demonstrated the viability of a 27-channel system. However, if either USSB or Directsat acquires an attributable interest in additional channels at 110° at the upcoming auction, it will be required to divest its channels at its other full-CONUS location.

64. We believe that the auction rule we adopt today, combined with the Commission's case-by-case authority to review subsequent transfers of DBS channels,[124] is more than sufficient to foster competitive rivalry between independent DBS operators, cable-affiliated DBS operators, cable systems, and other MVPDs. Contrary to the argument presented by Dr. Hausman and DIRECTV, we believe that this rule limiting for the moment the expansion of current DBS operators is not arbitrary or ill-advised, but instead serves the public interest. Our concern is not that a DBS firm might obtain market power; rather, our goal is to foster rivalry among MVPDs by promoting rivalry within the DBS service. The one-time auction rule is designed to ensure that there is an opportunity for the quickest possible entry by an additional full-CONUS DBS system in order to increase the possibility of vigorous rivalry among MVPDs. As a result, we reject the arguments against placing a restriction on DBS operators that are not affiliated with cable systems.

65. We share many commenters' reluctance for regulation of the DBS service, which is why we have sought to implement the least intrusive rule possible to further the goals articulated above of fostering competitive rivalry among MVPDs. The auction rule is, we believe, the least intrusive means of achieving these goals. It is sufficient to provide auction participants with the necessary certainty concerning outcomes, yet preserves the industry's ability to respond to change and our ability to review future transactions on a flexible case-by-case basis.

66. We do not believe that DIRECTV, EchoStar, or other DBS providers, limited to one full-CONUS location in the near term, will be faced with channel capacity problems that would cause them not to be able to compete effectively with cable. With digital compression, even a 21-channel system is able to provide over 120 video programming channels. As discussed in the 1995 Competition Report, the vast majority of cable systems have fewer than 54 channels.[125] Although we recognize that cable systems are likely to deploy digital technology, a substantial increase in the channel capacity of the average cable system is not imminent. In addition, as discussed below, it is not clear that it is currently feasible for DBS operators to increase capacity by combining channels at two or more orbital locations. In any case, we believe that the public interest benefits provided by ensuring at this point in time that there are separate DBS providers at each of the full-CONUS locations outweigh the temporary restriction on expansion of DIRECTV's operations.

67. It also appears that DBS systems may be currently unable as a technical matter to combine signals from more than one orbital location in a single service offering. The

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124/ 47 U.S.C. § 310(d).

125/ See 1995 Competition Report at App. B, Tbl. 3.

receiving equipment currently being used by DIRECTV/USSB, and the equipment to be used by EchoStar/Directsat when it initiates service, cannot be used to receive signals simultaneously from more than one orbital location. In its comments, DIRECTV suggested that this problem could be overcome, and cited the use of satellite dishes in Japan to simultaneously receive signals sent via BSS and FSS frequencies.[126] This example does not, however, address the more fundamental problem that the same frequencies are used to transmit DBS programming at each and every orbital location. Therefore, transmitting signals simultaneously from multiple orbital locations would likely require subscribers to use additional equipment to avoid interference problems. DIRECTV has not presented any evidence demonstrating that it would be feasible to deploy service in such a manner.

68. We also find unpersuasive DIRECTV's other arguments against intra-DBS spectrum caps. For example, DIRECTV states that a spectrum cap is not warranted given the other handicaps DBS faces, such as local zoning, terrestrial interference, restrictive covenants, and inability to offer local broadcast signals.[127] In the 1995 Competition Report, we recognized and discussed these limitations.[128] However, the existence of these limitations does not justify Commission action to ensure the success of any particular business venture. DIRECTV further argues that a structural rule is not necessary because the Commission may in the future be able to accommodate more DBS satellites and providers beyond the current eight locations allocated by international agreement.[129] It is likely that the international allocation of additional orbital locations capable of full-CONUS service would obviate the need for the one-location rule. Those locations are not now available, however; in the event they do become available, we will analyze transactions, including those involving the new locations, based on the state of competition at that time. In any event, DIRECTV's arguments are largely inapplicable to a rule of limited duration such as the one we have chosen to adopt.

69. A number of commenters support our suggestion in the NPRM for a rule that would limit concentration of DBS resources by preventing a person with a certain number of full-CONUS channels -- perhaps more than 16 -- from aggregating any additional channels at another full-CONUS location.[130] We choose not to implement this approach because, as EchoStar points out, the control of even a small number of channels at a full-CONUS location by a DBS operator that predominately offers service from another full-CONUS location can impact the development of a full-CONUS location by limiting channel capacity available to other providers operating there. While the proposal would to some degree limit channel holdings across a number of full-CONUS locations, it would not foster the development of

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126/ DIRECTV Comments at 1 n.21.

127/ DIRECTV Comments at 10.

128/ See 1995 Competition Report at ¶¶ 58, 66-67.

129/ DIRECTV Comments at 8 n.16. See also Time Warner Comments at 4-6.

130/ See, e.g., MCI Comments at 12-13; CTA Comments at 14-15; USSB Comments at 7-8.

another independent DBS provider as efficiently as does the rule we have adopted. Allowing a third entrant into the full-CONUS DBS market, it achieves what we believe to be a desirable pro-competitive result under current market conditions without dictating future DBS market structure.

b. MVPD/DBS Spectrum Limitations

70. The NPRM also proposed that the Commission implement a service rule that would limit non-DBS MVPDs from acquiring DBS channels at more than one full-CONUS location. To a certain extent, this proposal is mooted by our decision to limit *all* firms from acquiring channels at multiple full-CONUS locations through the auction process. However, since a number of parties raised particularized concerns about cable participation in the DBS industry, we feel it necessary to address those concerns.

71. *Comments*. While DIRECTV and others argue that independent DBS providers' lack of market power makes any intra-DBS spectrum limitations unnecessary, they also assert that the ability of other MVPDs *with* market power -- namely, large cable operators -- to use DBS resources for anticompetitive conduct justifies the imposition or spectrum limitations upon such MVPDs.[131] MCI believes that the Commission should limit DBS spectrum aggregation by large cable companies, defined as those with an aggregate national subscribership of 1,000,000 or more households or a market penetration of 50.1 percent or more of the television households in any area that it is licensed to serve, because of their power in the MVPD market.[132] EchoStar/Directsat asserts that since cable interests dominate the MVPD market, they should only be allowed to acquire the 16 full-CONUS channels necessary to provide sufficient capacity to allow Primestar to migrate to high-power DBS service.[133]

72. Cox argues that if a one-location cap is placed on all DBS providers, it is hard to see how limiting cable participation in DBS any further provides any additional pro-competitive benefits.[134] Tempo, Cox, Primestar and NCTA argue that as long as there is viable competition from non-affiliated DBS providers, a cable-affiliated DBS provider would have no incentive or ability to operate in a non-competitive manner.[135] Primestar also argues that an MVPD/DBS limitation would skew the marketplace with an artificial restraint that

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131/ See, e.g., DIRECTV Comments at 6-8; MCI Comments at 11-12; NRTC Comments at 5; NYNEX Comments at 2-6.

132/ See MCI Comments at 10- 2.

133/ See EchoStar/Directsat Comments at 41-44.

134/ Cox Comments at 5-6.

135/ Cox Comments at 6-7; Primestar Comments at 20-21; NCTA Comments at 8-9; Tempo Comments at 11-13 (citing Owen Declarations).

would decrease the value of DBS spectrum for non-DBS MVPDs and thereby decrease the value of spectrum to be auctioned.[136]

73. *Discussion.* We share the concern that cable-affiliated MVPDs with market power could use DBS resources, including those soon to be available at auction, for coordinated conduct that would not maximize competition in the MVPD market and would therefore fail to give the public the benefits that flow from vigorous competition. On balance, however, we believe that the rule we have decided to adopt obviates the need for a separate spectrum restriction on non-DBS MVPDs. Even if a cable-affiliated MVPD with market power were to acquire the permit for the full-CONUS channels available at 110°, two other full-CONUS locations -- largely occupied by independent DBS providers -- would remain.[137] The presence of these other providers severely constrains the strategic activities of an MVPD-DBS combination, since even if it chooses not to make full use of its DBS channels, consumers will have at least two other competitive sources for DBS service from which to choose. Moreover, we have recognized that cable-affiliated MVPDs bring certain positive attributes as DBS permittees.[138]

74. Allowing cable participation in DBS is consistent with the policy established in Tempo II. We also believe that it is not necessary to reverse Tempo II and exclude a cable-affiliated DBS operator from the opportunity to control or use DBS spectrum at one of the three full-CONUS orbital locations.[139] TCI and Tempo have already invested substantial resources in the creation of a DBS system, which is at least partially attributable to reliance on our decision in Tempo II not to prohibit cable/DBS cross ownership. Moreover, a cable/DBS limitation would be under-inclusive; it is necessary at this time to restrict channels available to *each* market participant and not just a cable-affiliated provider because the incentives discussed above are present without regard to the degree of affiliation with cable system operators. Therefore, a more restrictive limitation on cable participation does not appear likely to add significantly to the promotion of competition.

75. DOJ points out that, even under a permanent one-location rule, the three DBS locations capable of full-CONUS service could be controlled by three large cable-affiliated operators.[140] DOJ argues that even if a cable-affiliated DBS provider faced competition from two independent DBS providers, the incentives of the cable-affiliated DBS provider would be

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136/ See Primestar Reply at 16- 7.

137/ In addition, Tempo is nearing completion of satellites for its eleven-channel system at 119°.

138/ See Continental, 4 FCC Rcd at 6299 ("Tempo's participation could well accelerate the initiation of DBS service by bringing valuable marketplace experience and presence and possibly enhancing access to programming").

139/ See DIRECTV Comments at 13.

140/ See DOJ Comments at 7.

to restrain output and set higher prices, and that this could well reduce the incentives of the other two firms to compete vigorously: "[t]hose [independent DBS] firms would recognize that they can now set higher prices as well and not lose business to their cable/DBS competitor."[141] DOJ also argues that a cable/DBS firm would have an incentive to raise its *cable* prices because its DBS system would capture at least some of the cable customers who switched to DBS as a result of the price increase.[142] Tempo and its expert, Dr. Bruce Owen, dispute this scenario, arguing that the two independent DBS firms would be more likely to "free ride" by maintaining or lowering prices in order to gain market share.[143] DOJ further contends that a cable-affiliated DBS operator has an incentive to provide lower-quality programming, to raise the costs of independent DBS firms by negotiating less aggressively over price with programming suppliers and thereby creating an unduly high "floor" price, and in any event would be attempting to "meet, not beat" its competitors.[144]

76. At present, four firms unrelated to any cable system operators are either already in operation, or soon will be, at full-CONUS locations -- DIRECTV and USSB at 101° and EchoStar and Directsat at 119°. Thus, at present the only full-CONUS channels that appear to be available for acquisition by an entity that is related to a cable-affiliated MVPD are those to be auctioned at the 110° orbital location. We do recognize that, in the future, one or more of the current unaffiliated full-CONUS DBS operators may seek to assign or transfer control over its license to a cable-affiliated MVPD. The Commission has authority under Title III to approve, reject, or condition the assignment or transfer of DBS channels to other firms[145] and in the event a cable firm or consortium desires to acquire any additional channels, the competitive effect of that transfer in the MVPD market will be a significant issue in that transaction, as it was in approving Tempo's application. Because such a transaction would require Commission approval, we would be in a position to assess the competitive landscape if and when such a transaction was proposed, and to grant, deny, or condition authorization as appropriate under the circumstances at that time. Thus, as advocated by EchoStar/Directsat and DBSC among others, we will be able to monitor DBS channel aggregation on a case-by-case basis and retain the flexibility to take appropriate action under the circumstances.[146]

141/ DOJ Comments at 6-7.

142/ See DOJ Reply at 6-7.

143/ See Tempo Reply at 13; Owen Supp. Decl. at ¶ 10.

144/ See DOJ Reply at 7-10; see also DIRECTV Reply at 5 n.8; EchoStar/Directsat Reply at 17-19 (discussing Primestar's strategy).

145/ See 47 U.S.C. § 310(d).

146/ See, e.g., DBSC Comments at 15; EchoStar/Directsat Comments at 41-43.

c. Orbital Locations Covered by Spectrum Limitations.

77. For purposes of implementing the proposed spectrum aggregation limitations, the NPRM proposed to consider four orbital locations -- 61.5°, 101°, 110°, and 119° -- to be capable of full-CONUS service. The NPRM tentatively concluded that applying the spectrum cap to these four orbital locations will ensure that there is sufficient channel capacity for a minimum of four full-CONUS DBS providers. It also concluded that channels at the other four DBS orbital locations, which are not capable of full-CONUS service, probably cannot match the economies of scale in domestic service achieved by full-CONUS operators, and thus should be exempt from the proposed spectrum limitations.[147]

78. A clear majority of the parties that commented on this proposal agreed that the 61.5° location should not be considered to be a full-CONUS orbital location. Continental Satellite, whose submission on planned service from its channels at 61.5° was part of the basis for deeming that location to be full-CONUS,[148] states that its submission shows only that its satellite beam is *capable* of covering the entire United States, not that it expects to provide full-CONUS service from that location. In fact, Continental Satellite states that it will not be able to serve the West Coast from the 61.5° orbital location since the poor look angle from its satellite into that region allows buildings, trees, and other tall impediments to interfere with the DBS signal.[149] EchoStar/Directsat agrees that 61.5° is not suitable for full-CONUS service.[150] Primestar argues that the technical issues are at least unsettled, and that further study would be required before concluding that full-CONUS service is possible from that location.[151] Tempo proposes that the Commission reserve the channels currently available at 148° for paired use with channels at 61.5° to ensure full-CONUS capability for permittees at the latter location.[152] Only MCI contends that the 61.5° orbital location should be included in a spectrum limitation despite the limitations involved in providing service from that location.[153]

79. As mentioned above, we agree that the 61.5° orbital location should not be included with the other three full-CONUS locations. While it still appears that nationwide service from that location is a technical possibility, as a practical matter such service would

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147/ See NPRM at ¶¶ 44-45.

148/ Id. at footnote 78.

149/ See Continental Satellite Comments at 13-14.

150/ See EchoStar/Directsat Comments at 47.

151/ See Primestar Comments at 23 n.50.

152/ See Tempo Comments at 34-37.

153/ MCI Reply at 15 n.37.

not be comparable to service from 101°, 110°, or 119° for the reasons advanced by Continental Satellite. Accordingly, for purposes of implementing the spectrum aggregation limitations we have chosen to adopt, we will only consider three orbital locations -- 101°, 110°, and 119° -- to be capable of full-CONUS service. We have twice previously considered and rejected Tempo's proposal to reserve channels at the 148° orbital location for use in conjunction with channels at 61.5°.[154] Moreover, as discussed below, we have now decided to eliminate the east/west pairing scheme for DBS channels.[155] We see no reason to revisit the issue at this time.

d. Mechanism for Divestiture.

80. The NPRM proposed that any permittee or licensee that acquires an attributable interest in channels in excess of the proposed spectrum limitations be given ninety days from the date of Commission approval of such acquisition in which to either surrender to the Commission its excess channels, or file with the Commission a transfer or assignment application in order to divest sufficient channels to bring the applicant into compliance with all applicable spectrum limitations.[156]

81. Primestar and Tempo assert that ninety days is an unreasonable and inadequate period in which to require divestiture that will force permittees to sell DBS authorizations in a "fire sale" atmosphere. They instead propose that we allow 18 months as we have done in the broadcast context.[157] DOJ suggests a twelve month period in which to complete divestiture.[158] MCI, on the other hand, argues that ninety days is a reasonable divestiture period and that the apparent interest of prospective investors belies any fear that divestiture would require a "fire sale" by the permittee, who in any event did not pay for the spectrum it would be divesting.[159] EchoStar/Directsat also supports the spirit of the rule, but proposes that a dominant MVPD be required to return its excess channels to the public rather than assign or transfer them to another party, since such an MVPD would have an incentive to place those channels with anyone *other* than the party who could most efficiently use them to compete.[160]

154/ See Tempo Satellite, Inc., 7 FCC Rcd 6597, 6598 (1992); Advanced Communications Corp., 6 FCC Rcd 6977, 6978 (1991).

155/ See ¶ 124, *infra.*

156/ See NPRM at ¶ 43.

157/ See Primestar Comments at 23-24; Tempo Comments at 16-18.

158/ DOJ Comments at 10.

159/ See MCI Comments at 14- 5.

160/ See EchoStar/Directsat Comments at 45.

82. We agree with MCI that the number of parties interested in entering the DBS service or expanding their existing capacity should make for a competitive sales environment,[161] especially since the only channels subject to divestiture are those capable of full-CONUS service. Even those advocating a longer divestiture period recognize that the DBS service is in a stage of rapid development and evolution.[162] At this point, the proposed 18 month divestiture period is longer than any DBS licensee has been in operation. The divestiture rule must result in timely movement of channels to those who can use them from those who no longer can. Allowing more than a year for such a transition would be inconsistent with the rapid development of the DBS service.

83. On the other hand, we recognize that building and operating a competitive, national DBS system requires the commitment of hundreds of millions of dollars. A transaction that implicates funding of that magnitude may reasonably be expected to take several months to negotiate. Accordingly, we believe it appropriate to allow twelve months for divestiture of DBS channels if necessary as a result of the auction rule we have adopted. That period should be sufficient to allow an orderly divestiture, and strikes a proper balance between the time necessary for negotiation and the desire to ensure that spectrum not remain idle in this vibrant industry. We do not believe that 18 months are necessary for this purpose.[163] Accordingly, we will require any party who acquires full-CONUS channels at a second location in the upcoming auction to come into compliance within twelve months by filing applications necessary to divest excess channels at one location.

84. Although a party may surrender channels to the Commission in order to comply with the one-location rule, we will not *require* it do so. Such an approach would deny permittees and licensees the opportunity to recoup the investment of time and money that was necessary to remain in due diligence under our rules. When we receive an application from the successful auction bidders, any party will have the opportunity to argue that the proposed transaction should not be authorized due to its anticompetitive effect, and we will be in a position to assess the issue and take appropriate action at that time. We do not believe that a blanket rule would serve the public interest.

161/ See MCI Comments at 14-15.

162/ See, e.g., Primestar Comments at 16; Tempo Comments at 17.

163/ Compare Stockholders of CBS, Inc., FCC 95-469 at ¶ 46 (released Nov. 22, 1995)(granting temporary waiver of ownership rules for 12 months rather than 18 months, since that will still provide "ample time to locate potential purchasers and to negotiate purchase agreements for the stations to be divested" as a result of merger of CBS and Westinghouse).

e. Attribution Rules

85. For purposes of implementing the spectrum aggregation limitations, the NPRM proposed to attribute both controlling interests and any interest of five percent or more in a DBS permittee, licensee, or operator. The NPRM proposed to define a DBS operator as any person or group of persons who provides services using DBS channels and directly or through one or more affiliates owns an attributable interest in such satellite system; or who otherwise controls or is responsible for, through any arrangement, the management and operation of such satellite system.[164] The NPRM proposed to rely on existing case law for making control determinations where such issues arise. Specifically, the NPRM proposed to adopt rules that attribute to the holder any interest of five percent or more, whether voting or nonvoting, and all partnership interests, whether general or limited. In addition, the NPRM proposed to adopt attribution rules that: (1) attribute any interest of ten percent or more held by an institutional investor or investment company, rather than a five percent interest; (2) employ a multiplier for determining attribution of interests held through intervening entities; (3) provide for attribution of interests held in trust; (4) attribute the positional interests of officers and directors; (5) attribute limited partner interests based not only upon equity but also upon percentages of distributions of profits and losses; and (6) provide for attribution based upon certain management agreements, joint marketing agreements, and status as a DBS "operator."[165]

86. The NPRM also proposed to identify any individual or entity as an affiliate of a licensee, permittee, or operator, or of a person holding an attributable interest in a licensee, permittee, or operator, if such individual or entity: (1) directly or indirectly controls or has the power to control the licensee, permittee, or operator; (2) is directly or indirectly controlled by the licensee, permittee, or operator; or (3) is directly or indirectly controlled by a third party or parties that also has the power to control the licensee, permittee, or operator.[166] The NPRM also sought comment on whether the definition of an affiliate should include individuals or entities that have an identity of interest with the licensee, permittee, or operator.

87. The comments we received generally criticize the proposed rules as unduly restrictive. At least one comment urged us to postpone adoption of attribution rules until a fuller record can be developed.[167] GE Americom argues that overbroad rules will deprive the DBS market of capital and satellite operating experience, and as a result will slow the

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164/ See NPRM at ¶ 47.

165/ Id. at ¶¶ 47-48.

166/ Id. at ¶ 49.

167/ See GE Americom Comments at 10-11.

initiation of service while raising its cost.[168] Primestar and Tempo argue that the proposed rules are unreasonably harsh and that the Commission has failed to offer a sufficient justification for their imposition.[169] Tempo also expresses a preference for a narrow control test for determining attributable interests, rather than establishing the threshold at a five percent interest.[170] Time Warner questions why the rules for DBS should be more restrictive than those for any other video delivery media, including broadcast and cable.[171] Even MCI, which generally supports the attribution rules, cautions against rules that would unduly restrict joint ventures that might have beneficial competitive effects.[172] DIRECTV and Tempo express concern about the impact of the attribution rules in the context of the proposed cross-ownership limitation.[173]

88. We note initially that these comments were submitted in the context of proposed spectrum aggregation limitations that would have restricted ownership of DBS resources by non-DBS MVPDs, and would have erected a 32-channel cap on intra-DBS ownership applicable to all future transactions. In view of our decision not to adopt such rules, our attribution rules will not restrict the ability of a non-DBS MVPD to invest in a system operating at any one of the full-CONUS locations, and will not rule out investments by existing full-CONUS operators in the future. Therefore, concerns raised over the impact of attribution criteria are largely moot. However, attribution rules are necessary at this juncture to implement the auction spectrum rule and ensure that any person that acquires an interest in the full-CONUS channels now available for auction will be truly independent of all other licensees and permittees holding full-CONUS channel assignments, and therefore in a position to provide vigorous competition to them.

89. The attribution rules proposed in the NPRM were formulated to implement ongoing service rules, rather than a one-time auction rule. The proposed rules were designed to attribute both ownership interests and non-ownership interests that would nonetheless give one entity significant influence over the operation of another entity's DBS system. Thus, we included within the ambit of those rules certain management and joint marketing agreements that confer operational control, as well as DBS "operators" whose use of or control over DBS channels warranted attribution

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168/ See GE Americom Comments at 6-11; see also Tempo Comments at 18.

169/ See Primestar Comments at 24; Tempo Comments at 18-19, Reply at 22. See also Time Warner Comments at 19-20.

170/ See Tempo DBS Comments at 18-19, Reply Comments at 22-23.

171/ See Time Warner Comments at 19-21.

172/ See MCI Comments at 14-15.

173/ See Tempo Comments at 13; Direct TV Reply at 8; but see EchoStar/DirectSat Reply at 21-23.

90. The auction rule we adopt is much more limited in scope, and accordingly, we adopt more limited attribution rules that are better suited to a one-time auction rule. In adopting attribution rules to accomplish the goal of facilitating the entry of another full-CONUS DBS operator, we have drawn almost exclusively from similar rules applicable in the broadcast service.[174] We believe these rules will implement the one-time spectrum limitation in the least intrusive fashion consistent with our underlying concerns, while not unnecessarily disrupting existing arrangements within the industry.

91. Our two primary areas of concern are control and influence. These two concerns have long driven attribution policies with regard to ownership restrictions in the mass media context,[175] and we believe that these concerns are also appropriate in the context of DBS. Experience has shown that control can be conferred or exercised over management, operation, decision making and market conduct in the absence of ownership interests that confer *de jure* control. Accordingly, as with virtually all of the attribution rules in existence throughout our various telecommunications regulations, and as proposed in the NPRM, "control" will be defined to include not only majority equity ownership, but also any general partnership interest, or any means of actual working control over the operation of the licensee or permittee in whatever manner exercised. Existing Commission precedent will govern case-by-case "control" determinations when such issues arise.[176]

92. As with other Commission attribution rules, concerns rest not solely with control but also with an ability to influence. An entity with a significant interest in two full-CONUS DBS licensees or permittees operating from different orbital locations could be able to influence the behavior of one or both of them, and would have an incentive to modify conduct to maximize joint profits or returns. We seek in our attribution rules to ensure that no party can hold interests at more than one full-CONUS location that might provide it the incentive and ability to exercise such influence.

93. Accordingly, we conclude that in applying the auction spectrum rule adopted herein, interests will be attributed to their holders and deemed cognizable under criteria similar to those used in the context of the broadcast, newspaper and cable television ownership rules.[177] Thus, we will attribute the following interests: (1) any voting interest of five percent or more; (2) any general partnership interest and direct ownership interest; (3) any limited partnership interest, unless the limited partnership agreement provides for insulation of the limited partner's interest and the limited partner in fact is insulated from and

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174/ See 47 C.F.R. § 73.3555 Note 1.

175/ See Review of the Commission's Regulations Governing Attribution of Broadcast Interests, 10 FCC Rcd 3606 (1995).

176/ See e.g., WWIZ, Inc., 36 FCC 561 (1964), aff'd sub nom. Lorain Journal Co. v. FCC, 351 F. 2d 824 (D.C. Cir., 1965), cert. denied, 383 U.S. 967 (1966).

177/ See 47 C.F.R. § 73.3555, Note 1.

has no material involvement, either directly or indirectly, in the management or operation of the DBS activities of the partnership; and (4) officers and directors. The legal and policy justifications for those rules have been thoroughly discussed in prior Commission orders, and need not be reiterated here.[178] As with the broadcast attribution rules, the attribution threshold for institutional investors is ten percent, and a multiplier will be used to calculate interests held through successive and multiple layers of ownership.[179]

94. We do not adopt a single majority shareholder exception to the attribution standard because we do not believe it is consistent with the underlying purpose of the spectrum limitation to permit a person with a cognizable interest in one full-CONUS DBS licensee or permittee to acquire a large minority interest in another full-CONUS DBS licensee or permittee that has a single majority shareholder. The rule we have adopted is based on the pro-competitive effect of encouraging the development of three full-CONUS systems that are truly independent of and competitive with each other. Significant shared interests among these entities would diminish their independence and their incentive to compete rather than coordinate their activities. Thus, a single majority shareholder exception would conflict with the underlying rationale of the rule.

95. As noted above, the commenters generally assert that we should not adopt any attribution rules, or at most that we adopt liberal attribution rules that only attribute controlling interests.[180] These commenters assert that more restrictive rules are unwarranted because DBS is a nascent industry in which the need for capital, financing, experience and expertise is particularly crucial to success. These comments suggest that the adoption of rules that attribute less than controlling interests may impact the ability of a new DBS licensee to obtain financing, capital, technical experience and expertise from a firm that is already invested or involved in the DBS industry. We are not unsympathetic to this argument. However, the rule we have adopted will only restrict the sharing of resources among full-CONUS DBS licensees and permittees operating at different orbital locations. Our underlying policy goal is to ensure a minimum of three independent providers of DBS service to the

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178/ We incorporate by reference the discussion of attribution criteria in decision such as Telephone Company-Cable Television Cross-Ownership Rules, 10 FCC Rcd 244 (1994); and Reexamination of the Commission's Rules and Policies Regarding the Attribution of Ownership Interests in Broadcast, Cable Television and Newspaper Entities, 97 F.C.C.2d 997 (1984), recon. granted in part, 58 R.R.2d 604 (1985), clarified, 1 FCC Rcd 802 (1986). Our ongoing rulemaking proceeding to ascertain whether to revise the broadcast-related attribution rules does not undermine the continuing validity of the existing rules. See Review of the Commission's Regulations Governing Attribution of Broadcast Interests, 10 FCC Rcd 3606 (1995).

179/ See 47 C.F.R. § 73.3555, Note 1(c) and 1(d).

180/ See e.g., Tempo Comments at 18-19, Reply at 22-23; GE Comments at 7-11. Most of the commenters merely assert that we failed to adequately justify our proposed attribution rules, and did not proffer alternative or counter arguments in support of other attribution rules. See Primestar Comments at 24; Tempo Comments at 18-19 Time Warner Comments at 19-20.

American consumer. We have long recognized that non-controlling interests of even as little as five percent can confer an ability to influence the management, decision-making, control and market conduct of a company. We have thoroughly explained in numerous proceedings why we believe that influence, in addition to actual *de jure* control, is a critical component to determining attributable interests in media that involve the dissemination and distribution of ideas,[181] and we herein incorporate by reference our prior discussions of the justifications for this approach.

96. GE Americom asserts that we should confine attribution of non-controlling interests to those that are directly involved in the video programming distribution business themselves. GE Americom contends that our expressed concern is to prevent the concentration of control of programming distribution, and therefore any rule that limits an entity's ability to control more than one full-CONUS DBS orbital location is overreaching -- because according to GE Americom we are not concerned about the carrier, but about programming distributors. GE Americom is correct that we are concerned about ensuring competition among programmers. However, we are also concerned about ensuring competition in the DBS industry and believe three independent full-CONUS DBS licensees is the best means of ensuring competition. We agree with USSB that even a licensee that simply provides DBS satellite capacity to others has the power to select the programmers allowed to use that capacity, and therefore should be subject to spectrum limitations.[182] The rule GE Americom proposes would undermine our rule by allowing entities to hold multiple interests inconsistent with the development of truly independent full-CONUS systems. Other than merely stating its position, GE Americom does not provide support for its argument or state why we should depart from our traditional methods for examining attribution.[183] Accordingly, absent a compelling supportive argument, and in light of the reasons delineated above in support of our auction spectrum limitation, we decline to depart from our traditional attribution approach as GE Americom suggests.

97. Ameritech expresses concern that a five percent attribution threshold would be unduly restrictive if applied in the aggregate -- *i.e.*, if an entity holding a three percent interest in each of two DBS permittees would exceed the five percent threshold.[184] As with

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181 See footnote 178, *supra*.

182 See USSB Reply at 8.

183 While the Commission permits parties to seek to obtain non-attribution rulings for officers or directors of parent entities if a party can establish that the individual in question has no role whatsoever and no ability to influence the media related activities of the subsidiary entity, GE has cited no instance in which the Commission has held equity ownership interests non-attributable under similar circumstances.

184 Ameritech Comments at 4

all of our attribution rules, each ownership interest stands alone.[185] Aggregation otherwise exists only in the case of successive multiplication of interests within a succession of interrelated interests. Thus, Ameritech's concerns are unwarranted.

3. *Conduct Rules*

98. In addition to the structural solutions designed to promote competition by preventing the potential for undue concentration of DBS resources, the NPRM also proposed conduct limitations on the use of DBS channels and orbital locations to encourage, to the maximum extent possible, rivalry among MVPDs and to protect against the potential for anticompetitive strategic conduct. Specifically, we proposed to (1) extend the conditions imposed on Tempo Satellite, an existing DBS permittee that is wholly owned by a cable operator, to all MVPD providers that own DBS resources, so that DBS services will not be offered primarily as ancillary services, or be provided to other MVPDs under different terms than are being offered to non-subscribers; and (2) prevent a DBS operator from selling, leasing, or otherwise providing transponder capacity to any entity that enters into an arrangement with an MVPD granting that MVPD the exclusive right to distribute DBS services within, or adjacent to, its service area.[186] The NPRM also requested comment whether our existing program access and program carriage rules adequately address vertical foreclosure concerns arising from integration among DBS operators, other MVPDs, and program vendors, especially in connection with "headend in the sky" distribution from DBS satellites.[187]

99. *Comments.* The comments address all aspects of the proposed conduct rules -- some favoring the proposed conduct rules, some opposing them, and some proposing their own conduct rules. Primestar, Tempo and cable system operators are generally opposed to the proposed conduct rules. They contend that additional rules are unnecessary in light of increasing competition in the DBS service and existing legal safeguards -- the antitrust laws and two consent decrees under which Primestar and its cable partners operate.[188] Several parties argue that there is no reason to extend the Tempo II conditions to all MVPDs, since there is no indication that Primestar has been marketed as ancillary to cable service or provided to non-cable-subscribers on discriminatory terms, or that its cable owners have in

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185/ A company can have any number of shareholders holding less than 5% interests and not run afoul of any ownership rule, with one exception -- under the alien ownership limitations of Section 310 of the Communications Act, certain licensees may, in the aggregate, have a maximum of 25% of its equity held by aliens. See also 47 C.F.R. § 100.11 (1995) (DBS service rule on foreign ownership).

186/ See NPRM at ¶¶ 55-56.

187/ Id. at ¶¶ 57-62.

188/ See Continental Cablevision Comments at 19; Cox Comments at 8-9; GE Americom Comments at 6; NCTA Comments at 2-3; Primestar Comments at 25-28; Tempo Comments at 19-20; Time Warner Comments at 6, 12-13; Tempo Reply at 24-41; Primestar Reply at 14-16.

any way engaged in any anticompetitive conduct aimed at other DBS operators.[189] These commenters also argue that the competitive nature of the market for the delivery of video programming will constrain any potential anticompetitive conduct and that the proposed rules would merely serve to limit flexibility during the developmental stages of the DBS service when flexibility is most necessary.[190] Finally, many parties argue that there is no basis for rewriting the program access rules, since there is no evidence that vertically integrated programmers have discriminated against DBS operators or that large MVPDs could prevent unaffiliated programmers from dealing with competing DBS systems.[191]

100. Others parties see the issues quite differently. DIRECTV asserts that the proposed marketing rules are necessary, reasonable, and serve the public interest, but do not go far enough since they do not expressly prohibit cross-subsidization.[192] In addition, DIRECTV proposed that the Commission adopt the conditions it previously proposed in the Advanced Order proceeding, which include a number of conduct and regulatory measures that have been applied to common carriers, such as structural separation and review of cost allocation.[193] MCI favors the proposed rule that would prohibit exclusive marketing agreements for areas in or adjacent to an MVPD's service area, but only if it is limited to prohibiting such agreements with affiliated MVPDs since otherwise the rule would unduly restrain legitimate means for distribution of service between DBS operators and unaffiliated programmers.[194] NRTC strongly supports conduct limitations, but argues that they should apply only to cable operators since application to other, non-dominant MVPDs would unduly restrict capital available to DBS systems, and thereby perpetuate cable's dominance.[195]

101. Both DIRECTV and EchoStar/Directsat contend that the program access rules are inadequate in two respects.[196] First, they assert that existing rules do not prevent

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189/ See Continental Cablevision Comments at 19-20; NCTA Comments at 2-3, 10-11; Primestar Comments at 27-28; Tempo Comments at 21; Time Warner Comments at 6; Primestar Reply at 8; Tempo Reply at 9-11. In addition, BellSouth argues that such conduct should not be prohibited in the first place. See BellSouth Comments at 5-6.

190/ See, e.g., Continental Cablevision Comments at 1-2; NCTA Comments at 2-4; Tempo Comments at 8-10; Time Warner Comments at 3.

191/ See Continental Cablevision Comments at 17-18; Cox Comments at 10; NCTA Comments at 11-13; Primestar Comments at 29-30; Tempo Comments at 13-16.

192/ See DIRECTV Comments at 18-19.

193/ Id. at 20-21 and Attachment 2.

194/ See MCI Comments at 18.

195/ See NRTC Comments at 3-5.

196/ See DIRECTV Comments at 18-21; EchoStar/Directsat Comments at 48-54.

programmers from invoking illusory cost differentials or economies of scale as a basis for price discrimination. Second, they argue that the rules should be extended to apply to unaffiliated programmers as well those that are vertically integrated, a position with which BellSouth and NRTC also agree.[197] USSB opposes the latter proposal, arguing that the current rules would be triggered "if a DBS operator affiliated with a cable operator were to engage in anticompetitive programming practices" and that these rules are sufficient to remedy such conduct.[198] DBSC states that the proposed conduct rules would ensure that no one can dominate the DBS industry through manipulation of programming availability.[199] Ameritech favors any rules that remove unfair obstacles to programming access, and would even apply the proposals to the broadcast service.[200]

102. DIRECTV argues that a structural rule would be insufficient to ameliorate the concerns about cable participation in DBS service, and that conduct rules should be imposed upon cable activities in DBS instead. In particular, DIRECTV argues that the Commission should ensure strict conduct rules and ensure that DIRECTV and other current DBS providers be allowed to participate in the auction of the block of channels at 110° to ensure that the public realizes the full value of the spectrum.[201] It also argues that allowing cable-affiliated firms to participate in the auction would go well beyond the decision in Tempo II and it would essentially allow the cable-affiliated entities to control three times the current amount of full-CONUS spectrum assigned to Tempo alone.[202]

103. *Discussion.* We believe that the temporary structural rule we are adopting in this order will go a long way to promote rivalry among DBS systems and encourage the development of competition in markets for the delivery of video programming. Several parties support our conclusion that a structural approach may better serve the public interest than do conduct rules. DOJ makes the case that conduct rules "may actually be more intrusive than is necessary to achieve the goal of vigorous MVPD competition."[203] A structural solution is also superior because any conduct rule "cannot anticipate all forms of economically inefficient behavior by firms whose returns will be maximized by such

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197/ See BellSouth Comments at -9; NRTC Comments at 6-9

198/ USSB Reply at 8-9; USSB Comments at 9-10.

199/ See DBSC Comments at 1[illegible]

200/ See Ameritech Comments at 5-6.

201/ DIRECTV Comments at 1[illegible]-13.

202/ Id. at 15-16.

203/ DOJ Comments at 8-9.

behavior."[204] ASN, an independent satellite programming vendor, seems to agree with DOJ about the need for structural rules, and argues that "fair access" and conduct rules, such as those advocated by DIRECTV, EchoStar and others, are healthy in theory but administratively difficult to enforce because they are subject to interpretation and bound to contain ambiguities or uncertainties that can only be resolved in lengthy and costly litigation.[205] In fact, it is often difficult for anyone to detect a product differentiation strategy undertaken for the purpose of minimizing competition in this market, because it is difficult to assess the nature and quality of video programming. As a result, it would be even more difficult to fashion an appropriate and minimally restrictive remedy for such conduct.

104. Accordingly, we will refrain from adopting conduct rules at this stage in the development of the DBS industry. As noted by GE Americom, conduct rules "are not cost free . . . [and if] unnecessary restrictions are adopted here, they can raise the cost of DBS for consumers, and chill the full development of this innovative service."[206] Whether due to the relative novelty of the service or the existence of two comprehensive consent decrees already in place, there is little direct evidence of anticompetitive behavior specific to the DBS context. As the contours of the service emerge with greater clarity -- and as the consent decrees expire over the period from 1997 to 1999[207] -- we intend to remain vigilant against any vertical foreclosure or other anticompetitive strategies that may arise. For now, we agree with Tempo that the Commission need not adopt conduct rules, mindful that we remain free to initiate a later proceeding if warranted by market conditions.[208] Indeed, to a large extent, the concerns raised in the NPRM and addressed in the comments

105. With regard to the proposed extension of the Tempo II conduct rules and marketing restrictions, we believe that more competitive markets and vigorous DBS rivalry that should be fostered by our temporary structural rule will alleviate the competitive concerns we set forth in the NPRM. As discussed above, competitive rivalry among DBS firms, even where one of those firms is affiliated with a cable operator, will cause pressures for price competition and should lead to vigorous competition between cable and DBS systems. Given the market structure set in motion by our structural rule, we do not believe it necessary to adopt at this time rules ensuring that DBS services are not offered as "ancillary" to cable services. Similarly, we do not find a compelling need at this time for adopting rules designed to ensure that a cable-affiliated DBS operator will compete against other DBS providers for subscribers in cabled areas, or for determining that all joint marketing arrangements between DBS operators and other MVPDs will *a fortiori* reduce competition. We adopted those rules

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204/ Id. at 9.

205/ See ASN Comments at 8.

206/ GE Americom Reply at 3.

207/ See Continental Cablevision Comments at 18; Tempo Comments at 20.

208/ See Tempo Reply at 31.

in Tempo II due to the stated intentions of Tempo to engage in such activities.[209] Since we issued that decision, DBS has become an operational service with a significant subscriber base. As a result, we do not believe that the concerns justifying the Tempo II conditions are present, given that the structural rule we adopt should foster a competitive DBS and MVPD environment, and, therefore, hereby decline to extend the Tempo II conditions to other DBS operators, and to rescind them with regard to Tempo. Should Tempo or any other DBS operator engage in such activities, contrary to our expectations, we can reimpose such rules.

106. We also decline to consider at this time the manner in which our program access rules apply to the conduct of DBS operators affiliated with cable operators or other MVPDs, or whether the rules should be extended to programmers that are not vertically integrated with a cable operator. As we recognized in our 1995 Competition Report, vertical restraints can often have pro-competitive effects, though they can also be used strategically in a way that can deter competitive entry.[210] In the absence of record evidence that shows that protections beyond those already provided by our program access rules are necessary to protect against anticompetitive abuses, we hesitate to adopt a rule that may bring within its sweep legitimate and efficient business relationships. We do reaffirm the importance of program access to our efforts to create conditions for MVPD entry, and will continue to monitor this area closely.

107. Both USSB and MCI argue that the existing program access rules are sufficient to accomplish their purpose.[211] In addition, as noted by Primestar, there is no evidence in this record that exclusive agreements or other discriminatory conduct favoring a cable-affiliated DBS operator currently pose any anticompetitive concern.[212] Although DIRECTV has been in operation for over a year, and EchoStar, which is scheduled to launch its first DBS satellite in late December, presumably has made arrangements for programming to be carried on its system, neither has filed a complaint under the existing program access rules. In fact, only twenty program access cases have been filed with the Commission, none of which allege discriminatory conduct against a DBS operator.[213]

209/ Tempo II, 7 FCC Rcd at 2730-31.

210/ 1995 Competition Report at ¶ 158.

211/ See MCI Comments at 19-21; USSB Comments at 9-10.

212/ See Primestar Comments at 25-27, 30-31. We believe that NRTC's allegations in this docket are too general for us to address the issue. Should NRTC or any other party bring a complaint based on substantiated evidence of a program access violation, we will address the matter based on that record.

213/ The Commission did deny a petition for reconsideration of its report and order adopting the program access rules, which sought to include exclusive contracts between non-cable affiliated DBS operators and vertically-integrated programmers, such as the arrangement between USSB and HBO, within the per se prohibition of Section 628(c)(2)(C) of the Communications Act, 47 U.S.C. § 548(c)(2).

108. Additional prudential considerations also counsel against adopting further program access protections at this time. First, the extent to which affiliation between DBS system operators and programmers may develop is unclear. Second, exclusivity arrangements favoring Primestar -- currently the only operational DBS-like service that is cable affiliated -- are, in large measure, presently circumscribed by the Primestar consent decrees, and it is unclear to what extent such arrangements will be of concern after the decrees sunset. Finally, a DBS operator who believes it has been injured by an exclusivity arrangement or other discriminatory conduct that favors a cable-related DBS entity -- including alleged price discrimination based on illusory cost differentials or scale economies -- may seek appropriate relief before the Commission, whether by way of a program access complaint or otherwise.

109. We also note that several parties argue that the program access rules should be altered to switch the burden of proof or award damages.[214] We decline to adopt these proposals for the foregoing reasons in addition to the fact that these proposals apply to the program access rules generally and not to DBS service in particular.

4. "Headend In The Sky" Service

110. *Comments*. The comments addressing access issues related to service to MVPDs such as the "Headend in the Sky" ("HITS") service proposed by TCI raise a number of important issues. For example, it appears likely that a number of parties may be interested in using DBS facilities to provide HITS service.[215] The comments also reflect a concern that a vertically-integrated programmer might discriminate in favor of an affiliated DBS provider, even if other DBS providers offered more favorable terms and conditions for HITS service.[216] On the other hand, Primestar argues that the Commission should not be concerned about the potential effect of HITS service on competition among DBS operators and MVPDs because HITS service is not yet operational, there is no experience or data regarding the service, there

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Implementation of Sections 12 & 19 of the 1992 Cable Act, *Memorandum Opinion and Order on Reconsideration*, 10 FCC Rcd 3105, 3121-22 (1994). The Commission did note, however, that the petitioner or any other aggrieved party is not precluded from seeking relief from the effects of such contracts through under other provisions of the program access rules.

214/ EchoStar/Directsat Comments at 51-54; NRTC Comments at 6-9.

215/ See DIRECTV Comments at 21-22; EchoStar/Directsat Comments at 55-56; Primestar Comments at 31-34; Tempo Comments at 25-27.

216/ See BellSouth Comments at 9-10; DIRECTV Comments at 21-22; EchoStar/Directsat Comments at 55-56; NRTC Comments at 8-9; Justice Comments at 12-16; MCI Reply at 20; NYNEX reply at 8-10.

are no examples of anticompetitive activity, and there is no support for concerns that the proposed HITS service would pose a significant advantage to a DBS operator.[217]

111. DOJ presents a comprehensive analysis of the HITS service and argues for Commission regulation of that service. It notes that HITS service may be valuable to MVPDs, but argues that the potential that it could be used to develop market power exists for several reasons: (1) there are barriers to entry in a HITS market due to expensive technology and other large up-front costs; (2) the number of firms capable of providing the service "is severely limited by the small number of available DBS satellite slots;" and (3) a substantial first-mover advantage may be conferred on a small number of DBS operators because of the possibility that deployment of different encryption technologies would "tend to lock MVPDs into their initial wholesale DBS provider"; HITS customers may therefore be likely to prefer a more established DBS provider than an upstart, to avoid stranded costs.[218] Given the foregoing, DOJ predicts that there is "a substantial likelihood that the market for wholesale DBS service will be served by a monopolist for the immediate future. Moreover, according to DOJ, even if other firms eventually enter, the market is likely to be very highly concentrated."[219] As a result, DOJ argues that a HITS provider affiliated with a firm with market power in markets for the delivery of video programming may threaten competition through the use of vertical foreclosure strategies.[220]

112. Tempo and Primestar, which have proposed to provide HITS service, contend that such service is not, as characterized in the NPRM, "wholesale DBS service" and therefore is not subject to the program access rules. They base their argument on the fact that, as currently planned, the DBS operator would only provide authorization and transport service for two parties (a wholesale programmer and a retail distribution service) that have an agreement to which the operator is not a party.[221] In addition, like CATA,[222] Tempo and Primestar assert that the Commission has no experience with such a service and that there is no indication that any party would engage in anticompetitive behavior in providing it. They also join GE Americom[223] in arguing that attempting to bring HITS service within the ambit

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217/ Primestar Comments at 32.

218/ DOJ Comments at 10-14.

219/ Id. at 14-15.

220/ Id. at 15-18.

221/ See Primestar Comments at 31-34; Tempo Comments at 25-27. Consequently, these parties assert that the program access rules applicable to "wholesale distribution for sale of satellite cable programming" does not apply to a DBS operator providing HITS service. See 47 C.F.R. § 1000(i).

222/ See CATA Comments at 4-5.

223/ See GE Americom Reply at 7-9.

of a program access-type regime would be inappropriate since it would apply to parties *other than* DBS operators.

113. Tempo also disputes DOJ's characterization and analysis of HITS, noting that HITS service need not operate in the DBS band, and that TCI intends to launch HITS service with a combination of Ka-band and C-band FSS satellites.[224] Tempo also argues that the authorization code, a signal that allows the decryption of the scrambled programming feed, can be transmitted out-of-band by a number of other means.[225] Tempo points out that a number of programmers, including HBO, already offer digitally compressed signals, and that many video programmers will decide to compress signal transmission in their existing satellite transponders.[226] Tempo introduced evidence that another satellite provider, TVN Entertainment, recently announced the launch of a digital delivery system for cable systems.[227] As a result, Tempo argues that DBS locations or spectrum cannot be viewed as a scarce resource for providing HITS services and, therefore, that there are no significant barriers to entry in the provision of HITS service.[228] For similar reasons, General Instrument Corporation also urges the Commission to reject the DOJ analysis, arguing that it is grounded in baseless and theoretical concerns.[229]

114. Among independent DBS providers, DIRECTV notes that it has no *per se* objection to the development of HITS distribution so long as independent DBS operators have a "real opportunity" to provide these services and the Commission adopts and implements "appropriate competitive conditions and cross-subsidization restraints."[230] EchoStar states that it is "intensely interested in providing wholesale services" and that the service offers opportunity to generate two revenue streams from the same facility. However, EchoStar/Directsat notes concerns that cable systems might tend to favor receiving HITS service from a cable-affiliated DBS operator, and therefore urges the Commission to clarify

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224/ Tempo Comments at 27 n. 50; Tempo Reply at 37-40; Owen Nov. 1995 Affidavit, submitted with Tempo Reply, at ¶¶ 12-15.

225/ Tempo Reply at 37-38.

226/ Tempo Reply at 37.

227/ Tempo Reply at 39.

228/ Tempo Reply at 39-40.

229/ GIC Reply at 6-10.

230/ DIRECTV Comments at 21-22; *see also* Hausman Nov. 95 Aff. at ¶ 31.

that the program access rules apply to DBS services and require the disclosure of contracts between cable operators and affiliated satellite providers.[231]

115. Programmers generally give mixed reactions to the Commission's proposals and the HITS service. Viacom and ASN request that the Commission regulate the HITS service.[232] HBO flatly opposes any attempt by the Commission to regulate the provision of HITS service, arguing that in doing so, "the Commission effectively would regulate the means and technologies through which programmers digitize, encrypt and distribute their programming to cable operators" and other MVPDs.[233]

116. *Discussion.* Cable, MMDS, and SMATV systems currently receive their programming through their own headend facilities, which among other things, consist of several satellite dishes and receiving equipment. In addition, they typically negotiate their programming contracts with individual programmers through buying groups or as multisystem operations. As a result, it appears that a service that provided most of the available programming, and provided it in a digital format that could be passed through to subscribers, could offer substantial efficiencies for many MVPDs.

117. The record reflects that one way that a HITS-like service might be deployed by a DBS operator is through use of its DBS satellite, authorization center, and encryption facility to transmit to MVPDs the same signals that are received by DBS retail subscribers. To the extent that the average cost of using those facilities is likely to decline as greater numbers of subscribers are served, providing HITS-like services over DBS facilities might provide such an operator with an important cost advantage over a competing DBS operator who was unable to provide such services, if, for example, programmers refuse to authorize MVPDs to receive programming services from the competing operator's DBS satellites. If this scenario develops, only the DBS operator whose programming stream was also serving MVPDs would be able to spread the fixed costs of its DBS service over a large base of subscribers by recovering a substantial portion of those costs from the purchasers of the HITS service. This cost advantage could substantially reduce rivalry among DBS operators and MVPDs, especially if that cost advantage is the result of a vertical foreclosure strategy.

231/ EchoStar/Directsat also notes that there may already be contracts between programmers and cable operators that "are less restrictive with respect to the provision of HITS-type service than the contracts that EchoStar and DirectSat have been able to secure." EchoStar/Directsat Comments at 55-56.

232/ Viacom Comments at 5-6 (urging that the Commission ensure that proprietary digital technology is not used anticompetitively to create a gatekeeper between consumers and programmers); ASN Comments at 6-8 (provision of HITS service by a cable-affiliated DBS firm could harm independent programmers because that firm could impose draconian conditions upon independents seeking access to DBS channels).

233/ HBO Reply at 1-2. HBO argues that mandating that programmers transport and authorize distribution of their services to MVPDs through all DBS operators would compromise security and quality. HBO Reply at 2-3.

118. However, there is no evidence before us of firms presently supplying HITS-like service, and the actual characteristics of such a service remain unclear. Accordingly, we have never before addressed the vertical foreclosure issues presented by the proposed HITS services. As stated in the NPRM, we believe that a HITS-type service can actually promote the competitive position of DBS providers. As discussed above, other DBS operators and permittees have indicated that they too will offer HITS-like service if the DBS channels and orbital locations at issue here are so used, which should benefit consumers. We continue to believe, however, that the benefits of this service cannot materialize if vertical foreclosure strategies are used to limit the ability of unaffiliated DBS operators to provide programming streams to MVPDs. Nonetheless, resolution of these issues is not necessary to the proceeding at hand. Accordingly, we agree with those commenters that advise us that it would be imprudent for this Commission to consider rules governing HITS service absent a better understanding of the nature of HITS service.

5. Other Concerns About DBS-Related Conduct

119. ASN argues that the Commission need not follow a monolithic DBS model of vertically-integrated full-service DBS operators at separate orbital locations, and that we should set aside ten percent of the channels at the auction for independent programmers, because it would cultivate independent programmers, offer individualized programming choices at the wholesale level, create programming niches, and foster partnerships, alliances and distribution models.[234] MCI, on the other hand, opposes such proposals, arguing that the standards are unclear, and that any such rules are likely to result in an inefficient allocation of DBS resources.[235]

120. We do not believe it necessary to restrict the participants in the auction as ASN suggests. In an environment of competitive rivalry between DBS firms, cable systems, and other MVPDs, which we believe our structural rule will foster, an independent programmer providing a programming service or niche programming desired by consumers in the free market will have ample opportunity to sell its offerings to these competing providers.

121. The Commission has chosen to adopt a single structural rule that temporarily limits full-CONUS spectrum aggregation, and to rely upon this limitation and our continuing authority to review transactions under Title III rather than upon conduct rules to safeguard competition by ensuring the conditions necessary for development of three separate full-CONUS DBS services. The Commission also has the authority under Title III to, in the future, regulate by rule the use of DBS radio frequencies if that use is inconsistent with the public interest.

234/ ASN Comments at 8-12.

235/ MCI Reply at 19.

122. However, we emphasize that we remain committed to fostering a vibrant DBS service in which DBS systems have the opportunity to offer vigorous rivalry to cable systems and other MVPDs. While we believe that the auction rule we are adopting today will guard against diminished rivalry among DBS providers and MVPDs, we recognize that periodic reviews will be necessary to ensure that the benefits of independent programming sources (*i.e.*, those outside the distribution business) are available to the public. We are statutorily charged with conducting an annual review of competition in the MVPD market.[236] We also have procedures for accepting and investigating complaints of program access and carriage violations.[237] We intend to use these and other tools to keep a watchful eye on developments in this service to ensure that DBS systems have a chance to be competitive MVPDs.

6. East/West Paired Assignments

123. The NPRM tentatively concluded that progress in the DBS service since Continental was issued has rendered unnecessary the policy, developed in that decision, of assigning DBS channels only in east/west pairs, with eastern half-CONUS service permitted only from the four eastern orbital locations and western half-CONUS service permitted only from the four western orbital locations.[238] The Commission adopted this pairing scheme in order to assure service to the entire United States from at least 128 channels at a time when full-CONUS service was untested.[239] At the time, however, the Commission noted that the same number of channels would serve the entire United States if three eastern locations provide full-CONUS service and the other one (61.5°) provides service in tandem with channels at any western location.[240]

124. All parties commenting on the proposal agree that the general pairing requirement is no longer technically required or justified as a matter of policy.[241] As noted above, however, Tempo proposes that the Commission facilitate additional DBS service by pairing the channels at 61.5° with those now available at 148°, thus combining the half-CONUS channels with the best technical attributes for service to the United States.[242]

236/ See 47 U.S.C. § 548(g).

237/ 47 C.F.R. § 76.1003.

238/ See NPRM at ¶ 65.

239/ Continental, 4 FCC Rcd at 6293 and 6302 n.6.

240/ Id. at 6302 n.10.

241/ See DIRECTV Comments at 25; EchoStar/Directsat Comments at 57; MCI Comments at 22-23; USSB Comments at 10.

242/ See Tempo Comments at 34-37.

Permittees with channels assignments at the 61.5° orbital location already have western channels assignments at locations other than 148°, and the channels currently available at the latter location are insufficient to pair with all of those at the former location.[243] If those permittees wish to provide a full-CONUS service from two half-CONUS locations, they are therefore already able to do so. Accordingly, we will not require permittees and licensees to retain their assigned channels in east/west pairs.

D. Service to Alaska and Hawaii

125. In view of the increasing maturation of the DBS industry and the lack of certainty that DBS service will be provided outside the contiguous United States in the near future, the NPRM proposed: (1) to require that all new permittees provide service to Alaska and Hawaii if such service is technically feasible from their orbital locations; and (2) to condition the retention of channels assigned to current permittees at western orbital locations on provision of such service, from either or both of their assigned orbital locations.[244]

126. This proposal also received near unanimous support, although with some variations. DIRECTV, MCI, NRTC, and the State of Alaska favor adopting the rule as proposed in order to achieve the important goal of bringing service to important underserved regions.[245] DIRECTV especially supports phrasing the rule in terms of service that is "technically feasible" rather than "technically possible," since that will allow the Commission to take into account weight and power resources for such service, the size or receiving dish required, and technical limitations imposed by the Commission and the ITU. BellSouth similarly supports application of the rule in a manner that accounts for practical and economic limitations of satellite programming delivery.[246] The State of Hawaii, Primestar, and Tempo support the rule, but propose that the requirement of service to Alaska and Hawaii be extended to both new *and existing* permittees.[247] USSB asserts that the rule is unnecessary since progress in DBS will soon bring service to Alaska and Hawaii, but that if a rule is adopted it should apply only to new entrants and only where feasible.[248]

243/ USSB has been assigned eight channels at the 148° location. DBSC, Continental, and Dominion have been assigned eleven, eleven, and eight channels, respectively, at the 61.5° location. Thus, there are six fewer channels available at 148° than necessary to pair with all those assigned at 61.5°.

244/ See NPRM at ¶ 70.

245/ See DIRECTV Comments at 25-26; MCI Comments at 23-24; NRTC Comments at 10; Alaska Reply at 1.

246/ See BellSouth Comments at 10.

247/ See Hawaii Comments at 6-7; Primestar Comments at 24; Tempo Comments at 38.

248/ See USSB Comments at 10-11.