

ICTA suggests that the Commission establish a "bright line" test of ownership, so there will be no question as to ownership at any point in time.⁶⁰²

214. Finally, Media Access/CFA strongly opposes proposals to deregulate inside wiring rates, arguing that deregulation would risk monopolization by existing service providers.⁶⁰³ Media Access/CFA claims that the 1992 Cable Act expressed a fundamental preference for the protection of subscribers, noting that the Act exempted cable systems from rate regulation only if those systems were subject to effective competition.⁶⁰⁴ Otherwise, rate regulation is required, including regulation of equipment used by subscribers to receive the basic tier.⁶⁰⁵ ICTA also opposes rate deregulation, arguing that it would probably not result in subscriber access prior to termination.⁶⁰⁶ ICTA claims that operators are unwilling to sell their wiring at any price in order to force owners to let the operator stay in the building, and that permitting operators to receive replacement cost is eminently fair because the wiring is worth less than its removal cost and the operator has ordinarily more than fully recouped its investment by the time of termination. ICTA also states that, in the alternative, the Commission should not deregulate the rates for which inside wiring can be sold for the period after the operator receives notice of termination.⁶⁰⁷

215. Time Warner also recommends that we continue to regulate prices for installation and maintenance of wiring if a cable operator retains ownership and control over that wiring upon installation. Prices should be deregulated if the operator chooses to cede control of the wiring to the subscriber on installation; this would foster a competitive installation and maintenance market, and would also eliminate the need to regulate inside wiring and maintenance prices.⁶⁰⁸

2. Discussion

216. We now establish a rule that will allow customers to provide and install their own cable home wiring within their premises, and to connect additional home wiring within their premises to the wiring installed and owned by the cable operator prior to termination of service. Under this rule, customers will be able to select who will install their home wiring (e.g., themselves, the cable operator or a commercial contractor). In addition, customers may connect additional wiring, splitters or other equipment to the cable operator's wiring, or redirect or reroute the home wiring, so long as no electronic or physical harm is caused to the cable system and the physical integrity of the cable operator's wiring

⁶⁰²ICTA Comments at 35-36.

⁶⁰³Media Access/CFA Comments at 18.

⁶⁰⁴*Id.* at 17 (citing 47 U.S.C. § 543(a)(2)).

⁶⁰⁵*Id.* at 17-18 (citing 47 U.S.C. 1992 Cable Act, §3(a) and Communications Act, § 623(b)(3)).

⁶⁰⁶ICTA Comments at 34.

⁶⁰⁷*Id.* at 34-35.

⁶⁰⁸Time Warner Comments at 30-31.

remains intact.⁶⁰⁹ Subscribers will not be permitted to physically cut, improperly terminate, substantially alter or otherwise destroy cable operator-owned inside wiring. To protect cable operators' systems from signal leakage, electronic and physical harm and other types of degradation, we will permit cable operators to require that any home wiring (including any passive splitters, connectors and other equipment used in the installation of home wiring) meets reasonable technical specifications, not to exceed the technical specifications of such equipment installed by the cable operator.⁶¹⁰ If, however, the subscriber's connection to, redirection of or rerouting of the home wiring causes electronic or physical harm to the cable system, the cable operator may impose additional technical specifications to eliminate such harm.

217. We believe that subscriber access to home wiring is necessary to enhance competition, which will result in lower and more reasonable rates for services such as the installation of additional outlets.⁶¹¹ Indeed, where competition is introduced, consumers benefit from lower prices, greater technological innovation, and additional consumer choice.

218. We take this action pursuant to Sections 4(i) and 303(r) of the Communications Act⁶¹² to further the purposes of Section 623⁶¹³ specifically and Title VI generally. The Commission has authority under Sections 4(i) and 303(r) to allow a subscriber to install and maintain its cable home wiring. As set forth above,⁶¹⁴ Section 4(i) grants the Commission the authority to make such rules as are necessary to carry out its functions, so long as the rules are not inconsistent with the Communications Act.⁶¹⁵ Section 303(r) grants the Commission similar authority.⁶¹⁶ The rule adopted here is necessary to effectuate the purpose of the Communications Act of promoting reasonable rates through the introduction of competition and is not inconsistent with any provision of the Act. Congress, in enacting Section 623(b) of the Communications Act, expressed a clear preference for competition as a method to reach reasonable rates.⁶¹⁷ Section 623(b) requires the Commission to ensure that the installation and lease charges for cable

⁶⁰⁹Such additional wiring or rerouting may not, however, be used to provide video service to other subscribers in nearby homes or other units in an MDU.

⁶¹⁰In the *Second Further Notice* below, we request comment on whether we should apply this rule to all MVPDs. See Section IV.B. below.

⁶¹¹See 1992 Senate Report at 23 (urging the Commission to adopt policies that will protect consumers against the imposition of unnecessary charges, including those for home wiring maintenance).

⁶¹²Communications Act, §§ 4(i) (Provisions relating to the Commission) and 303(r) (General Powers of Commission), 47 U.S.C. §§ 154(i) and 303(r).

⁶¹³Communications Act, § 623 (Regulation of Rates), 47 U.S.C. § 543.

⁶¹⁴See Section III.A.2.c.

⁶¹⁵47 U.S.C. § 154(i).

⁶¹⁶47 U.S.C. § 303(r) (the Commission has the authority to "[m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this Act . . .").

⁶¹⁷47 U.S.C. § 543.

equipment, which include cable home wiring,⁶¹⁸ are "reasonable" and based on "actual cost."⁶¹⁹ We believe that, if subscribers are allowed to install and to maintain their own cable home wiring, or to pay an outside vendor to do it for them, the wiring installation and maintenance markets will be more competitive and operate to ensure reasonable rates, the goal of Section 623(b).⁶²⁰

219. More generally, we believe our decision furthers the goal of competition which pervades Title VI. Section 601 states that one purpose of Title VI is to "promote competition in cable communications and minimize unnecessary regulation that would impose an undue economic burden on cable systems."⁶²¹ Subscriber control over the installation and maintenance of home wiring will result in greater competition in cable wiring services, while deemphasizing the necessity for rate regulation for those services. In addition, Congress has expressed a preference for enhancing a subscriber's ability to connect equipment to the cable operator's home wiring.⁶²² More broadly, Congress explicitly prohibited exclusive franchises,⁶²³ which indicates that Congress sought to encourage widespread competition in the cable communications area. We also note that Congress has shown its intent to introduce broader competition in the communications industry overall with the passage of the 1996 Act.⁶²⁴ Thus, we conclude that these provisions support the Commission's authority to take actions necessary to prompt evolution of a competitive environment.

220. Contrary to the assertions of cable operators, subscriber pre-termination access is not inconsistent with the Communications Act. Specifically, Section 624(i) does not limit our authority to take this action.⁶²⁵ The plain language of that provision refers only to the disposition of cable wiring "after a subscriber to a cable system terminates service"⁶²⁶ The rule we adopt here will have an impact on the rights and obligations of service providers and subscribers prior to termination of service. As discussed above with regard to our new rules regarding the disposition of home run wiring,⁶²⁷ we find

⁶¹⁸See *Report and Order and Further Notice of Proposed Rulemaking*, MM Docket No. 92-266 (Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992, Rate Regulation) ("*Rate Order*"), 8 FCC Rcd 5631, 5806 & n.666 (1993).

⁶¹⁹Communications Act, § 623(b), 47 U.S.C. § 543(b).

⁶²⁰See AT&T Comments at 8; New York DPS Reply Comments at 2-4.

⁶²¹47 U.S.C. § 521(6).

⁶²²See Communications Act, § 629, 47 U.S.C. § 549 (Competitive Availability of Navigation Devices); Communications Act, § 624A, 47 U.S.C. § 544a (Consumer Electronics Equipment Compatibility).

⁶²³47 U.S.C. § 541(a).

⁶²⁴See 1996 Conference Report at 1.

⁶²⁵See Section III.A.2.c.

⁶²⁶Communications Act § 624(i), 47 U.S.C. § 544(i).

⁶²⁷See Section III.A.2.c.

no "inescapable conflict" between the establishment of customer pre-termination access rights to cable home wiring and the plain language of Section 624(i).⁶²⁸

221. This rule does not impermissibly treat cable operators as common carriers. Functionally, our rule permitting subscribers to connect their own home wiring to the cable operator's wiring is no different than a subscriber connecting his or her own television or video cassette recorder to the cable operator's wiring. Indeed, as noted above, Congress has established policies designed to enhance subscribers' ability to connect their own equipment to the cable operator's wiring.⁶²⁹

222. We also do not believe that the rule we are adopting will pose an undue risk of signal leakage or harm to the cable system. Many subscribers already own and control their home wiring -- e.g., where the cable operator charges for it upon installation or where state law deems home wiring to be a "fixture." Indeed, as many cable interests have pointed out in this proceeding, the marketplace has established the F-type connector as the de facto standard for connecting coaxial cable to CPE.⁶³⁰ Such connectors are readily available and, if properly used, provide adequate signal leakage protection.⁶³¹ Also, as stated above, we will permit cable operators to establish reasonable technical specifications for subscriber-installed home wiring (including passive splitters, connectors and other equipment used in the installation of home wiring), not to exceed the specifications of their own wiring and equipment. Furthermore, we will protect the cable system from electronic and physical harm by allowing the cable operator to impose additional technical specifications where such harm exists.

223. We note that, although questioning the Commission's authority to require operators to allow subscribers to own and access their home wiring prior to termination of service, NCTA and Time Warner do not appear to believe that allowing subscriber access to home wiring poses substantial risks. Both parties suggest that the Commission might provide incentives, such as deregulation of wiring and equipment rates, for cable operators to voluntarily cede control of home wiring to consumers upon installation.⁶³² Notably, Continental and Time Warner agreed, under the terms of their respective Social Contracts,⁶³³ to provide their subscribers with pre-termination access to their home wiring. Not only do we believe that it is unlikely that Continental and Time Warner would have agreed to do so if the signal leakage problems posed by such access were insurmountable, but we also have seen no evidence of increased hazardous signal leakage for systems owned by Continental in the over one year, or Time Warner in the nearly two years, since this provision of the respective Social Contracts went into effect.

⁶²⁸See III.A.2.c. (citing *Aeron Marine Shipping Co.*, 695 F.2d at 576).

⁶²⁹See Communications Act, § 629, 47 U.S.C. § 549 (Competitive Availability of Navigation Devices); Communications Act, § 624A, 47 U.S.C. § 544a (Consumer Electronics Equipment Compatibility).

⁶³⁰See, e.g., Time Warner Comments at 31-36; NCTA Comments at 35-36. The status of the F-type connector as the cable industry standard is discussed at length in the Section on Means of Connection, below.

⁶³¹In addition, cable operators can provide guidance to subscribers who install their own wiring.

⁶³²NCTA Reply Comments at 9; Time Warner Comments at 29-31.

⁶³³*Social Contract for Continental Cablevision*, 11 FCC Rcd 299 (1995) *Continental Cablevision, Inc., Amended Social Contract*, 11 FCC Rcd 11118 (1996); *Social Contract for Time Warner*, 11 FCC Rcd 2788 (1995).

224. We will not modify our current requirement that cable operators monitor signal leakage and eliminate harmful interference while they are providing service, regardless of who owns the home wiring.⁶³⁴ We also will continue to require cable operators to discontinue service to a subscriber where signal leakage occurs, until the problem is corrected.⁶³⁵ As stated in the *Cable Wiring Order*, a cable operator will not be held responsible for facilities over which it no longer provides service.⁶³⁶ We believe that the continuation of these requirements will appropriately balance the interests of subscribers with the interests of those engaged in licensed over-the-air communications and cable operators in maintaining the security and integrity of the cable systems.

225. Allowing subscribers to install their own cable home wiring prior to termination of service may raise concerns regarding physical and electronic harm to the cable system and degradation of signal quality, including interference with other customers' service. To the extent a customer's installations or rearrangements of wiring degrade the signal quality of or interfere with other customers' signals, or cause electronic or physical harm to the cable system, we will allow cable operators to discontinue service to that subscriber, as operators may do where a customer's wiring causes signal leakage, until the degradation or interference is resolved. We note, however, that cable operators are not responsible for degradation of signal quality to the subscriber where a subscriber has added outlets or owns and maintains his or her own wiring. While we recognize that theft of cable service is a legitimate concern,⁶³⁷ we do not agree that our rules granting customers pre-termination access to cable home wiring will promote theft of service. Some cable companies already provide customer pre-termination access to wiring, and there is no evidence in the record that these policies have resulted in increased theft of service. In addition, cable operators may take security measures, such as scrambling of their signals, to deter theft of service.

226. We do not believe that the above rule will result in an impermissible per se or regulatory "taking" under the Fifth Amendment.⁶³⁸ First, our rule does not authorize a permanent physical occupation of the cable operator's property, and thus does not constitute a per se taking under *Loretto*.⁶³⁹ To the contrary, the only physical "burden" that can be placed on the cable operator's wiring under our rules is its connection to wiring installed by the subscriber or the subscriber's redirecting of the wiring to another location. The rule specifically provides that subscribers may not physically cut, substantially alter or otherwise destroy operator-owned wiring. So long as the cable operator continues to own the wiring, the cable operator retains the right, prior to termination of service, to use and dispose of its property in any

⁶³⁴See WCA Comments at 23 (citing WCA December 1, 1992 Comments filed in MM Docket No. 92-260 at 8-10). Cable operators are required to demonstrate compliance with a cumulative signal leakage index at least once a year. See 47 C.F.R. § 76.611. In addition, cable operators must monitor a substantial portion of their cable plant every three months, and must promptly take appropriate remedial action to eliminate any detected harmful interference. 47 C.F.R. §§ 76.613-76.614.

⁶³⁵See 47 C.F.R. § 76.617.

⁶³⁶*Cable Wiring Order*, 8 FCC Rcd at 1439.

⁶³⁷See 1992 House Report at 118; *Cable Wiring Order*, 8 FCC Rcd at 1436, para. 7.

⁶³⁸U.S. Const. amend. V. The Fifth Amendment provides that private property shall not be "taken for public use, without just compensation." *Id.*

⁶³⁹See *Loretto*, 458 U.S. at 426.

manner it sees fit.⁶⁴⁰ No government edict requires cable operators to place their wires in subscribers' homes, and no government edict requires cable operators to keep them there. So long as cable operators choose to place and to maintain their wiring on subscribers' private property, they have no reasonable expectation that the wiring will never be used or moved by the subscribers themselves.

227. Nor do we believe that our rules effect a "regulatory taking" under the factors set forth in *Penn Central Transportation Co. v. New York City*, which examine: (1) the character of the governmental action; (2) the economic impact of the regulation; and (3) the regulation's interference with investment-backed expectations.⁶⁴¹ First, the *Penn Central* court held that a taking "may more readily be found when the interference with property can be characterized as a physical invasion by government . . . than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good."⁶⁴² Applying this principle, the Claims Court in *American Continental Corporation v. United States* found that the characterization of the governmental action as involving "an effort to promote the public interest militates against finding a fifth amendment taking."⁶⁴³ Here, our action seeks to promote competition and consumer choice in the marketplace for cable home wiring. We expect our action to produce the same benefits we have seen in the myriad of other areas of communications where we have introduced competition, including lower prices, greater technological innovation and additional consumer choice. We believe this factor weighs heavily against any finding of a regulatory taking.

228. Second, we do not believe that the economic impact of the rules we adopt argues in favor of a taking. Cable operators' home wiring will remain intact, and they may continue to use that property for the very purpose for which it was installed -- to provide video programming and other services to subscribers. While cable operators may lose some revenues relating to the installation of home wiring and additional outlets, we believe that monopoly profits lost when a market is opened to competition are not an infringement on legitimate property rights that requires compensation:

Suffice it to say that government regulation -- by definition -- involves the adjustment of rights for the public good. Often this adjustment curtails some potential for the use or economic exploitation of private property. To require compensation in all such circumstances would effectively compel the government to regulate by purchase.⁶⁴⁴

⁶⁴⁰See *Andrus v. Allard*, 444 U.S. 51, 65-66 (1979) ("The regulations challenged here do not compel the surrender of the artifacts, and there is no physical invasion upon them In this case, it is crucial that appellees retain the rights to possess and transport their property, and to donate or devise the protected birds.").

⁶⁴¹438 U.S. 104, 124 (1978).

⁶⁴²*Id.* at 124 (citation omitted).

⁶⁴³*American Continental*, 22 Cl. Ct. 692, 696 (1991).

⁶⁴⁴*Andrus v. Allard*, 444 U.S. at 65; see also *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922) ("Government could hardly go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.").

In addition, as the Supreme Court held, a "prediction of profitability is essentially a matter of reasoned speculation that courts are not especially competent to perform. Further, perhaps because of its very uncertainty, the interest in anticipated gains has traditionally been viewed as less compelling than other property-related interests."⁶⁴⁵

229. Third, we believe that the rule we are adopting will not interfere with cable operators' legitimate "investment-backed expectations." As noted above, subscribers can already connect some of their own equipment to the cable operator's network in a manner similar to that provided for home wiring in our new rule. More importantly, we do not believe that cable operators could have a "reasonable expectancy" that the cable home wiring market would continue to be a monopoly service never subject to competition. Given that the cable industry and cable wiring are subject to significant regulation under Title VI of the Communications Act, the expectations of entities in the cable industry must be based on those regulations, the premise of the law underlying them, and that regulations are amended to respond to changing circumstances.⁶⁴⁶ This environment is consistent with the Commission's authority to evaluate changing circumstances and amend its policies as it determines necessary.⁶⁴⁷ We therefore believe that all three *Penn Central* factors weigh in favor of a finding that our pre-termination access rule does not effect a regulatory taking.

230. We will neither establish a presumption of ownership of cable home wiring nor deregulate home wiring rates at this time. These proposals encompass a range of issues beyond the scope of this proceeding. We believe that our rules allowing consumers to install, redirect and reroute their cable home wiring adequately promote the goals of expanded competition and consumer choice without the need to address ownership issues. We also note our obligation under Section 623 to regulate the rates of equipment used by subscribers to receive the basic service tier.⁶⁴⁸

H. Signal Leakage

1. Background

231. In the *Inside Wiring Notice*, we sought comment on whether and how to extend our signal leakage rules that currently apply only to traditional cable systems to others that provide service over

⁶⁴⁵*Andrus v. Allard*, 444 U.S. at 65-66 ("loss of future profits -- unaccompanied by any physical property restriction -- provides a slender reed upon which to rest a takings claim"); see also *Everard's Breweries v. Day*, 265 U.S. 545, 563 (1924) (rejecting takings argument where regulation prohibited the sale of alcoholic beverages despite the fact that individuals were left with previously acquired stocks).

⁶⁴⁶See *American Continental*, 22 Cl. Ct. at 697 ("[W]hen investment is made in a highly regulated industry, to be reasonable, expectations must be based not only on then-existing federal regulations but also on the recognition that there may well be related changes in the regulations in the future.").

⁶⁴⁷See *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 94-95, 98 (1953).

⁶⁴⁸See 47 U.S.C. § 543.

broadband facilities.⁶⁴⁹ We noted that while signal leakage from the transmission of broadband video programming may interfere with licensed over-the-air communications, signal leakage from the transmission of narrowband telephony does not pose a similar threat to such communications.⁶⁵⁰ We recognize, however, that telephone companies and other telecommunications service providers now deliver broadband service over the same aeronautical and public safety frequencies, and at similar levels of power, as do cable systems. We are concerned that the risks posed by the delivery of cable signals also exist with respect to these providers of broadband service. We solicited comment on whether, if our cable signal leakage rules were to apply to all broadband service providers, our current signal leakage requirements are adequate or whether they should be modified in light of the additional types of broadband service providers that would be covered.⁶⁵¹

232. The comments filed in this proceeding overwhelmingly support extending the Commission's existing cable television signal leakage rules to all providers of broadband service.⁶⁵² These commenters assert that broadband service providers, in addition to franchised cable systems, may transmit signals over aeronautical and public safety frequencies at power levels sufficient to cause potential interference.⁶⁵³ The commenters generally agree that where potential signal leakage from a broadband service provider poses a risk of interfering with air traffic and emergency communications, the Commission's cable signal leakage rules should apply.⁶⁵⁴

233. A few commenters believe that extension of the Commission's cable signal leakage standards to all providers of broadband service is unnecessary. Ameritech argues, for instance, that the signal leakage rules should not apply to broadband digital transmissions that may not interfere with

⁶⁴⁹*Inside Wiring Notice*, 11 FCC Rcd at 2759-60. Cable systems often deliver cable signals over the same frequencies as many over-the-air licensees, including air traffic control and police and fire safety communications. In order to reduce the potential for electromagnetic interference with over-the-air services caused by cable signal leakage, the Commission established specific restrictions on cable operators' use of radio frequencies. See 47 C.F.R. §§ 76.605(a)(12) (formerly § 76.605(a)(13)) and 76.610-76.617.

⁶⁵⁰*Inside Wiring Notice*, 11 FCC Rcd at 2757-59. The transmission of narrowband telephony is not a source of signal leakage that could cause harmful interference with critical health and safety frequencies because it requires only a fraction of the power used to transmit video programming. In addition, telephone signals have been carried over a much narrower, as well as different, portion of the frequency spectrum than licensed over-the-air communications.

⁶⁵¹*Id.* at 2759-60.

⁶⁵²See Time Warner Comments at 36-42; Time Warner Reply Comments at 59-62; Adelphia Comments at 5; AT&T Comments at 18; AT&T Reply Comments at 14, n.36; OpTel Comments at 16; ICTA Comments at 58; GTE Comments at 14; PacTel Comments at 10; Cox Comments at 23-27; Cox Reply Comments 17-18; New Jersey BPU at 10; MCI Reply Comments at 3-4; Liberty Cable Comments at 24; Bartholdi Reply Comments at 20; Media Access/CFA Comments at 16-17; New Jersey Ratepayer Advocate Comments at 3-4.

⁶⁵³See, e.g., Time Warner Comments at 39-42; AT&T Comments at 18.

⁶⁵⁴See, e.g., PacTel Comments at 10; Time Warner Comments at 39-42.

aeronautical and public safety bands.⁶⁵⁵ Tandy and Circuit City both insist that concerns about signal leakage from consumer-installed broadband wiring can be addressed through mandatory labeling requirements and installation instructions for broadband wiring and connectors.⁶⁵⁶ TIA asserts that leakage hazards can be diminished through minimum cable performance specifications and detailed customer installation guides.⁶⁵⁷ General Instrument and Media Access/CFA propose the adoption of cable shielding standards to reduce the risk of signal leakage.⁶⁵⁸

234. In addition, while ICTA and Optel generally support application of the cable signal leakage standards to all providers of broadband service, they request the establishment of a transition period to permit private cable operators to bring existing systems into compliance with signal leakage rules.⁶⁵⁹ Specifically, ICTA proposes a five-year transition period.⁶⁶⁰ ICTA and Optel argue that a transition period is necessary in light of the costs associated with compliance and in order to afford private cable operators a reasonable time within which to upgrade their systems.⁶⁶¹ They further urge the Commission to tailor signal leakage testing criteria to private cable operators serving MDUs.⁶⁶² In particular, these commenters ask the Commission to consider each MDU connected via microwave link a separate cable system so that leakage from individual MDUs may be assessed individually rather than cumulatively.⁶⁶³ Time Warner opposes ICTA's and Optel's requests. Time Warner argues that the five-year period suggested by ICTA is too long and proposes a one-year transition period for non-cable broadband service providers to comply with the Commission's signal leakage rules.⁶⁶⁴ In response to ICTA's and Optel's request that the Commission modify its signal leakage testing criteria, Time Warner

⁶⁵⁵Ameritech Comments at 15 (supporting, however, extension of the Commission's cable signal leakage rules to providers of broadband analog service); Ameritech Reply Comments at 8-9; *see also* Bell Atlantic Reply Comments at 17-18 (asserting that digital transmission over fiber optics poses little risk of interference with public safety or aeronautical traffic).

⁶⁵⁶Tandy Comments at 5; Tandy Reply Comments at 6; Circuit City Comments at 14 (also suggesting that the Commission set minimum standards regarding the quality of wiring sold to the public).

⁶⁵⁷TIA Comments at 4.

⁶⁵⁸General Instrument Comments at 5-7; General Instrument Reply Comments at 2; Media Access/CFA Comments at 16-17.

⁶⁵⁹ICTA Comments at 57-59; OpTel Comments at 16-18.

⁶⁶⁰ICTA Comments at 59.

⁶⁶¹ICTA Comments at 57-59; OpTel Comments at 16-18.

⁶⁶²ICTA Comments at 57-59; OpTel Comments at 16-18.

⁶⁶³ICTA Comments at 57-59; OpTel Comments at 16-18.

⁶⁶⁴Time Warner Reply Comments at 59-62. Time Warner notes that when the Commission revised its cable signal leakage requirements in 1984, it established a five-year transition period to allow for compliance. Time Warner argues, however, that at that time cable operators faced problems such as equipment replacement and plant reconditioning of a magnitude that would not be faced by private cable systems seeking to comply with signal leakage rules today. *Id.*

suggests that the Commission establish certain distance criteria that define when areas served by the same microwave system may be considered separate for testing purposes.⁶⁶⁵

235. Finally, a number of parties suggest that, in the event that our signal leakage rules are extended to all broadband service providers, new techniques for identifying signal leakage may have to be devised.⁶⁶⁶ These commenters assert that pinpointing the source of a particular leak may be difficult in cases where several providers serve the same or overlapping geographic areas and propose methods for identifying the source of the signal leakage.⁶⁶⁷ Time Warner, Bartholdi, and Cox all suggest that the Commission implement signal leakage tracking procedures while Adelphia proposes that service providers themselves establish methods for pinpointing the source of leakage.⁶⁶⁸

2. Discussion

236. The purpose of the Commission's signal leakage rules is to protect licensed over-the-air communications, including aeronautical, police, and fire safety communications, from interference caused by signal leakage.⁶⁶⁹ Until now, the Commission rules governing signal leakage have been applied only to cable systems, which often deliver signals over the same frequency bands as many over-the-air licensees.⁶⁷⁰

237. An increasing number of MVPDs are competing with cable operators in the provision of video programming and other services. Because these MVPDs often transmit signals over the same public safety and navigation frequencies as cable operators, they may be a source of potentially harmful signal leakage.⁶⁷¹ The public safety concerns that underlie application of our signal leakage regulations to cable operators are equally present with respect to other MVPDs such as SMATV, MMDS and open video system operators and others. We agree with the majority of commenters in this proceeding and will modify our rules to extend existing cable signal leakage requirements to non-cable MVPDs. In light of the potential harm to public safety that may be caused by broadband signal leakage interfering with

⁶⁶⁵*Id.* at 62.

⁶⁶⁶Time Warner Comments at 42; Adelphia Comments at 5; Bartholdi Reply Comments at 20-21; Cox Reply Comments at 18.

⁶⁶⁷Time Warner Comments at 42; Adelphia Comments at 5; Bartholdi Reply Comments at 20-21; Cox Reply Comments at 18.

⁶⁶⁸Time Warner Comments at 42; Adelphia Comments at 5; Bartholdi Reply Comments at 20-21; Cox Reply Comments at 18.

⁶⁶⁹The Commission's signal leakage rules were initially adopted in 1977 and revised in 1984. *Report and Order*, Docket No. 21006, 65 F.C.C.2d 813 (1977); *Second Report and Order*, Docket No. 21006, 99 F.C.C.2d 512 (1984).

⁶⁷⁰Specifically, Section 76.605(a)(12) establishes the maximum individual signal leakage limits for all cable operators using frequencies outside the broadcast television bands, while Sections 76.610-76.617 impose more stringent operating and monitoring requirements for cable systems operating in the bands that are used by aircraft for communications and navigation. See 47 C.F.R. §§ 76.605(a)(12) and 76.610-76.617.

⁶⁷¹Currently, cable operators transmit video signals in the radiofrequency band from 54 MHz up to 1 GHz.

aeronautical, navigational and communications radio systems, we will not rely on labelling requirements, installation instructions or cable performance specifications.

238. With regard to Ameritech's argument that our signal leakage rules should not apply to digital transmission, we note that systems transmitting digitized signals may operate in the restricted aeronautical and public safety bands. Our signal leakage rules provide that systems operating in the restricted bands are only subject to the testing and monitoring requirements when they operate above a threshold power level.⁶⁷² Systems using digital transmissions normally operate below this power threshold.⁶⁷³ Systems using digital technology that operate below our threshold power level therefore would not generally be subject to the most rigorous sections of our signal leakage rules.⁶⁷⁴ MVPDs using digital transmission will, however, be subject to Section 76.605(a)(12) which sets forth the maximum signal leakage limits for systems, regardless of the frequency band or power level in use.⁶⁷⁵

239. We will require that all MVPDs comply with Section 76.613 of our rules upon the effective date of this *Order*. Section 76.613 protects licensed over-the-air communications from harmful interference and requires prompt action to eliminate such interference.⁶⁷⁶ We believe that immediate compliance with Section 76.613 is necessary because, unlike our other signal leakage rules that are designed to minimize the risk of interference by requiring that leakage be detected and repaired, Section 76.613 provides that once harmful interference actually occurs it must be promptly eliminated. We recognize, however, that immediate compliance with many of our other signal leakage requirements may present hardships to existing MVPDs not previously subject to such rules. We will allow for a five-year transition period from the effective date of these rules to afford non-cable MVPDs time to comply with our signal leakage rules other than Section 76.613.⁶⁷⁷ We note that such a transition period is consistent with the time period allotted to cable operators in 1984 to comply with the more stringent signal leakage requirements imposed by the Commission.⁶⁷⁸ We disagree with Time Warner that non-cable MVPDs do not need five years to comply with signal leakage rules because they do not face many of the same obstacles cable operators confronted in the past in complying with such rules. We believe that a five-year transition period will provide a reasonable time period for existing non-cable MVPDs to undertake such functions as replacing equipment, upgrading existing wiring, and training personnel to conduct signal

⁶⁷²See 47 C.F.R. § 76.610.

⁶⁷³For digital transmissions that may operate above the power threshold, the Commission shall continue to apply the same requirements as those for analog transmissions due to the potential harm to public safety.

⁶⁷⁴See *id.*

⁶⁷⁵See 47 C.F.R. § 76.605(a)(12).

⁶⁷⁶47 C.F.R. § 76.613.

⁶⁷⁷In addition, we are issuing a *Second Further Notice* herein to determine, among other things, whether and how to apply the reporting requirements of Section 76.615(b)(7) of our signal leakage rules to certain broadband service providers other than cable operators. 47 C.F.R. § 76.615(b)(7).

⁶⁷⁸In 1984, the Commission imposed more stringent signal leakage requirements and granted cable operators a five year time frame within which to comply. See *Second Report and Order*, Docket No. 21006, 99 F.C.C.2d 512 (1984).

leakage measurements.⁶⁷⁹ The five-year transition period will apply only to the systems of those non-cable MVPDs that have been substantially built as of January 1, 1998. We will define "substantially built" as having 75% of the distribution plant completed.

240. Our rules require that each cable system perform an independent signal leakage test annually.⁶⁸⁰ Based on the current record, we will not amend our rules to treat MDUs or different geographic areas connected by microwave link as separate systems for testing purposes.⁶⁸¹ We believe that for the past six years our testing criteria have provided effective standards for monitoring and rectifying signal leakage in 31,000 cable communities nationwide. Cognizant of the changing technologies that may be used by MVPDs, we will continue to review specific systems' operations and designs that may warrant adjustments to our signal leakage testing criteria.

241. We will not establish any new signal leakage testing procedures such as tracking systems to identify the source of signal leakage. We believe that MVPDs are capable of devising and selecting the most appropriate methods for detecting signal leakage on their own systems. We encourage MVPDs to work together to develop methods that will permit them to accurately identify the source of any signal leakage.

242. While our signal leakage rules generally require cable operators to perform signal leakage monitoring and testing, Section 76.615 requires cable operators to file specific information with the Commission.⁶⁸² In particular, Section 76.615(b)(7) requires that cable operators annually file with the Commission the results of signal leakage testing.⁶⁸³ The reporting requirements of Section 76.615(b)(7) may impose undue burdens on small MVPDs. In the *Second Further Notice* below, we seek comment on whether certain MVPDs should be exempted from the reporting requirements of Section 76.615(b)(7).⁶⁸⁴ Since Section 76.615(b)(7) is one of the provisions covered by the five-year transition period, all non-cable MVPDs will have five years to comply with the filing requirements; the *Second Further Notice* seeks comment on whether we should create a permanent exemption for certain types of MVPDs.

⁶⁷⁹We note that the signal leakage requirements under Part 15 of the Commission's rules will continue to apply during the transition period.

⁶⁸⁰47 C.F.R. § 76.611.

⁶⁸¹See ICTA Comments at 57-59; OpTel Comments at 16-17; Time Warner Reply Comments at 62.

⁶⁸²47 C.F.R. § 76.615.

⁶⁸³47 C.F.R. § 76.615(b)(7).

⁶⁸⁴See Section IV.C. below.

I. Signal Quality

1. Background

243. We sought comment in the *Inside Wiring Notice* on whether our cable signal quality standards should be extended to other broadband video service providers.⁶⁸⁵ We noted that signal strength can be reduced by the use of poor cable, signal splitting for additional television sets, improper termination, and improper attachments of and to CPE.⁶⁸⁶ We suggested, however, that the extension or further maintenance of signal quality standards may not be necessary due to the emergence of competition among broadband service providers.⁶⁸⁷ We further sought comment on how our decisions in this rulemaking concerning the issues of access to wiring prior to termination of service, ownership and control of the wiring, and the location of the demarcation point would affect our signal quality requirements should they be maintained or extended.⁶⁸⁸ We asked for comment generally on how any new or revised regulatory approaches proposed in the *Inside Wiring Notice* would affect signal leakage or signal quality considerations.⁶⁸⁹

244. Alternative video service providers generally oppose extension of the Commission's cable signal quality standards to other broadband service providers or believe that such extension is unnecessary.⁶⁹⁰ They contend that increased competition among broadband service providers reduces the need to rely on Commission rules to ensure delivery of adequate levels of service.⁶⁹¹ These commenters believe that in a competitive marketplace providers of broadband service will be motivated to deliver an acceptable level of signal quality to attract and retain customers.⁶⁹² Cable operators, in contrast, support extension of signal quality requirements to all broadband service providers.⁶⁹³ Time Warner argues, for

⁶⁸⁵*Inside Wiring Notice*, 11 FCC Rcd at 2760. Commission signal quality standards define the quality of television signal that cable subscribers are entitled to receive and, in particular, ensure the delivery of a good quality picture to the television set or video cassette recorder. See 47 C.F.R. §§ 76.601, 76.605, and 76.609.

⁶⁸⁶*Inside Wiring Notice*, 11 FCC Rcd at 2758.

⁶⁸⁷*Id.* at 2760.

⁶⁸⁸*Id.*

⁶⁸⁹*Id.*

⁶⁹⁰DIRECTV Comments at 11; NYNEX Comments at 19; GTE Comments at 14; GTE Reply Comments at 13; Bell Atlantic Reply Comments at 18; WCA Comments at 23; PacTel Comments at 10.

⁶⁹¹See PacTel Comments at 10; NYNEX Comments at 19; GTE Comments at 14; GTE Reply Comments at 13; WCA Comments at 23; Bell Atlantic Reply Comments at 18; DIRECTV Comments at 11.

⁶⁹²See PacTel Comments at 10; NYNEX Comments at 19; GTE Comments at 14; GTE Reply Comments at 13; WCA Comments at 23; Bell Atlantic Reply Comments at 18; DIRECTV Comments at 11.

⁶⁹³Adelphia Comments at 5; Cox Comments at 24-27; Time Warner Comments at 36-37; see also New Jersey Ratepayer Advocate Comments at 3.

instance, that while a competitive environment may render signal quality standards unnecessary, they should be applied to all broadband service providers to the extent that they remain in force.⁶⁹⁴

2. Discussion

245. By statute, the Commission is charged with promulgating regulations governing the quality of television signals delivered to cable subscribers.⁶⁹⁵ We believe that continued application of the Commission's signal quality standards to cable operators is necessary because, despite the recent entrance of other service providers into the video market, cable operators, in most areas of the country, still exercise significant market power.⁶⁹⁶ We do not believe at this time that market forces alone will ensure that cable subscribers receive the quality picture they are entitled to expect. With regard to non-cable broadband service providers, we believe that government regulation of signal quality would be unnecessary and unduly intrusive. These alternative providers do not exercise market power and virtually always compete with an incumbent cable operator.⁶⁹⁷ We agree with those comments that contend that head-to-head competition with a cable operator should ensure that alternative MVPDs deliver a good quality picture in order to attract and retain customers. We believe that, as cable operators become subject to vigorous competition, market forces will ensure that they, too, deliver a good quality picture. As competition develops and its effects become clearer, we expect to leave the issue of signal quality wholly to market forces.

J. Means of Connection

1. Background

246. In the *Inside Wiring Notice*, we sought comment on whether the Commission should adopt uniform technical standards for jacks and connectors for broadband service.⁶⁹⁸ We noted that adoption of uniform standards could yield certain benefits such as: (1) ensuring network integrity; (2) minimizing concerns over signal leakage and substandard signal quality by decreasing the frequency of incorrect connection by alternative providers; and (3) simplifying the use of existing wire and connections by alternative service providers.⁶⁹⁹ We recognized, however, that use of a particular type of connector, known

⁶⁹⁴Time Warner Comments at 36-37.

⁶⁹⁵Communications Act, § 624(e), 47 U.S.C. § 544(e).

⁶⁹⁶See *Third Annual Report*, CS Docket No. 96-133 (Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming), 12 FCC Rcd 4358, 4425 (1997) ("... cable MSOs continue to be the main distributors of multichannel video programming, with 89% of total MVPD subscribers.").

⁶⁹⁷See *id.* at para. 13 (revealing that at year end 1995 cable service was available to 96.7% of all television households in the United States).

⁶⁹⁸*Inside Wiring Notice*, 11 FCC Rcd at 2761. While the Commission does not currently have specific rules governing the type of connectors used to attach coaxial cable to customer premises equipment, the Commission does define the technical specifications for jacks that interface with the telephone network. See subpart F of 47 C.F.R. Part 68.

⁶⁹⁹*Inside Wiring Notice*, 11 FCC Rcd at 2761.

as the "F-type connector," is already prevalent in the cable television industry and that Commission adoption of connection standards may, therefore, be unnecessary.⁷⁰⁰ We also solicited comment on whether the Commission should establish technical standards for connections to cable networks or broadband service where multiple services are delivered over a single wire.⁷⁰¹

247. Virtually all of the parties commenting on the means of connection focused on the issue of whether the Commission should adopt uniform technical requirements for connections to broadband service.⁷⁰² A majority of the commenters addressing the connection issue either oppose Commission adoption of specific standards for jacks and connectors for broadband service or believe that if broadband connections standards are to be established, they should be developed by industry standard-setting entities rather than the Commission.⁷⁰³ Commenters that oppose Commission adoption of uniform standards, such as cable interests and property management firms, generally contend that marketplace forces have established the F-type connector as the *de facto* standard for connecting coaxial cable to CPE.⁷⁰⁴ These commenters maintain that, in light of the cable industry's pervasive use of the F-type connector, standardization of broadband connections already exists and Commission action in this area is

⁷⁰⁰*Id.* at 2760-61.

⁷⁰¹*Id.* at 2761.

⁷⁰²*But see* AT&T Comments at 19 (supporting the development of technical standards for jacks used to interface between broadband common carrier service and the telephone network).

⁷⁰³*See* Time Warner Comments at 31-36; NCTA Comments at 35-36; Cox Reply Comments at 15; WCA Comments at 24; SBC Reply Comments at 6; New Jersey BPU Comments at 12; PacTel Reply Comments at 4 (also supporting industry development of a universal connection device located at the demarcation point to which broadband and narrowband providers can connect their facilities); Building Owners, et al., Comments at 41-42; Asset Mgt. & Consulting Comments at 1; Anthem Equity Comments at 2; Colonial Manor Apts. Comments at 2; Gorsuch Mgt. Comments at 2; Institute of Real Estate Mgt. Comments at 2; IPM Real Estate Comments at 1; Koll Real Estate Comments at 2; Lakeside Comments at 2; Lane Company Comments at 1; LCOR Comments at 1; Ledic Mgt. Comments at 2; Live Oak Properties Comments at 1; Lockwood Group Comments at 2; Mgt. Services Comments at 2; MarRay-Ash Plaza Comments at 3; Mendik Realty Comments at 2; MetLife Comments at 4-5; Nat'l Assn. of Real Estate Investment Trusts Comments at 2; NP Dodge Mgt. Comments at 2; Patriot American Comments at 2; Southridge Manor Apts. Comments at 2; Spokane BOMA Comments at 2; Terry Johnson & Assoc. Comments at 2; West World Mgt. Comments at 2; Zehman-Wolf Mgt. Comments at 1; USTA Comments at 5; GTE Comments at 14-15; GTE Reply Comments at 14 (but suggesting establishment of minimum standards and qualifications applicable to third parties that install broadband wiring); Ameritech Comments at 16-17; Ameritech Reply Comments at 9; DIRECTV Comments at 11; Charter/Comcast Comments at 19.

⁷⁰⁴Time Warner Comments at 31-36; NCTA Comments at 35-36; WCA Comments at 24; New Jersey BPU Comments at 12; USTA Comments at 5; *see also* SBC Reply Comments at 6; Building Owners, et al., Comments at 41-42; Asset Mgt. & Consulting Comments at 1; Anthem Equity Comments at 2; Colonial Manor Apts. Comments at 2; Gorsuch Mgt. Comments at 2; Institute of Real Estate Mgt. Comments at 2; IPM Real Estate Comments at 1; Koll Real Estate Comments at 2; Lakeside Comments at 2; Lane Company Comments at 1; LCOR Comments at 1; Ledic Mgt. Comments at 2; Live Oak Properties Comments at 1; Lockwood Group Comments at 2; Mgt. Services Comments at 2; MarRay-Ash Plaza Comments at 3; Mendik Realty Comments at 2; MetLife Comments at 4-5; Nat'l Assn. of Real Estate Investment Trusts Comments at 2; NP Dodge Mgt. Comments at 2; Patriot American Comments at 2; Southridge Manor Apts. Comments at 2; Spokane BOMA Comments at 2; Terry Johnson & Assoc. Comments at 2; West World Mgt. Comments at 2; Zehman-Wolf Mgt. Comments at 1.

unwarranted. Other commenters argue that Commission action is unnecessary because an industry standard-setting body is more likely to be responsive to new and evolving technology.⁷⁰⁵ These commenters maintain that, given the rapid pace of technological innovation, government regulations established today may be irrelevant tomorrow.⁷⁰⁶ A few commenting parties urge the Commission to adopt technical standards, to be developed by the industry, for broadband connections.⁷⁰⁷ CEMA and MCI claim that without the adoption of uniform standards for jacks and other connectors, service providers would be free to use proprietary interfaces with which only their wiring and equipment can properly connect.⁷⁰⁸ CEMA argues that use of such proprietary interfaces would permit dominant service providers to maximize the sale of their own CPE and thwart competition among equipment manufacturers and service providers.⁷⁰⁹

2. Discussion

248. Based on the record, we will not adopt uniform technical standards for jacks and connectors for broadband service. As several commenters in this proceeding have noted, the F-type connector has emerged as the de facto broadband connection standard within the cable industry. We believe that, properly used, the F-type connector is an effective means of connecting coaxial cable to CPE while minimizing the potential for signal leakage. The comments additionally indicate that non-cable video service providers use the F-type connector to connect their services via coaxial cable to CPE. Further government action in this area is therefore unwarranted at this time. In addition, in light of the fact that we are extending our cable signal leakage rules to all broadband service providers, we believe that such providers will have the incentive and obligation to ensure that connections are properly made with high quality materials, without the Commission mandating a connection standard.

K. Dual Regulation

1. Background

249. In the *Inside Wiring Notice*, we recognized that cable companies and telephone companies operate under different regulatory frameworks.⁷¹⁰ We indicated that as technology advances to permit the delivery of cable and telephone services over the same wire, and as single companies develop the capacity

⁷⁰⁵See, e.g., PacTel Reply Comments at 4; DIRECTV Comments at 11.

⁷⁰⁶See, e.g., PacTel Reply Comments at 4; Charter/Comcast Comments at 19.

⁷⁰⁷CEMA Comments at 7-8; CEMA Reply Comments at 5; MCI Reply Comments at 2; U S West Comments at 10-11 (urging Commission adoption of similar rules for both telephone and cable connectors); see also NYNEX Comments at 18 (recommending that the Commission utilize industry forums and standards bodies to develop minimum technical standards and guidelines for cable CPE, such as jacks, plugs, and set top boxes).

⁷⁰⁸CEMA Comments at 8; CEMA Reply Comments at 5; MCI Reply Comments at 2.

⁷⁰⁹CEMA Reply Comments at 5; CEMA Comments at 8.

⁷¹⁰*Inside Wiring Notice*, 11 FCC Rcd at 2771-73.

to deliver both of these services, confusion might arise as to which regulatory scheme would be applicable.⁷¹¹ We sought comment on whether and how to harmonize the dual systems of regulation governing cable and telephone companies where broadband or multiple services are provided over a single wire or multiple wires.⁷¹²

250. State authorities generally contend that, for now, the existing systems of regulation for cable and telephony should remain intact.⁷¹³ They argue for the preservation of state regulatory responsibility with respect to simple telephone inside wiring and are concerned about federal preemption of state regulations.⁷¹⁴ In contrast, a number of commenters addressing the issue of dual regulation urge the Commission to preempt state and local regulation of telephony and cable inside wire.⁷¹⁵ GTE argues for complete deregulation of cable inside wire.⁷¹⁶ Several commenters recommend that the Commission take other steps to provide guidance on dual regulation. Charter/Comcast suggest the establishment of a joint state/federal board to resolve issues related to dual regulation of wireline service providers.⁷¹⁷ RTE Group urges the Commission to develop guidelines to define the regulatory roles of both state public utility commissions and local franchising authorities.⁷¹⁸

2. Discussion

251. We do not believe that the record before us provides sufficient information to address the issues raised in the *Inside Wiring Notice*. Based on the current record, it appears that service providers will continue to use separate inside wiring to provide cable and telephone service for at least the near future. If and when circumstances change, we will revisit this issue with the goal of creating a single set of inside wiring rules.

⁷¹¹*Id.* at 2772-73.

⁷¹²*Id.*

⁷¹³California PUC Comments at 4-8; New York DPS Reply Comments at 4-7.

⁷¹⁴California PUC Comments at 4-9 (also suggesting that states be given the authority to regulate the maintenance of cable inside wire); New York DPS Reply Comments at 4-7.

⁷¹⁵PacTel Comments at 14-15 (additionally advocating less Commission oversight of telephony and cable inside wire); PacTel Reply Comments at 6-7; AT&T Comments at 19-20; DIRECTV Comments at 13; DIRECTV Reply Comments at 11; *see also* Building Industry Consulting Comments at 6-7; TIA Comments at 6-7.

⁷¹⁶GTE Comments at 20 (stating that neither the Commission nor local franchising authorities should continue to regulate rates for such wiring or, in the alternative, the Commission should discontinue cable inside wire rate regulation once a cable system faces effective competition).

⁷¹⁷Charter/Comcast Comments at 20-21.

⁷¹⁸RTE Group Comments at 4; RTE Group Reply Comments at 3.

L. Regulation of Simple and Complex and of Residential and Non-Residential Wiring

1. Background

252. In the *Inside Wiring Notice*, we described how Commission regulation of telephone inside wiring varies depending on whether simple or complex wiring is used to receive service.⁷¹⁹ Simple wiring includes wiring installations of up to four access lines. Section 68.213 governs the connection of simple wiring to the network.⁷²⁰ Complex wiring refers to all wiring other than simple wiring. Section 68.215 of our rules governs the connection of complex wiring to the network.⁷²¹ Most single dwelling units require only simple wiring, while MDUs and commercial settings require complex wiring. Installation and maintenance of complex inside wiring is largely unregulated. We note that, with respect to intrastate telephone service, the states regulate the prices, terms, and conditions of simple inside wire service.

253. By contrast, while our cable inside wiring rules do not differentiate between simple and complex wiring, they often make other distinctions. For example, the rules governing the disposition of wiring upon termination of service apply only to cable wiring installed by cable operators in residential dwelling units.⁷²² In the *Inside Wiring Notice*, we sought comment on whether, in light of the convergence of cable and telephone technologies, we should harmonize our rules with respect to simple versus complex wiring and residential versus non-residential wiring.⁷²³

254. A number of commenters addressing this issue contend that there is no need to revisit the rules that have deregulated the installation and maintenance of simple and complex telephone inside wire.⁷²⁴ NYNEX maintains that, as long as telephone and video services are provided over separate facilities, there is no need to change existing rules.⁷²⁵ Building Owners, et al., contend that, while it may make sense to account for the convergence in telephone and cable technologies, it does not make sense to adopt uniform rules for all kinds of property.⁷²⁶ GTE believes that it would be beneficial to establish standards governing the type and installation of both cable and telephone inside wire installed by carriers and independent contractors.⁷²⁷ New Jersey Ratepayer Advocate argues that the Commission should

⁷¹⁹*Inside Wiring Notice*, 11 FCC Rcd at 2762-63.

⁷²⁰Section 68.213 allows customers to connect wiring installations involving up to four access lines. 47 C.F.R. § 68.213; see also *Common Carrier Wiring Reconsideration Order*, *supra*.

⁷²¹47 C.F.R. § 68.215.

⁷²²See *Cable Wiring Order*, 8 FCC Rcd at 1436.

⁷²³*Inside Wiring Notice*, 11 FCC Rcd at 2764-65.

⁷²⁴See USTA Comments at 5; NTCA Reply Comments at 3-4; GTE Comments at 15.

⁷²⁵NYNEX Comments at 3.

⁷²⁶Building Owners, et al., Comments at 43.

⁷²⁷GTE Comments at 15.

harmonize the definitions within the common carrier and cable rules with regard to simple versus complex wiring and residential versus non-residential wiring.⁷²⁸ U S West maintains that the treatment for simple inside wiring for single-line applications should be consistent for cable and telephony.⁷²⁹ Building Industry Consulting recommends that the complex versus simple classifications be removed from Part 68 of our rules rather than extended to cable wiring and that a single set of regulations be applied to all telecommunications wiring.⁷³⁰

2. Discussion

255. We will not, at this time, establish common definitions in the common carrier and cable rules with regard to simple versus complex wiring and residential versus non-residential wiring. Relatively few parties commented on this specific issue, and even fewer parties proposed a change in our existing rules. In the telephone context, we believe that our distinction between simple and complex wiring has proven to be a workable and effective way to promote competition while ensuring network protection. Similarly, in the cable context, we agree with Building Owners, et al., that there may be substantial differences between residential and commercial buildings which would make it difficult to adopt uniform rules for all kinds of property.⁷³¹ We do not believe that the current record provides sufficient evidence to support the need for a modification of our rules, nor does it provide adequate guidance on the direction any such modification should take. We therefore will not modify our rules at this time.

M. Customer Premises Equipment

256. In the *Inside Wiring Notice*, we sought comment generally on the costs and benefits of harmonizing or revising our rules regarding customer premises equipment ("CPE") to accommodate the possible convergence of technologies used to receive and to interact with network-delivered video programming and telephony. We asked for comment on whether to establish rights of customers to provide and connect unregulated CPE to cable operators' networks.⁷³²

257. We believe that the issues raised in the *Inside Wiring Notice* have been superseded by the 1996 Act. The issues will be addressed in a separate ongoing Commission rulemaking proceeding arising under new Section 629 of the Communications Act.⁷³³

⁷²⁸New Jersey Ratepayer Advocate Comments at 4.

⁷²⁹U S West Comments at 12.

⁷³⁰Building Industry Consulting Comments at 4-5.

⁷³¹See Building Owners, et al., Comments at 43.

⁷³²*Inside Wiring Notice*, 11 FCC Rcd at 2779.

⁷³³See *Notice of Proposed Rulemaking*, CS Docket No. 97-80 (Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices), FCC 97-53 (released February 20, 1997).

IV. SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

A. Exclusive Service Contracts

258. We believe that exclusive service contracts between MDU owners and MVPDs can be pro-competitive or anti-competitive, depending upon the circumstances involved. Some alternative providers have commented that in order to initiate service in an MDU, they must be able to use exclusive contracts to ensure their ability to recover investment costs.⁷³⁴ Other alternative providers have argued that the Commission should limit the ability of incumbent cable operators to enter into exclusive contracts with MDU owners.⁷³⁵

259. We seek comment on whether the Commission should adopt a "cap" on the length of exclusive contracts for all MVPDs that would limit the enforceability of exclusive contracts to the amount of time reasonably necessary for an MVPD to recover its specific capital costs of providing service to that MDU, including, but not limited to, the installation of inside wiring, headend equipment and other start-up costs.⁷³⁶ Commenters have suggested exclusivity periods such as five to six years,⁷³⁷ seven years⁷³⁸ and seven to ten years⁷³⁹ as reasonable. We seek comment on what would be a reasonable period of time for a provider to recoup its specific investment costs in an MDU. We seek comment on an approach under which a presumption that all existing and future exclusivity provisions would be enforceable for a maximum term of seven years, except for exceptional cases in which the MVPD could demonstrate that

⁷³⁴ICTA comments at 45; OpTel Comments at 7-8; OpTel Reply Comments at 2; OpTel Further Reply at 9; OpTel/MTS *ex parte* submission, dated July 23, 1996, at 2; Wireless Holdings Reply Comments at 2; GTE *ex parte* submission, dated May 15, 1997, at 1-2; ICTA *ex parte* submission, dated February 24, 1997, at 3-4; ICTA *ex parte* submission, dated February 27, 1997.

⁷³⁵*See, e.g.*, Bell Atlantic Comments at 5; MCI Reply Comments at 3; NYNEX Comments at 17; Ameritech *ex parte* submission, dated May 15, 1997; GTE Comments at 22 (existing cable operators should be barred from entering into or enforcing any exclusive arrangements in excess of 12 months in markets where alternative providers have announced an intention to enter).

⁷³⁶*See* GTE *ex parte* submission, dated May 15, 1997, at 2 (arguing that any rule limiting exclusive contracts to new installations must consider the service providers' total investment and not just inside wiring). By "specific investment costs" we mean those costs that are specific to a particular MDU and cannot be recovered elsewhere. For example, if a rooftop antenna can be removed and re-used on another building, it would not be a specific investment cost; the costs of installing and removing the antenna, however, would be a specific investment cost. *See also* OpTel *ex parte* submission, dated July 22, 1996 (advocating the difficulty of establishing any precise limit because of varying circumstances).

⁷³⁷*See* ICTA *ex parte* submission, dated February 27, 1997, at 3 (stating that it takes approximately 5-6 years for a service provider to recover its installment costs under an exclusive contract, disregarding the time value of money).

⁷³⁸*See* SBC/PacTel/PacBell *ex parte* submission, dated April 28, 1997, at 1 (proposing a rule that exclusive contracts be allowed only where a service provider has newly installed at least 75% of the inside wiring in an MDU and that the contract term be limited to 7 years from the time of new installation).

⁷³⁹*See* Further Reply of OpTel at 9 (stating that an exclusive period of seven to ten years is the minimum required in most cases to recover the investment required to serve an MDU).

it has not had a reasonable opportunity to recover its specific investment costs.⁷⁴⁰ We inquire whether there should be different treatment accorded existing contracts and future contracts. We also seek comment on the appropriate forum for such a showing and whether the enforceability of an exclusivity provision should be extended only for the time period reasonably necessary for the provider to recover its costs.

260. If a "cap" is adopted, we seek comment on whether service providers would generally be able to structure their business arrangements so as to recover their capital costs within that time limit.⁷⁴¹ After a video service provider has had an opportunity to recover its costs under an exclusive contract on a particular property, we seek comment on whether we should prohibit future exclusive contracts between the video service provider and the property owner, unless the service provider can demonstrate that the exclusive contract is necessary to recoup a substantial new investment in the property. We also inquire whether MDU owners should be afforded an opportunity to terminate the exclusive contract and retain the inside wiring, in exchange for a payment to the provider compensating it for unrecovered investment costs. We seek to determine what circumstances allow MDU owners and tenants to receive the benefits of technological improvements most expeditiously, while at the same time enhancing competition among MPVDs.

261. In the alternative, we seek comment on whether the Commission should only limit exclusive contracts where the MVPD involved possesses market power. The Supreme Court has noted: "Exclusive dealing is an unreasonable restraint on trade only when a significant fraction of buyers or sellers are frozen out of a market by the exclusive deal."⁷⁴² We seek comment on circumstances encompassing the video distribution market and whether the Commission can and should restrict or prohibit MVPDs with market power from entering into or enforcing exclusive service contracts. In particular, we seek comment on how to define "market power" for these purposes, as well as how to define the relevant geographic market.

262. We are concerned about the administrative practicability of making market power determinations on a widespread, case-by-case basis and seek comment on whether we should establish any

⁷⁴⁰For instance, the exclusivity of a "perpetual" exclusive contract entered into in 1983 would no longer be enforceable; however, if the service provider completed a substantial rebuild of its plant in 1996, the provider may be able to show that it has not had a reasonable opportunity to recover its investment costs notwithstanding the fact that the exclusive contract was entered into more than seven years ago. Similarly, a provider may be able to show that it has not had an opportunity to recover its costs where it provided discounted service in the early years of an exclusive contract with the expectation of making its returns in later years. See Jones *ex parte* submission, dated January 8, 1997, at 1, 4; see also NCTA Reply Comments at 20-21 (any policy adopted by the Commission must protect the "legitimate business expectations" of the incumbent operator).

⁷⁴¹See ICTA *ex parte* submission, dated February 24, 1997, at 4 (broad provisos for the term of exclusive contracts to be extended to protect the service providers' business expectations and investments would spawn never-ending litigation and deprive the market of any certainty regarding the termination of these contracts, thus further hobbling competition). But see GTE *ex parte* submission, dated May 15, 1997, at 2 (arguing that too stringent a limit on the period in which a new entrant may recover its investment through an exclusive contract will force the new entrant to increase its price to subscribers, making it less able to compete with the entrenched cable operator).

⁷⁴²*Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 45 (1984), citing *Standard Oil v. United States*, 337 U.S. 293 (1949).

presumptions in this regard. We seek comment on whether our decision not to preempt state mandatory access statutes effectively means that non-cable MVPDs cannot enforce exclusive agreements in those states, even where such agreements may be pro-competitive. We also seek comment on any other issues relevant to the analysis of market power and exclusive contracts in the context of this proceeding.

263. In addition, we seek comment on whether the Commission can and should take any specific actions regarding so-called "perpetual" exclusive contracts (i.e., those running for the term of a cable franchise and any extensions thereof). For instance, under the market power approach, we seek comment on whether the Commission should adopt a presumption that the MVPDs involved possessed market power when such contracts were executed. Under the seven-year "cap" approach, we seek comment on whether "perpetual" exclusive contracts would simply fall within the general rule limiting the enforceability of exclusive contracts to seven years from execution unless the MVPD can demonstrate that it has not had a reasonable opportunity to recover its specific capital costs.

264. We also seek comment on whether we can and should adopt a "fresh look" for "perpetual" exclusive contracts. In addition, we seek comment on several implementation issues: (1) whether the "fresh look" would apply only to "perpetual" exclusive contracts and, if so, how such contracts reasonably can be distinguished from other long-term exclusive contracts; (2) the scope of the "fresh look" and how the "fresh look" period would be triggered to ensure a viable choice exists (e.g., whether the "fresh look" be applied on an MDU-by-MDU basis upon the request of a private cable operator able to serve the MDU, or more generally on a franchise-by-franchise basis where competitive choices exist in the franchise area); and (3) whether the "fresh look" would be a one-time opportunity or whether there could be additional "fresh look" windows in light of the development of new technology and the entry of new video service providers.

265. If we were to adopt a "fresh look" for "perpetual" exclusive contracts, we seek comment on whether we should open a 180-day "fresh look" window for MDU owners upon the effective date of our rules, unless the "perpetual" exclusive contract was entered into less than seven years earlier, in which case the "fresh look" window would open for that MDU at the end of the seven-year period. We also seek comment on whether the MVPD should be able to apply to the Commission for an extension if the MVPD can demonstrate that it has not had a reasonable opportunity to recover its specific capital costs by the end of this seven-year period. Further, we seek comment on whether, if an MDU owner does not enter into a new contract during its initial "fresh look" period, a new 180-day "fresh look" window should open at the expiration of each subsequent franchise period until the MDU owner opts out of its "perpetual" exclusive contract. We seek comment on whether this framework would protect MDU owners who do not have a competitive alternative and therefore would be prejudiced by a one-time "fresh look" window, while ensuring that the MVPDs involved have a reasonable opportunity to recover their costs.

266. We also seek comment on our statutory authority to adopt the exclusive contracts proposals discussed above. We also seek comment on any other constitutional, statutory or common law implications that these proposals raise.

B. Application of Cable Inside Wiring Rules to All MVPDs

267. We propose to apply our cable home wiring rules for single-unit installations to all MVPDs in the same manner that they apply to cable operators. We believe that applying those rules to all MVPDs would promote competitive parity and facilitate the ability of a subscriber whose premises was

initially wired by a non-cable MVPD to change providers. We seek comment on this proposal and on our authority to adopt it.

268. We also propose to expand to all MVPDs the rule we are adopting herein regarding cable subscribers' rights, prior to termination of service, to provide and install their own cable home wiring and to connect additional home wiring to the wiring installed and owned by the cable operator. We believe that applying this rule to all MVPDs will promote the same consumer benefits as in the cable context: increased competition and consumer choice, lower prices and greater technical innovation.⁷⁴³ We seek comment on this proposal, and in particular on the Commission's authority for expanding this rule to all MVPDs.

C. Signal Leakage Reporting Requirements

269. Section 76.615 of the Commission's signal leakage rules requires cable operators to file certain information with the Commission when operating in the aeronautical radio frequency bands.⁷⁴⁴ In particular, Section 76.615(b)(7) requires cable operators to file annually with the Commission the results of their signal leakage tests conducted pursuant to Section 76.611.⁷⁴⁵ We are concerned that the reporting requirements of Section 76.615(b)(7) may impose undue burdens on small broadband service providers, including small cable operators. We seek comment on whether certain categories of broadband service providers should be exempt from the filing requirements of Section 76.615(b)(7) and, if so, what criteria the Commission should use in defining those providers. We would not propose to exempt any broadband service providers from the testing requirements of Section 76.615(b)(7), but simply the requirement to report the results of such tests to the Commission. For instance, we seek comment on whether we should exempt small broadband service providers from the filing requirements of Section 76.615(b)(7) based on an existing definition in the Commission's rules,⁷⁴⁶ a particular number of subscribers served, the length of the cable plant or some other criteria. We seek comment on the risks to safety of life communications posed by such an exemption. We also seek comment on any other changes in this area that would reduce burdens, yet meet the goals of protecting against signal leakage.

D. Simultaneous Use of Home Run Wiring

270. As stated above, DIRECTV suggests that the Commission should establish a "virtual" demarcation point from which an alternative provider could share the wiring simultaneously with the cable operator.⁷⁴⁷ Other alternative providers endorse this view, if it is technically possible,⁷⁴⁸ and CEMA states

⁷⁴³See Section III.G. above.

⁷⁴⁴47 C.F.R. § 76.615.

⁷⁴⁵47 C.F.R. §§ 76.611 and 76.615(b)(7).

⁷⁴⁶For example, we have defined a small cable system as any system that serves 15,000 or fewer subscribers and a small cable company as one serving a total of 400,000 or fewer subscribers over all of its systems. *Sixth Report and Order and Eleventh Order on Reconsideration*, MM Docket Nos. 92-266 and 93-215 (Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation), 10 FCC Rcd at 7406.

⁷⁴⁷DIRECTV Comments at 8-10.

that some of its members are currently developing equipment that will allow multiple uses of a single broadband wire.⁷⁴⁹ Cable operators generally oppose DIRECTV's suggestion that two video service providers may share a single wire, stating that the alternative provider would have to use different frequency bands to avoid interference, and, while theoretically possible, most systems do not have sufficient bandwidth capacity to carry multiple MVPDs.⁷⁵⁰ DIRECTV acknowledges that only service providers that use different parts of the spectrum technically may be able to share a single wire.⁷⁵¹

271. We believe that the sharing of a single wire by multiple service providers deserves further exploration. We seek comment on DIRECTV's proposal that we require competing broadband service providers to share a single home run wire in MDUs. In particular, we seek comment on the current technical, practical and economic feasibility and limitations of sharing of home run wiring. We also seek comment on our legal authority to impose such a requirement and whether such a requirement would constitute an impermissible taking of private property under the Fifth Amendment.

V. REGULATORY FLEXIBILITY ACT ANALYSIS

A. Final Regulatory Flexibility Act Analysis

272. As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603 ("RFA"), Initial Regulatory Flexibility Analyses ("IRFAs") were incorporated in the *Inside Wiring Notice*, the *Cable Home Wiring Further Notice*, and the *Inside Wiring Further Notice*. The Commission sought written public comments on the proposals in these notices, including comments on the IRFAs. This Final Regulatory Flexibility Analysis ("FRFA") conforms to the RFA, as amended by the Contract with America Advancement Act of 1996 ("CWAAA"), Pub. L. No. 104-121, 110 Stat. 847 (1996).⁷⁵²

Need for Action and Objectives of the Rule

273. This *Order* adopts new procedural mechanisms to provide order and certainty regarding the disposition of MDU home run wiring upon termination of existing service. In addition, this *Order* promotes competition and consumer choice by establishing rules for the disposition of cable "loop through" wiring upon termination of service. This *Order* also permits consumers to provide or install their own cable home wiring, or redirect, reroute or connect additional wiring to the cable operator's home wiring. These rules will promote competition among MVPDs as well as cable wiring services, which will result in lower prices, greater technological innovation, and additional consumer choice. Finally, to protect

⁷⁴⁸See NYNEX Comments at 8-9; Batholdi Reply Comments at 16.

⁷⁴⁹CEMA Reply Comments at 13.

⁷⁵⁰Cox Comments at 19; Marcus Cable, et al., Comments at 6; Adelphia Comments at 5; CATA Comments at 4; TKR Comments at 5.

⁷⁵¹See Further Comments of DIRECTV at 5.

⁷⁵²Title II of the CWAAA is "The Small Business Regulatory Enforcement Fairness Act of 1996" (SBREFA), codified at 5 U.S.C. § 601 *et seq.*

public safety and navigation frequencies, this *Order* applies the cable signal leakage rules to all broadband service providers that pose a similar threat of interference with licensed over-the-air communications.

Summary of Issues Raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis

274. In response to the IRFAs contained in the *Inside Wiring Notice* and the *Cable Home Wiring Further Notice*, Building Owners, et al., filed comments arguing that the proposed rules would have a significant effect on small residential and commercial building operators and that the Commission should exempt these entities from any final rules.⁷⁵³ In response to the IRFA contained in the *Inside Wiring Notice*, CATA filed comments and an ex parte submission requesting that the Commission rescind the *Inside Wiring Notice* and reissue it as a notice of inquiry or reissue it with specific proposed rules. CATA argues that the *Inside Wiring Notice* failed to propose specific rules, thereby preventing both the Commission staff and small entities from analyzing and commenting on the effects of proposed rules on small entities.⁷⁵⁴ RTE Group filed its comments and reply comments as "a response by a small business pursuant to Section 603 of the Regulatory Flexibility Act."⁷⁵⁵ The issues raised by RTE Group are addressed above. No comments were filed in response to the IRFA contained in the *Inside Wiring Further Notice*.

Description and Estimate of the Number of Small Entities Impacted

275. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules.⁷⁵⁶ The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction," and the same meaning as the term "small business concern" under Section 3 of the Small Business Act.⁷⁵⁷ Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").⁷⁵⁸ The rules we adopt in this *Order* will affect video service providers and MDU owners.

276. *Small MVPDs*: SBA has developed a definition of a small entity for cable and other pay television services, which includes all such companies generating \$11 million or less in annual receipts.⁷⁵⁹

⁷⁵³Building Owners, et al., IRFA Comments at 2-5.

⁷⁵⁴CATA IRFA Comments at 4; Ex Parte Letter from Barry Pineles, Bienstock & Clark, on behalf of CATA, to William Kennard, General Counsel, Federal Communications Commission (April 22, 1996) at 2.

⁷⁵⁵RTE Group Comments at 1; RTE Group Reply Comments at 1.

⁷⁵⁶5 U.S.C. § 604(a)(3).

⁷⁵⁷5 U.S.C. § 601(3).

⁷⁵⁸15 U.S.C. § 632.

⁷⁵⁹13 C.F.R. § 121.201 (SIC 4841).