licenses and authorizations.³⁹⁷ Further, we have broad authority to attach conditions to a transfer of lines and licenses to ensure that the public interest is served by the transaction. Section 303(r) of the Act authorizes the Commission to prescribe restrictions or conditions, not inconsistent with law, that may be necessary to carry out the provisions of the Act.³⁹⁸ Similarly, Section 214(c) of the Communications Act authorizes the Commission to attach to the certificate "such terms and conditions as in its judgment the public convenience and necessity may require."³⁹⁹

148. Moreover, IM, new IM-based services (including AIHS in particular), and AOL's NPD are subject to our jurisdiction under Title I of the Communications Act.⁴⁰⁰ Our jurisdiction flows from at least three sections of the Communications Act. Section 1 of the Communications Act established the Commission "[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States . . . adequate facilities at reasonable charges . . ."⁴⁰¹ Similarly, Section 2 gives us jurisdiction over "all interstate and foreign communication by wire or radio" and "all persons engaged within the United States in such communication . . ."⁴⁰² Finally, Section 3 defines "communication by wire" and "communication by radio" as including "the transmission . . . of writing, signs, signals, pictures and sounds of all kinds . . . including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission."⁴⁰³ We find that IM and AIHS fall well within Section 3's definitions of radio and wire communication, as does the NPD as an instrumentality, facility, apparatus, or service incidental to the IM and AIHS. Accordingly, the Commission has Title I jurisdiction over IM and AIHS services.⁴⁰⁴ This being clear, we need not classify

³⁹⁶ For example, while in a merger of two taxi companies, we might be required to approve the transfer of control of various radio licenses, in making our decision we would not examine the effect of the merger on taxi service to the public. That task is for others.

³⁹⁷ 47 U.S.C. §§ 214(a) and 310(d).

³⁹⁸ 47 U.S.C. § 303(r).

³⁹⁹ 47 U.S.C. § 214(c).

⁴⁰⁰ 47 U.S.C. §§ 151 *et seq.*

⁴⁰¹ 47 U.S.C. § 151.

⁴⁰² 47 U.S.C. § 152.

⁴⁰³ 47 U.S.C. § 153.

⁴⁰⁴ *Cf. Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the*
(continued...)

IM and AIHS as information services, cable services, or telecommunications services (as some allege) – the Commission has subject matter jurisdiction over them.

149. While several commenters agree that the Commission has “clear jurisdiction” to impose conditions on IM here, citing, *inter alia*, Sections 1, 2, 230(b)(2), 310(d), and 256, and Title VI of the Communications Act,⁴⁰⁵ AOL argues that there is no such jurisdictional nexus.⁴⁰⁶ AOL’s argument, despite its jurisdictional phraseology, amounts to a claim that its position on the merits is correct, namely that the IM business is competitive and the IM issues raised in this proceeding are not merger-specific. As we find below, however, the IM business is not competitive, and AOL’s acquisition of Time Warner’s content, cable assets and control of Road Runner will be contrary to the public interest.

150. In deciding whether the transfer of control of the licenses and authorizations at issue here is in the public interest, as discussed above in Section II, we consider, *inter alia*, whether the merger would interfere with the policies and objectives of the Communications Act. Several policies and objectives are implicated by this merger. First, in enacting the Telecommunications Act of 1996,⁴⁰⁷ Congress established a clear national policy that competition leading to deregulation, rather than continued regulation of dominant firms, shall be the preferred means for protecting consumers.⁴⁰⁸ Further, to promote the policies of the Communications Act, we may “plan in advance of foreseeable events instead of waiting to react to them.”⁴⁰⁹ We may therefore examine and place conditions on a merger to ensure that it will not impede the development of future competition but will, in fact, enhance competition.⁴¹⁰ Congress expressed its preference for similar policies with respect to the Internet. Section 230(b) of the Communications Act provides that it is a policy of the United States “to promote the continued development of the Internet and other interactive computer services and other interactive media” and “to preserve the vibrant and competitive free market that presently exists for Internet and other interactive computer services, unfettered by Federal or State regulation.”⁴¹¹ Finally, Congress has

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Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities, WT Dkt. No. 96-198, Report and Order and Further Notice of Inquiry, FCC 99-181, ¶¶ 96-98 (rel. Sept. 29, 1999).

⁴⁰⁵ See, e.g., Tribal Voice and iCast Sept. 5 Ex Parte, at 22-27, 29-33; iCast Oct. 10 Ex Parte at 1-7. These commenters further claim that the Commission’s ancillary jurisdiction authority also provides grounds for imposing a condition on IM interoperability. Tribal Voice and iCast Sept. 5 Ex Parte at 27-29.

⁴⁰⁶ AOL Sept. 29 Ex Parte. iCast replies that AOL’s submission, when read carefully, does not dispute the Commission’s jurisdiction to impose IM-related conditions. Rather, according to iCast, AOL’s arguments consist of reasons why the Commission should choose not to exercise such jurisdiction in this instance – reasons that iCast strongly disputes. iCast Oct. 10 Ex Parte, at 1.

⁴⁰⁷ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

⁴⁰⁸ Joint Statement of Managers, S. Conf. Rep. No. 104-230 at 1 (1996).

⁴⁰⁹ See *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177 (1968), quoting *Amendment of Subpart L, Part 11 to Adopt Rules & Regulations to Govern the Grant of Authorizations in the Business Radio Service for Microwave Stations to Relay Television Signals to Community Antenna Systems*, First Report and Order, 38 FCC 683, 701 (1965).

⁴¹⁰ See *WorldCom-MCI Order*, 13 FCC Rcd at 18034-35 ¶ 14; *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 19987 ¶2.

⁴¹¹ 47 U.S.C. § 230(b)(1), (2). See also *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges*, First Report and Order, 12 FCC Rcd 15982, 16133 ¶ 344 (1997).

charged the Commission with “encouraging the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”⁴¹²

151. Several commenters argue that we may impose conditions on IM services to remedy anticompetitive harms, and that doing so would be consistent with our prior decision in *WorldCom-MCI*.⁴¹³ In *WorldCom-MCI*, we held that because the merger raised anticompetitive concerns regarding the Internet backbone service market, it was necessary for the Commission to review the applicants’ proposed divestiture of one of their Internet backbone services to ensure that those anticompetitive concerns were met, even though the applicants did not need our “approval” to complete that divestiture.⁴¹⁴ AOL finds the analogy to Internet backbone service to be inapposite, claiming that IM is not a facility or transmission service that the Commission regulates, but an information service that the Commission has chosen not to regulate.⁴¹⁵ Those commenters who seek to impose a condition on IM or AIHS also cite Section 230(b) of the Communications Act as support.⁴¹⁶ We agree, in part because our decision in *WorldCom-MCI*⁴¹⁷ supports our examining this merger to ensure that it does not have an anticompetitive effect on the provision of AIHS. The fact that we have chosen not to subject IM and AIHS to traditional regulation does not mean that the merger’s effects on these services escapes our inquiry.⁴¹⁸ In fact, exactly the opposite is true. Because we have jurisdiction over IM and AIHS but, mindful of Congress’s intent, have chosen not to regulate them, it is all the more important that we ensure that this merger does not cause any anticompetitive harms with regard to these services. Only in this way can we “preserve the vibrant and competitive free market that presently exists for Internet and other interactive computer services” and ensure that competition, rather than regulation, protects consumers.

152. *Relevant Markets.* After reviewing all the parties’ submissions and making our own analysis of the businesses in question and relevant economic principles, we find that the area of our concern is “NPD services” – interactive communication services which, as we described above, depend on an NPD for real time communication between and among users. Today, the principal services of this type are IM, the emerging new IM-based services, and AIHS in particular. In the following paragraphs, we find that the database of names and the presence detection ability of an NPD cause services that depend on an NPD to be characterized by strong network effects. These and other aspects of NPD services cause them to have few, if any, substitutes.⁴¹⁹ We further recognize that IM services are evolving rapidly, and we expect that this evolution will continue as more home users come to use high-speed

⁴¹² Section 706 of the Telecommunications Act of 1996, Pub. L. 104-104, Title VII, § 706, 110 Stat. 153, set forth at 47 U.S.C. § 157 nt.

⁴¹³ *WorldCom-MCI Order*, 13 FCC Rcd at 18103-04 ¶ 142.

⁴¹⁴ *Id.* at 18104 n.381.

⁴¹⁵ AOL Sept. 29 Ex Parte, at 16.

⁴¹⁶ Tribal Voice and iCast Sept. 5 Ex Parte at 29-33; iCast Oct. 10 Ex Parte at 5-6.

⁴¹⁷ *WorldCom-MCI Order*, 13 FCC Rcd at 18103-04 ¶ 142.

⁴¹⁸ By “traditional regulation,” we mean ongoing scrutiny, intense in the case of dominant providers, of entry and exit, prices, and service offerings and quality.

⁴¹⁹ For example, in an IM chat in a Civil War chat room between “Johnny Reb” and “Yankee Doodle Dandy,” those two individuals may not know each other’s names and telephone numbers. Each may have come into contact with the other simply by being simultaneously in the Civil War chat room. Therefore, the “conversation” they conduct via instant messaging would probably not have occurred on the telephone network.

platforms for Internet access.⁴²⁰ A more precise definition of the relevant market is not necessary here, where the Commission can accurately assess the competitive impact of the merger without such a detailed analysis.⁴²¹

153. *General Characteristics of NPD Services. Network Effects.* Certain services, such as telephone services, become more attractive to customers as more customers use them, a phenomenon called "network effects." Network effects tend to be strongest in businesses whose main output or product is access to other persons, as is the case with telephone service.

154. Often, in businesses with strong network effects, each of several providers creates its own network that is potentially incompatible with the others'. If each of the networks is of roughly equal size, then no provider dominates the market and each has an incentive to interoperate -- to make its service compatible -- with the others. In such an equilibrium, interoperability gives each provider's users access to a larger universe of other users and that makes each service more valuable to its users.⁴²² This equilibrium leads to effective competition and benefits consumers.

155. A different outcome, and one less beneficial for consumers, can also occur in markets with strong network effects. If one provider achieves a larger market share, either through superior performance or a first mover advantage,⁴²³ then it may not have an incentive to interoperate. If that provider wants to dominate the market, it can adopt a strategy of refusing to interoperate with the other, smaller providers. This, compared to a strategy of interoperation, will make its service less valuable and will hurt its users. But while these ill effects will be relatively slight, because the users will still be able to reach most other users, refusing to interoperate will hurt the smaller providers and their users greatly, because their users will not be able to reach most other users. The largest provider's refusal to interoperate will lead to users switching to it from the smaller providers, which will further swell the dominant provider's NPD and shrink the smaller ones'.⁴²⁴ This will continue until the largest provider's

⁴²⁰ Since the early 1980's at very least, economists and antitrust practitioners have recognized the existence of "innovation markets" in which identifiable firms engage in research and development on new products that are intended to appeal to the same buyers. It may even be that none of these emerging products have been created. See, e.g., Daniel Rubinfeld, *Competition, Innovation, and Antitrust Enforcement in Dynamic Network Industries*, March 24, 1998, Speech at Software Publishers' Ass'n; Christine A. Varney, *Why Innovation Market Analysis Makes Sense*, March 15, 1995, Speech at Antitrust 1995 Conference, at 1995 WL 112078; Richard J. Gilbert and Steven C. Sunshine, *Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets*, 65 ANTITRUST L. J. 569 (1995).

⁴²¹ See *AT&T-TCI Order*, 14 FCC Rcd 3160, 3205 ¶ 92 (1999); *AT&T-MediaOne Order*, 15 FCC Rcd at 9866 ¶ 116. See also *FCC v. RCA Commun. Inc.*, 346 U.S. 86, 96-97 (1953) (FCC not required to base its public interest analysis on the type of "tangible evidence appropriate for judicial determination," but is permitted to rely on its expertise to make predictive judgments).

⁴²² If any one provider decided not to interoperate, then its users would find themselves cut off from the majority of other users. They would quickly defect to another provider who did interoperate, thereby gaining access to all users other than those on the non-interoperating service. The holdout service would quickly lose all its users or be forced to change its decision and interoperate. Thus, in this situation it is not profitable for any provider to refuse to interoperate.

⁴²³ A first mover advantage is an advantage that may accrue to the first firm to introduce a new service, such as low marketing costs resulting from a lack of rivals. Dennis W. Carlton and Jeffrey M. Perloff, *MODERN INDUSTRIAL ORGANIZATION* at 113 (1994).

⁴²⁴ Of course, unique features that are especially attractive to small groups of users may win them away from the service that is most popular. For example, a small closed service may be preferable to users who desire greater
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network is the dominant one, perhaps yielding the provider monopoly control of the market. From that point onwards, the dominant network remains dominant, not necessarily because it charges the lowest prices, offers the best quality, or innovates fastest with the features that customers want most, but simply because in the past it gained the most users.⁴²⁵

156. Where there is no interoperability, the network effects of a service can be mitigated if competing providers or users of another service can provide an "adapter." An adapter is a facility or activity that enables users of one service to benefit, in full or in part, from the network effects of another.⁴²⁶ The absence of an adapter can lead to inconvenience and inefficiency. For example, in the early 20th century, a telephone subscriber who wanted access to every other telephone subscriber had to establish accounts with several telephone companies, have several telephones and telephone directories, and perhaps consult the directories each time he wanted to call someone to find out which system(s) that person subscribed to. Most consumers preferred that all telephone systems be interconnected and unified.⁴²⁷ These conditions led to monopoly and, ultimately, federal and state regulation.

157. The dominant provider of a service with network effects can exploit its dominant position as it offers new services that also have network effects. The provider can do so by making its new service compatible with its existing one ("backward compatibility"). This extends the network effects of the existing service into the new business and helps to migrate the provider's users from its existing service to the new one. Backward compatibility is efficient to the extent that it allows users to benefit from both the features of the new service and the network effects of the old service. If, however, it occurs where there is no interoperability, then backward compatibility can serve to lengthen and widen the dominant provider's power, to the harm of consumers and efficiency. The actual, or even potential, introduction of new backward compatible services by the largest provider can also stifle innovation, as potential entrants will be unlikely to invest in new services, knowing the disadvantage that they have in competing with the largest provider.

158. *Findings About NPD Services.* We find that NPD services exhibit strong network effects. Our first basis for this finding is simply that IM strongly fits the above definition of a business that is characterized by network effects. If an NPD service has only one user, the service is useless to her because she is the only user in the NPD and there is no one with whom to engage in instant messaging. When a second user joins the service, NPD grows and the IM service based on it becomes useful.⁴²⁸ Each

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privacy and security. Other factors may also make other small services preferable to small groups of users.

⁴²⁵ Ultimately, new technology may overcome the dominant provider's power, as the telephone did to the telegraph and airplanes and automobiles did to railroads. Many years can pass, however, before a new technology appears with enough advantages to overcome the entrenched one. That technology, too, may be deployed by the dominant incumbent, who will deploy it slower than a new entrant would. Finally, some technologies persist for very long times, such as the QWERTY keyboard.

1. ⁴²⁶ For example, when three different speeds were in use for phonographic records (33 1/3, 45, and 78 rpms), one adapter was a record player that could operate at all three speeds. Another was the small plastic disks that fitted in the wide holes at the center of 45 rpm records and made them useable on record players that had thin spindles.

⁴²⁷ Milton Mueller, Jr., *UNIVERSAL SERVICE: COMPETITION, INTERCONNECTION, AND MONOPOLY IN THE MAKING OF THE AMERICAN TELEPHONE SYSTEM* at 134 ("More often than not, voters, city councils, and statewide referenda weighed in on the side of universal service and consolidation."), 136-45 (1997).

⁴²⁸ IM, in this respect, is like the telephone, of which AT&T once said: "A telephone -- without a connection at the
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additional user makes the NPD larger and the IM service based on it more useful to both its existing users and to potential users. Most users of IM want to be able to compose their buddy lists from, and/or engage in IM with, the largest number of other users. Therefore, when choosing between rival IM services, a typical new user will place the greatest value on the service with the largest NPD (and therefore the most users) and will choose that service. In all these hypothetical situations, the underlying value (or lack of value) in an IM service resides in the NPD.

159. Second, many observers agree that IM services exhibit strong network effects.⁴²⁹ Third, although AOL's filings before us almost deny that there are any network effects in IM, or that any such effects benefit only AOL,⁴³⁰ its promotions attempt to attract new users by proclaiming how many millions of registered IM users it already has. Specifically, the top paragraph of its own web page for AIM 4.1 entices users with "[f]ind out what over 64 million people already know, . . ." (underlining in original).⁴³¹ Accordingly, we find that NPD services are characterized by strong network effects.

160. We find that AOL is by far the leading provider of IM today. Many commentators have concluded that it dominates IM.⁴³² AOL was the first company to successfully market IM to the mass market and thus gained a significant first mover advantage. According to all observers, AOL has a mass of users – and, therefore, an NPD – that is several times larger than any other provider's and is larger than all other providers' combined.⁴³³ And AOL's presence in IM is still growing.⁴³⁴ Furthermore, small IM providers have recently exited the market.⁴³⁵

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other end of the line – is not even a toy or a scientific instrument. It is one of the most useless things in the world. Its value depends on the connection with the other telephone – and increases with the number of connections." AT&T Corp., *Annual Report for the Year Ending Dec. 31, 1908*, at 21.

⁴²⁹ E.S. Browning and Greg Ip, *Six Key Myths That Led the Boom In Tech Stocks*, ASIAN WALL ST. J., Oct. 17, 2000, at 2000 WL-WSJA 23750599; Dan Carney and Catherine Yang, *Is AOL's Instant Messaging an Unfair Advantage?*, BUSINESS WEEK, July 3, 2000, at 2000 WL 7827524; Matt Carolan, *IMUnified Good, Government Bad*, INTERACTIVE WEEK FROM ZDWIRE, July 25, 2000, at 2000 WL 4067383; Alan Murray, *Changing Code: For Policy Makers, Microsoft Suggests a Need to Recast Models*, WALL ST. J., June 9, 2000, at 2000 WL-WSJ 3032437; William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000 ("AOL's IM is a closed service using proprietary protocols. With dominant market share this creates huge network effects.").

⁴³⁰ AOL Sept. 29 Ex Parte at 1.

⁴³¹ AOL, *New AIM 4.1 Available Now*, at <http://www.aol.com/aim/> (visited Oct. 11, 2000). See Confidential Appendix IV-B-2, Note 1.

⁴³² See, e.g., Julia Angwin, *Instant Messaging Services at AOL Quietly Linked*, WALL ST. J., Oct. 26, 2000, at B-1 (referring to "AOL's dominance of instant-messaging technology"); Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000 (AOL "vastly outnumbering its competitors' numbers")); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28 (in IM, AOL "has become the undisputed heavyweight"), B-38 (referring to "AOL's domination of the market" for IM); Prepared Testimony of Preston R. Padden, Executive Vice President of Government Relations, The Walt Disney Co., at 3 ("a near monopoly in Instant Messaging"), FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000).

⁴³³ See, e.g., Letter from Peter D. Ross, Esq., Wiley Rein and Fielding, Counsel for AOL, to Ms. Deborah Lathen, Chief, Cable Services Bureau, FCC, dated Dec. 9, 2000, Attachments *passim*.

In a market characterized by strong network effects, a provider with a market share X times the size of another will, in fact, have more than X times the power of the other. In such markets, a participant's relative
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161. Independent companies have recognized the strength of AOL's IM by signing deals with AOL. These include both Sprint and AT&T agreeing to make AOL's IM available to their wireless customers⁴³⁶ and Sears agreeing to use instant messaging to connect Sears customers with Sears customer service representatives.⁴³⁷ EarthLink, a major direct competitor of AOL in the ISP business, has continued a licensing arrangement with AOL. EarthLink would be expected to compete with AOL in IM if that were possible. Finally, the continuing strength of AOL's IM has been recognized by a number of independent analysts.⁴³⁸ All this evidence strengthens our conviction that AOL's possession of by far the largest NPD confers great power on it.

162. AOL disagrees with the commenters who contend that it dominates IM. For example, AOL points to entry into the IM business by other providers and appears to claim that it does not benefit from network effects.⁴³⁹ We disagree. New entry may indicate competition, especially in a stable, mature business. IM is not such a business, however, and new entry into IM may also be explained by factors other than healthy competition. The smaller providers may be able to attract customers in a fast-growing market in which they offer extraordinary promotional inducements,⁴⁴⁰ may plan to succeed by targeting niche groups⁴⁴¹ or may be concentrating on very sophisticated features and functions.⁴⁴²

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strength may be measured not so much by its market share (N) as by N^2 in the case of one-to-one messaging and by 2^N in the case of group communications such as chat rooms and IM groups.

⁴³⁴ AOL Nov. 17 Ex Parte, Attachment (Growth in Unique Visitors to Instant Messaging Services 2000).

⁴³⁵ Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 (describing "the now-defunct CMGI-owned companies iCast and Tribal Voice") (emphasis in original), attached to AOL Nov. 17 Ex Parte.

⁴³⁶ See, e.g., Irene M. Kunii, *Look Who's Going Courting in Japan*, BUSINESS WEEK, Aug. 7, 2000, at 2000 WL 24484561; Neil Irwin, *AOL Debuts E-Mail/IM Pager*, WASHTECH.COM, Dec. 1, 2000, at <http://washtech.com/news/media/5560-1.html> (visited Dec. 1, 2000); *New Media*, COMMUN. DAILY, Oct. 20, 2000. See also America Online, Inc., *Open IM Architecture Design*, at <http://aim.aol.com/openim>, visited June 19, 2000 (licensees of AOL include Lotus, Lycos, EarthLink, and other ISPs).

⁴³⁷ See, e.g., Michael Brick, *AOL, Sears Form Alliance*, THESTREET.COM, March 14, 2000, at <http://www.thestreet.com/pf/brknews/internet/900219.html> (visited Dec. 13, 2000). By contrast, Yahoo! has been able to interest relatively few wireless providers in adopting its IM. See, e.g., *New Interactive Wireless Service from Motient Fortified With Yahoo! Now Available to Consumers Nationwide Via www.elinkhere.com*, PR NEWSWIRE, Nov. 9, 2000.

⁴³⁸ Julia Angwin, *Instant Messaging Services at AOL Quietly Linked, Linked*, WALL ST. J., Oct. 26, 2000, at B-1; Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000).

⁴³⁹ AOL Sept. 29 Ex Parte at 1.

⁴⁴⁰ See Letter from William L. Fishman, Esq., Swidler Berlin Shereff Friedman, LLP, counsel for RCN Telecom Services, Inc., to Magalie Roman Salas, Secretary, FCC, dated Dec. 21, 2000, at 3. See also Confidential Appendix IV-B-2, Note 2.

⁴⁴¹ Letter from Margaret Heffernan, President and CEO, iCast, and Shai Buber, President, Odigo Ltd., to Magalie Roman Salas, Secretary, FCC, dated Oct. 25, 2000, at n.2 ("iCast and Odigo Oct. 25 Ex Parte").

⁴⁴² See iCast Comments at 6; Tribal Voice Comments at 6-7 (alleging that services other than AOL's have better
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Because their offerings are unlikely to tempt a significant number of mass market users, however, they do not challenge AOL directly or significantly. Further, entry into IM may have been induced, despite network effects, by the prospect of interoperability with AOL. This prospect has been created by industry efforts; by expectations of governmental action by this Commission, the Federal Trade Commission, and/or Congress;⁴⁴³ and by AOL's own public statements pledging to help achieve interoperability.⁴⁴⁴ These factors may induce entry especially by those who believe that they will have advantages post-interoperability stemming from unique features and functions.

163. From among all entrants into the IM business, AOL points especially to Microsoft as a significant rival. AOL claims that Microsoft's presence, and especially its recent growth in the market, demonstrates that AOL does not dominate IM. AOL points to Microsoft integrating its IM product into its Windows desktop and to Microsoft's strength in desktop applications generally.⁴⁴⁵ We note that Microsoft is a potentially formidable competitor. However, Microsoft has not always been able to leverage its control of the Windows desktop into dominance of other applications.⁴⁴⁶ In addition, in IM today, AOL benefits from network effects and first mover advantages; and, as we discuss below, the proposed merger would give AOL significant, additional advantages over Microsoft, Yahoo!, and smaller IM providers. And even if Microsoft's NPD did grow to rival AOL's, the result would be merely a duopoly, not the healthy competition that exists today in electronic mail and that we hope will exist in new IM-based services and AIHS in particular.⁴⁴⁷

164. AOL also claims that any incompatibilities between its and other IM providers' NPDs are mitigated by an existing adapter for IM, namely that an IM user may use several IM services simultaneously,⁴⁴⁸ and that millions of users do so.⁴⁴⁹ AOL argues, therefore, that there are no barriers to entry into IM.⁴⁵⁰ We disagree. We find the ability of users to use several IM services is not a substitute for interoperability. Using several IM services (and, therefore, several NPDs) entails much

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features and are more innovative). The President and CEO of iCast claims that an AOL employee told her that iCast's "application was really cool." Heffernan House Testimony at 2, Attachment to iCast Oct. 10 Ex Parte. See also Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000), comparing several IM services based on their features, appearance, ease of use, and other aspects. See Confidential Appendix IV-B-2, Note 3.

⁴⁴³ iCast and Odigo Oct. 25 Ex Parte at 2.

⁴⁴⁴ Heffernan House Testimony at 2 ("we were hopeful that AOL would allow us to be interoperable . . ."), Attachment to iCast Oct. 10 Ex Parte.

⁴⁴⁵ AOL Oct. 19 Ex Parte at 3.

⁴⁴⁶ See, e.g., Dean Takahashi, *Zap! Bop! It's Web Comics*, ASIAN WALL ST. J. at 24 (Apr. 28, 2000), available at 2000 WL-WSJA 2938872; Bob Trott, *Microsoft Views AOL-Time Warner Deal as Confirmation of Its Own Strategy*, NETWORK WORLD FUSION (Jan. 12, 2000); Steven Manes, *Information Isn't Everything*, INFORMATIONWEEK (May 26, 1997), available at 1997 WL 7602548.

⁴⁴⁷ We find similarly unattractive the prospect of a tight oligopoly of three IM providers (AOL, Microsoft, and Yahoo!) predicted by AOL. See Oct. 19 Ex Parte and the Attachments thereto.

⁴⁴⁸ AOL Sept. 29 Ex Parte at 3, 5-6.

⁴⁴⁹ AOL Oct. 19 Ex Parte at 2-3 and attached charts and diagrams.

⁴⁵⁰ See, e.g., Letter, from Peter D. Ross, Esq., Wiley, Rein & Fielding, Counsel for AOL, to Magalie Roman Salas, Secretary, FCC, Sept. 19, 2000, at 4 ("barriers to entry simply do not exist") ("AOL Sept. 19 Ex Parte").

inconvenience. A user must download several kinds of IM software; must register and maintain accounts, unique names, and passwords with several IM providers; must use each one enough to become comfortable with its 'look and feel'; must keep several buddy lists and remember which buddies are on which IM service (and with what names); and must keep several IM sessions open simultaneously. Even then, three-way communications are impossible unless all participants use the same service. Indeed, in light of these inconveniences, the fact that millions of people use more than one IM service (especially AOL and one or more other services) indicates not easy adaptation but the great value that users put on being able to communicate with more, rather than fewer, people.⁴⁵¹ Maintaining multiple accounts, each with its own IM software, will be especially burdensome in hand-held devices. They have less storage capacity than desktop personal computers.⁴⁵² In addition, we understand that wireless carriers may choose one software (e.g., AOL's) and make use of others impossible. Lack of choice of IM services in hand-held devices will particularly hurt persons with hearing, speech, and other disabilities, to whom IM via hand-held devices can be as important as telephones and face-to-face conversations are to persons who do not have hearing limitations. In sum, we find that the ability to use several IM services and NPDs does not effectively mitigate the network effects that favor AOL's NPD.

165. AOL further contends that it does not dominate IM because it is possible for users to move in a coordinated group from one IM service to another. We find this not only inconvenient, but in most cases impossible as a practical matter. Only if those who propose to move have precisely the same buddy lists is this solution possible. Most likely, one user's buddy list does not correspond perfectly with his or her buddies' lists, in which case moving requires that at least some of one's buddies be left behind.⁴⁵³ Accordingly, we find that no adapter exists to mitigate the network effects of AOL's NPD.

166. AOL claims that entry into IM would be easy for any company with a customer list, especially a customer list as full as, for example, that of Sears or American Express. Again, we disagree. As we noted above, an NPD for IM must be a working part of an electronic communications network. Even the lengthy list of an interactive web service firm such as Amazon, E-Bay, Napster and Real Player would only be the starting raw material for entry into IM. Any of these would-be entrants would need to master a new business -- real-time, two-way, consumer-to-consumer interactive service. A would-be entrant would also need to launch a major marketing campaign to interest its customers in using its IM. Then millions of those customers would need to accept the invitation, download software into a personal computer or other interactive device, pick an IM name and find their buddies on the same service. From the entrant's original customer list, tens of millions of customers would need to finish all these steps for the resulting IM NPD to rival AOL's. We find that there are few companies that could seriously attempt such entry, and that even they would find many obstacles to successful entry.

167. Finally, it might be thought that in the rapidly changing technology of the Internet, even network effects and AOL's present position in the market would not prevent successful entry by IM providers other than AOL, that a new breakthrough technology might become available and would be superior enough to AOL's service to overcome the network effects flowing from its NPD, and cause users to shift *en masse* away from AOL. In some "serial monopoly" markets, one standard dominates a market

⁴⁵¹ See Letter from Erin M. Egan, Esq., Covington & Burling, Counsel for Microsoft Corp., to Magalie Roman Salas, Secretary, FCC, dated Nov. 20, 2000, at 1-2 ("Microsoft Nov. 20 Ex Parte").

⁴⁵² Letter from David Lawson, Esq., Counsel for AT&T, to Magalie Roman Salas, Secretary, FCC, dated Nov. 22, 2000, at 2 ("AT&T Nov. 22 Ex Parte").

⁴⁵³ See Confidential Appendix IV-B-2, Note 4. See also AT&T Nov. 22 Ex Parte at 2.

for a time and is then overtaken by a new standard.⁴⁵⁴ We see no evidence at this time, however, of such a new breakthrough technology strong enough to overtake AOL's NPD. AOL has pointed us to no such evidence. On the contrary, the evidence indicates that NPD technology is the best protocol for providing address and presence information for interactive services.

168. *AOL's Resistance to Interoperability.* AOL has consistently resisted interoperability of IM services. In 1999, various non-AOL IM providers repeatedly attempted to gain access to AOL's proprietary and/or AIM NPD in order to interoperate with AOL, and were blocked by AOL.⁴⁵⁵

169. AOL has stated that it will seek interoperability, but has participated little in industry consultations aimed at industry-wide interoperability.⁴⁵⁶ According to several observers, AOL has dragged its feet in these consultations.⁴⁵⁷ Objective evidence supports this view.⁴⁵⁸ The body through which the consultations were occurring, the Internet Engineering Task Force (IETF), found that AOL's

⁴⁵⁴ See, e.g., Stan J. Liebowitz and Stephen E. Margolis, *WINNERS, LOSERS AND MICROSOFT* at 10-11, 137 (1999).

⁴⁵⁵ iCast Comments at 1; Disney July 25 Ex Parte at 27-28; Aaron Pressman, *Microsoft Messenger Finds Its Voice* at 2, *THE STANDARD*, July 20, 2000, at <http://thestandard.com/article/display/0,1151,16984,00.html?nl+dnt> (visited July 21, 2000). We know of no attempt to gain access to AOL's NPD for ICQ.

⁴⁵⁶ See IMUnified, *Mission Statement*, at <http://www.imunified.org/> (visited Aug. 11, 2000), concerning IMUnified, a recently formed coalition of technology and instant messaging companies. They plan to make each others' services interoperable and "will strive to implement open standards-based interoperability for instant messaging as these protocols emerge from the IETF standardization process." Founding members include AT&T, Excite@Home, iCast, Microsoft, Odigo, Tribal Voice and Yahoo!. They announced in late July that "we will publish specifications that will enable functional interoperability among IMUnified members' instant messaging services and that we will implement during the fall timeframe." IMUnified, *Roundtable Q&A: Industry Leaders Discuss Goals of New IMUnified Coalition*, at <http://www.microsoft.com/presspass/features/2000/jul00/07-25imUnified.asp> (visited Aug. 11, 2000). See also Ariana Eunjung Cha, *AOL Unmoved in Software Dispute*, *WASH. POST*, Aug. 24, 2000, at A-1, -14; Jim Lynch, *Instant Messaging Roundup*, *MSNBC Technology*, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000).

⁴⁵⁷ iCast Comments at 5, 10; Letter from Ross Bagully, President and CEO, Tribal Voice, to Magalie Roman Salas, Secretary, FCC, dated Aug. 8, 2000, at 1-2 ("Tribal Voice Aug. 8 Ex Parte"); Industry White Paper on AOL's Submissions to the IETF & the FCC ("Second IM White Paper") at 11 n.19, 14, Attachment to Letter from Ross Bagully, President and CEO, Tribal Voice, to Magalie Roman Salas, Secretary, FCC, dated July 21, 2000 ("Tribal Voice July 21 Ex Parte"). Several observers appear to find AOL's original participation in IETF less than enthusiastic. Carolyn Duffy Marsan, *AOL Out of Instant Messaging Standard Bake-Off*, *Network World Fusion News*, Aug. 7, 2000, at <http://www.newfusion.com/cgi-bin/mailto/x.cgi> (visited Aug. 15, 2000); *Network World*, *Front News Briefs, AOL Touts Instant Messaging Standard*, *NETWORK WORLD*, June 19, 2000, at 2000 WL 9435687 ("After a year of dragging its feet on instant messaging interoperability, AOL . . ."); Lawrence J. Magid, *Instant Messaging Users Victims as Giants Do Battle*, *LOS ANGELES TIMES*, Aug. 23, 1999, at C-1, at 1999 WL 2189129 ("IETF has yet to receive AOL's instant messaging protocols, said Vijay Saraswat, co-chair of the IETF's Instant Messaging and Presence Protocol committee. 'In terms of moving the whole process forward, it would be significantly helpful to have AOL's protocols published, but different companies choose to participate in different ways,' Saraswat said"); Charles Cooper, *The Messaging Muddle: End the Bickering*, *ZDNET NEWS*, AUG. 4, 1999, at 1999 WL 14537884 ("The IETF, which has been working towards hashing out a consensus on messaging protocols, received encouraging news last week when AOL said it would participate in a working group charged with drafting the outlines of a universal messaging protocol. . . . AOL could accelerate the process by next publishing its existing Instant Messaging protocols. That suggestion has so far gone nowhere. . .").

⁴⁵⁸ Between August 1999 and October 2000, industry members exchanged thousands of electronic mails about IM interoperability through the IETF. Only eight were by AOL. Heffernan House Testimony at 5, Attachment to iCast Oct. 10 Ex Parte.

proposal lacked specificity, and began pursuing several other proposals.⁴⁵⁹ Recently, the IETF suspended its efforts, stating that no consensus about how to effect interoperability could be reached.⁴⁶⁰ At the en banc hearing in this proceeding, AOL opined that interoperability could only be achieved after lengthy industry deliberations and has stated that a technical standard could be achieved by July 2001, after which testing would begin.⁴⁶¹ As noted below, we will require AOL to file a progress report with the Commission every 180 days with regard to the actions it has taken towards interoperability.

170. AOL claims that it has been stymied in its attempts to provide interoperability by its desire to protect the privacy and security of its customers.⁴⁶² Other IM providers allege that they already have security and privacy procedures that are at least as great as AOL's.⁴⁶³ We find AOL's claim unconvincing. AOL has given us no details about its concerns, or how it currently protects its users. While it may be that AOL desires eventually to create an interoperable product that protects subscribers' privacy and security, privacy and security are matters that can be negotiated and resolved promptly, not pretexts for delaying interoperability unnecessarily.⁴⁶⁴ Microsoft and Yahoo! express no such disabling anxieties about privacy and security, even though they, like AOL, have reputations, goodwill, and customer bases to protect, and the technical expertise to distinguish serious and real problems from imaginary and minor ones. Microsoft and Yahoo!, not to mention many other IM providers, have as much incentive as AOL to implement interoperability with adequate protections for users' privacy and security. Security concerns do not appear to be the only reason that AOL has resisted interoperability.

171. *AOL's Use of Backward Compatibility.* AOL's new IM-based services in AIM 4.1 include a Talk Feature. In introducing AIM 4.1, AOL is taking advantage of backward compatibility by

⁴⁵⁹ See also Carolyn Duffy Marsan, *AOL Out of Instant Messaging Standard Bake-Off*, Network World Fusion News, Aug. 7, 2000, at <http://www.newfusion.com/cgi-bin/mailto/x.cgi> (visited Aug. 15, 2000) ("AOL's last-minute submission was a general framework for instant messaging interoperability rather than a full-fledged protocol, so it was not chosen for further consideration.").

⁴⁶⁰ Dennis Fisher, *A New Tack for IM Protocol*, EWEEK FROM ZDWIRE, Oct. 22, 2000, at 2000 WL 18179376. It is largely for this reason that we choose a remedy other than the ones, emphasizing industry standard setting through the IETF, advocated by IMUnified and its members. See, e.g., Microsoft Nov. 20 Ex Parte at 2.

⁴⁶¹ FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000), Tr. at 167-68: Chairman Kennard: "... You've said that you want [interoperability] to happen and that you can do it. Could you tell us for the record when it will get done?" Mr. Schuler: "Well, we can tell you for the record that there are two pieces to the puzzle. One piece of the puzzle is building the technology that will allow our servers to interoperate with other services and incorporate all the controls that allow us to protect our consumers. We think that's about a 12-month job. . . ." Chairman Kennard: "Twelve months from today." Mr. Schuler: "We are working at it right now. But there's another issue --" Chairman Kennard: "Is that a yes?" Mr. Schuler: Well, yes. Twelve months from today." Chairman Kennard: Twelve months from today." Mr. Schuler: "But let me clarify. That's 12 months to do the technology. There is another issue that's important, . . . the hackers and spammers are out there figuring out how to break it. . . . [T]here has to be a period of quality assurance, a period of us testing the system and assuring that . . . you've built the most unbreakable system possible." We do not necessarily agree with AOL that achieving interoperability will require such a lengthy time. See also Confidential Appendix IV-B-2, Note 5; Tribal Voice Aug. 8 Ex Parte at 1-2.

⁴⁶² Compare Case En Banc Testimony, Tr. at 29-30, and Schuler En Banc Testimony, Tr. at 164-65, with Bagully En Banc Testimony, Tr. at 154. See also AOL Sept. 19 Ex Parte at 4; American Online, Inc., *Open IM Architecture Design*, at <http://aim.aol.com/openim>, visited June 19, 2000 ("[W]e have resisted efforts by our competitors to impose a 'quick fix' system that would jeopardize our members' privacy and security.").

⁴⁶³ iCast July 25 Ex Parte, Attachment at 11-13.

⁴⁶⁴ See Tribal Voice July 21 Ex Parte, Attachment (Second IM White Paper) at 7-11.

making its new features compatible with its IM service.⁴⁶⁵ AOL does this by using the same NPD, the one it originally built for IM, for these new features. In this way, a user of AIM 4.1 who has high-speed Internet access service is not only able to engage in AIHS exchanges with other users of AIM 4.1, but is also able to continue to engage in IM with the much larger body of AOL's IM users who continue to use narrowband Internet access service. AOL is also using its base of IM users as a springboard for launching its AIHS. Recently, in introducing AOL Instant Messenger 4.3, AOL's web page warns that "[i]n order to take advantage of some of the newest AIM features, both you and your buddies must upgrade to AIM 4.3. . . . If your buddy's software is older, they may not be able to talk, share files, or take advantage of other new features. Send an instant message to your buddies today to let them know about AIM 4.3."⁴⁶⁶

172. We find it likely that AOL will, when presented with other, similar opportunities, continue to take advantage of backward compatibility as it rolls out new AIHS. Users of its new high-speed services will be able to use AOL's IM to communicate with its existing customer base. In addition, narrowband IM users may be able to adopt these new high-speed services, which will enable them to communicate with their users, albeit with relatively low quality. The Talk Feature of AIM 4.1 is a good example of such a feature. It can be used by narrowband customers, but quality is higher for high-speed customers. This difference will be more evident for features that require yet more bandwidth, such as videoconferencing.

173. Backward compatibility will have at least two benefits for AOL. First, it will enable it to offer new services tailored to high-speed customers without losing the network effects of the NPD that it developed in narrowband IM services. That is, AOL will be able to take the value inherent in its IM NPD and leverage it into its new AIHS. For example, users of AOL's AIHS will, because of the availability of AOL's NPD, be able to send streaming video messages to more other users, and will be able to receive them from more other users, than users of any other AIHS. AOL users will be able to video chat with more buddies, will be able to go web surfing via streaming video with more other users, will be able to hold larger business meetings with documents displayed via streaming video, and will be more likely to quickly compose large groups for these and other uses of streaming video.

174. Second, the benefits of providing backward compatible AIHS may lead other actual or potential providers of competitive but incompatible AIHS to conclude that it will be difficult, if not impossible, to successfully compete with AOL for customers.⁴⁶⁷ Thus, AOL's user base and NPD in IM gives it a unique first mover advantage into AIHS. We find that, with the advantages that backward compatibility will give it, AOL will be more able to dominate AIHS, or may be likely to dominate AIHS, not necessarily on the merits of its service, but because of the network effects inherited and leveraged from the NPD it built up in the IM business.

175. *Anticompetitive Effects of the Proposed Merger.* As already discussed, AOL is by far the largest IM provider, by virtue of its uniquely large NPD, and therefore has a strong incentive to resist and delay interoperating with other IM providers' NPDs. Without interoperability, users may choose AOL's

⁴⁶⁵ See Bernstein and McKinsey – Broadband! at 24 (“. . . AOL counts fully half of the current online subscribers as its customers, giving it the opportunity to shift many customers from slow- to high-speed service.”).

⁴⁶⁶ America Online, Inc., *AOL Instant Messenger 4.3*, at <http://www.aol.com/aim40/html> (visited Nov. 17, 2000). Slightly earlier, in announcing its AIM 4.1, AOL encouraged users to “[s]end an instant message to your buddies today to let them know about AIM 4.1!” America Online, Inc., *AOL Instant Messenger 4.1*, at <http://www.aol.com/aim/aim40.html> (visited Oct. 11, 2000).

⁴⁶⁷ See AT&T Nov. 22 Ex Parte at 2-3.

IM simply because it has the largest NPD and not because it offers the best value or is most attractive for some other meritorious reason. This puts a damper on competition and innovation, whether or not the network effects are so strong that they cannot likely be overcome (e.g., by a highly superior product offered by a competitor). AOL is in fact strongly resisting interoperability, thus taking advantage of the network effects of its NPD in competing with other providers. As a consequence, all consumers and the public interest are being disserved. Actual and potential competition among IM providers is hampered.

176. We conclude that AOL, through the proposed merger, will gain control over many significant assets owned by Time Warner and that these assets will make AOL Time Warner more able or more likely to dominate AIHS than it would otherwise be.⁴⁶⁸ AOL Time Warner may well be in a position of unassailable dominance in AIHS as a result of the proposed merger.

177. One, but by no means the only, relevant asset is the cable television systems owned by Time Warner. These systems are now being used to provide high-speed Internet access. A second asset that AOL will acquire in the proposed merger is Time Warner's contractual relations with the approximately 13 million cable television households in this country that those systems serve.⁴⁶⁹

178. A third relevant Time Warner asset is Road Runner, a major high-speed ISP, and a fourth is Road Runner's contractual relations with its subscriber base, which recently passed 1.1 million.⁴⁷⁰ Road Runner is now the exclusive high-speed ISP on Time Warner cable systems.⁴⁷¹ In addition, approximately 40 percent of Road Runner's customers are on cable television systems other than Time Warner's that have agreed to make Road Runner their exclusive high-speed ISP through 2001.⁴⁷² These latter cable television systems serve more than five million households.⁴⁷³ Thus, by acquiring Time Warner, AOL has gained access to nearly 20 million households who are or will be enabled for residential high-speed Internet access and to whom AOL Time Warner may now market AIHS.⁴⁷⁴ Road Runner

⁴⁶⁸ We do not here challenge how AOL achieved its dominance of IM service, or its deployment of AIHS as stand-alone services. Indeed, we have engaged in numerous proceedings to encourage the deployment of new and innovative services to all Americans, and we welcome the introduction of AIHS and any increased demand for high-speed services and connections that may result from the introduction of AIHS.

⁴⁶⁹ *Time Warner Cable Joins PowerUP to Provide High Speed Access to Bridge the Digital Divide: New Partnership Helps Underserved Youth Succeed in the Digital Age*, BUSINESS WIRE, Oct. 19, 2000.

⁴⁷⁰ Road Runner Corp., *Road Runner Sets Record Third Quarter* (press release), Oct. 16, 2000.

⁴⁷¹ Time Warner has announced that this exclusivity will end in April 2001. AT&T Corp., *Road Runner Joint Venture To Be Dissolved* (press release), Dec. 18, 2000. See also Time Warner Inc., *Time Warner To Increase Road Runner Ownership and Manage Its Operations* (press release), Dec. 18, 2000.

⁴⁷² See, e.g., Rebecca Cantwell, *DOJ Waves Road Runner Away From AT&T*, INTERACTIVE WEEK FROM ZDWIRE, June 5, 2000, at 2000 WL 4066715 (Road Runner is exclusive high-speed provider to Media One).

⁴⁷³ Recently, MediaOne alone was estimated to have 5 million cable service customers. Kelly Pate, *CSG Systems Stock Dives Amid Dispute with AT&T*, DENVER POST, Sept. 29, 2000, at 2000 WL 25829548.

⁴⁷⁴ *Road Runner Goal One Million*, TELEVISION DIGEST, March 13, 2000, at 2000 WL 8644906 (in March 2000, new Road Runner President's "plan calls for offering Road Runner to at least another 10 million cable homes this year, which would make it available in more than 25 million homes, over 80% of combined Time Warner-MediaOne universe.").

does not now include an IM service in its home page offering, but it is reasonable to expect it to have one and for that to be AOL's NPD.⁴⁷⁵

179. AOL will also acquire other relevant Time Warner assets, such as the significant content owned by Time Warner. This includes the stories and photographs in Time Warner's magazines, such as Time and Sports Illustrated; the news, sports programs and other information in video form available through CNN; and its extensive library of movies, television shows, popular music, and animated entertainment. This content will be useful to certain of AOL's new AIHS, in particular sending individual users television-based news stories on pre-selected subjects and allowing users to send each other Time Warner-owned animation, movie and television excerpts, and music. The video assets in particular are well suited for AIHS. AOL's ownership of Time Warner will allow it to make this mass of content available quickly to users of AOL's AIHS.⁴⁷⁶ This content will have already been created, so the cost of providing a copy of it (e.g., a video clip from CNN or a story from Time Magazine) to AOL will be, as a practical matter, zero. The savings resulting from this kind of vertical merger will thus be increased beyond their normal levels.⁴⁷⁷

180. The combination of these assets will likely give AOL Time Warner another first mover advantage in AIHS.⁴⁷⁸ In contrast, other AIHS providers, if they have any access to Time Warner's systems, services, and content, will need to negotiate individual contracts for that access and will have to pay for it. They will need negotiations with, and payments to, other content owners, also, to bring comparable AIHS to their users. Given the size and scope of Time Warner's assets, many contracts and much time would be needed to make an equivalent AIHS offering.

181. In sum, although Time Warner's valuable content, conduits, prominent high-speed ISP, and ready-made customer base will enable the merged firm to provide more services to AOL's IM customers, this combination will also make it much easier for AOL Time Warner to leverage the network effects of AOL's NPD into AIHS. The Applicants appear to be pointing to this very phenomenon as a benefit of their proposed merger when they state that they "plan to create and deliver to consumers easily

⁴⁷⁵ See Confidential Appendix IV-B-2, Note 6. The FTC's Order to Hold Separate will prevent such an offering until AOL Time Warner offers an unaffiliated ISP on each of its cable systems. *Order To Hold Separate*.

To the extent that the almost twenty million Time Warner and Road Runner households already subscribe to one of AOL's narrowband IM services, the backward compatibility of AOL Time Warner's AIHS can make the latter services' attractions apparent sooner than they otherwise would be.

⁴⁷⁶ AT&T Nov. 22 Ex Parte at 2.

⁴⁷⁷ See Letter from Dr. Frederick R. Warren-Boulton, Microeconomic Consulting and Research Assocs., Inc., consultant for AT&T, to Magalie Roman Salas, Secretary, FCC, dated Dec. 5, 2000, at 2. See also Michael H. Riordan and Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 513, 526-27 (1995) ("Eliminating Double Markup of Costs. When both the input and output markets are imperfectly competitive, output prices are increased above the competitive level and possibly even above the monopoly level, as marginal input costs are marked up twice, once by the input supplier and once by the output producer. Under these circumstances, when the integrated firm can efficiently supply inputs to itself, a vertical merger of a firm with a supplier of a variable input can reduce output prices by eliminating one of the two markups.").

⁴⁷⁸ AOL Time Warner's first mover advantage will make more difficult the task facing deployers of any new "breakthrough technology."

accessible interactive services – mixing and fusing content and communication elements – that today are only in their infancy or are not yet on the drawing board.⁴⁷⁹

182. The proposed merger will also give AOL the opportunity and incentive to impair the performance of its rivals' AIHS. Other AIHS providers will provide their services over Time Warner cable systems and Road Runner. The proposed merger will put AOL in control of those assets. The merger will thus give AOL the opportunity to control the quality of service that its competitors receive.⁴⁸⁰ For example, AOL Time Warner will be able to make its own users' video conferencing transmissions quick and clear and those of competitors slow and choppy.⁴⁸¹ AOL Time Warner will have the incentive to engage in such conduct because it will discourage consumers from using competitors' AIHS and will draw them instead to AOL Time Warner's.⁴⁸² Such conduct would be particularly destructive to competition in AIHS because, as we have noted, QoS will be especially important in those services.

183. There is precedent for such misconduct. Companies in communications markets have been known to acquire scarce facilities that their competitors need and to deny the competitors equal or reasonable access to those facilities, and thus to give themselves anticompetitive advantages or monopolies.⁴⁸³ AOL in particular has a history of denying its IM competitors *any* access to its NPD.

184. We find the situation in AIHS different from that which, in our ruling on the merger of AT&T and Media One, led us to conclude that concern for the future of competition in various broadband services would be premature and that it would be prudent to refrain from action.⁴⁸⁴ There, we addressed

⁴⁷⁹ Applicant's Second Response at 17.

⁴⁸⁰ The existence of high-speed services that compete with cable-based high-speed services, such as xDSL, may not dissuade AOL from such conduct in IM. AOL's present position in IM and its likely dominance of AIHS derive in large part from its NPD and will be felt on all high-speed "last miles." xDSL and other high-speed alternatives to cable will not discipline, and may even extend, the anticompetitive potential of AOL's NPD.

⁴⁸¹ A promotional paper by Cisco Systems states that, with its network equipment, "[s]ervice providers can 'up the ante' by giving customers guaranteed and differentiated services through IP-based QoS product." Cisco Systems, *White Paper: Cisco's Packet over SONET/SDH (POS) Technology Support; Mission Accomplished* at 4, at http://www.cisco.com/warp/public/cc/pd/rt/12000/tech/posdh_wp.htm (visited Oct. 10, 2000).

⁴⁸² Because we expect the basic technology of AOL's new IM-based services to be similar to others', AOL Time Warner will likely have more of an incentive to discriminate against the latter than it would if their services were sharply differentiated and if each appealed to different customers. In the latter event, AOL Time Warner's incentive would more likely be to make all the differentiated services function well. See Confidential Appendix IV-B-2, Note 7.

⁴⁸³ See generally *United States v. AT&T*, 524 F. Supp. 1336 (D.D.C. 1981) (detailing the discrimination of the Bell System local telephone companies against its competitors in terminal equipment, long distance, and other products and services for which access to local lines was necessary). Similar concerns also underlie the provisions concerning "program access" by cable television companies (Communications Act § 628, 47 U.S.C. § 548) and Bell re-entry into interexchange service (Communications Act §§ 271-72, 47 U.S.C. §§271-72). See also James W. Olson and Lawrence J. Spiwak, *Can Short-Term Limits on Strategic Vertical Restraints Improve Long-Term Cable Industry Market Performance?*, 13 *CARDOZO ARTS & ENT. L.J.* 283 (1995).

⁴⁸⁴ *AT&T-MediaOne Order*, 15 FCC Rcd at 9871 ¶ 123 ("Given the nascent condition of the broadband industry and the foregoing promises of competition, we find it premature to conclude that the proposed merger poses a sufficient threat to competition and diversity in the provision of broadband Internet services, content, applications, or architecture to justify denial of the merger or the imposition of conditions to supplement the Justice Department's proposed consent decree.").

the entire residential high-speed Internet access business. Here, our attention has been sharply focused on AIHS, the NPD assets at its core, and the particular abilities and incentives in AIHS of the two specific parties to this proposed merger. Seeing a foreseeable and likely danger to competition in AIHS, we can act promptly and with confidence. This danger leads us to protect the possible emergence of a competitive market and not to wait for more traditional antitrust remedies, which may not be used until harm is done and may take years to undo.

185. With a dominant position in the AIHS business, AOL Time Warner would be likely to charge higher prices than it otherwise would to end users, content providers, and/or advertisers.⁴⁸⁵ AOL's domination may also result in less innovation in new IM-based services, and AIHS in particular, than there otherwise would be. We find such harm both more likely as a result of the proposed merger than it would otherwise be, and contrary to the public interest. Accordingly, we find that the proposed merger will significantly enhance AOL Time Warner's ability and incentive to leverage the network effects of AOL's NPD, from its IM service, into new IM-based services including AIHS, thereby making it more able or likely to dominate those services and to effectively foreclose the emergence of a competitive market. We see no benefits from AOL Time Warner's domination that will outweigh these harms.

186. AOL implies that we should address these issues in a rulemaking that would apply to all providers of IM and new IM-based services.⁴⁸⁶ The concerns we have described above flow, specifically and exclusively, from AOL's role, and not from any other company's, in services that depend on an NPD after the proposed merger. Further, our concerns are time-sensitive, focusing as they do on current events in the emerging business of new interactive services. By the time a rulemaking ended, the domination by AOL Time Warner that we today find likely might well have been achieved and be beyond correction by marketplace forces. Regulation of AOL Time Warner's offerings might be necessary. Too often in the history of communications, interoperation has required detailed government mandate and decades of supervision,⁴⁸⁷ and dominant firms' entry into new markets has required case-by-case permission after

⁴⁸⁵ See, e.g., Heffernan House Testimony at 3 ("By declining to allow IM interoperability and allowing rival interactive TV providers to use AOL IM only upon payment of substantial license fees (or not licensed at all), AOL would substantially raise rival interactive TV providers' costs."), Attachment to iCast Oct. 10 Ex Parte.

⁴⁸⁶ See AOL Sept. 19 Ex Parte at 5.

⁴⁸⁷ See, e.g., AT&T Corp., *Annual Report for the Year Ending Dec. 31, 1913*, at 24-26 (1914) (the "Kingsbury Commitment," in which AT&T committed to interconnect its long distance lines with independent telephone companies under certain conditions), cited in Milton Mueller, Jr., *UNIVERSAL SERVICE: COMPETITION, INTERCONNECTION, AND MONOPOLY IN THE MAKING OF THE AMERICAN TELEPHONE SYSTEM* at 130 n.1 (1997); *Bell System Tariff Offerings of Local Distribution Facilities for Use by Other Common Carriers; and Letter of Chief, Common Carrier Bureau, Dated October 19, 1973, to Laurence E. Harris, Vice President, MCI Telecommunications Corp.*, Docket No. 19896, Decision, 46 FCC2d 413 (1974), affirmed, *Bell Tel. Co. v. FCC*, 503 F.2d 1250 (3rd Cir. 1974), cert. denied, 422 U.S. 1026 (1975) (regulating interconnection between dominant carriers and new entrant private line carriers); *United States v. AT&T*, 552 F. Supp. 131, 227 (D.D.C. 1982), affirmed, 460 U.S. 1001 (1983) (requiring Bell local companies to offer long distance carriers other than AT&T interconnection equal to that offered to AT&T); *Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers; Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Service Providers*, CC Docket Nos. 94-54 and 95-185, Notice of Proposed Rulemaking, 11 FCC Rcd 5020 (1996) (one of many proceedings regulating interconnection of dominant wireline carriers and relatively small mobile wireless carriers); Communications Act § 251, 47 U.S.C. § 251 (detailed regulation of interconnection between dominant incumbent local exchange carriers and new entrant competitive local exchange carriers).

intense scrutiny.⁴⁸⁸ We assiduously seek to avoid those outcomes here, and we earnestly hope that our light-handed, market-opening condition will lead to interoperability without further government action.

187. *Interoperability.* We find that the anticompetitive dangers discussed above would be mitigated if there were interoperability between AOL's new IM-based services and those of other companies. This would permit a user of an AOL service and a user of another service to talk, play games, engage in video conferencing, *etc.*, with each other as easily as each exchanges instant text messages today with other users of the service to which he or she subscribes. If there were interoperability of new IM-based services, AOL would be less able to leverage its leading position in IM services into those new services.

188. To prevent AOL Time Warner, as a result of the proposed merger, from becoming more able or likely to dominate AIHS, we impose a prophylactic condition. Because the domination that concerns us would be made likely by the combination of AOL's and Time Warner's assets, we reject AOL's argument that its dispute with other IM providers about interoperability preceded and is therefore immaterial to the proposed merger.⁴⁸⁹ We have also considered carefully AOL's other cautions against intervention in the market, but we find them unconvincing. AIHS are novel services, but we and many others believe that they will be significant in the near future. If they are not, our intervention will cause little, if any, harm to consumers or efficiency. If, as AOL predicts, Microsoft and Yahoo! effectively challenge AOL in IM and/or AOL Time Warner in AIHS, then AOL will have an incentive to achieve interoperability and our condition will not come into operation. The risk of our not intervening now, however, is to risk the emergence of a significant new business needing regulation, a result we and Congress wish to avoid especially on the Internet and interactive services. For the reasons stated above, we cannot be certain that new entry, even by the likes of Microsoft and Yahoo!, will discipline AOL Time Warner in AIHS. Finally, we are not convinced that AOL's expressions of concern with security and privacy justify giving free rein to its resistance to interoperability.

189. Accordingly, we are imposing a condition that is precisely and narrowly aimed at preventing the specific harm that the proposed merger will cause. It is also directed at serving the broader public interest in encouraging entry, competition, innovation, the broader deployment of new services, the lowest possible transaction costs for consumers, and necessary protection of persons with disabilities. Our condition is balanced because it contains ways for AOL to show that, due to events we do not anticipate, the condition is no longer necessary. Our condition gives AOL incentives that it does not now have to interoperate and thus to benefit consumers, efficiency and the public interest. Our condition also gives other IM and AIHS providers incentives to enter and remain in the business that they do not now have.

190. As set forth below, our condition gives AOL an incentive to interoperate by forbidding it from providing streaming video AIHS applications until it interoperates. Our condition focuses on streaming video AIHS applications, for several reasons. First, AOL is not offering them as part of its IM today. Second, as we define them below, we believe that the scope of video AIHS applications is relatively clear. If our condition focused on AIHS applications that included "talking" or "game-playing,"

⁴⁸⁸ Examples are wireline telephone companies' entry into cellular service (*see, e.g.,* Rogers Radio Commun. Serv., Inc. v. FCC, 593 F.2d 1225 (D.C.Cir. 1978); MCI Cellular Tel. Co. v. FCC, 738 F.2d 1322 (D.C. Cir. 1984)) and enhanced services (*see, e.g.,* California v. FCC, 905 F.2d 1217 (9th Cir, 1990), 39 F.3d 919 (9th Cir. 1994), *cert. denied*, 514 U.S. 1090 (1995); and Bell incumbent local exchange carrier entry into in-region interexchange service (47 U.S.C. §§ 271-72).

⁴⁸⁹ Applicants' Reply Comments at 47-49.

which AOL appears to be providing now to some extent, there might be difficulty in detecting when AOL had made an advancement with these services. Third, AOL will be able to provide streaming video AIHS applications for the first time on the facilities of Time Warner that are coming under AOL's control as a result of the proposed merger. We believe that it is in these applications that AOL would be positioned to gain the greatest anti-competitive advantage as a result of the proposed merger, by combining its NPD with the assets of Time Warner.

3. Condition

191. AOL Time Warner's likely domination of the potentially competitive business of new, IM-based services, especially AIHS applications such as videoconferencing, requires that we impose a condition to prevent that merger-specific harm.⁴⁹⁰ AOL Time Warner may not offer an AIHS application that includes the transmission and reception, utilizing an NPD over the Internet Protocol path of AOL Time Warner broadband facilities, of one- or two-way streaming video communication using NPD protocols – including live images or tape – that are new features, functions, and enhancements beyond those offered in current offerings such as AIM 4.3 or ICQ 2000b,⁴⁹¹ unless and until AOL Time Warner has successfully demonstrated it has complied with one of the following grounds for relief.

192. *Grounds for Relief. Option One.* AOL Time Warner may file a petition demonstrating that it has implemented⁴⁹² a standard for server-to-server interoperability of NPD-based services⁴⁹³ that has been promulgated by the IETF or a widely recognized standard-setting body that is recognized as complying with National Institute of Standards and Technology or International Organization for Standardization requirements for a standard setting body. At a minimum, AOL Time Warner must demonstrate that the adopted protocol makes available to another provider of NPD-based services such data in AOL Time Warner's NPD(s) as will enable the other provider's users to know the addresses of AOL Time Warner users and detect their presence online, to the same extent that AOL Time Warner's users know each others' addresses and detect each others' presence online. AOL Time Warner must also demonstrate that the protocol makes available to other IM providers any other information used by AOL Time Warner to implement and process transactions of AIHS services, to the extent allowed by law.⁴⁹⁴ The adopted standard shall also ensure that AOL Time Warner shall afford the same quality and speed in processing transactions to and from the other provider as it affords to its own transactions of the same type.⁴⁹⁵ Other than specifying server-to-server interoperability as described above, we do not set any technical criteria for interoperability.

⁴⁹⁰ In "AOL Time Warner," we include the separate pre-merger companies and the post-merger company.

⁴⁹¹ We explicitly exclude upgrades to AOL's current IM products that are not otherwise included in AIHS. We do not intend to include within AIHS streaming video communications not utilizing NPD protocols or applications that contain or are packaged with current IM.

⁴⁹² By "implemented," we mean both the creation and deployment of the interoperable application.

⁴⁹³ "Server to server" interoperability is interoperability in which a client interacts with other NPD-based services through its own server. Each server establishes communication with other servers, including those controlled by other providers of NPD-based services, to exchange presence information and names.

⁴⁹⁴ The other provider must afford the same capabilities to AOL.

⁴⁹⁵ We do not require the AOL Time Warner software to read and interpret all the data it receives or to make that data comprehensible to its users.

193. *Option Two.* AOL may file a petition demonstrating that it has entered into written contracts providing for server-to-server interoperability with significant, unaffiliated, actual or potential competing providers of NPD-based services offered to the public.⁴⁹⁶ AOL must execute the first such contract prior to offering the video AIHS service described above. After AOL Time Warner executes the first contract, an officer of AOL Time Warner shall certify to the Commission that it is prepared to promptly negotiate in good faith, with any other requesting provider of NPD-based services.⁴⁹⁷

194. Within 180 days of executing the first contract, AOL must demonstrate that it has entered into two additional contracts with significant, unaffiliated, actual or potential competing providers. The interoperability achieved under these contracts shall be identical to that described under Option One above with identical terms and conditions for technical interoperability. All parties to a contract shall agree not to alter the technical protocol without the consent of all parties providing interoperable IM services under these agreements. The contracts may contain different provisions for business considerations. AOL Time Warner must submit copies of these agreements for server-to-server interoperability into the record of this proceeding within 10 days of execution of such agreement. AOL Time Warner may redact any proprietary information or terms not related to technical interoperability.

195. *Option Three.* AOL Time Warner may seek relief from the condition on offering AIHS video services by filing a petition demonstrating that imposition of the condition no longer serves the public interest, convenience and necessity because there has been a material change in circumstance, including new evidence that renders the condition on offering AIHS video services no longer necessary in the public interest, convenience, and necessity. If AOL Time Warner proffers market share information as evidence that the condition no longer is necessary in the public interest, convenience, and necessity, AOL Time Warner must demonstrate that it has not been a dominant provider of NPD services for at least four (4) consecutive months.

⁴⁹⁶ A potential competitor is "an aggressive, well equipped and well financed company that is engaged in the same or related lines of commerce." *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 532 (1973). See also *United States v. Penn-Olin Chem. Co.*, 378 U.S. 158, 174 (1964). In this case, we expect that the potential provider would be a company that is capable of entering into an arms-length, commercially reasonable and mutually beneficial contract with AOL and is likely to become a significant competitor in the near term in providing NPD services.

⁴⁹⁷ By "negotiate in good faith," we mean that AOL Time Warner: (1) may not refuse to negotiate with another IM provider regarding interoperability; (2) must appoint a negotiating representative with authority to bargain and conclude an agreement on interoperability; (3) must agree to meet at reasonable times and locations and may not act in a manner that would unduly delay the course of negotiations; (4) may not put forth a single, unilateral proposal that is not subject to negotiation; (5) in responding to an offer proposed by another IM provider, must provide considered reasons for rejecting any aspects of the other provider's offer or proposal; (6) may not enter into an agreement that requires the other IM provider to interoperate exclusively with AOL Time Warner or authorizes AOL Time Warner to deny interoperability to any other IM provider, and (7) must agree to execute a written agreement that sets forth the full agreement between AOL Time Warner and the other IM provider. We add the seventh requirement to ensure that there are no misunderstandings as to the obligations of the parties to the agreement. In addition, because good faith determinations must be grounded on particular facts, we will also examine whether, based on the totality of the circumstances, AOL Time Warner has bargained in good faith. If we find that AOL Time Warner has not bargained in good faith, we will instruct AOL Time Warner to restart negotiations with the aggrieved IM provider, but will not mandate that the parties reach agreement or enter into a contract on specific terms or conditions. Cf. *Implementation of the Satellite Home Viewer Improvement Act of 1999, Retransmission Consent Issues: Good Faith Negotiation and Exclusivity*, CS Docket No. 99-363, First Report and Order, 15 FCC Rcd 5445 (2000).

196. *Procedure for Submission of Petition to the Commission.* To receive authorization to offer AIHS video services pursuant to Options One through Three above, AOL Time Warner shall submit a Petition to the Commission. The Petition shall be filed with the Secretary's office and shall contain the factual and legal bases demonstrating satisfaction of one of the three options set forth above. The Commission shall put the Petition out for Notice and Comment with a maximum of 30 days for receipt of such comments. Petitioner may submit a reply not more than 15 days after the closure of the comment period. Upon the timely filing of Petitioner's reply, the Petition, comments and reply shall be submitted to the Commission for disposition. The Commission shall issue its findings and conclusions not more than 60 days after receipt of the matter. This timeline may be altered at the discretion of the Commission upon a timely submitted request of the Petitioner. The findings of the Commission shall be made upon clear and convincing evidence, and in the absence of such an evidentiary showing, the condition shall not be eliminated.

197. *Reporting Requirement.* We also require that AOL Time Warner file a progress report with the Commission, 180 days after the release of this *Order* and every 180 days thereafter, describing in technical depth, the actions it has taken to achieve interoperability of its IM offerings⁴⁹⁸ and others' IM offerings. Such reports will be placed on public notice for comment. Any confidential or proprietary information contained in the reports may be submitted to the Commission pursuant to the terms of the protective order in this proceeding.

198. *Enforcement.* The Commission shall retain jurisdiction over the licensees or their successors for the purpose of enforcing the terms of this condition, for a period not to exceed five years. The terms of this condition shall be enforced pursuant to the Commission's powers under the Communication Act. Any party to the *Order*, or their successor in interest, may petition this Commission at any time for relief from the condition on offering AIHS video services imposed pursuant to this *Order*.

199. In the event that any person wishes to bring to us a dispute about AOL's compliance with our condition, we shall require that the following procedures be followed. These procedures are designed to resolve any disputes within sixty (60) days of the first filing. Within twenty (20) days after public notice is given of either the filing of a complaint or a showing by AOL Time Warner, any interested party shall file a response (AOL Time Warner's answer to the complaint, another person's response to AOL Time Warner's alleged showing). Within ten (10) days after the filing of the responses, the party that made the first filing may file its reply.⁴⁹⁹ The complainant and AOL Time Warner shall each, with its first filing, furnish a detailed report, technical or otherwise, describing the conduct or events that are the subject of the filing. All these filings shall be made with the Commission Secretary and shall be concurrently served on the Chief, Cable Services Bureau.⁵⁰⁰ The complaint or showing, as the case may be, shall be dismissed or sustained within sixty (60) days of its filing.

200. *Sunset.* Five (5) years after the date of release of this *Order*, the condition set forth in the preceding paragraphs shall expire and shall not restrain AOL Time Warner from offering video AIHS.

⁴⁹⁸ Within "its IM offerings," we include the IM offered as part of AOL's basic proprietary Internet access service, AIM, ICQ, any IM that is sponsored by AOL Time Warner and is included in Road Runner, and any new IM-based service that uses the NPD that AOL uses for its IM.

⁴⁹⁹ Cf. 47 C.F.R. § 76.7

⁵⁰⁰ See para. 126F, *supra*.

C. Video Programming

201. In this section, we consider the proposed merger's impact on video programming sold by program networks to MVPDs, who then deliver the networks via their distribution systems to their subscribers' television sets. MVPDs include cable, DBS, multichannel multipoint distribution services ("MMDS"), and satellite master antenna television ("SMATV") providers.⁵⁰¹

202. Companies that own programming networks produce their own programming and/or acquire programming produced by others, then package this programming for sale to MVPDs. As discussed above, Time Warner has ownership interests in a large number of programming networks, such as CNN, TBS, HBO, Comedy Central and Court TV, among others.

203. We examine below whether the merger will create public interest harms with respect to electronic programming guides ("EPGs"), the carriage of analog and digital video signals, or AOL Time Warner's post-merger ownership interest in DirecTV, the nation's largest DBS provider. We conclude that the merger will not result in a violation of the Communication's Act or Commission rules, nor will it interfere with our implementation of the Communications Act or the Commission's policy objectives. Accordingly, we reject commenters' requests that we impose conditions related to video programming.

1. Electronic Programming Guides

204. EPGs are on-screen directories of programming delivered through various means, including cable plant, telephone lines, and over-the-air broadcast signals. Original-generation EPGs are not interactive, but rather continually scroll programming listings. These EPGs are generally delivered as discrete video programming channels. Newer, interactive EPGs, however, allow users to sort and search programming, give program descriptions, provide reminders of upcoming programming, and take users to programming they select. Interactive EPGs can be transmitted via the Vertical Blanking Interval ("VBI")⁵⁰² of analog channels, or may be transmitted as standalone digital data streams. The purchasers of EPGs are MVPDs such as cable and DBS operators, and, potentially, through set-top boxes, individual consumers.⁵⁰³ The sellers of EPGs are EPG companies.⁵⁰⁴ Gemstar, the current market leader in the

⁵⁰¹ See *1999 Competition Report*, 15 FCC Rcd at 980 ¶ 3 (generally describing the various types of MVPDs) (Section 628(g) of the Communications Act, 47 U.S.C. § 548(g), requires the Commission to report annually to Congress on the status of competition in markets for the delivery of video programming). DBS operators provide programming via satellite to subscribers that own or lease small-diameter receiving dishes. MMDS providers offer programming via microwave facilities (the service is often referred to as "wireless cable service"). SMATV operators, also known as "private cable operators," also frequently use microwave facilities to transmit programming to subscribers without crossing public rights-of-way. SMATV subscribers usually reside in multiple dwelling units ("MDUs").

⁵⁰² Newton's Telecom Dictionary (11th Ed. 1996) defines the VBI as:

The interval between television frames in which the picture is blanked to enable the trace (which "paints" the screen) to return to the upper left hand corner of the screen, from where the trace starts, once again to paint a new screen.

This time period is the equivalent of 21 scanning lines. The VBI is used to transmit data to organize the television picture, as well as other data. Line 21 of the VBI is reserved for distribution of closed captioning information. See *Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Video Programming Accessibility, Report*, MM Docket No. 95-176, 11 FCC Rcd 19214 (1996).

⁵⁰³ Some set-top boxes and television sets will have EPGs embedded within them.

provision of EPGs, has contracted with AT&T for provision of EPGs on AT&T cable systems.⁵⁰⁵ Gemstar also has an agreement with AOL to provide electronic program guide functions for AOLTV.⁵⁰⁶

205. Gemstar argues that, although it has no complaint regarding AOL, Time Warner has engaged in anticompetitive conduct by blocking subscriber access to Gemstar's Guide Plus+ EPG.⁵⁰⁷ The "Guide Plus+" EPG conveys programming information to consumers without a monthly service charge and without the need for set top boxes or other devices.⁵⁰⁸ According to Gemstar, Guide Plus+ works only when the television can receive updated programming information transmitted via the vertical blanking interval of local television broadcast stations.⁵⁰⁹ Gemstar states that Time Warner strips out the EPG data in the VBI, rendering Guide Plus+ useless to many potential consumers.⁵¹⁰ Prior to the start of this proceeding, Gemstar filed a petition for special relief with the Commission regarding Time Warner's actions.⁵¹¹ Gemstar states that it is taking the additional step of filing in this proceeding because it believes Time Warner's past conduct with respect to Gemstar illustrates Time Warner's lack of commitment to open access for content, including EPGs.⁵¹² As a result, Gemstar asks that the Commission impose conditions on the merger to ensure that Time Warner will keep its systems open to competitive content and service providers.⁵¹³

206. In response to Gemstar's comments, the Applicants state that this merger is not the appropriate forum to litigate EPG issues.⁵¹⁴ The Applicants assert that the special relief proceeding initiated by Gemstar is the proper place to issue a determination on the EPG dispute.⁵¹⁵

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⁵⁰⁴ In addition, some ITV providers may provide interactive EPGs as part of their ITV service. EPG companies include Gemstar, WorldGate (who provides "TV Gateway" for WorldGate subscribers) and Liberate Tribune.

⁵⁰⁵ We note that on July 11, 2000, Gemstar and TV Guide, Inc. announced the completion of their merger, in which TV Guide, Inc. will become a wholly owned subsidiary of Gemstar. TV Guide, Inc., *Gemstar International Group Limited and TV Guide, Inc. Announce Completion of Their Merger* (press release) July 11, 2000. In addition, in October 2000, News Corp. increased its ownership interest in Gemstar-TV Guide to 43% by acquiring AT&T's Liberty Media Group's 21% ownership interest. As part of this same transaction, AT&T's Liberty Media Group will increase its ownership interest in News Corp. to 18% from 8%. Ronald Grover, *What Does John Malone Really Want?*, BUSINESS WEEK, Oct. 9, 2000, at 1.

⁵⁰⁶ TV Guide, Inc., *Gemstar International Group Limited and TV Guide, Inc. Announce Completion of Their Merger* (press release), July 11, 2000.

⁵⁰⁷ Gemstar Comments at 3.

⁵⁰⁸ *Id.*

⁵⁰⁹ *Id.*

⁵¹⁰ *Id.* Time Warner stated recently that it has ceased this practice (see letter from Marc Apfelbaum, Senior Vice President and General Counsel, Time Warner Cable, to Stephen Weiswasser, Executive Vice President and General Counsel, Gemstar Development Corp, dated June 15, 2000). However, we note that Gemstar indicates that Time Warner's current decision to refrain from stripping EPG data does not alleviate its overall concerns, characterizing Time Warner's actions as "a temporary cease fire." See Letter from Gerald J. Waldron and Jennifer A. Johnson, Counsel for Gemstar-TV Guide International, Inc., to Magalie Roman Salas, Secretary, FCC, dated January 4, 2001.

⁵¹¹ See *In re Petition for Special Relief of Gemstar*, CSR-5528-Z (filed Mar. 16, 2000).

⁵¹² Gemstar Comments at 4.

⁵¹³ *Id.* at 7. See also NAB May 19 Ex Parte at 2-3; NAB Oct. 2 Ex Parte at 1-3.

⁵¹⁴ Applicants' Reply Comments at 52.

207. Gemstar has not shown that the merger is likely to create or exacerbate competitive harm. Its dispute with Time Warner predates the merger announcement. Moreover, Gemstar's arguments are being fully considered in the context of its petition for special relief asking that Time Warner cease stripping out the Guide Plus+ data, and we find that it would be inappropriate to address them here.⁵¹⁶ We therefore decline Gemstar's additional request for conditions on the proposed AOL Time Warner merger. Furthermore, we note that the Commission has committed to "monitor developments with respect to the availability of electronic programming guides to determine whether any action is appropriate in the future."⁵¹⁷ Finally, the Commission has requested comment in a pending rulemaking proceeding on "whether any rules are necessary to ensure fair competition between EPGs controlled by cable operators and those that are controlled by broadcasters."⁵¹⁸

2. Broadcast Signal Carriage Issues

208. The National Association of Broadcasters ("NAB") and other broadcast groups are concerned about the impact of the proposed merger on Time Warner's carriage of analog and digital television signals.⁵¹⁹ Specifically, NAB urges the Commission to prohibit AOL Time Warner from blocking access to any part of a broadcast signal that consumers could receive free over-the-air, such as electronic program guide information.⁵²⁰ NAB also requests that the Commission require AOL Time

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⁵¹⁵ *Id.* at 53. See also Letter from Daniel L. Brenner, National Cable Television Association ("NCTA") to William E. Kennard, Chairman, FCC, dated May 36, 2000 ("NCTA May 26 Ex Parte"), transmitted by letter from Daniel L. Brenner to Magalie Roman Salas, Secretary, FCC, dated May 26, 2000.

⁵¹⁶ See *In re Petition for Special Relief of Gemstar*, CSR-5528-Z (filed March 16, 2000). Gemstar states that it incorporates, by reference, its comments from the special relief proceeding regarding Time Warner's refusal to carry EPG-related data in the vertical blanking interval of a television broadcast signal. In that proceeding, Gemstar argued the following points: (1) Time Warner's actions violate the Commission's rules and policies requiring mandatory carriage of all program-related material accompanying a broadcast signal that has must carry rights; (2) Time Warner is impeding the retail availability of competing navigation devices; and (3) Time Warner's actions are contrary to other Commission rules and policies. The Commission is also currently engaged in a proceeding to review the effectiveness of the navigation devices rules and to consider whether any changes are necessary. See *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Further Notice of Proposed Rulemaking and Declaratory Ruling, FCC 00-341 (rel. Sept. 18, 2000). See also *In re Carriage of the Transmission of Digital Television Broadcast Stations*, CS Docket No. 98-120, Notice of Proposed Rulemaking, 13 FCC Rcd 15092, 15129 ¶ 82 (1998).

⁵¹⁷ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Report and Order ("Navigation Devices Order"), 13 FCC Rcd 14775, 14820 ¶ 116 (1998).

⁵¹⁸ *In re Carriage of the Transmission of Digital Television Broadcast Stations*, CS Docket No. 98-120, Notice of Proposed Rulemaking, 13 FCC Rcd. 15092, 15129 ¶ 82 (1998).

⁵¹⁹ See NAB May 19 Ex Parte at 1-6; MSTV Reply Comments at 1-2; Sinclair Comments; Disney Reply Comments at 18-19; Disney July 25 Ex Parte at 35-37; Freedom Broadcasting Reply Comments.

⁵²⁰ NAB May 19 Ex Parte at 2; MSTV Reply Comments at 2; Disney Reply Comments at 18-19. We note that MSTV, Disney, and Sinclair have requested similar conditions as part of the merger approval process. See MSTV Reply Comments at 1 (requesting conditions that would prohibit AOL Time Warner from "discriminating against the programming, navigation devices and other services delivered through the broadcast signal for free"); Disney Reply Comments at 19 (requesting a condition that requires AOL Time Warner to "pass through unaltered all the free bits of broadcasters"); Sinclair Comments at 2 ("The Commission should prohibit AOL Time Warner from degrading or blocking subscriber access to any part of the digital broadcast signal that could be received free over-

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Warner to carry the digital broadcast signals of local television stations on its upgraded cable systems.⁵²¹ In response, the National Cable Television Association ("NCTA") asserts that the issues raised by NAB are not merger-specific, but rather apply to all cable operators.⁵²² Time Warner states that it has negotiated retransmission consent agreements providing for carriage of both analog and digital signals with each of the four major television networks (ABC, CBS, FOX, and NBC).⁵²³ According to Time Warner, these agreements also serve as templates for stations affiliated with, but not owned by, any of the four television networks.⁵²⁴

209. The record does not indicate that the merger will create or enhance AOL Time Warner's ability or incentive to refuse carriage of broadcasters' signals. We cannot conclude, therefore, that the merger would create any public interest harm in this regard. Moreover, the issues raised by the broadcasters are already under consideration in pending Commission proceedings of general applicability. The conditional requirements suggested by NAB should be addressed in those proceedings, and not within the confines of the merger analysis. As NCTA points out, the issues raised by the broadcasters affect all cable operators and not only Time Warner. We arrived at a similar conclusion in the AT&T-TCI merger,⁵²⁵ where NAB also requested digital broadcast signal carriage as a merger condition. We find no reason to depart from Commission precedent in this case. Insofar as NAB's concerns about the carriage of all components of the free analog broadcast signal are directed at EPG data carried on the broadcaster's VBI, we note that this particular matter will be addressed in the Gemstar special relief proceeding, where the issues have been fully briefed and discussed.⁵²⁶ The carriage of digital broadcast signals by Time Warner and other cable operators is being considered in a pending rulemaking proceeding specifically addressing digital must-carry issues.⁵²⁷ The conclusions we reach in that docket will, of course, apply to Time Warner as well as all other cable operators. Accordingly, we reject commenters' requests that we impose remedial conditions on AOL Time Warner in this proceeding.

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the-air.").

⁵²¹ NAB states that the Applicants' request for approval of the merger based on assertions that the combined entity will speed the construction of digital broadband platforms provides a separate basis for the Commission to require carriage of digital broadcast signals on its systems. See NAB May 19 Ex Parte at 5. See also MSTV Reply Comments at 6 ("specific and enforceable conditions must be placed on AOL Time Warner to protect the public's access to all of the digital offerings broadcast stations would deliver to consumers free of charge.").

⁵²² See NCTA May 26 Letter at 2.

⁵²³ See Applicants' First Response at 6.

⁵²⁴ Time Warner adds that, in fact, negotiations with other major television group owners are underway. *Id.*

⁵²⁵ See *AT&T-TCI Order*, 15 FCC Rcd at 3183 ¶ 43.

⁵²⁶ See *In re Petition for Special Relief of Gemstar*, CSR-5528-Z (filed March 16, 2000). See also *Navigation Devices Order*, 13 FCC Rcd at 14820 ¶ 116.

⁵²⁷ See *In re Carriage of the Transmission of Digital Television Broadcast Stations*, CS Docket No. 98-120, Notice of Proposed Rulemaking, 13 FCC Rcd 15092, 15129 ¶ 82 (1998). We note that Sinclair also argues that the Commission should ensure that consumers have access to free over-the-air digital broadcast signals via antennas and that the Commission should adopt the COFDM digital broadcast standard. Sinclair Comments at 3. We find that these matters are not linked in any way to either the merger or the broadcast carriage issues generally presented by the parties. These matters are more appropriately dealt with in the Commission's periodic review of the digital television transition. See *In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Notice of Proposed Rulemaking, MM Docket No. 00-39, FCC 00-83 (rel. Mar. 8, 2000).

3. Cable Horizontal Ownership Rules

210. Commenters assert that AOL's indirect ownership interest in DirecTV, coupled with Time Warner's cable holdings, would give the merged entity excessive purchasing power in the video programming market such that it could harm video programmers and MVPD competitors.⁵²⁸ We analyze below the potential harm that the merger may cause in the video programming market. We examine specifically the question whether the merger would violate the Commission's cable horizontal ownership rules,⁵²⁹ which we adopted pursuant to a statutory directive.⁵³⁰ We find that AOL's ownership interest in GM does not violate our horizontal ownership rules or the statute, nor does it frustrate the implementation of the Communications Act's goals.

211. In 1999, AOL made a \$1.5 billion investment in General Motors Corporation ("GM") in exchange for 2,669,633 shares of a type of GM Preference Stock ("Preference Stock").⁵³¹ General Motors invested this money in its wholly owned subsidiary, Hughes Electronics Corporation ("Hughes"), which in turn wholly owns DirecTV, a direct broadcast satellite ("DBS") company that provides multichannel video programming to approximately 8.3 million consumers nationwide.⁵³² Several commenters argue that AOL's investment in GM gives AOL the ability to influence DirecTV and DirecTV's video programming purchasing decisions.⁵³³ Given that Time Warner is the second largest cable operator in the nation, these commenters argue that the proposed merger would increase the merged firm's size as a multichannel video distribution provider ("MVPD"). Commenters contend that this larger, combined MVPD would have excessive purchasing power over suppliers of video programming, thereby harming suppliers of video programming and MVPD competitors of AOL Time Warner seeking access to the programming.⁵³⁴ Accordingly, the commenters request that the Commission require AOL to divest its interest in GM as a merger condition.⁵³⁵

212. In Section 613(f)(1)(A) of the Communication Act, as amended, Congress directed the Commission to place limits on a cable operator's size.⁵³⁶ Congress was concerned that concentration in the cable industry could pose "barriers to entry for new programmers and a reduction in the number of media voices to consumers."⁵³⁷ Therefore, Congress directed the Commission to establish a horizontal ownership limit that would prevent a large cable operator from using its size to harm video programmers and MVPD competitors by virtue of its purchasing power.⁵³⁸ Pursuant to this directive, the Commission

⁵²⁸ See ACA Comments at 1.

⁵²⁹ 47 C.F.R. § 76.503.

⁵³⁰ See Section 613(f)(1)(A) of the Communication Act of 1934, as amended; Cable Television Consumer Protection and Competition Act of 1992 § 11(c); 47 U.S.C. § 533(f)(1)(A).

⁵³¹ See Applicants' March 21 Supplemental Information at 11-12 n.15.

⁵³² See *id.* at 10-11.

⁵³³ See, e.g., RCN Comments at 6-7.

⁵³⁴ See RCN Comments at 6-8; ACA Comments at 13-14; Consumers Union Comments at 157.

⁵³⁵ See ACA Comments at 13-14; Consumers Union Comments at 157; Consumers Union Reply Comments at 6.

⁵³⁶ See 47 U.S.C. § 533(f)(1)(A).

⁵³⁷ Cable Act § 2(a)(4); 47 U.S.C. § 521 note.

⁵³⁸ See 47 U.S.C. § 533(f)(2)(A)&(B).

promulgated a rule limiting a cable operator to 30% of the nation's MVPD subscribers.⁵³⁹ The 30% limit takes into account the ability of a cable operator "either because of its size . . . or because of joint actions by a group of operators of sufficient size" to unfairly impede the flow of programming from the video programmer to the consumer.⁵⁴⁰

213. The Commission established rules (the "attribution rules") that determine whether a cable operator has sufficient influence or control over an MVPD such that the MVPD's subscribers should count towards the cable operator's 30% limit.⁵⁴¹ Under these rules, AOL's Preference Stock is not attributable because nonvoting equity is not attributable unless the nonvoting equity is worth more than 33% of the total assets of the MVPD, which is not the case here.⁵⁴² The only possible attribution rule that could be invoked here is one that is triggered when a cable operator holds 5% or more of the MVPD's voting equity.⁵⁴³ However, even if AOL's Preference Stock were converted to voting equity, it would constitute approximately 1.76% of GM's voting equity, well below the 5% voting equity threshold.⁵⁴⁴ Thus, under our attribution rules, AOL does not have an interest in GM and its subsidiary DirecTV which would *de jure* deem AOL to have influence and control over DirecTV and its purchasing decisions.

214. Nevertheless, RCN argues that the Commission should examine the totality of the circumstances of the AOL and DirecTV relationship to determine whether AOL has the actual ability to influence or control DirecTV.⁵⁴⁵ In our order establishing the attribution rules, we declined "to examine contract language on a case-by-case basis to determine whether the contract gives one of the parties thereto an attributable interest."⁵⁴⁶ However, the Commission reserved discretion to review unique cases where "there is substantial evidence that the combined interests held are so extensive that they raise an issue of significant influence."⁵⁴⁷ We do not find that this case presents unique facts that would merit such a review.

215. RCN argues that AOL's investment in GM has led to a high degree of cooperation, including the launch of AOLTV for DirecTV and an integrated AOLTV-DirecTV set-top box.⁵⁴⁸ We also note that AOL and DirecTV have a number of other contracts relating to DirecTV, DirecPC and AOL's

⁵³⁹ See 47 C.F.R. § 76.503.

⁵⁴⁰ See *In re Implementation of Section 11(c) of the Cable Television Consumer Protection and Competition Act of 1992: Horizontal Ownership Limits*, MM Docket No. 92-264, Third Report and Order ("Horizontal Third Report and Order"), 14 FCC Rcd 19098, 19114-19116 ¶¶ 39-43 (1999).

⁵⁴¹ See 47 C.F.R. § 76.503 n.2.

⁵⁴² See 47 C.F.R. § 76.503 n.2; 47 C.F.R. § 76.501 n.2(i).

⁵⁴³ See 47 C.F.R. § 76.503 n.2; 47 C.F.R. § 76.501 n.2(a).

⁵⁴⁴ See Applicants' March 21 Supplemental Information at 14.

⁵⁴⁵ RCN Comments at 7 n.25.

⁵⁴⁶ See *In re Implementation of the Cable Television Consumer Protection and Competition Act of 1992; Implementation of Cable Reform Act Provisions of the Telecommunications Act of 1996: Review of the Commission's Cable Attribution Rules*, CS Docket Nos. 98-82, 96-85, Report and Order ("Attribution Order"), 14 FCC Rcd 19014, 19050 ¶ 92 (1999) ("[A] bright-line . . . test is superior to a case-by-case analysis because it permits the planning of financial transactions and minimizes regulatory costs.").

⁵⁴⁷ *Id.* at 19050-51 ¶ 92.

⁵⁴⁸ RCN Comments at 6-7.

ISP services.⁵⁴⁹ Nonetheless, our review of these contracts does not reveal that they confer on AOL significant influence over DirecTV's video programming activities. Therefore, we reject the arguments of commenters that AOL's ownership interest in GM will enable the merged firm to harm video program suppliers and MVPD competitors seeking access to these suppliers.

D. Interactive Television Services

216. In this section we consider whether the merger will harm consumers or competition with respect to the provision of interactive television ("ITV") services in Time Warner's cable system service areas. Two objectives of the Communications Act appear to be relevant to the provision of ITV services. First, the Commission has the responsibility to ensure that cable communications provide the "widest possible diversity of information sources and services to the public."⁵⁵⁰ Second, the Commission is charged with ensuring the rapid, private deployment of advanced services.⁵⁵¹ As discussed in our analysis of public interest benefits,⁵⁵² AOL and Time Warner bring together assets that could engender a successful launch of ITV. AOL is the world's largest aggregator of Internet content and interactive services, and Time Warner is the nation's second largest cable operator and owner of a significant number of the nation's most popular cable programming networks.⁵⁵³

217. We examine below whether the merged entity will have the ability and the incentive to engage in behavior that would likely cause public interest harms with respect to ITV. We find that AOL Time Warner would have the potential ability to use its combined control of cable system facilities, video programming and the AOLTV service to discriminate against unaffiliated video programming networks in the provision of ITV services. We also find that AOL Time Warner may have incentives to engage in

⁵⁴⁹ See Confidential Appendix at Section IV-C-1.

⁵⁵⁰ See 47 U.S.C. § 521(4) (purpose of Title VI, "Cable Communications," of the Act is to "assure that cable communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public"); 47 U.S.C. §§ 532(a), (g) ("diversity of information sources"); see also *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622, 663 (1994) (quoting *United States v. Midwest Video Corp.*, 406 U.S. 649, 668 n.27 (1972)); *Review of the Commission's Regulations Governing Television Broadcasting, Television Satellite Stations Review of Policy and Rules*, MM Docket No. 91-221, MM Docket No. 87-8, Report and Order, 14 FCC Rcd 12903, 12910-12916 (1999); *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 390 (1969) ("It is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market, whether it be by the Government itself or a private licensee."); *Turner Broadcasting*, 512 U.S. at 657 (emphasizing that "[t]he potential for abuse of this private power over a central avenue of communication cannot be overlooked. The First Amendment's command that government not impede the freedom of speech does not disable the government from taking steps to ensure that private interests not restrict, through physical control of a critical pathway of communication, the free flow of information and ideas."). We also note that IM Unified argues that the Commission has jurisdiction over ITV because it is a "cable service." See Tribal Voice and iCast Sept. 5 Letter at 31. Because we do not impose any conditions with regard to ITV, we need not resolve here the question of our authority to do so. However, we address this issue in our *ITV NOI* proceeding. See *ITV NOI*, FCC 01-15.

⁵⁵¹ See *AT&T-MediaOne Order*, 15 FCC Rcd at 9821 ¶ 11; *WorldCom-MCI Order*, 13 FCC Rcd at 18030-3 ¶ 9; see also 47 U.S.C. §§ 254; Telecommunications Act of 1996 ("1996 Act"), Pub.L. 104-104, Title VII, § 706, Feb. 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. § 157; 1996 Act Preamble.

⁵⁵² See Section V, *infra*. (Analysis of Potential Public Interest Benefits).

⁵⁵³ Time Warner owns three of the five most highly rated cable programming networks, as well as the largest news (CNN) and pay networks (HBO). Time Warner also has significant publishing, music, movie and broadcasting holdings.

such discriminatory behavior. Nevertheless, even if AOL Time Warner were to discriminate, it appears that the terms of the FTC Consent Agreement⁵⁵⁴ will, at present, substantially address concerns about the availability of alternatives for the distribution of unaffiliated video programming networks' ITV services. Therefore, we conclude that discrimination by the merged entity is not likely to cause a public interest harm that warrants denial of the merger or the imposition of conditions that do not apply industry-wide. Though we are unpersuaded a case has been presented on this record of merger-specific harm, we do believe important questions have been raised that warrant further examination in a proceeding of general applicability. In the *ITV NOI*, we will consider whether industry-wide rules are needed to address any impediments to the development of ITV services and markets.⁵⁵⁵

1. Background

a. The Components of ITV Service

218. Given the infancy of this market and the limited record before us, it would be imprudent to endorse a comprehensive definition of ITV services. At present, however, such services appear to include EPGs,⁵⁵⁶ content that permits the viewer to interact with the video signal ("interactive content"), time shifting, and the overlay of communications services (chat, e-mail and instant messaging) functionality onto video programming provided by a programming network (such as TBS or AMC).⁵⁵⁷ Based on this record, it appears that three components⁵⁵⁸ are necessary for the delivery of high-speed ITV services to consumers:

219. (1) a transmission system (preferably broadband) for the delivery of the video signal and interactive content ("transmission system"),

220. (2) an Internet connection with sufficient bandwidth to provide a suitable interactive experience, with limited latency and optimal synchronicity ("Internet connection"), and

221. (3) a processing capability (e.g., a stand-alone set-top box ("ITV-STB"), such as those used by WebTV or AOLTV, or a box integrated with the cable or DBS set-top box, that can respond to interactive triggers, integrate video and enhanced content, and display the integrated product on a television screen.⁵⁵⁹

⁵⁵⁴ See FTC Consent Agreement.

⁵⁵⁵ See *ITV NOI*, FCC 01-15.

⁵⁵⁶ We discuss the provision of EPG services separately, above. Original-generation EPG are not interactive, but rather continually scroll programming listings. Newer, interactive EPGs, however, allow users to sort and search programming, give program descriptions, provide reminders of upcoming programming, and transport users to programming they select.

⁵⁵⁷ The *ITV NOI* will explore ITV services in more detail. For purposes of this *Order*, we define ITV services to include all of these services.

⁵⁵⁸ The *ITV NOI* will explore these components more closely.

⁵⁵⁹ Cable operators and DBS providers traditionally have supplied set-top boxes to their subscribers, typically on a leased basis, in order that their subscribers may view video programming. A stand-alone ITV-STB will not, by itself, enable a cable subscriber to view video programming. As discussed below, the first deployment of AOLTV involves a stand-alone ITV-STB that must be connected to a cable or DBS set-top box in order to receive video programming. The ITV-STB then blends the video programming with interactive programming that the ITV-STB receives from a connection to the Internet, which is currently a narrowband dial-up connection. Next-generation

(continued...)

222. *Transmission System.* It appears that cable facilities provide the optimal platform for the delivery of ITV services. The cable pipeline can permit interactive content to be delivered to the viewer with the video signal, thereby ensuring that the video programming and the interactive content achieve a high level of synchronicity when blended in the ITV-STB for television viewing.

223. A video programming network may send two types of interactive content with its video signal, the so-called "trigger" of interactive content and interactive content itself, both of which could be based on the ATVEF protocol or any other protocol.⁵⁶⁰ The "trigger" can appear as an icon on a viewer's television screen and alerts the viewer to the availability of interactive content. When a viewer clicks on the trigger, the trigger requests the interactive content. When the interactive content is sent with the video signal, the trigger causes a compatible ITV set-top box to display the interactive content on the television set.⁵⁶¹

224. A high level of synchronicity is necessary for certain forms of interactivity. For example, synchronicity would be important if secondary audio, such as a referee's voice, were to be delivered with the video signal to a viewer watching a sporting event. By sending the interactive content with the video signal of the television program, a cable operator ensures that the ITV set-top box is able to blend the television program and the interactive content seamlessly, without the level of latency associated with interactive content delivered via the Internet.

225. *Internet Connection.* Although synchronicity and latency difficulties can be avoided by sending some interactive content with the video signal, the amount of interactive content that may be delivered with the video signal might be limited by the video pipeline's bandwidth or capacity. Under these circumstances, where the interactive content requires a large amount of bandwidth (or subscriber-

(... continued from previous page)

ITV-STB boxes, the focus of our analysis, will be integrated with the cable or DBS set-top box so that a consumer utilizes a single box to receive both video programming and interactive content, rather than two separate boxes.

⁵⁶⁰ The Advanced Television Enhancement Forum ("ATVEF") has made significant progress in standardizing protocols for the delivery of ITV information via the video signal. When we refer to the ATVEF standard herein, we intend to include other such standards that may be used as ITV technology develops. The ATVEF Enhanced Content Specification is a standard that defines a common set of requirements for the creation, transport, and delivery of interactive television. ATVEF is a cross-industry group comprised of the major computer companies, television programmers, technical platform providers, broadcasters, and transport providers. See <http://www.atvef.com>. The ATVEF content specifications provide creators of enhanced television content with a mandatory minimum format that will be supported by ATVEF-compliant receivers such as televisions or set-top boxes. By conforming to the ATVEF specifications, a content provider will be able to provide enhanced television services to the maximum number of receivers. A content provider who chooses to create enhanced content that falls outside of the ATVEF specification must work in conjunction with the manufacturer of the target receiver to enable the additional enhancements. Some European countries have deployed DVB-MHP, another form of ITV. DVB (the umbrella organization of all companies taking part in the launching of digital TV in Europe) developed the "Multimedia Home Platform" (MHP). MHP defines a protocol that content providers can use to develop interactive applications. The protocol also gives manufacturers the ability to build a universal set-top-box that is compatible with a wide array of video interactive services.

For analog video signals, the ATVEF interactive content is transmitted in the VBI. For digital video signals, the ATVEF interactive content is transmitted in digital form in the MPEG digital video stream. MPEG will be discussed more fully in the *ITV NOI*.

⁵⁶¹ In the alternative, the interactive content might be stored on the Internet, in which case the trigger would direct the ITV set-top box to retrieve the content from the Internet and display it on the television set.

specific content), the ATVEF trigger carried with the video signal would direct the ITV-STB to obtain interactive content from the Internet. However, because the ATVEF (or similar) interactive content would be delivered via the Internet and not via the video signal, the video programming and the interactive content would have a lesser degree of synchronicity. Therefore, a high-speed two-way Internet connection, such as a DSL or cable Internet connection, appears necessary in order to provide large capacity interactive content to the viewer with minimum latency. While a narrowband Internet connection, *i.e.*, a dial-up telephone connection, could enable an interactive experience, it cannot currently provide the speed and bandwidth that broadband paths would provide.

226. *The ITV Set-Top Box.* An ITV set-top box is the third necessary component for ITV services. The ITV set-top box activates interactive content sent with the video signal and blends it with the video program signal for display on the television set. As noted above, an ITV subscriber may also direct the ITV set-top box to obtain additional interactive content (from the Internet) that is designed to accompany the television program viewed by the subscriber.

b. AOLTV

227. AOL offers ITV services via its AOLTV set-top boxes. The AOLTV service provides interactive television programming in conjunction with video programming to create interactive television channels. AOLTV services also currently include an EPG and most features of AOL's ISP service, such as limited Web browsing, e-mail, IM, and chat. AOL has deployed its AOLTV set-top boxes in several U.S. cities, including Phoenix, Sacramento and Baltimore, for sale through Circuit City and other retailers.⁵⁶² To receive the service, consumers in these cities must purchase an AOLTV set-top box and subscribe to AOLTV at a rate of \$14.95 per month for current AOL ISP subscribers or \$24.95 per month for AOLTV customers that do not subscribe to the AOL ISP service.⁵⁶³ The subscriber need not purchase the AOL ISP service (or any ISP service) in order to receive AOLTV because the interactive set-top box interfaces with the Internet directly using standard Internet Protocol ("IP").

228. At present, the AOLTV service can be provided to both cable and DirecTV subscribers, but utilizes only a narrowband telephone connection to the Internet. The current AOLTV box is not integrated into a cable or DBS set-top box. Instead, the current AOLTV box receives video programming from a separate cable or DBS set-top box, and receives two-way narrowband interactive services via a telephone line. The AOLTV box then blends the interactive content and the video programming for viewing on the subscriber's television set. At this time, the interactive triggers, the customer's request for interactivity and further interactive content are transported to the subscriber's television through the AOLTV set-top box's connection to the Internet.

229. AOL intends to upgrade its AOLTV service to a high-speed Internet platform, using cable modems, DSL, and DBS.⁵⁶⁴ As a preliminary step, AOL may continue to employ a stand-alone ITV-STB that connects to a cable or DBS set-top box that contains a high-speed cable modem, DSL line, or high speed DBS Internet connection.⁵⁶⁵ AOL states that it will complete this upgrade by integrating

⁵⁶² America Online, Inc., *AOL Launches AOLTV* (press release), June 19, 2000, at 1.

⁵⁶³ Mindy Charski, *AOL Announces Interactive TV for Eight Cities*, ZDNET NEWS, June 19, 2000 at <http://www.zdnet.com> (visited Oct. 2, 2000). The AOLTV set-top box retails for \$249.00. *Id.*

⁵⁶⁴ Applicants' Second Response at 5.

⁵⁶⁵ *Id.* See also Ex Parte Comments of Applicants' (Aug. 25, 2000) ("Applicants' Aug. 25 Letter"), Attachment at 2, transmitted by letter from Peter D. Ross on behalf of AOL and Time Warner to Magalie Roman Salas, Secretary, FCC, dated Aug. 25, 2000.

AOLTV functionality into DBS set-top boxes that contain high-speed Internet connections.⁵⁶⁶ AOL has had preliminary discussions to incorporate its AOLTV software into the Time Warner cable set-top box, and AOL and DirecTV have entered into an agreement in which Hughes will manufacture a set top box that integrates DirecTV and AOLTV.⁵⁶⁷ In addition, the Applicants state that AOLTV will incorporate additional features such as personal video recording capability and more advanced interactive programming, including services that would enable video programmers to use and customize AOLTV features such as chat for special television events.⁵⁶⁸

c. Other ITV Services and ITV Companies

230. ITV services can be offered directly to consumers by the ITV service provider (such as AOLTV or WebTV) or through a partnership between a transport provider (such as a cable or DBS operator) and an ITV provider (such as WorldGate). When ITV services are offered directly to consumers, typically consumers must purchase a set-top box and then contract with an ITV provider for service. When ITV services are offered through partnerships between transport providers and ITV providers, often ITV components are integrated into the transport provider's set-top box, and the service is offered in addition to the transport provider's existing video services. These services are then marketed by the transport provider as a premium offering supplemental to its existing array of services. ITV providers may, in turn, rely on partnerships with other vendors for certain components of the ITV product. AOL, for example, contracts with Philips Electronics to build its ITV-STB and licenses software for the ITV-STB from Liberate.⁵⁶⁹

231. At this early and fluid stage of the ITV market, there are a growing number of firms that now provide or plan to provide ITV service. The types of ITV services offered and the business models used by these companies vary widely. For purposes of our analysis, it is useful to examine a non-exhaustive sampling of existing ITV services and business models.

232. *ITV Providers.* Microsoft Corp. has approximately one million users subscribing to its WebTV product.⁵⁷⁰ WebTV provides e-mail and Internet access, and also enables interactivity with certain television programs. At present, WebTV customers must buy a separate ITV-STB for use in conjunction with the box of their selected MVPD provider, though plans exist to integrate WebTV directly into MVPD set-top boxes. For example, EchoStar's Dish Network set-top boxes will include WebTV Plus, which will provide additional features such as on-line banking, shopping, and video programming storage.⁵⁷¹ In addition, Microsoft, Thompson RCA, and DirecTV announced plans to

⁵⁶⁶ Applicants' Second Response at 5, 8. See also Ex Parte Comments of Applicants' (Aug. 22, 2000) ("Applicants' Aug. 22 Letter") at 8, transmitted by letter from Peter D. Ross on behalf of AOL and Time Warner to Magalie Roman Salas, Secretary, FCC, dated Aug. 22, 2000.

⁵⁶⁷ Applicants' Second Response at 8; Bob Sullivan, *Broadband from the Sky Tries Again*, ZDNET NEWS, Aug. 26, 2000 at <http://www.zdnet.com> (visited Aug. 29, 2000). See also Confidential Appendix IV-C-1, Note 1.

⁵⁶⁸ Applicants' Second Response at 5.

⁵⁶⁹ Patricia Fusco, *AOL Gunning for WebTV*, INTERNET.COM, June 16, 2000, at <http://www.internet.com> (visited June 19, 2000).

⁵⁷⁰ Ex Parte Comments of Disney, Attachment (Aug. 16, 2000) ("Myers Group Report") at ¶ 30, transmitted by letter from Preston R. Padden, Executive Vice President, Government Relations, Disney, to Magalie Roman Salas Secretary, FCC, dated Aug. 16, 2000.

⁵⁷¹ *Id.*

jointly create an integrated set top box and service that will combine DirecTV satellite service and a new version of WebTV called Ultimate TV.⁵⁷² The Ultimate TV product will include personal video recording, picture-in-picture viewing and the ability to watch one program while recording another.⁵⁷³ Microsoft states that it will also offer two-way satellite service that allows downloading and uploading as rapidly as cable modems or DSL.⁵⁷⁴

233. As an ITV service provider, Microsoft has also established business relationships with several cable MSOs and interactive software providers. In 1997, Microsoft purchased an 11.5% interest in Comcast Communications,⁵⁷⁵ and in 1999 it entered into an agreement to supply the software for 7.5 million of AT&T's planned 10 million ITV-STBs, although technical trials have since been delayed.⁵⁷⁶ Microsoft recently acquired Peach Networks, Ltd., which manufactures software for cable headends that enables more advanced programming to run on existing set-top boxes.⁵⁷⁷ Microsoft has also entered into a relationship with Wink Communications, a provider of interactivity with video programming and advertising.⁵⁷⁸ Microsoft recently announced plans to incorporate its Microsoft TV software into Whistler, the next version of the Windows 2000 operating system.⁵⁷⁹ Under the new plan, TV signals and interactive programming would be received via a personal computer that runs the Whistler operating system, using a television set as the monitor.⁵⁸⁰

234. WorldGate Communications provides ITV service through a cable set-top box,⁵⁸¹ and offers ITV subscribers access to the Internet, e-mail and other interactive services.⁵⁸² WorldGate serves

⁵⁷² Stephanie Miles, *Microsoft Partners on Interactive TV Project*, CNET NEWS.COM, June 12, 2000, at <http://www.news.cnet.com> (visited Aug. 29, 2000).

⁵⁷³ *Id.*

⁵⁷⁴ Bob Sullivan, *Broadband from the Sky Tries Again*, ZDNET NEWS, Aug. 26, 2000, at <http://www.zdnet.com> (visited Aug. 29, 2000).

⁵⁷⁵ Howard Wolinsky, *Interactive TV Revisited*, UPSIDE TODAY, July 25, 2000, at <http://www.upside.com> (visited July 26, 2000) ("Wolinsky Article").

⁵⁷⁶ Technical trials of the AT&T ITV product have been postponed from the planned summer 2000 launch. No alternative date has been announced for the launch. *AT&T Considers MS Set-Top Alternatives*, ZDNET NEWS, Aug. 29, 2000, at <http://www.zdnet.com> (visited Aug. 29, 2000).

⁵⁷⁷ Wolinsky Article; David Iler, *Interactive-TV Firms Play Merger Game*, MULTICHANNEL NEWS ONLINE, May 1, 2000, at <http://www.multichannel.com> (visited Sept. 29, 2000).

⁵⁷⁸ Wolinsky Article.

⁵⁷⁹ Stephanie Miles, *Will Microsoft's Next OS Run Your TV?*, CNET NEWS.COM, Sept. 5, 2000, at <http://www.news.cnet.com> (visited Sept. 6, 2000).

⁵⁸⁰ *Id.*

⁵⁸¹ Myers Group Report at 31. Rebecca Cantwell, *Interactive TV Takes a Variety of Shapes*, ZDNET NEWS: INTER@CTIVE WEEK, July 9, 2000, at <http://www.zdnet.com> (visited Sept. 29, 2000) ("Cantwell Article").

⁵⁸² WorldGate Communications, Inc., at <http://www.wgate.com/how/how.html> (visited Nov. 30, 2000). WorldGate Communications, Inc. announced plans to add RespondTV's enhanced television applications to the WorldGate ITV product. WorldGate Communications, Inc., *RespondTV to Support Enhanced Interactive Television Content Through WorldGate's Interactive TV Platform* (press release), Oct. 24, 2000.

homes using the facilities of several cable MVPDs, including AT&T, Comcast and Charter Communications.⁵⁸³ As of summer 2000, 15,000 consumers subscribed to the WorldGate ITV service.⁵⁸⁴

235. *ITV Services Provided by MVPDs.* Cable and satellite MVPDs are also positioning themselves to introduce their own ITV services. Cox Communications has partnered with Excite@Home to launch a trial ITV product in San Diego in late 2000.⁵⁸⁵ The Cox-branded service will provide video-on-demand, Web browsing and e-mail.⁵⁸⁶ AT&T also plans to offer ITV in partnership with Excite@Home.⁵⁸⁷ BellSouth announced in August that it would use Liberate to deliver ITV applications to some of its customers in the Southeast.⁵⁸⁸

236. *Other ITV Services.* The Applicants state that TiVo and RePLAY, providers of personal video recording service ("PVR"),⁵⁸⁹ Wink and RespondTV (e-commerce providers), and EPG provider

⁵⁸³ Cantwell Article; see also WorldGate Communications, Inc., *WorldGate Reports Record Third Quarter Results* (press release), Nov. 2, 2000; WorldGate Communications, Inc., *AT&T Broadband and WorldGate Announce Interactive Television Deployment in Three Cities* (press release), Nov. 6, 2000.

⁵⁸⁴ Cantwell Article. WorldGate plans to offer service to 115,000 homes in Pennsylvania in 2001 through an agreement with cable operator Blue Ridge Communications. *Id.* In addition, in November 2000, AT&T Broadband and WorldGate announced that the companies began offering WorldGate's interactive television service in Cedar Falls and Waterloo, Iowa, and will next offer service in Tacoma, Washington. WorldGate Communications, Inc., *AT&T Broadband and WorldGate Announce Interactive Television Deployment in Three Cities* (press release), Nov. 6, 2000.

⁵⁸⁵ Cantwell Article; AtHome Corp., *Cox Communications Signs Agreement With Excite@ Home For The Development of Advanced TV Services* (press release), Dec. 16, 1999.

⁵⁸⁶ Cox Communications, Inc., *Cox Communications Updates Investors on Successful Delivery of Advanced Broadband Communications Services* (press release), June 1, 2000; Cantwell Article.

⁵⁸⁷ In August 2000, AT&T announced that it will increase its economic interest in Excite@Home from 24% to 38%, and will increase its voting interest from 56% to 79%. *Excite@Home Announces New Board and Completion of Partner Distribution Agreement, AT&T Assumes 74 Percent Voting Stake*, PR NEWswire, Aug. 28, 2000, at <http://www.prnewswire.com> (visited Aug. 30, 2000); AT&T Corp., *AT&T Updates SEC Filing on Excite@Home* (press release), Jan. 12, 2001. Excite@Home and AT&T stated that they would work together "to deliver services to consumers via advanced TV." As noted above, AT&T entered into an agreement in June 2000 with Microsoft to provide interactive television software for 7.5 million of AT&T's planned 10 million Motorola-manufactured ITV set top boxes, though planned technical trials have since been delayed. In September 2000, AT&T announced it will use interactive television software from Liberate (also the software provider for AOLTV) for trials, planned for late 2000, of Motorola-manufactured ITV set-top boxes. *AT&T To Use Liberate Interactive TV Software*, ZDNET NEWS, Sept. 21, 2000, at <http://www.zdnet.com> (visited Sept. 24, 2000). Motorola has a 5.4% stake in OpenTV Corp., another interactive television software manufacturer. *Motorola Ups OpenTV Stake*, MULTICHANNEL NEWS ONLINE, Sept. 18, 2000, at <http://www.multichannel.com> (visited Sept. 24, 2000). OpenTV announced that TeleCruz Technology, Inc., will license OpenTV software for chips that can be integrated directly into television sets to enable browsing similar to WebTV; OpenTV also plans to make its software available for PCs and cellular phones. David Iler, *OpenTV Deal Bypasses Box*, MULTICHANNEL NEWS ONLINE, Sept. 11, 2000, at <http://www.multichannel.com> (visited Sept. 24, 2000).

⁵⁸⁸ Jeff Baumgartner, *Liberate, OpenTV Could Make Gains on Microsoft's Turf*, MULTICHANNEL NEWS ONLINE, Sept. 4, 2000, at <http://www.multichannel.com> (visited Sept. 6, 2000).

⁵⁸⁹ A PVR can pause, rewind, and perform slow motion and instant replay of a live program, thereby allowing a viewer to watch earlier portions of a program while later portions of the program are still being broadcast. A PVR can be used with a service that provides an onscreen programming guide service through a telephone connection. This technology can be used to create a personal menu that records in accordance with a viewer's television

(continued...)

Gemstar all offer elements of ITV service.⁵⁹⁰ We note that AOL holds an ownership interest in TiVo, and Time Warner holds an interest in RePLAY, another PVR service.⁵⁹¹

2. Discussion

a. Relevant Markets

237. At a global level, the developing ITV market appears to have two broad segments that may constitute separate markets. The first segment is ITV programming. The second is ITV distribution and retail. The ITV programming segment includes interactive content provided by video programming networks to accompany their video signals. ITV distribution involves the aggregation of interactive video content and other inputs in the provision of ITV services.⁵⁹² As discussed in greater detail above, AOL is an aggregator and distributor of ITV inputs, and has begun a nationwide rollout of its AOLTV product. Time Warner owns cable facilities that can be used to deliver advanced ITV services to consumers. AOL and Time Warner will become a vertically integrated provider of ITV services in Time Warner's cable territories.⁵⁹³

b. Harm to Competition

238. Commenters allege that the merged firm would have the ability to discriminate against unaffiliated programming networks.⁵⁹⁴ AOL Time Warner could, according to commenters, discriminate against unaffiliated video programming networks by denying them access (or degrading their access vis-à-vis affiliated video programming networks) to one or all three delivery components of ITV: the cable video pipeline, the merged entity's ITV-STB, and the cable Internet connection.⁵⁹⁵ We recognize the possibility of the alleged harm. However, we are of the view that a merger-specific condition is unwarranted given the terms of the FTC Consent Agreement and that any industry-wide intervention requires (1) a greater examination of the potentially conflicting incentives for favoring one's own programming to the detriment of competitors, and for offering as much interactive programming as possible; and (2) a fuller exploration of the technical ability and manner of potential discrimination.

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preferences.

⁵⁹⁰ Ex Parte Comments of Applicants' (Sept. 29, 2000) ("Applicants' Sept. 29 ITV Letter") at 3, transmitted by letter from Peter D. Ross on behalf of AOL and Time Warner to Magalie Roman Salas, Secretary, FCC, dated Sept. 29, 2000.

⁵⁹¹ Applicants' Second Response at 29. "On July 14, 2000, AOL and TiVo announced a three-year strategic agreement and equity investment whereby AOL acquired slightly over 1% interest in TiVo." *Id.* Time Warner Inc., *Form 10-K for the Year-ended 1999 (filed as amended Mar. 30, 2000)*, at I-26. "As of March 1, 2000, investments made by [Time Warner] in digital media include ... ReplayTV ..." *Id.*

⁵⁹² At this time, we do not find it necessary to further distinguish among these ITV inputs, aside from EPGs, which we discuss below in Section IV-C-1., *supra* (Electronic Programming Guides). In particular, we find no reason to distinguish between markets for aggregation of narrowband and broadband ITV content given overlaps in the range of services.

⁵⁹³ The *ITV NOI* will explore further the geographic scope of the market for ITV services.

⁵⁹⁴ Disney July 25 Ex Parte at 1-6, 61-71; NBC July 24 Ex Parte at 1-10.

⁵⁹⁵ Disney Reply at 12-15; Ex Parte Comments of Disney, Attachment (Sept. 25, 2000), ("Disney Sept. 25 Memorandum") transmitted by letter from Marsha McBride, Vice-President, Government Relations, Disney, to Magalie Roman Salas, Secretary, FCC, dated Sept. 26, 2000.

239. Disney argues that conditions must be placed on Commission approval of the merger⁵⁹⁶ to prevent AOL Time Warner from using its control over the cable video pipeline, the ITV-STB, and the broadband Internet connection to discriminate against the interactive content of unaffiliated video programming networks in the following ways:⁵⁹⁷

- excluding unaffiliated interactive content and services,⁵⁹⁸
- transmitting its affiliated content at faster rates,⁵⁹⁹
- manipulating communications between competing content providers and customers,
- limiting unaffiliated ITV services providers from caching data locally,⁶⁰⁰
- favoring its own content on navigation systems and links (with more convenient consumer interfaces for its own content),⁶⁰¹
- building its own links to merchant Internet sites that conflict with an unaffiliated video programming network's advertisers,⁶⁰²

⁵⁹⁶ Disney argues that the Commission should require AOL Time Warner to separate its content from distribution as a condition to approval of the merger. Disney July 25 Ex Parte at 6. Disney asserts that if the Commission does not require such separation, the Commission should, at a minimum, require enforceable, non-discriminatory treatment of unaffiliated content and interactive service providers. Disney Reply Comments at 15; Disney July 25 Ex Parte at 6. See also NAB May 19 Ex Parte at 2-4; NAB Oct. 2 Ex Parte at 2; Sinclair Reply Comments at 1 ("Sinclair urges the Commission to condition the AOL/Time Warner merger on the companies' divestiture of all content," or to impose nondiscrimination requirements that prohibit the merged company from "degrading or blocking customer access to any part of the digital broadcast signals carried on its infrastructure that could be received by its customers free over the air."); MSTV Reply Comments at 1 (the Commission should impose conditions that "strictly prohibit AOL Time Warner from discriminating against the programming, navigation devices and other services delivered through the broadcast signal for free."). In addition to a "catch-all" prohibition against discrimination, Disney argues that the Commission should impose a series of specific, but not exhaustive, prohibitions of practices that would otherwise allow AOLTV to discriminate against unaffiliated content providers. Disney states that these would include prohibitions against: refusals to deal; discrimination in prices, terms or conditions of carriage; discriminatory presentation of information or displays on navigational devices or electronic program guides for purposes of enabling subscribers to select program or content offerings; discrimination with respect to downstream traffic; discrimination on the return path for interactive television services; discrimination that undermines interactive advertising opportunities; discrimination in set-top box design and architecture that fills up memory with affiliated content before loading unaffiliated content; and discrimination in caching practices. Finally, Disney recommends that the Commission use arbitration procedures to enforce these safeguards. Disney July 25 Ex Parte at 82-85.

⁵⁹⁷ We note that prior to the merger, Time Warner already had the ability to discriminate against unaffiliated video programming networks by not carrying their interactive content on the video pipeline or the broadband Internet connection. The merger does not alter Time Warner's ability in this regard. However, the merger might encourage Time Warner to carry unaffiliated video programming content to its new affiliated AOLTV because, as discussed below, it is arguable that AOLTV will need as much interactive content as possible to successfully launch its ITV product.

⁵⁹⁸ Disney July 25 Ex Parte at 44.

⁵⁹⁹ *Id.*

⁶⁰⁰ *Id.* "Caching" is the technique of storing frequently accessed content in fast memory (e.g., RAM) in order to speed access to those files by eliminating delays and costs associated with reverting to the original source for the information. An ISP engages in caching when it downloads a copy of Internet content onto its own server, from which it can thereafter supply its subscribers' repeated demands for this content.

⁶⁰¹ *Id.*

⁶⁰² *Id.*

- making unaffiliated video programming less attractive and/or accessible to consumers,⁶⁰³
- imposing charges for each interactive commercial transaction,⁶⁰⁴
- restricting an unaffiliated video programming network's advertising on interactive channels so that it would not interfere with exclusive contracts that AOL Time Warner has with its advertisers,⁶⁰⁵ and
- developing AOLTV controlled interactive advertising that undermines unaffiliated content providers' advertising.⁶⁰⁶

240. The record in this proceeding demonstrates that AOL Time Warner intends to integrate the cable set-top box with the AOLTV box and a high speed Internet connection and that AOL and Time Warner are well aware that control over the set-top box would enable the merged firm to favor its own content.⁶⁰⁷ In addition, we agree with Dr. Haseltine's findings that AOL Time Warner could use equipment at the cable headend in order to discriminate.⁶⁰⁸ While AOL and Time Warner do not dispute Disney's allegations that they have the technical ability to use the three components – Time Warner's video pipeline and broadband Internet connection and AOLTV's set-top box – in the manner alleged, they argue that they have no incentive to do so.⁶⁰⁹ Based on this record, it appears that the merged entity would have conflicting incentives. Applicants assert that the merged entity has the incentive to carry as much interactive programming as possible so that AOLTV will be attractive to consumers.⁶¹⁰ AOL Time Warner states that its AOL ITV-STB will activate the ATVEF interactive content of unaffiliated video programming networks, without any agreement with or payment to AOL, so that AOLTV subscribers may view unaffiliated interactive content.⁶¹¹

241. However, the record also contains evidence that AOL has a history of negotiating exclusionary deals once it is in its economic interest to do so.⁶¹² AOL may cease its current practice of carrying interactive content of unaffiliated programmers without AOLTV carriage agreements once it has achieved some level of success in the marketplace. We note that if AOLTV becomes successful, it may be less dependent on the interactive content of unaffiliated video programming networks and therefore

⁶⁰³ Disney July 25 Ex Parte at 44; Ex Parte Comments of Disney, Attachment (Sept. 5, 2000) ("Disney Sept. 5 Memorandum") at 11, transmitted by letter from Marsha McBride, Vice-President, Government Relations, Disney, to Magalie Roman Salas, Secretary, FCC, dated Sept. 14, 2000; NBC July 24 Ex Parte at 5-6.

⁶⁰⁴ Disney Sept. 5 Memorandum at 11.

⁶⁰⁵ Disney July 25 Ex Parte at 44.

⁶⁰⁶ *Id.*

⁶⁰⁷ See Applicant's Second Response at 5, 8; Confidential App. IV-D-1, Note 1.

⁶⁰⁸ Ex Parte Comments of Disney, Attachment (Oct. 25, 2000) ("Declaration of Eric C. Haseltine") at 1-2, transmitted by letter to Lawrence R. Sidman, Counsel for Disney, to Magalie Roman Salas, Secretary, FCC, dated Oct. 25, 2000.

⁶⁰⁹ See Applicants' Sept. 29 ITV Letter.

⁶¹⁰ Applicants' Sept. 29 ITV Letter at 5 ("[t]here is no advantage in denying consumers access to a full array of content sources. AOL and Time Warner's surest route to failure in interactive television would be to restrict or degrade consumers' access to a true diversity of interactive content and service offerings.").

⁶¹¹ Applicants' Sept. 29 ITV Letter at 5.

⁶¹² See Confidential Appendix IV-D-1, Notes 1 and 2.

may be in a position to discriminate against them in the terms, conditions and prices for carriage on AOLTV.⁶¹³ At the same time, unaffiliated video programming networks will likely become more dependent on interactive television commerce revenue. Some analysts predict that while video programmers' revenues from traditional advertising will decline over the next few years, lost revenue will be replaced by new revenue from interactive television commerce.⁶¹⁴ Moreover, AOL and Time Warner have stated that their MOU does not obligate them to provide access to the cable broadband platform for ITV uses.⁶¹⁵

242. We believe that, at the present time, the terms of the FTC Consent Agreement will substantially mitigate any potential public interest harm that may arise from discrimination by AOL Time Warner with regard to ITV content or service. The FTC has ordered that AOL Time Warner not discriminate in the transmission and carriage of content⁶¹⁶ that it has agreed to carry, and has forbidden AOL Time Warner from blocking or otherwise interfering with interactive content transmitted by an unaffiliated ISP.⁶¹⁷ Thus, it would appear that unaffiliated video programming networks could utilize alternatives to AOLTV for distribution of their interactive content. For example, even if AOL Time Warner refused to carry an unaffiliated video programmer's interactive content with its video signal,⁶¹⁸ the video programmer could seek to deliver its interactive content via an unaffiliated ISP on AOL Time Warner's cable system. Further, the FTC Consent Agreement would prohibit AOL Time Warner from blocking subscribers' access to any interactive content that is carried on the AOL Time Warner facilities and thus would enable subscribers to access such content as part of an ITV service provided by an unaffiliated entity.⁶¹⁹ If unaffiliated video networks have alternatives to the video pipeline for the provision of competitive interactive services to consumers (comparable to a cable-affiliated ITV provider that has access to a video pipeline), then AOL Time Warner's refusal to carry interactive content with the video signal would not appear to harm the public interest. Therefore, in light of the FTC's actions, we

⁶¹³ NAB notes that in *Time Warner Entertainment Co., L.P. v. U.S.*, 211 F.3d 1313 (D.C. Cir. 2000), the court, when reviewing the channel occupancy limits of the Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460 (47 U.S.C. § 533(f)(1)(B)), stated that "[Time Warner] does not deny that a cable operator has an incentive to favor its affiliated programmers; where the two forces are in conflict, the operator may, as a rational profit-maximizer, compromise the consumers' interests." NAB Oct. 2 Ex Parte at 2.

⁶¹⁴ Disney Oct. 25 Ex Parte at n. 37; Myers Group Report at 13 (predicting that advertising revenues from interactive television, including e-commerce and subscription fees, will reach \$20 billion by 2005).

⁶¹⁵ See Ex Parte Comments of Applicants (Sept. 6, 2000) ("Applicants' Sept. 6 Letter") at 12, transmitted by letter from Craig A. Gilley, Fleishman & Walsh, to Magalie Roman Salas, Secretary, FCC, dated Sept. 6, 2000. See also Confidential Appendix IV-D-1, Note 3.

⁶¹⁶ The *FTC Consent Agreement* construes the term "content" to include interactive signals and interactive triggers. See *FTC Consent Agreement* Section I.R. (defining content as "data packets carrying information including, but not limited to, links, video, audio, text, e-mail, message, interactive signals, and interactive triggers.").

⁶¹⁷ See *FTC Consent Agreement* Section III.A. ("Respondents shall not interfere . . . with Content passed in either direction along the Bandwidth contracted for and being used by any non-affiliated ISP in compliance with the Non-affiliated ISP's agreement with Respondents.").

⁶¹⁸ See Disney Sept. 25 Memorandum at 3-4; Ex Parte Comments of Disney (Sept. 14, 2000) ("Disney Sept. 14 Ex Parte") at 2-3, transmitted by letter from Marsha McBride, Vice-President, Government Relations, Disney, to Magalie Roman Salas, Secretary, FCC, dated Sept. 14, 2000.

⁶¹⁹ *FTC Consent Agreement* Section III.C. ("Respondents shall not interfere with the ability of a Subscriber to use, in conjunction with ITV services provided by a Person that is not Affiliated with Respondent, interactive signals, triggers, or other Content that Respondents have agreed to carry.").

disagree with Disney that the Commission should impose a merger condition with respect to unaffiliated video programming networks and interactive content providers that does not apply industry-wide.

243. We note that Disney has provided evidence that suggests that alternatives to the cable video path may not ultimately provide competitive outlets for the provision of ITV services.⁶²⁰ We find that it is necessary to develop a more complete record in this regard to determine whether rules of general applicability are needed to promote competition and diversity in the provision of ITV services. Our *ITV NOI* will explore further what types of services should be defined as ITV, what types of ITV business models will prevail, how ITV services will be delivered, and whether there are competitive alternatives to a cable operator's affiliated ITV provider for the provision of ITV services.⁶²¹

E. Multichannel Video Programming Distribution

244. In this section we examine the merger's potential effects on the video services provided by multichannel video programming distributors ("MVPDs").⁶²² MVPDs include cable operators, direct broadcast satellite providers ("DBS"), multichannel multipoint distribution services ("MMDS"), and satellite master antenna television ("SMATV") providers.⁶²³ In *AT&T-TCI*, we concluded that the relevant geographic market for MVPD service is local.⁶²⁴ One or more MVPD providers furnish MVPD services in local franchise areas. Only one cable operator serves most franchise areas. In a limited number of franchise areas, a second cable operator (an "overbuilder") or MMDS operator also offers service. SMATV providers generally offer service in any setting in which a public right-of-way is not crossed, but do not provide competition throughout a local franchise area. DBS providers also distribute MVPD services and are available nationwide to consumers with an unobstructed southern view.

245. Time Warner is the dominant provider of multichannel video programming services in those local markets in which it operates franchised cable systems. America Online does not directly operate any company providing MVPD service, but does have an ownership interest in DBS operator DirecTV's corporate parent, Hughes.

246. We examine below specific allegations of harm to MVPDs arising from the combination of Time Warner's cable systems with AOL's ownership interest in DirecTV, as well as concerns about

⁶²⁰ See, e.g., Disney July 25 Ex Parte at 34-36; Disney Reply Comments at 8; Myers Group Report at 39. We note that the Applicants argue that existing broadband alternatives, such as DSL, are equivalent to a cable Internet connection. Applicants' Sept. 29 ITV Letter at 8. However, such alternatives may not currently be able to support ITV services comparable to those that can be provided using a cable Internet connection.

⁶²¹ See *ITV NOI*, FCC 01-15.

⁶²² See 47 U.S.C. § 522(13) (defining MVPD as "a person, such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming").

⁶²³ See *AT&T-TCI Order*, 14 FCC Rcd at 3172-73 ¶ 21. DBS operators provide programming via satellite to subscribers that own or lease small-diameter receiving dishes. MMDS providers offer programming via microwave facilities (the service is often referred to as "wireless cable service"). SMATV operators, also known as "private cable operators," also frequently use microwave facilities to transmit programming to subscribers. SMATV subscribers usually reside in multiple dwelling units. *Id.*

⁶²⁴ *AT&T-TCI Order*, 14 FCC Rcd at 3172-73 ¶ 21.

MVPDs' access to Time Warner video programming post-merger.⁶²⁵ We conclude that the merger will not present any public interest harms affecting MVPD services.

1. Common Ownership of DBS and Cable MVPDs

247. As discussed in Section IV.C.3 above, AOL paid GM \$1.5 billion for 2,669,663 shares of non-voting GM Preference Stock that tracks the performance of Hughes, GM's wholly owned subsidiary.⁶²⁶ If AOL converted its GM Preference stock into GM voting equity, AOL would hold approximately 1.76% of GM's voting equity.⁶²⁷ GM's wholly owned subsidiary DirecTV, the nation's largest DBS provider, served 8.3 million MVPD customers nationwide as of March, 2000.⁶²⁸ Commenters argue that the merged firm's ownership interests in both DirecTV and Time Warner will enable the merged firm to harm competition between DBS and cable MVPDs.⁶²⁹ Consumers Union asserts that the merged firm will harm the ability of DirecTV to compete with cable.⁶³⁰ Although the Commission does not have a rule barring cross-ownership of both a DBS and cable MVPD, RCN argues that the Commission has the discretion to address any competitive harms caused by such cross-ownership on a case by case basis.⁶³¹ Consumers Union and ACA request that the Commission order AOL to divest its interest in GM, DirecTV's parent, as a condition of the merger.⁶³²

248. With respect to the merged firm's ownership interest in GM, we find that the proposed merger will not violate the Communications Act or any Commission rules, nor will it frustrate the implementation of the Communications Act or its goals. We conclude that the merger will not result in public interest harms regarding competition between DBS and cable.

249. Although legislation introduced in the Senate proposed a cable/DBS cross-ownership ban in the 1992 Cable Act, the House and Senate Conference decided that it was premature to adopt such a

⁶²⁵ We note that Everest Connections Corp. ("Everest"), a broadband cable overbuilder, in a late filed comment in this proceeding, states that leading set-top box and cable equipment manufacturers claim that they cannot provide their products to companies, like Everest, that intend to operate MVPD systems in competition with Time Warner cable systems. These manufacturers, according to Everest, will provide equipment to Everest only if it agrees that it will not use the equipment to compete with Time Warner. Everest Comments at 1-3. Everest asks that the Commission condition the merger on a requirement that Time Warner not prohibit equipment vendors from supplying equipment to Time Warner's MVPD competitors. Everest Comments at 5-7. If Everest's allegations are accurate, Time Warner's actions are disturbing because they apparently are impeding consumers' ability to purchase competing MVPD services. Nevertheless, Everest has not sufficiently established how the merger would affect Time Warner's behavior in this regard. Moreover, Everest does not allege that Time Warner is violating any Commission rule or provision of the Communications Act. Hence, we cannot conclude that Time Warner's alleged behavior constitutes a merger-specific public interest harm.

⁶²⁶ See Applicants' March 21 Supplemental Information at 11-12 n.15.

⁶²⁷ *Id.* at 14.

⁶²⁸ *Id.* at 12.

⁶²⁹ Consumers Union Comments at 35; ACA Comments at 12-14.

⁶³⁰ Consumers Union Comments at 35.

⁶³¹ RCN Comments at 6 (citing *In re Policies for the Direct Broadcast Satellite Service*, IB Docket No. 98-21, Notice of Proposed Rulemaking ("DBS NPRM"), 13 FCC Rcd 6907, 6939 ¶¶ 56, 58 (1998)).

⁶³² Consumers Union Comments at 157; ACA Comments at 13-14.