claim that with the spectrum liberated from duplicative carnage. they will be able to offer at least 12 HDTV channels (compared with the two to three HDTV channels that DirecTV and EchoStar individually can offer currently),[470] as well as greatly expanded PPV, VOD, educational. specialty and foreign language programming. and other new and improved product offerings. including interactive

195. Applicants project a discounted present value of free cash flow from new services of **REDACTED.'"** These new services include the provision of local-into-local television programming in the DMAs where EchoStar and DirecTV currently do not provide local programming. VOD and PPV. HDTV. and interactive services. The Applicants acknowledge that they will incur certain costs in moving customers over to a single set-top box platform, which is necessary for the realization of these new services. The Applicants estimate that it will cost an average of **REDACTED** per customer for each customer transitioned, or a total of **REDACTED** in expenditures over three years to perform the box-swap.[473] Deducting the cost of the box-swap, yields an estimated net increase in revenues (in present value terms) **of REDACTED.'"'**

196. Opponents, while conceding that the merger could eliminate duplicative programming, respond that consolidating channel delivery and eliminating duplicative programming could he achieved through less anticompetitive means. For example. some Opponents suggest that DirecTV and EchoStar could form a joint venture to share channel uplinks and downlinks and use compatible set-lop boxes that could receive programming from either company's satellites,[475] and that the spectrum efficiencies are therefore not merger specific.

197. Several Opponents of the merger claim that nationwide local-into-local service could be achieved through less anti-competitive means. because, as discussed in Section IV.C.1 *supra*, each of the Applicants individually has enough Ku-band CONUS capacity to offer local television broadcasting service to significantly more markets that they do today (at least 100 markets. and possibly all **210** markets.[476] Opponents contend that, using existing or planned spot beam satellites. the Applicants individually could increase the number of markets in which they provide local channels **to** as many as 100 DMAs.[477] Opponents also contend that improved modulation and compression techniques can yield at least a 30% increase in transponder capacity, while replacing existing MPEG-2 encoders with MPEG-4 would increase efficiency by a factor of two or three.[478]

198. **NAB** notes that the Applicants have failed to disclose how many markets euch company individually could serve with its own satellite fleet, or proposed fleet, and argues that. without this

[470] Applicaiion. Eng. Statement at 10

[411] Application. Eng. Statement **at 11.**

[412] Letter **from** Pantelis Michalopoulos, Esq. on bchalf of EchoStar **and** Gary M. Epstein. Esq. on behalf of Hughes to Marlene Dortch. Secretary. FCC (July 5, 2002) at 7 ("Applicants July 5 *ex parte*")

[473] *Id.* **at** 28. The Applicants claim that customers will bear none olthc cost) of this transition, however. *Id.*

[474] Applicants' July ***5 ex pone*** at 28.

[475] **Duke** Law Reply Comments at 16-17; NAB Petition at 75-76: Pegasus Petition **at** 61; NRTC Petition at 63-65

[476] Pegasus Petitional **41-42;** NAB Petition at **84-89; and** Duke Law Comments at 22.

[477] *See, e.g.*, NRTC Petition. Morgan Decl. at 2: Pegasus Pctiiion. Rusch Aff. **at** 10.

[478] NAB Petition. **Could Decl.** ai 6-7; Pegasus Petition. **Rusch** Aff. at 11.

information, it is impossible to determine what proponion of the benefits arising from providing local programming in all 210 DMAs is merger-specific.[479]

199. ***Discussion.*** As discussed, the merger offers cenain technical efficiencies by reducing the amount of duplicative programming that is currently carried by both DirecTV and EchoSrar. For purposes of the Commission's public interest analysis. however. the relevant question is not how much spectrum will be conserved, but rather whether and how those spectrum savings will translate into new or improved products or lower costs. We find. as discussed below, that the Applicants have failed to satisfy their burden of demonstrating that these spectrum efficiencies will result in cognizable. merger-specific public interest benefits.

200. We note at the outset that the Applicants essentially present their efficiencies case by comparing the free cash flow that they claim will result from services that the merged entity will offer after the merger[480] with the free cash flow that each of the Applicants receives today from the services each currently offers. This is the wrong basis for comparison. First. it is a measure of the Applicant, private benefit, not the public interest. Second, even if one wanted to determine the private benefits *of* the merger to the Applicants, the appropriate comparison is to contrast the present discounted value of the stream of profits that the merged entity is likely to receive from services it is likely to offer after the merger with the present discounted value *of* the stream of profits that DirecTV and EchoStar individually would likely earn from services each would likely offer absent the merger. For example, if, absent the merger. the Applicants individually would offer local programming in the top 100 DMAs, then the incremental revenues attributable to local programming that can he said to result from the merger are only the revenues from the additional **DMAs** that would not be served. but for the merger.

201. An additional problem with the Applicanls' efficiency claims **is** that they ignore the possibility that, because the merged entity will possess more spectrum. it will use it less efficiently than would EchoStar and DirecTV individually absent the merger. In particular. the merger may affect the incentive **of** the merged **entity** to adopt new, more productive technology. which in turn could affect how efficiently the spectrum will be used. The reason that the merged entity may be less willing to invest in productivity-enhancing technology is that the marginal value of a firm's spectrum will decline *as* the total amount of spectrum it controls increases.[481] This suggests that, if as a result of the merger. New EchoStar doubles the amount of spectrum it controls, it will have a reduced incentive to invest in productivity-enhancing technology. We **note,** in this regard, that the Applicants themselves have acknowledged the diminishing marginal value of the recovered spectrum.[482] Thus, from a social welfare point of view, the merged entity may select a technology that is less efficient than it would select **if** each separate DBS competitor controlled less spectrum resulting in a public interest harm rather than a benefit.

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[479] NAB Petition at **77-79.**

[480] The Applicants esrimate future cash **flow** for the years 2002 through 2007. They then calculate the earnings before interest. taxes, depreciation. and amortization ("EBITDA") for 2007, and then apply a "terminal multiple" **of REDACTED** to the year **2007 EBITDA to** obtain an estimate of future EBITDA from 2008 in perpetuity. Applicants' July ***5 ex parte*** at I **I.**

[481] The following *illustrates* this point. Since channels differ in popularity. a **DBS** provider, with limited capacity will initially choose the most valuable channels **to** transmit and will add less popular channels only as **its** capacity increases. The DBS provider can increase capacity either by adding spectrum or adopting new, more productive technology. **But.** the channels transmitted as **a** result of this increase in capacity will nevenheless be less valuable than the provider's **most** popular channels.

[482] In Letter from Pantelis Michalopoulos. Esq. on behalf of EchoStar **and** Gary M. Epstein **. Esq.** on behalf of Hughes to Marlene Dortch, Secretary, FCC (August 2. 2002) ("Applicants' Aug. **2** *ex* parte"). the Applicants state: **REDACTED.**

202. Another problem with the Applicants' efficiency showing is that many of the claimed benefits appear highly speculative. For example. the Applicants claim that, with the launch of NEW ECHOSTAR I in 30 months. they will be able to offer local programming in all 210 DMAs. This claim. however, is premised on a number of assumptions that may not prove true. For example. the prediction assumes that NEW ECHOSTAR I can be launched in 30 months and put in operation within six months after launch, but both these dates may slip. Indeed, Applicants' claimed timeline and costs are inconsistent with guidance given to the financial community that the box-swap could cost $2.5 billion and take four years.[483] The prediction also assumes that the 1500 local television channels that New EchoStar will transmit will be in standard definition format. If. however. broadcast HDTV is introduced in local markets more quickly and more broadly than the Applicants assume, then the merged entity may have inadequate transponder capacity to carry all the local channels in **HDTV** format.[484] If this proves true, then this may undermine the Applicants' estimates of the incremental revenues that they expect will flow from providing local television programming in all 210 DMAs. thus undercutting their projected efficiencies and benefits. More generally. many of the Applicants' efficiency claims are inherently speculative because they are not projected to occur until three or more years aftsr consummation of the merger.[485]

203. In addition. many of the claimed merger benefits do not appear credible. For example, we are skeptical of the Applicants' financial projections concerning the planned expansion of local programming into all 210 DMAs. Specifically, the Applicants' acknowledge that **REDACTED.**[486] Purely from an economic standpoint. we are not persuaded that the private benefits of being able to claim that New EchoStar provides local programming into all 210 DMAs outweigh the economic losses **that** it is likely to incur in serving those markets. If it appears likely that the New EchoStar will lose money on providing local programming in some number of the smaller DMAs. then we need to be skeptical that **it** will actually carry out this strategy, and we must therefore discount the associated claimed benefits. Indeed, DMAs 101-210 have 600 local channel.; that would he carried **to** reach only an additional 14% of the population.[487] Similarly, the Applicants have not presented sufficient convincing evidence that they will actually use the entire amount of spectrum held by New EchoStar. Particularly, if the marginal return from such spectrum is low enough, the Applicants may simply choose to "warehouse" the spectrum. even though the spectrum would be of much greater value to another entity.

204. Finally, we are not persuaded by the Applicants' attempt to quantify the benefits of many of the new services that they claim they will offer. Although the Applicanrs have submitted what they characterize as a "synergies presentation" that attempts to estimate the free cash flow and EBITDA gains from these new services, we find this presentation flawed in a number ***of*** respects. First. we note that the Applicants do not attempt to estimate specifically the incremental profit that is likely to be generated by these new services. even though profit is the economically meaningful measure of the merged entity's private gain **or** surplus. In addition. however. even if they were accurately estimating their expected incremental profit. this would not necessarily provide a clear indication of the net gain in social welfare.

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[481] **See** Douglas S. Shapiro. Michael L. Savner and Jeffrey R. Toohig. *Initiating Coverage of DBS Sector,* (Equity Research, Bank of America Securities, Sept. **19,** 2002) at *6.*

[484] According **to the** Applicants, each **HDTV** local channel uses as much as ten times as much spectrum as a SDTV channel. Application. Eng. Statement. at 13-14.

[485] *Cf. DOJ/FTC* ***Guidelines*** § 4. n. 37 ("Delayed benefits from efficiencies (due to delay in the achievement of. or the realization of consumer benefits from. **the efficiencies**) will he **given** less weight because **they** are **less** proximate and more difficult to predict.")

[486] Applicants' Aug. **2** ***Ex Parte***.

[487] Shapiroet **al.** at 37-38.

In particular, if the incremental cash flow results from customers' switching from cable, then that incremental cash flow may well exceed the incremental increase in social surplus, since it may come at the expense of cable companies that suffer correspondingly lower profits.[488]

205. More generally, the Applicants provide aggressive revenue estimates for many of the new services that they claim the merged entity will provide. but they fail to provide detailed evidence supporting those revenue projections. For example, the Applicants project incremental revenues of REDACTED.[489] The Applicants provide no economic model or any other empirical evidence to suppon these projections. however.

2. Cost **Savings**

206. The Applicants claim that the merger will generate significant cost savings of REDACTED per year or **REDACTED**.[490] First, they assert that the merger will result in a reduction of REDACTED in subscriber acquisition **costs ("SAC").** which represents a reduction in the cost of adding an additional customer of REDACTED."' The Applicants break down the reduction in SAC into the following categories: reduced piracy costs of REDACTED (resulting from increased signal security made possible by the shift to a single DBS service platform).[491] increased efficiency of installation for a savings of REDACTED, incremental volume discounts from hardware manufacturers and suppliers amounting to REDACTED, and savings in marketing. advertising and distribution **of REDACTED.**[493] Second, the Applicants also claim that the availability of local programming, plus other enhancements. will reduce customer chum and save a total of REDACTED."" Third. they claim that by merging, the parties will be able to realize a REDACTED reduction in programming costs which will amount to a total savings of **REDACTED.**[495] Fourth, the Applicants claim savings of REDACTED resulting from reductions in general and administrative expense.[496] Finally. they assen that the merger will permit them to reduce capital expenditures by REDACTED.'" Opponents dispute these projected cost savings and the claim that they will be passed on to consumers. **NAB** suggests that the high post-merger

[488] Similarly, in estimating the gain in free cash **flow** from providing local programming in all 210 DMAs. the Applicants assume that the introduction of the local programming will increase their market share in all geographic markets by the same percentage. We find this assumption to be highly unrealistic. Particularly for those geographic markets where customers do not have access to cable and where current DBS penetration rates are already high. we would not expect market share **to** rise **as** much **3s** it would in markets whcrc customers have access to cable and **DBS** penetration is consequently lower.

[489] ***Id.*** at **40.**

[490] ***Id.*** at **17.**

[491] ***Id.*** at 18.

[492] Application at ***36;*** Applicants July 5 *ex parte* at 18

[493] Applicants July **5** *ex* ***pane*** at 18.

[494] ***Id.*** ai 20.

[495] ***Id.*** at **22.**

[496] ***Id.*** at **24.**

[497] ***Id.*** at 26. Part **of** the reduction **in** capital expenditures. according to the Applicants, will result from ihe ability ***of*** the merged entity to "utilize all 32 DBS transponders at 119° W.L. orbital location using just two satellites instead of the four that are slated ***to*** operate there." Application. Eng. Statement at 12. The Applicants acknowledge, however. chat they will incur additional capital expense in launching spot beam satellites ***to*** provide local programming into more DMAs. ***Id.*** at 27.

concentration makes it unlikely that the merged entity will pass any cost savings on to consumers.[498] NRTC and Pegasus further claim that the additional costs associated with the merger make it unlikely that the merged entity will pass along any cost savings to consumers.[499] NRTC and Pegasus also argue that reduced customer chum should not be considered an efficiency, because it is the result of the elimination of competition.'"[500] NAB claims that the Applicants failed to include any empirical data to suppon their claims and that the efficiency gains would be in fixed costs, which are less likely to off-act the competitive harms resulting from the merger.[501] In response to the Applicants' July 5. 2002 **Et** *Parte* presentation. NRTC questions the Applicants' claimed reduction in programming costs NKTC claims this is not *a* true economic efficiency and. even if realized, might not even represent volume discounting **REDACTED.'"**

207. *Discussion:* We find *a* number of issues and problems with the Applicants' efficiencies showing. These issues and problems cause us to conclude that the Applicant!, have failed to adequately support their claims that the merger will result in significant cost savings. We discuss each of these issues in turn.

208. First, the Applicants have claimed several efficiencies that do not appear to be merger-specific. and therefore are not cognizable. For example. the Applicants claim that the merged firm will require over 30 million new set-top boxes, and that the cost per box will decline significantly **REDACTED** due to economies of scale in production. They then claim that the reductions in the cost of the set-top boxes represent an efficiency of the merger. To demonstrate that claimed volume-based cost savings are merger-specific. however, the Applicants must demonstrate that the cost saving.; result from the increased demand of the single merged entity, rather than from any increase in the entire industry demand. The Applicants have made nc such demonstration. Moreover, they have not even alleged that the cost savings could not result absent the merger. because the components used by EchoStar and DirecTV individually are not sufficiently similar. Thus. for **example.** if set-top box manufacturers would use the same computer chips and hard drives. regardless of whether the parties merged, then any volume-related cost savings resulting from the growth in total market demand would not be deemed merger specific. Similarly, the Applicants cite several factors for the reduced chum that contributes significantly to their total projected costs savings. It is not clear. howevsr that one of the factors contributing to reduced chum – the adoption of "best practices at call center.;. service centers. and on installations" – is merger specific.[503] Likewise, the Applicants claim that chum will be reduced because the merged entity will be able to offer *a* bundled MVPD/broadband product.[504] As discussed below, however, it is not clear that the ability to bundle broadband service with DBS service is merger-specific.

209. Second, many of their other claimed cost savings appear to be either speculative or lacking in credibility. For example, according to the Applicants' own estimates. a significant percentage of the claimed cost savings will not accrue before 2006.[505] As previously indicated, benefits that are

[498] NAB Petition at **73-75.** *See* **also** Duke Law Comments at 17

[499] Pegasus Petition at 53. **For** example, NRTC estimates that the **xi-lop box** change-out will cost the merged company more than **$5** billion, not the "couple of billion dollars over a period of three or four years" stated in the Application. NRTC Petition at **66-67.**

[500] NRTC Petition at **67-68;Pegasus Petition** at 56-57.

[501] **NAB** Petition. **Sidak** Decl. at **59-60**

[502] **See NRTC Sept. 4 ex** *parte*

[503] Applicants' **July** 5 *expone* **ai** *20*

[504] ***Id.***

[505] ***Id.*** at 17.

projected to occur only in the relatively distant future are normally discounted because they are inherently less certain. This speculative nature of future benefits becomes panicularly problematic if it is claimed. as Applicants do here, that certain benefits will continue into perpetuity. Specifically. the Applicants apply a terminal multiple of REDACTED, which is intended to measure the "going forward" value of cash flow for all benefits efficiencies that are present in year 2007.[506] By applying this terminal multiple, Applicants are basically claiming that the year 2007 efficiencies will continue forever."' Claiming perpetual cost savings would always raise credibility issues. but those concerns are increased here. since some of the claimed cost savings appear to be of a limited duration. For example. the Applicants assumed that the merger would yield a reduction in piracy costs of REDACTED per gross add in the first year and REDACTED per gross add in each yem thereafter. for a total savings of REDACTED in piracy costs. The projected reduction in piracy costs. however. is premised on changes in the conditional access software that will be implemented with the box swap. While this change in conditional access may initially reduce piracy, it is not at all clear that the incidence of piracy will not begin to rebound.'"'

210. In other cases. the Applicants either have clearly exaggerated the likely cost savings or have simply failed to provide adequate justification for their efficiency estimates. For example. the Applicants have not adequately substantiated their claimed savings in programming costs. In particular, they have not demonstrated that programming costs will necessarily fall to the extent they predict based on the merged entity's larger subscriber base. We note in this regard that the record indicates that REDACTED. Similarly, they have not provided sufficient evidence to support their claimed installation efficiencies and distribution efficiencies or the claimed cost reductions associated with reduced churn. In addition. the Applicants frequently fail to distinguish claimed cost savings that would result in a reduction in marginal cost from cost savings that would result in a reduction in fined cost. For example, it is not clear whether the Applicants' projected savings in advertising, marketing, and distribution. which it claims will contribute to a significant reduction in SAC. represent savings in marginal cost or fixed cost.

21 1. In addition. the Applicants' analysts of cost savings takes the form of a business case analysis, rather than a welfare analysis that specifically considers whether claimed cost reductions result in net increases in social surplus. which can be balanced against any anticompetitive effects of the merger. Certain of the Applicants' claimed efficiencies appear to represent no true cost savings. but rather only a transfer of surplus. For example, it appears that a ponion of the claimed reduction in SAC costs actually relate to a reduction in the subsidy DirecTV and EchoStar currently provide to retailers and new subscribers to cover part of the cost of equipment and installation. Since a reduction in the subsidy simply means that the retailer or customer will pay more. there is no cognizable efficiency gain from this portion of SAC. Reductions in these "expenses," rather. may be indicative of the emasculation of competition and the resulting consumer harms. Similarly. we agree with NRTC and Pegasus that reductions in chum may more accurately be considered as indicative of the reduction in consumer choice and so cannot be counted as a public benefit. Finally. any savings in programming costs that result from a

[506] *Id.* at 11

[507] We note that the Applicants' choice of multiplier is inconsistent with the discount rate they employ. Specifically. the Applicants' choice of a terminal multiple of REDACTED implies a discount rate of REDACTED In their business case analysis. however. the Applicants generally employ a discount rate of REDACTED, such as when they compute the present value of the terminal value and the prcscnt value of the synergies in years 2003-2007. *Id.* at 1 1. Applying a consistent, ten percent discount rate in calculated the terminal multiple would reduce the multiple to 10, which would significantly reduce the calculated benefits.

[508] See *Id.* at 18. *See also Satellite Business News*, 10 (Aug. 14, 2002) (discussing the view that any security system could be compromised given enough time. and that ihe only way to prevent piracy is to continue to upgrade the core security system).

change in bargaining power represent a shift in surplus between programming providers and DBS operators, but not necessarily an increase in total surplus.

212. To summarize, as described above, the Applicants have failed to demonstrate that certain of the claimed efficiencies are merger-specific. Other claimed cost savings appear too speculative. while others simply are not credible. Finally, other alleged cost savings do not appear to be not true efficiencies but rather represent a shift in surplus between parties without any necessary increase in social welfare. Again, as discussed above. what *is* important is the extenr to which these lower costs lead to lower prices and can offset the reduction in competition. rather than whether the merged entity will achieve a lower cost structure as a *per se* matter.

3. Enhanced Ability to Compete with Cable

213. The Applicants claim that one of the most compelling benefits of the proposed merger is that New EchoSrar, as an integrated. full-service DBS provider. will be able to compere betrer with cable systems to the benefit of consumers. The Applicants claim that DBS spectrum inefficiency has precluded the Applicants individually from effectively competing with cable systems. particularly given existing must-carry obligations.[509] The Applicants argue that as separate companies. neither Echostar nor DirecTV has been able to discipline cable companies' prices and that only through the merger will DBS be able to provide effective, price-reducing competition. The Applicants note that cable companies have been continuing to raise their prices in excess of the consumer price index.[510]

214. Opponents disagree that the merger is necessary for DBS to compete effectively with cable. Pegasus and others claim that DBS's current excellent ability to compete effectively with cable is evident by DBS subscriber growth rate. In 2000-2001, Pegasus states that DBS subscribers have increased by **24%.** while cable subscribership increased by only 1.9%.[511] ACA notes that the DBS subscriber growth rate is *2.5* times that of cable."[512] ACC Satellite claims that the current competitive MVPD marketplace with its two DBS providers benefits consumers because it provides for increased customer services, products, features, channel selections, and competitive prices.[513]

215. As an initial matter, we note that it is not entirely evident how this argument differs from the Applicants' other efficiency claims – *i.e.*, that the merger will lower New EchoStar's costs and allow it to offer new and innovative services, In particular, since it is not the Commission's role to pick winners and losers in competitive markets, it is not clear why any net increase in DBS market share resulting from the merger, by itself, should be treated as a public interest benefit.

216. One possible interpretation of the Applicants' argument. though the Applicants themselves do not articulate it, is that absent the merger. Echostar and DirecTV would be driven from the market or marginalized by cable competitors. If the Applicants are implicitly making such a "failing firm" argument, we do not find it to be persuasive. As Pegasus and other merger Opponents note. the relative market share of DBS compared with cable has been one of steady and impressive growth. Furthermore. there is no evidence in the record that suggests that this growth will suddenly terminate, markedly decrease, or that DBS will suddenly begin to lose customers to cable.

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[509] Application at **24.**

[510] Applicants' Reply Cornmenis at 45-47, 67.

[511] Pegasus Petition at 37. **See *also*** Carolina Comments at *3;* NRECA Comments at *6*

[512] ACA Petition at **12.**

[513] ACC Satellite Cornmenis at *6*.

217. A second interpretation would bs that the merger will force cable competitors to cut prices and improve their cable offerings in ways they would not have attempted absent New EchoStar's assumed more competitive offerings. The problem with this argument is that the merger simulations, discussed above. already take into account the possibility that cable companies will cut price. If the Applicants are arguing that the merger simulations, in some way. underestimate the extent of the competitive reaction by cable companies. then they would need to explain the reasons for this underestimation. This. they have not done. Indeed they have not demonstrated that such a potential decrease in cable prices could overwhelm the likely negative effect of the merger with respect to increased MVPD market concentration. Thus. while the merged entity might be a more capable single competitor. that does not necessarily mean more effective competition in the MVPD market place. and therefore better results for consumers To the contrary, our analysis demonstrates that the proposed merger would likely leave New EchoStar a more capable. but less effective, competitor, a situation that is more likely to harm than benefit consumers, and therefore the public interest.

D. Potential Public Interest Benefits — Broadband Market

218. *Introduction.* Applicants assert that the merger will benefit the public because it will "allow New EchoStar to deploy a true broadband alternative that is competitive in all major respects to DSL and cable modem services." *arid* that is able to compete effectively with the "bundled video, broadband and interactive service . . . that is being rolled out by those cable companies offering digital cable service."[514] By "true broadband" the Applicant5 mean a competitively-priced residential Internet access service meeting the Commission's definition of "advanced services" – *i.e.*, providing Internet connection speeds in excess of 200 kilobit.; per second (Kbps) in both directions of transmission – and that is provided primarily through the use of next-generation satellite systems employing Ka-band spectrum.[515] The Applicants argue that capturing the alleged benefits turns on the deployment of Ka-band systems because "Ku-band two-way broadband satellite services, such as those implemented by Starband and Hughes. will struggle to achieve sufficient economies of scale to effectively compete with terrestrial DSL and cable broadband services."[516] The Applicants argue they must combine their Ka-band licenses and individual DBS subscriber bases in order to deploy a competitive satellite broadband service in time to challenge cable and digital subscriber line technologies ("DSL") and to prevent cable from locking in

[514] Applicants' Reply Comments at 106, 83 (true broadband alternative) (bundled service by digital cable). *See also* Applicaiion at i ("The merger will allow New EchoStar to provide meaningful broadband competition with cable and telephone companies as a virtual third line into the home *for a bundle of video/data/Internet services.")* (emphasis added).

[515] *Id.* at 83, n.198 (citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability* ro *All Americans in a Reasonable And Timely Fashion. and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Acr* of *1996*, 17 FCC Rcd 2844, 2847-51 (2002) ("*Third* 706 *Report*") (defining alleged "true broadband" benefit as meeting Commission's definition of "advanced telecommunications capability")). For purpose of our analysis, we refer to such enhanced Internet access services as "satellite broadband service" unless the context requires otherwise. We note that the terms "broadband" and "broadband services" have come to mean many different things to many different people. and has been used to refer to 'high->peed' Internet access services—i.e., in excess of 200 Kbps in at least one direction—in addition to "advanced services." *Appropriate Framework for Broadband Access to rhr Internet over Wireline Faciliries Universal Service Obligations of Broadband Providers,* Notice of Proposed Rulemaking, 17 FCC Rcd **3019.** 3019 (2002) *("Wireline Broadband NPRM"); See also Inquiry Concerning High-speed Access to rlie Inrerner Over Cable and Other Faciliries;* Inrerner *Over Cable Declaratory Ruling; Appropriate Regulator Treatment for Broadband Access to the* Inrerner *Over Cable Faciliries).* 17 FCC Rcd 4798. 4802-03 (2002) ("*Cable Modem Declaratory Order & NPRM*").

[516] Application, Eng. Statement at 15.

its dominant position in the provision of bundled video/Internet access service.[517] The Applicants allege that the merger will enhance competition in the delivery of broadband Internet access services in urban areas and offer such services. at the same low price and high quality. to areas that are unlikely to he served by cable modem or DSL in the near future (if at all).[518] The Applicants assert that merger-related efficiencies would allow them to deploy satellite broadband to an alleged "critical mass" of five-million satellite broadband customers within five years."'

219. Opponents contend that the Applicants' competitive satellite broadband service is possible without the proposed merger.[520] Moreover, Opponents argue that the merger will in fact ***harm*** competition for satellite broadband services in rural America by thwarting competition in the anticipated market for enhanced broadband Internet access services and will also eliminate competition in the marker for existing, Ku-band Internet services.[521] NRTC argues that the Applicants "'target' a $35 monthly charge — but they offer no definition of 'target' or any hint of when (or if) they will meet the 'target"' and that "the Applicants propose their target price for a 'basic monthly broadband service' – but they fail to define what 'basic' service is and what kinds of services would constitute 'broadband.""" As NRTC further asserts, "basic" broadband "may mean the slowest of speeds or a level of service that few would

[517] *Id.* at 47-48 ("Time to market is of the essence If next-generation satellite broadhand services reach the market only after cable and DSL have commanded 60% of potential broadband customers. it is not clear whether any late-coming service would be able to attract enough of the remaining customers to become viable."); *id.* at 48 ("[O]nly a narrow window of opportunity is presented for imposing heightened pressure on cable before cable is able to lock in its dominant position.")

[518] Id. at 43 (proposed merger "will have a profoundly positive effect on the deployment of facilities-based. advanced, two-way, broadband services via satellite to all American,. especially in rural areas"), *id.* at 47 (merger will "promote exponentially the efforts of hoth companies to implement truly competitive next-generation broadband systems in a fashion that. absent the merger, would likely hc significantly less beneficial to the public."): Applicants' Reply Comments at 96 ("[T]he efficiencies flowing from the merger will enable New EchoStar Io deploy a competitive true broadband satellite offering for the benefit of all U.S. consumers, rural. suburban and urban alike."). *id.* at 106-109 (merger's efficiencies will allow dcployment of competitive. "true" broadband alternative to cable modem and DSL): NRTC Petition at 42 (summarizing Applicants' claims).

[519] The Applicants contend that with this critical mass. they can "rccovcr the significant up-front investment and subscriber acquisition costs associated with launching and marketing a new two-way broadband satellite service." Applicants' Reply Comments at 101. *See also* Application. Eng. Statement at 15 (estimating that "at least 5 million subscribers would be necessary to recover the significant up front investment and subscriber acquisition costs associated with launching and marketing (a competitive} two-way broadband satellite service").

[520] See. *e.g.*, NRTC Petition at 54-55. Morgan Decl. at 2-3, 36-39; Pegasus Petition at 47 ("[I]t is clear that both EchoStar and DIRECTV already are at the forefront in offering competitive broadband services, and that each can and would continue to develop enhanced broadband services on a competitive basis without the merger:"); *id.* at 49 ("Both EchoStar and Hughes each have sufficient spectrum (both in the Ku FSS and Ka FSS bands) to offer a competitive broadband service. Moreover, both have existing customer bases accustomed to using satellite services, vast distribution networks. and formidable financial resources necessary to support satellite broadband through the growth phase."); NAB Petition at 104-105 (noting Applicants planned Ka-band projects and DirecTV's "optimistic" statements about future of satellite broadband).

[521] See. *e.g.*, NRTC Petition at 50-51 (merger would cause Ku-band merger-to-monopoly in areas not served by cable modem or DSL); NRTC ex *parte* Reply Comments (April 4, 2002) ("NRTC Reply Comments") at 30, n.75 (cause broadband monopoly in areas not served by cable modem or DSL); *id.* at ¶ 42 (cause broadband monopoly in rural America); NAB Petition at ii ("Consumers in [areas without other broadband options] will be at the mercy of a monopolist for broadband Internet access."); *id.* at 102-03 (merger will "snuff out existing competition" for existing service in rural America); Pegasus Petition at 30 ('This merger will eliminate current choices in satellite broadband.").

[522] See NRTC Sept. 4 *ex parte*, Attachment (Ex Parte Comments (Redacted)) at 35-36.

want, leaving the door wide open for price discrimination for 'non-basic' broadband service." As a monopolist, **NRTC** contends. "New EchoStar would have every incentive *to* set a high national price for 'basic' broadband; it would have a limited desire to compete against DSL and cable modem in the areas where those services enjoy a huge head start. and instead would have every incentive to overcharge rural Americans who have no other choices."

220. For the reasons set forth below, we find that the record fails to suppon Applicanis' broadband services claims. We are panicularly concerned that. as NRTC argues, the Applicants have provided too little detail about the price and nature of their proposed satellite broadband service for us to conclude that the proposed transaction will produce a non-speculative, merger-specific benefit with respect to broadband services. Based on the record before us. we cannot conclude thar the proposed merger is necessary to allow New EchoStar to directly and effectively compete with DSL-based and cable modem services *or* with cable provider,' bundled MVPD/Internet services. Additionally, on the record before us. we cannot conclude that the mrrper will speed the deployment of satellite broadband services to the millions of Americans in rural (and other underserved areas) who are unlikely to receive terrestrial broadband services in the foreseeable future. The record indicates that. to the contrary. the merger may impede the provision of any form of satellite Internet service. particularly to rural Americans.

221. ***Buckground.*** While most residential Internet access service is provided over narrowband connections, Americans are increasingly subscribing to broadband Internet access services.[523] Such services today are predominantly provided by cable operators using cable modem technology, and secondarily by telecommunications carriers utilizing DSL.[524] By contrast. current satellite-provided Internet access services constitute only 3 small percentage of all Internet access service accounts.[525]

222. Despite the large number of subscribers to terrestrially-provided Internet access services, millions of residential consumers may **not** have access tu hroadhand Internet access services in the near-term.[526] Although MMDS. third generation wireless (3G) and other wireless technologies have the

[523] We have recognized analysts' predictions concerning the likely increase in broadband connection,. ***Third*** 706 ***Report***, 17 FCC Rcd at 2870-71 ("Currently. ihc vast majority (80.0 percent) [of on-line households have] narrowband connections, but the percentage of high-speed connections should increase, so that in the next live years. 55.7 percent of access connections are projected to be high-speed or advanced."). Broadband Internet access services are approximately four times as fast as the less than 56 Kbps achieved hy did-up, or "narrowband," Internet access technologies. ***See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant ro Secrion*** 706 ***of the Telecommunications Acr of 1996***, 14 FCC Rcd 2398 (1999) (rate of 200 Kbps is "approximately four rimes faster than the Internet access received through a standard phone line at 56 kbps," and was chosen "because it is enough to provide the most popular forms of broadband—to change web pages as fast as one can flip through the pages of a book and to transmit full-motion video."). We anticipate that our measure of advanced services may change as technology continues to evolve. ***See Third*** 706 ***Reporr,*** 17 FCC Rcd at2851

[524] ***See*** Applicants' Reply Comments at 87-88; **Third** 706 ***Report***. 17 FCC Rcd at 2864-66. Throughout this discussion we refer to "DSL services." even though thcrc are several classes of xDSL service. ***See, e.g .Deployment of Wireline Services Offering Advanced Telecommunications Capabiliries. Third Reconsideration Order.*** 16 FCC Rcd 2101. 2104; ***GTE Telephone Operating Cos..*** 13 FCC Rcd 22466. 22471 (1998) ("The 'x' in xDSL is a placeholder for the various types of DSL serviccs. such as . . . ADSL (asymmetric digital subscriber line), HDSL (high-speed digital subscriber line). UDSL (universal digital subscriber line). VDSL (very-high speed digital subscriber line), and RADSL (rate-adaptivedigital subscriber line)").

[525] ***See. e.g., Third*** 706 ***Repon.*** 17 FCC Rcd at 2859: 1869. App. C. Table 1; Applicants' Reply Comments at 88.

[526] ***See*** Applicants Reply Comments at iii ('The 'digital divide' in the United States is real: as many as 40 million households in the United States today do not have access to high-speed Internet and data services . . . ."); ***id.*** at ***86*** ("A report cited by rhe Commission puts the number of homes that may never have [cable modem or DSL] access at 20 *to* 30 million.") (citing ***Third*** 706 ***Reporr.*** at 2877. n.196 (in turn. citing studies by Salomon Smith Barney and

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potential to significantly expand the availability of broadband Internet access to consumers in rural areas. they have yet to do so to any significant degree.'" Thus. satellite-provided broadband Internet access services may provide one of the best potential options for millions of rural subscribers in the near term.[528]

223. Existing satellite-provided Internet access service is provided using Ku-band spectrum similar to. but with service rules different from, that used for DBS service.[529] Ku-band systems have been optimized for the delivery of the DBS point-to-multipoint MVPD service. The evolution of Ku-band FSS systems with **CONUS** coverage beams and two-degree spacing requirements renders such systems **less** than optimum for ubiquitous point-to-point services like residential Internet access service.[530] Current Internet access services provided with the Applicanis' Ku-hand systems may exceed 200 Kbps only in the downstream direction — upstream transmissions are advertised as approximately **I28** and I50 Kbps.[531]

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Merrill Lynch)); NRTC Petition at 44 ("According to a recent FCC report. 75% of U.S. zip codes have at least one high-speed line, but 49.5% of **U.S.** zip codes are served hv one or no providers.")(citing *High Speed Services for Inrerner: Subscribership as of December 31, 2000* (rel Aug 9. 2001)); *id.* at 45 ("A recent Congressional report stated that cable modem service is potentially available to an estimated 64 million households. leaving 40 million households without such access.") (citing Lennard **C.** Kruger. *Broadband Internet Access and the Digital Divide. Federal Assistance Programs.* CRS Report for Congress (Jan 14. 2002) at CRS-2); **NAB** Petition at 100 ("One industry study indicates that in 2002, 28 percent of the U S. will be without terrestrial broadhand access. In the very near future, according to other industry observers. there uill bc approximately 20 to 30 million U.S. households that will be unserved by cable modem or DSL").

[527] **See** NRTC Petition at 49 (MMDS yet to emerge as major competitor to cable modem and DSL. and MMDS broadband access providers have scaled back service deployment): *Third 706 Report*, 17 FCC Rcd at 2878 (discussing potential of third generation wireless (3G) systems); NRTC *ex parte* Reply Comments at 32 (use of unlicensed technologies not competitive), *Bur see* Applicants' Reply Comments **at** 111 ("The Commission **has** recently observed that new entrants using several different technology platforms have already begun. or are poised to begin. playing a significant role in providing high-speed and advanced services to many areas of the couniry including smaller markets."); ***id.*** **at** 111-114 (discussing prospects of broadband deployment hy MMDS. several Ka-band providers, ***3G*** **systems.** advanced DSL technologies. and small cable companies).

[528] **See,** *e.g.*, NRTC Petition at 49 ("Regardless of which statistics are more accurate, it **is** indisputable that **a** very large number of rural Americans do not have access to cahlc modem or DSL services, leaving satellite **as** their only available choice.").

[529] Currently. Ku-band Internet access service **is** provided in the fixed-satellite service (FSS) band. 11.7-12.2 GHz with the uplink portion of two-way service in the 14.0-14.5 GHz hand. While the DBS ancillary service policy could facilitate one-way satellite Imernet access service in the BSS hand. 12.2-12.7 GHz. two-way service would not be feasible in the BSS band. ***See*** 2002 ***DBS Report and Order.*** This is because the BSS feeder **link** hand, 17.3-17.8 GHz, is limited **to** feeder link operation by hoih international and domestic footnotes to the tables of frequency allocations,. **See 47** C.F.R. **§2.106,** n.US271; International Radio Regulations. RR5.516. In addition. the BSS uplink is also allocated to **BSS** downlink effective April 1. 2007 rendering the band incompaiible with the ubiquitous customer-premised iwo-way earth stations required for two-way satellite-provided Internet access service. **See** 47 C.F.R. § 2.106, n.NG163; International Radio Regulations. RR5.517.

[530] *See* Applicants' Reply Comments, Friedmnn Decl. **at** ¶ 15 (unlike Ku-band systems, Ka-band systems better for broadband Internet access service because. "[a]mong oihcr things, the use of many **small spot** beams (by Ka-band systems] facilitates the provision of point-io-poini service by many different users with **a** high raie of efficient frequency reuse."); Douglas **S.** Shapiro. ***EchoStar Communications Corp.. Initiating Coverage with a Strong Buy***, Banc of America Securities (Equity Research) (Sep. 19, ***2002)*** at 5 ("[W]hile we believe **the** DBS business is the **most** efficient broadcast architecture, it is also **the** most inefficient point-io-point architecture. making two-way services such **as** high-speed data, VOD. true interactivity and voice impractical or technologically impossible.").

[531] **See.** ***e.g.***, NRTC Petition **at** 45-46 (EchoStar's StarBand and DirecTV's DirecWay services provide upload/download speeds of 1501500 and 128/400 Kbps. respectively); Applicanis' Reply Comments **at** 90

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224. At the time the Merger Application was filed. the Applicants owned or controlled the only two Ku-band Internet access services available nationally in the United States -- DirecTV's DirecWay service and EchoStar's Starband service.[532] The Applicants provide Ku-band service by leasing transponders from third parties, at an annual cost of $2 million per transponder.[533] Both use satellite dishes somewhat larger than DBS dishes and both offer a way to access some of the full-CONUS DBS orbital locations using a single dish.[534] EchoStar's customers accessing the eastern and western DBS locations at 61.5' W.L. and 148° W.L. do not have a one-dish solurion for bundled DBS/broadband service. Several firms — including two merger Opponents, NRTC and Pegasus – resell DirecTV's existing satellite-provided Internet access services.[535]

225. It appears that next-generation Ka-band satellite systems will be better-suited than existing Ku-band systems to provide "true" broadband Internet access because Ka-band technology will achieve higher bandwidths in both directions through more extensive use of spot beams and the frequency reuse that can be achieved with spot beams.[536] Anticipating the benefits of Ka-band technology for satellite broadband services, the Commission has licensed several entities to provide Kn-band service.[537]

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("[C]urrent satellite offerings do not meet the Commission's definition of 'advanced services' because the satellite offerings are not capable of providing transmission speeds in excess of 200 kbps in both directions.")

[532] As discussed further below, after the merger application was filed, EchoStar withdrew its support of Starband and relinquished its voting interest. See. *e.g.*, *EchoStar Stops Backing StarBand After $100 Million Investment*, Satellite Week (Apr. 8. 2002): SrarBand *Accepts Registration of EchoStar Board Members*, Communications Daily (May 8, 2002) (noting May 5, 2002, resignation of four EchoStar-appointed nicmbers from seven-person board).

[533] See Applicants' Reply Comments at 91

[534] See. *e.g.*, Randy Sukow. *Satellite Internet: Another Piece in the Last-mile Broadband Puzzle*, Rural Telecommunications (Jul./Aug. 2001). *available at* http://www.ruraltelecom.org/julaug01/satellite-b-full.html (noting that the Internet-capable satellite dishes associated with Applicants' satellire Internet access services are "somewhat larger than dishes designed to receive TV service only.")

[535] Pegasus has announced that it will discontinue its Internet access service. See Pegasus Satellite Communications, Inc., 10-Q For Period Ending June 30. 2002 (filed Aug. 14. 2002) at 11 ("Because our Pegasus Express two way satellire internet access business no longer fits into our near term strategic plans, we cntcred into an agreement with an unaffiliated party in June 2002 to sell our Pegasus Express subscribers and the Pegasus Express equipment inventory for cash.") *available at* http://www.shareholder.com/Common/Edgar/1015629/1135338-02-25/02-00.rtf.

[536] *See. e.g.*, Pegasus Petition at 40-41 (explaining Applicants' deployment of spot beams for MVPD services) ("Because the television signal [retransmitted with multiple spot beams] is transmitted to a small area. the same frequency may be re-used in other geographic areas without the interference that would result if two signals were transmitted nationally on the same frequency. This means that a single satellite can supply a large number of local television channels with relatively little spectrum usage."). *See also*, WildBlue, *WildBlue Corporate Backgrounder*, *at* http://www.wildblue.com/me/backgrounder.html (visited Sep. 16. 2002) (WildBlue system designed to "use a large number of small 'spot beams' pointed at different geographic regions instead of using one single U.S. beam." that such "[s]pot beams allow a large degree of frequency re-use (i.e. multiple beams can re-use the same frequency as long as they are aimed at different parts of the country). and should facilitate "up to 4 - 6 times as much bandwidth per dollar as a Ku-band satellite").

[137] Although spot beam technology could be used in the Ku band to provide point-to-point services such as broadband Internet access service, the service rules in the Ku FSS band require a satellite longitudinal spacing of two degrees. See *Licensing of Space Stations in the Domestic Fixed-Satellite* Service, 54 Rad. Reg. 2d (P&F) 577, 589 (1983). This requires thar the use of small subscriber antennas be coordinated with the neighboring satellites in order to minimize interference between the co-channel services. Typically, small-antenna services on one satellite are only compatible with large-antenna services on the neighboring satellite. rendering it essentially impossible to commit an entire Ku-band FSS satellite to broadband Internet access services. Thus, Ku-band FSS satellite broadband services are implemented on a transponder basis rather than a satellite basis. On the other hand, the Ka-

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With respect to anticipated Ka-band services, the Applicants combined would control six of about 25 full-CONUS Ka-band orbital locations, depending on the results of other proceedings before the Commission.'" The Ka-band orbital locations that the merger would place under New EchoStar's control would be panicularly well-suited to providing a "bundled" DBS/satellite broadband service over a single dish. Such a "one-dish" service would be akin to the bundled service offering increasingly provided by the larger cable operators.[539]

226. *Applicanrs' Claimed Benefits.* The Applicants claim that the merger will result in "many efficiencies" that "allow New EchoStar to deploy a true broadband alternative that is competitive in all major respects to DSL and cable modem services."[540] The Applicants contend that "[t]he merged company will combine the resources and subscriber bases of both [Applicants] which will result in substantial cost and service advanrages over any possible individual Ka-band offering of EchoStar or Hughes."[541] Such enhanced broadband service will. the Applicants allege. be "akin to an increase in the number of broadband competitors from "zero to one" in most areas and 'one-to-two' or 'two-to-three' in other areas of the country."[542] This increase in coinpetition would. they allege, in turn force cable operators to further improve their systems.[543]

227. *Verifiable, Non-Speculative in Nature.* The Applicants' predicted benefits primarily are based on the deployment of new satellites using spot beam technology over the Ka-band spectrum Although licenses for the use of this spectrum haw been issued and some satellites are currently scheduled, none have been deployed. Despite the potential for providing broadband Internet access services using Ka-band spectrum. several would-be provider\ have recently delayed further deployment of their systems due to *a* lack of funding. For example. Astrolink suspended construction *of* its system following a significant investment; PanAmSat hac given low priority to its Ka-band development; and

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band service rules, while also requiring two-degree spacing, still allow for antennas in the two-foot range to be deployed ubiquitously on a co-channel basis on neighboring satellites uith acceptable intcrfcrrncc levels

[538] The combined locations of EchoStar and Hughes would satisfy the "one-dish" solution criterion of the Applicants. See. Appendix B·D. *See also,* Letter from Gary M. Epstein, Latham & Watkins, Counsel for Hughes Electronics Corporation and General Motor, Corporation. and Pantelis Michalopoulos, Steptoe & Johnson LLP. Counsel for EchoStar Communication5 Corporation, to Marlene H. Dortch. Secretary. FCC (June 13, 2002) ("Applicants Jun. 13 ex *parte*"), Attachment at 38 ("Broadband Presentation"); EchoStar's pending Petition for Reconsideration seeks reinstatement of its Ka-hand authorizations at 83" W.L. and 121° W.L., which were canceled for failure to meet milestones. *See* n.23. *supra.*

[539] *See* Applicants' Reply Comments at 82, n.146. More pcnerally. we have previously recognized the importance of bundled video and Internet access service. *Accord, Annual Assessment of* rhe *Status of Competition in* rhe *Market for* rhe *Delivery* of *Video Programming.* Eighth Annual Report. 17 FCC Rcd 1244, 1248 (2002) ("The most significant convergence of service offerings continues to be the pairing of Internet service with other service offerings.")

[540] Applicants' Reply Comments at 106.

[541] *Id.* at 106

[542] *Id.* at 81.

[543] *Id.*. Willig Decl. at 36-37 (merger's effect on coinpetition in the broadband Internet access services market generally would be to "likely pressure cable providers to upgrade their infrastructure so that connection speeds do not deteriorate as the subscriber base increases." thcrchy "increase[ing] the speed at which extant cable modem subscribers connect to the Internet or allow more broadband users at any given connection speed").

WildBlue's plans have been slowed due to funding difficulties?' The license for Motorola's Ka-band Millennium System was declared null and void because construction **was** not commenced by January 31, 2002, **as** required.[545] Spaceway. the Ka-band system planned by DirecTV, however, ***is*** scheduled to launch its first satellite by **2003.**[546] Clearly. the nascent state of this potential future service raises questions and uncertainties both as to the timing and scope of its implementation and **as** to the quality and price that will be achieved that cannot reasonably be answered at this time. Thus, it is highly speculative whether this alleged merger benefit will come into fruition within a reasonable timeframe.

228. ***Merger*** *Specificity*. The Applicants allege that the merger is necessary to allow them to "achieve the necessary economies of scale and scope" to offer satellite broadband services over Ka-band facilities at "price points" competitive with terrestrial broadband alternatives.[547] In order to capture such economies. the Applicants claim that "one company must have access to a sufficient number of state-of-the-an satellites in relatively close proximity to one another and must have enough spectrum to sustain **a** critical mass of subscribers" sufficient to "recover the significant up front investment and subscriber acquisition costs associated with launching and marketing [a competitive] two-way broadband satellite service."[548] The Applicants "estimate" the necessary "critical mass" to be "at least" five million subscribers in five years.[549] According to the Applicants, this critical mass "would significantly increase the ability of [New EchoStar] to make the investments necessary to develop advanced services, such as price-competitive high-speed Internet access. and to achieve the scale necessary to spread the fixed costs

[544] See. *e.g.*, Applicants' Reply Comments at **93** ("Just recently, Astrolink reported that it had terminated its 'La-hand spacecraft contract with Lockheed Martin. after having built 90% of its first spacecraft, and after spending about $710 million on its Ka-band system and finding itself unable to finance the remaining cost of implementing the Astrolink broadband system."). *But* ***see, In*** re ***Astrolink*** *International* ***LLC, Application for Authority to Construct, hunch.*** and *Operate* a Ka-band *Satellite* ***System in the*** *Fixed-Satellite* ***Service***, Memorandum Opinion and Order, 17 FCC Rcd 11267 (Int'l Bur. 2002); File Nos. 182 through 186 SAT-PILA-95 and SAT-MOD-19971222-00200 (waiving Astrolink's Ka-hand construction commenccmcnt milestone, contingent upon Astrolink's entering construction contract by January 2003); Letter from Jack Richards. Keller and Heckrnan LLP, Counsel Io NRTC. to Marlene **H.** Donch. Secretary. FCC (Jul. ***25.*** *2002)* Attachment ai 2 ("The EchoStar/DIRECTV Merger Would Be Disastrous For Rural America") (suggesting that EchoStar "chose to cease funding its WildBlue Ka-band project" apparently to thwart development of satellite-delivery broadband. and thereby promote the merger).

[545] See Application of Motorola, Inc. and Teledcsic. LLC for Extension of Time Allowed for Commcncemenl of Construction. File No. SAT-MOD-20020131-00012, 17 FCC Rcd 16543(Int'l Bur.. 2002).

[546] See, *e.g.*, Letter from John P. Janka. Hughes Electronic Corp. io Magalie Roman Salas, Secretary. FCC. at 16 (Jan. 14,2002)(file Nos. SAT-MOD-20011221-00135 & 00136); Pegasus Petition at 31-32.

[547] Application. Eng. Statement at 15. **See** also Applicants' Reply Comments at 101 ("As explained in the Application. EchoStar believes that it must achieve ***at*** least 5 million broadband subscribers within a five year period in order to recover the significant up-front investment and subscriber acquisition costs assuciated with launching and marketing a new two-way broadband satellite service."): Applicants Jun. **13** ***Ex*** *Parte* at **2** ("Without the merger, neither **firm** will likely have **a** large pool of subscribers **to** attain the scale—about 5 million broadband subscribers—required to reduce the price to the consumer and thereby effectively compete with cable and DSL broadband offerings.").

[548] Application. Eng. Statement at 15 ("ECC and Hughes estimate that at least 5 million subscribers **would be** necessary in the next **5** years to recover the significant up front investment and subscriber acquisition costs associated with launching and marketing such two-way broadband satellite service."). **See** also Application at 47 ('Time to market is **of** the essence. If next generation satellire broadband services reach the market only after cable and DSL have commanded 60% of potential broadband customers, it is not clear whether any late-coming service would be able to attract enough of the remaining customers to become viable."); NRTC Petition, Morgan Decl. (disputing Applicants' 5 million subscriber "critical mass" argument).

[549] Application, Eng. Statement at 15; Applicants' Reply Comments **at** 101; Applicants Jun **13** ***ex*** *parte* at 2.

among a sufficient number of subscribers."[550] Opponents contend that Applicants have sufficient spectrum and subscriber base to achieve their alleged benefits without the merger."[551] NRTC raises the most technically-detailed challenge to the Applicants' five million subscribers "critical mass" argument.[552]

229. Based on the record evidence. we find that the Applicants have failed to demonstrate that the merger will result in cognizable public interest benefits related to satellite broadband service. More specifically. as discussed below, we find that Applicants' benefit claims are speculative and not credible and do not appear to be merger-specific.

230. First, even if we were to accept the Applicants' "critical mass" argument. it is nor clear that the ability to combine customers and facilities is a merger-specific benefit. In particular. it is noi clear that the benefits of consolidation could noi be achieved by other means, such as a joint venture. that would be less likely to have anticompetitive effects.[553]

231. Second, we find that the merger would generate fewer spectrum efficiencies in satellite Internet access service than it would for DBS service. Because DBS service is a broadcast service sent to all subscribers, the merger will reduce the nerd to broadcast duplicative channels. Satellite Internet access service, in contrast, requires the use of at least some dedicated spectrum to transmit data and content to and from a particular subscriber.

232. Third, it appears that. absent the merger. DirecTV's Spaceway system could have adequate infrastructure to achieve the "critical mass" of five million residential subscribers in the five years assumed by the Applicants as a requirement for a viable satellite broadband business.[554] It also

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[550] Application. Willig Decl. at ¶ 25; Application. Eng. Statement at 16 (merged entity will he "able to achieve scale in manufacturing to significantly reduce subscriber terminal costs"); *id.* ("[B]y combining the investments of hoth companies and standardizing the product. the fixed costs lor the system will bc reduced by 50%. providing a more competitive and compelling product to the Amcricnn consumcr."). *id.* at 15-16 (noting efficiencies concerning "ground stations and access gateways. hoih primary and redundant. as well as the provision of customer suppon facilities." and concerning "consumer terminals required for the provision of satellite broadband services").

[551] NRTC Petiiion at 54-55. (Applicants own statements and "simple multiplication" show each Applicant can serve from 4.5 to six million subscribers standing alone); NRTC Petition. Morgan Dccl.. at 2-3, 36-39 (without merger. DirecTV and EchoStar can provide Ka-band broadband service to approximately 1.6 to 14.5 million and 6.6 to 12.7 million subscribers, respectively); NRTC ex *parte* Reply Comments at Y (noting EchoStar "flip-flop" on ability io provide Ka-band service); Pegasus Petition at 31 (Applicants' claim "inconsistent with the statements that they have been making to the Commission for several years now—including very recently—that the are each. separately, committed to deployment of broadband satellite systems and have been building separate Ka-band satellites lor several years."); *id.* ai 47 ("[I]t is clear that both EchoStar and DIRECTV already are at the forefront in offering competitive broadband services. and that each can and would continue to develop enhanced broadband services on a competitive basis without the merger.")

[552] See *generally,* NRTC Petition, Morgan Decl. at 36-39. Table 14.

[553] *See, e.g., DOJ/FTC Guidelines* § 4 (efficiencies will not be considered "merger specific" if they could be accomplished by other means).

[554] Staff analyses based on the Applicants' stated capacity suggest that Spaceway could accommodate over 5 million broadband residential subscribers on its two Ka-band satellites at the licensed 99º W.L. and 101º W.L. locations. This is based on the 8.5 frequency reuse factor associated with a processing satellite and the assumption that Spaceway would find a way to exploit the full 720 MHz of bandwidth allocated to FSS for blanket-licensed earth stations at Ka-band. 18.58-18.8 & 19.7-20.2 GHz (space-to-Earth) and 28.35-28.6 & 29.5-30.0 GHz (Earth-to-space). See Applicants Jun. 13 *ex parte*, Attachment ai 9.

appears that EchoStar could potentially approach this assumed critical mass.[555] This is particularly true when one takes into account the opponunity that each of the Applicants will have in marketing their broadband Internet access service to the 40 million households that they claim currently lack access to DSL and cable modem services.[556]

233. Fourth. we are not convinced by the Applicants' claim that they must achieve a critical mass of five million customers. For example. in calculating the minimum critical mass, the Applicants assumed that the average monthly broadband service fee would be REDACTED.'" The Applicant.;, however, present no convincing evidence that this is the likely market rate. If the actual monthly revenue were higher, the minimum critical mass would he **less** than five million. In addition. in estimating revenue, the Applicants include REDACTED Making this adjustment would likewise lower the critical mass below five million. Thus, the minimum viable customer base is likely to be significantly below five million subscribers for an integrated MVPD and broadband operator.

234. Finally, we give little credit to the Applicant.;' claims that the merger will generate efficiencies due to the consolidation of "advertising and promotion budgets and . . . distribution channels." as well as the "customer service centers. uplink facilities, network operating centers, trunking facilities and billing functions."[558] We discount thew efficiencies arguments because the efficiencies alleged here relate to fixed rather than variable costs. and therefore are unlikely to counteract any anticompetitive effects of the merger.[559]

235. In summary, the record does not support the Applicants' claim that the provision of satellite broadband services should be considered a public interest benefit of the merger. We cannot emphasize strongly enough the potential value of broadband Internet access services to every community and citizen in the country. Applicants, however, have failed to demonstrate that their proposed merger is either more likely than not to hasten the delivery of satellite broadband services, or is necessary to achieve this important public interest benefit. Specifically. thcy have failed to demonstrate that this claimed benefit is non-speculative and incapable of being achieved through other means.

236. *Potential Public Interest Harms.* Although Applicants argue that the merger will benefit competition in the Internet access service market. Opponents contend that the merger will instead harm competition in that market by eliminating existing Ku-band competition, particularly in rural areas where

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[555] There are currently pending before us two petitions concerning Ka-band licenses held by EchoStar that could be used for broadband services. In addition, undcr the Merger Agreement. EchoStar has the option to purchasc PanAmSat from Hughes if the merger is terminated undcr certain circumstances. Favorable action on the pending petitions, together with the PanAmSat assets. would, according the FCC staff analyses, leave EchoStar able to serve close lo 4 million residential subscribers on these three satellites. This is based on the Frequency reuse factor of 4 associated with bent pipe satellites and the assumption that the lull 720 MHz Ka blanket-license band would .be exploited for the two satellites that could do so (only 500 MHz of bandwidth is licensed to EchoStar at I? I° W.L.). *See also* n.23. *supra*; Applicants Jun. 13 *ex parte*. Attachment at 9. Additional residential subscribers could be served through joint ventures with other Ka-band licensee like WildBlue. KaStar, or others.

[556] *See. e.g.*, Applicants Jun. 13 ex *pane,* Attachment at 44 ("About 40 million households currently unserved by cable modem or DSL.")

[557] Letter from Pantelis Michalopoulos. Esq. on behalf of EchoStar and Gary M. Epstein. Esq. on bchalf of Hughcs to Marlene Dortch. Secretary. FCC (July 30. 2002) Tab A. at 2 ("Applicants July 30 *ex porte").*

[558] Applicants' Reply Comments at 107.

[559] *See DOJ/FTC Guidelines* 54

satellite-provided Internet access services are the only option for residential consumers,[560] and limiting competition in the provision of next-generation. Ka-band satellite-provided broadband Internet access service. Under Commission precedent, the burden of persuasion is on the parties proposing the transfer of a license or authorization to show that the potential public interest benefits of the transfer outweigh the potential public interest harms.[561] On the record before us. we cannot find that the Applicants have met this burden.

237. *Ku-band Internet Access Services.* Opponents argue that the merger will eliminate competition in the current market for Ku-band satellite Internet access service by combining the only two facilities-based providers of that service – Starband and DirecWay.[562] Such a monopoly. Opponent.; claim. would result in higher prices, degraded service. and decreased innovation. particularly in rural areas where no alternative to Ku-band Internet access service exists.[563]

238. Applicants argue that the Ku-band Internet access service market is not viable without the merger, and, in any event, harm to that market will be prevented by the Applicants' promise to impose the same monthly fees nationally.'" For example. the Applicants note that the *560* to $70 monthly fee for existing satellite-provided broadband Internet access service. is "significantly" higher than monthly fees for cable modem and standard DSL service. which can be as low as $30 and $45, respectively.[565] They claim that the same is true for equipment and installation costs. which are more than $700 for satellite-provided broadband Internet access services. compared to less than $200 or $250 for some cable modem

[560] *See, e.g.*, NRTC Petition ai 42-56; NRTC *ex parte* Reply Comments at 15-16. n.35; NAB Petition at ii. 98-104 (merger will reduce rural consumers' only choice for hroadhand services now and in the future): NRTC Response at iv, 2-3 (same effect for estimated 25 million rural consumers); Pegasus Petition at 30 (merger will eliminate satellite broadband competition by removing current rural broadband choices and reducing future choices).

[561] See. *e.g.*, *Bell Atlantic-NYNEX* Order, 12 FCC Rcd at 20063 ("Applicants bear the burden of showing both ihat the merger-specific efficiencies will occur, and that thcy sufficiently offset any harms io competition such that we can conclude that the transaction is pro-competitive and therefore in the puhlic interest."): *SBC-Ameritech* Order, 14 FCC Rcd at 14825 (same).

[562] NRTC Petition at 50 ("For these existing Ku-band services. the combination of EchoStar and Hughes would constitute a merger to monopoly [in areas not served hy cahlc modem or DSL]."); id. at 51 (For foreseeable future, Starband and DirecWay are the only choices for many rural markets without cable modem or DSL service. and therefore merger will "eliminate competition entirely in these markets. leading to monopoly pricing for the only technology capable of meeting demand for rural broadband services."); NRTC *ex pone* Reply Comments at 30-31, n.75 (Arguing that "combined New EchoStar would. as a rural broadband monopoly . . . increase[e] prices. as there would be no competitor to constrain prices in [ ] areas [without competition]."); id. at 32-33 ("For rural America. New EchoStar would enjoy a broadband monopoly."); NAB Pctiiion at ii ("Consumers in [areas without other broadband options] will be at the mercy of a monopolist for broadband Internet access."): id. at ID2 ("DIRECTV/Hughes and EchoStar though its equity interest in StarBand'" control the only two satellite broadband products available today."); id. at 103 ("[T]he merger will actually snuff out existing competition'' for existing service in rural America); Pegasus Petition at 30 ("This merger will eliminate current choices in satellite broadband.")

[563] For example, NAB notes that competition between the Applicants must "flourish" in order to "provide rural America with the most cost-effective and up-to-date broadband service.'' NAB Petition at 101

[564] See Applicants' Reply Comments at 118.

[565] *Id.* at 93.

and DSL providers, respectively.[566] The Applicants note that some DSL service providers charge no installation fees at all.[567]

239. The record indicates that harm to existing Ku-band Internet access service will primarily occur in areas not served by cable modem or DSL facilities because such service may not be "reasonably interchangeable" with cable modem or DSL broadband Internet access services.[568] Our ability to conclusively evaluate the impact of the proposed merger on the provision of satellite Internet access service using Ku-band spectrum, however. was complicated by Echostar's announcement on April 4, 2002, that it was withdrawing its suppon from and surrendering its control of Starband's Ku-band project because it judged that service not viable.'[569] NRTC argues that Echostar's actions were intended to promote the merger.'[570] Similarly, after the Merger Application had been filed. DirecTV stated that it "is unlikely Io continue to fund its residential satellite broadband service without the merger."[571] We view

[566] *Id.* at 93-94.

[567] *Id.* at 94.

[568] *See, e.g.*, Applicants' Reply Comments at iv ("The two companies' current hroadhand offerings arc expensive 'niche' products that are hampered by several constraints, do not even satisfy the Commission's definition of an 'advanced service.' and have attracted fewer than 150.000 subscribers combined."); *id.* at 85 ("[S]atellite broadband today is not fully comparable to cable modem and DSL. leaving many Americans without a true broadhand alternative."); *id.* at 90-95; NRTC *ex parte* Reply Comments at 24 (noting the Applicants' complaint "that their Ku-band service offerings are subject to constraints on transmission speeds, capacity and overall costs," hut arguing that "[w]hile this may or may not be true. the Merger is not the right vehicle tu correct these purported shortcomings.").

[569] *See EchoSrar Stops Backing SrarBand After $100 Million Investment*, Satellite Week (Apr. 8, 2002). *See also*, *SrarBand Accepts Registration of EchoSrar Board Members*, Communications Daily (May 8. 2002) (noting May 5, 2002. resignation of four EchoStar-appointed members from seven-person hoard). In the wake of EchoStar's withdrawal. StarBand filed for Chapter 11 bankruptcy protection. a move that StarBand claimed was necessary because EchoStar was withholding StarBand's customer records. *See* Yuki Noguchi, *SrarBand Files for Chaprcr 11; Firm Drops Suit Against EchoStar*, Wash. Post (June 1, 2002) at E1 ("Since [February, 2002], StarBand has been unable to collect revenue from about 31,000 of its 41,000 customers. according to [StarBand's bankruptcy filing.]"). According to StarBand's President. David Trachienberg. "EchoStar, which had control of StarBand's board, was creating obstacles *to* StarBand's growth by stymieing funding efforts and business plans." *Id.* At the lime of its bankruptcy filing. StarBand claimed that remained operational. *Id.* ("[StarBand's] network is up and running, customers are getting service, dealers can order products. and employees arc still getting paid."). On June 20, 2002. StarBand announced that it had reached a settlement with EchoStar, pursuant to which "EchoStar will pay StarBand $710,000 and hand over service records fur 16.000 retail StarBand customers," and will "pay StarBand a $35-a-month fee for each of the 15,000 customers it sold service to under a previous wholesale agreement." See Yuki Noguchi, *StarBand, EchoStar End Their Dispute; Fight Over Billing Settled Out of Corirr.* Wash. Post (Jun. 21. 2002) at E5. The settlement also requires EchoStar to give up its right to block or veto any future funding or business decisions for StarBand. *Id.* In return. StarBand agreed not to publicly disparage EchoStar and issued an apology to EchoStar chairman and CEO Charles Ergen for posting his email on StarBand's website. *Id.* The settlement was to become effective upon approval by a bankruptcy judge. Before the settlement. EchoStar was expected to lose its 30 percent ownership of StarBand during the course of the bankruptcy proceeding. *See supra*, Noguchi, *SrarBand Files for Chaprer 11*

[570] Letter from Jack Richards. Counsel for NRTC. to Marlene H. Dortch. Secretary. Federal Communications Commission (July 23,2002). Attachment at 2. After withdrawing its support, EchoStar initially withheld Starband's customer records. thereby preventing Starband from collecting revenue from about 31,000 of its 41.000 customers. This action led Starband to sue EchoStar. but the lawsuit was subsequently withdrawn when Starband filed for bankruptcy on July 31, 2002 *See* Yuki Noguchi, *StarBand Files fur Chuprrr 11; Firm Drops Suit Against EchoSrar.* Wash. Post (June 1. 2002) at E1. See *also* Andy Pasztor, *StarBand Files For Bankruptcy, Blaming EchoSrar.* Wall St. Journal (June 3.2002) at B5.

[571] *See* Applicants Jun. 13 *ex parte* at 6.

such self-serving statements with skepticism, however, particularly in the absence of objective supporting evidence.[572] Applicants have done nothing to rebut NRTC's claims that their actions with respect to Ku-band Internet access service are no more than self-fulfilling prophesies that continued provision of the service is not possible without the merger. The Applicants' actions and statements could well he designed to bolster their claims that satellite Internet services are not viable absent the merger. In sum, the single most potent harm to Ku-band Internet services may be the pendency of the merger itself.

240. Finally, to the extent that the Applicants are correct concerning the importance of a larger subscriber base and the ability to bundle video and broadband services on a single satellite dish, then Starband may have difficulty in the future competing effectively with DirecWay, due to the loss Echostar's funding and subscriber base together with the flexibility to provide a "one-dish" solution that Echostar's DBS orbital slots would provide. EchoStar's actions toward Starband following announcement of the merger arguably raise questions whether different actions might have been. or might be, taken if the merger does not go forward.[573] Thus, we find that the record indicates that the proposed merger appears more likely to harm existing competition in the provision of Ku-band Internet access market than it is to benefit this market.

241. ***Ka-band Broadband Internet Access Services.*** The anticipated broadband Internet access services to be provided over next-generation. Ka-band facilities present somewhat different issues. On the one hand, the gestational character of these as yet un-deployed services. combined with rapidly developing technology in this area, make it difficult to define markets or market participants with any confidence. and thus to predict the existence or magnitude of any alleged harms or benefits to consumers as a result of the merger. At the same time. the record suggests that the merger could have significant anticompetitive effects.

242. Opponents argue that the merger will harm future competition in the provision of Ka-band broadband Internet access services.[574] NRTC argues that the merger will stifle anticipated competition in such Ka-band services by *adding* barriers to entry faced by potential entrants.[575] Opponents further allege that giving the Applicants the most valuable Ka-band orbital slots will deter

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[572] See, *e.g.*, *In re Applicarions of Amerirech Corp.. Transferor. and SBC Communications Inc.. Transferee. For Consent to Transfer Conrrol of Corporarions Holding Commission Licenses and Lines Pursuant to Sections 214 ond 310(d) of the Communications Acr and Parrs 5, 22, 24. 25, 63. 90, 95 and 101 of the Commission's Rules*, 14 FCC Rcd 14712, 14750 (1999) ("Although Ameritech minimizes the competitive significance of its own independent entry absent the merger. the preponderance of the evidence demonstrates that Ameritech's portray31 is self-serving.")(citing *id.*, Appendix B (Summary of Confidential Information and Conclusions)).

[573] One industry observer noted that Starband's bankruptcy filing had "potentially important implications for the satellite industry because it's the first time a federal court will hear claims that EchoStar used unfair and even illegal tactics to boost its proposed takeover of Hughes Electronics Corp., parent of DirecTV." Andy Pasztor, *Starband Files For Bankruptcy.* Further exacerbating our inability to predict how Starband will fare in competition with DirecWay post-merger is the fact that EchoStar may have effectively purchased Starband's silence in this proceeding. *See* Yuki Noguchi. *StarBand, EchoStar End Their Dispute: Fighr Over Billing Settled Out of Court*, Washington Post (June 21, 2002) at E5 ("Starband also agreed not to publicly disparage EchoStar . . . .").

[574] *See* NRTC Petition ai 53-54 (merger would "stiflecompetition. squander scarce and valuable spectrum resources and deter any new competition in the foreseeable future").

[575] See *Id.* at 54. Commenters also argue that the merger will remove the Applicants' motivation to continue to innovate with regard Io these services. See NAB Petition at 61 ("The loss of an innovation incentive also will significantly affect the development and deployment of advanced services. like interactive video programming and broadband Internet. via satellite—a primary goal of the Telecommunications Act of 1996.")

competitive entry.[576] Applicants contend that Opponents are mistaken that the merger "will 'stifle' Ka-band competition, or 'prevent Ka-band cornpetition from emerging in rural areas.'"[577] The Applicants maintain that this is the case because "there are more than enough prime Ka-band **slots** controlled by others to ensure that the merger will not "stifle" competition in providing broadband services.'' Funher. they argue that. in any event, "the Commission has observed that new entrants using several different technology platforms have already begun. or are poised to begin, playing a significant role in providing high-speed and advanced services to many areas *of* the country including smaller markets."[578]

243. We consider the competitive effects of anticipated next-generation Ka-hand services to better assess Applicants' claims about benefits. but our discussion of potential harms in this area is necessarily limited by the fact that Ka-band broadband Internet access services are not currently on the market. Thus, our analysis, like the claimed broadband benefit itself. is somewhat speculative. NRTC's alleged harm of additional barriers to entry. however. appears even more likely to occur if we assume. for purpose of this analysis, that a bundled MVPD/broadband service is as important to consumers as the Applicants claim.[579] Indeed. if the ability to offer a bundled MVPD/broadband service proves important to consumers, then Pegasus may he correct that "the creation of a DBS video monopolist – New EchoStar – would result in a de facto satellite broadband monopolist as well."[580]

244. However, **we** cannot make this ultimate determination on the record before us. Fur example, we do nut know whether Ka-band broadband Internet access service will actually be reasonably interchangeable with terrestrially- provide^ alternatives.[581] Similarly, the fluid state of broadband Internet access service technologies prevents our determining whether potential entrants, beyond the field of anticipated Ka-band broadband Internet access service providers. would challenge what Opponents claim would be the unassailable dominance of New EchoStar with respect to the broadband Internet access market in many areas of rural America.

245. Moreover, for reasons similar to those discussed in connection with the MVPD market. the Applicants have not demonstrated that the likely potential harms to existing or future Internet access service competition can be ameliorated through a national pricing scheme.[582] The Applicants have provided scant evidence of what they mean by "national" pricing for satellite broadband services. For example, the Applicants have not defined the difference between "basic" broadband Internet access services — for which a $35 monthly fer is predicted – and "non-basic" broadband Internet access

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[576] ***See Id.*** at ***52-56; 55*** (potential competitors "will **not** he able to raise funding in the face of the EchoStar/Hughes/PanAmSat six-pack of satellites.").

[577] Applicants' Reply Comments at 109; ***id.*** at 109-114 Applicants further **argue** that the merger is preferable to a "complicated web *of* regulations" that the Applicants allege will be required to achieve universal broadband deployment absent the merger. ***Id.*** **at** 115.

[578] ***Id.*** at 109-10 (sufficient"prime" Ka-band slots) & 111 (new entrants with alternative technologies)

[579] ***See, e.g.***, Application at 6-7; Pegasus Petition at 34 (since consumers increasingly demand "bundled package of' video and broadband," the "inability of other firms to offer satellite video services would inhibit new broadband entry.").

[580] Pegasus Petition **at** 34-35. ***Accord.*** NRTC ***Ex Parte*** Reply Comments **at** ***36*** (MMDS operators unlikely to "bundle MVPD and broadband" and "[m]ore fundamentally. no MMDS operator has announced plans to provide bundled services using the MMDS spectrum.").

[581] Estimated timelines for the deployment of Ka-band broadhand Internet access services have slipped before. ***See. e.g., AT&T-MediaOne Order.*** 15 **FCC** Rcd at 9868-69 (noting Spaceway's expectation to begin operations in 2002).

[582] ***See supra*** Section V.B.4.

services.[583] Nor have they explained ihe dramatic drop from current to future predicted pricing levels for satellitedelivered Internet access service. Moreover. as NRTC points out. the Applicants have left "many unanswered questions about the implementation, governance and enforcement of a national broadband pricing plan."[584]

246. Finally, the record and Applicants' own submissions suggest that the proposed mcrger may not in fact result in the Applicants' increased ability Io offer a bundled satellite MVPD/broadband service capable of competing head to head with the voice/video/data bundle of services being deployed by some of the largest cable MSOs, or the videoldata bundled being deployed by the vast majority of cable MSOs. For example, the Applicanis have noted that "[c]able systems ihat have gone to 100% digital programming have an effective throughput of 4.47 Gbps, and when they upgrade from 750 MHz transmissions to 1250 MHz transmissions they will have an effective throughput to ihe home of 8.94 Gbps."[585] In response to such anticipated digital cable capacity. the Applicanis argue that "[t]he merger will help address this competitive disadvantage by . . . providing the merged entity with an aggregate throughput of approximately 2.9 Gbps for all national programming, and a satellite "pipe" to the home of approximately 2 Gbps after accounting for capacity dedicated to local broadcast channels."[586] We find it unlikely that the merger will result in spectrum efficiencies (from avoiding duplication) similar to those alleged in the MVPD context, because the spectrum used for broadband Internet access service is finite and must be apponioned to individual subscriber3 individually.[587] We note that cable modem service "typically delivers information to end users at speeds in excess of 2 Mbps."[588] Moreover. by emphasizing a benchmark for "advanced services" of *at least* 200 Kbps in both directions. the Applicants essentially ignore that "in future years, the appropriate definition of broadband service may change as iechnology improves and consumer demand grows for more features and functions from residential broadband

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[583] **See** NRTC Ex Parte Reply Cornmenis at ¶ 17 (no definition of "basic" and "nun-basic" broadband services); Applicants Reply Comments **at 118** ("New EchoStar will commit to a nationwide pricing policy for baric broadband services that will translate effective competition in urban areas into benefits to all households for broadband service, just **as** it will for MVPD services."): Applicants Jun. 13 *Ex Parte* (promising 3 "target price of $35 or lower Ior basic monthly broadband service, ***uniformly applied throughout the nation.***") (emphasis added). The Applicants' failure to specify uplink and downlink speeds for its "basic" service is inconsistent uiih DirecTV's public statement. after the merger application was filed. that Spaceway's Ka-band system would "far exceed the FCC's standard for advanced services" by providing "super-fast download speeds of starting at 30 Mbps and uplink rates from 512 Kbps for the smallest earth terminals for ***individual users***, and from tens of hlhps for ***businesses*** and hubs." National Telecommunications & Information Administration, Deployment of Broadband Networks and Advanced Telecommunications. Docket No. 011109273-1273-01, Late Filed Comments of Hughes Network Systems, *available at* http://www.ntia.doc.gov/ntiahome/broadband/

[584] NRTC *ex parte* Reply Comments **at 21-22.**

[585] EchoStar May 16 ex*pane* at *3.*

[586] ***Id.***. Attachment. "Post-Merger Bandwidth Comparison: Fat Pipe Model."

[587] ***See, e.g.***, NAB Petition ai 106 ('The information each consumer requests via ihe Internet is unique, and the information downloaded **as a** result is equally uniquc."). **As** NAB observes, "[t]he broadband capacity needed to offer this 'programming' to each consumer will not change whether the merger takes place or not." NAB Petition at 106. Although the merger may result in some fixed cost savings to the Applicants. such savings (unlike variable costs) are **less** likely to be cognizable in the context of competition analysis. Moreover. the Applicanis have not demonstrated **that** any cost savings in **the** provision **of** satellite-provided broadband Internet access services will inure to the benefit **of** residential subscribers.

[588] ***Third 706 Reporr*** **at** 2865. ***Id.,*** Appendix B ai 2917-18 ("Under optimal conditions. an upgraded cable system can provide **maximum** downsueam speeds **of** 27 Mbps and maximum **upstream** speeds **of** 10 Mbps. more than sufficient **to** qualify **as** advanced **telecommunications capability**.422 In praciice. however, cable **transmission** speeds typically range from 500 kbps to 1.5 Mbps.").

service."[589] In other words, we have no way of discerning whether the appropriate benchmark for "true" broadband connection speeds will exceed that proposed by the Applicants before the end of the five-year period alleged as crucial for obtaining a "critical mass" of five million subscribers.

247. *Conclusions.* We therefore conclude that the Applicants have not demonstrated that the claimed broadband service benefits are likely to occur and that the merger is necessary to realize them. Applicants' position that the merger will result in increased deployment of satellite broadband services is based primarily on the projected provision of broadband Internet services using Ka-band spectrum. Such services, however, are not only nascent, in nearly every case they are months. if not years, away from public availability. The facilities to provide broadband Internet access service using Ka-band spectrum are not yet deployed. Substantial uncertainties remain as to the likely quality and prices of such service. Moreover, Applicants have failed to demonstrate thai the promised benefits, even if technically and economically achievable. could not be achieved without the merger. It is not clear that one or hoth of the Applicants would not be able to individually fund their satellite broadband projects without the merger, or that the cost savings and efficiencies alleged by the Applicants could not be achieved through other means, for example by the adoption of open technological standards or by recovering capital costs through revenues from enterprise broadband Internet access services.[590] Finally. Applicants have not

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[589] ***Third*** 706 *Repor:* at 2850. In the ***Third*** 706 ***Reporr*** we noted our belief that "services at speed, over 200 Khpa *and* 2 ***Mbps*** are currently available through traditional wireline offerings—though must often deployed to businesses—and we concluded that the information we rcquirc respondents to report [with respect to these benchmark connection speeds] will enable us to detect the *evolution of supply and demand /or such future generarions of* ***broadband.")*** (emphasis added). ***See*** *also* Gartner Dataquest. *Gartner Dataquest Says Implementation of "True"* ***Broadband*** *Could Bolster U.S. GDP by $500 Billion a* ***Year*** (Aug. ***26. 2002)*** ("While many consumers associate the term broadband with the typical 384 kbps downstream that service providers offer today, Gartner Dataquest defines 'true' broadband as broadband to the home with aggregate downstream capability of a minimum of 10 Mbps.").

[590] ***See. e.g.***, Peter J. Brown. ***Two-way*** *Service But* ***No*** *Standards. No Interoperability*, Broadband **Week** (Jan. 22. 2001) ***available at*** http://www.broadbandweek.com/news/010122/010122_wireless_return.htm (visited Sep. 10, 2002) ("Proprietary system have to disappear from the satellite industry in order to build scale. Scale means volume, and volume means lower costs. . . . DVB-RCS is available. and numerous other companies are building to it.") (quoting Robert Bucher, President, Canadian company Norsat International); EMS Technologies. Inc., 2001 Annual Report at **5** ("The intent of an open **standard** is **to** speed market growth by lowering the cost of broadband service to customers. service providers and hardware suppliers.") *available at* http://www.elmg.com/investors/annual_report_2001/AnnRpt.pdf. EMS has noted that a numhcr **of** companies developing next generation systems had sponsored Digital Video Broadcast - Return Channel System (DVB-RCS) standard. "in an attempt to arrive **at an** open standard." ***See EMS Technologies.*** Satellite Broadband *at* http://www.ems-t.com/STG/broadband/dvb-rcs.asp. EMS notes that "[t]he intent of an open standard is to accelerate economies of scale. thereby generating lower-cost solutions and opening the market in a shorter timeframe than could be possible with competing proprietary solutions." including that used by HNS and Gilat. *Id.* The Applicants note that "[s]erving the enterprise sector provides the opportunity for [Spaceway] to recover more quickly the enormous capital cost **of** deploying this system: conversely. focusing on **a** ubiquitous residential service is a far riskier endeavor that would **take** far longer to recover such costs." Applicants' Reply Comments at 98. The Applicants do not explain. however, what mix of enterprise/residential service would allow Spaceway to recoup capital costs while still providing service **to** a significant number of residential subscribers. Moreover. the Applicants do not explain why Ka-band spectrum could not be reasonably apportioned between the peak hours for enterprise and residential, since they differ.

The Applicants might **also** take advantage of **the $20** million in grants that are available. through **the** Department of Agriculture's Rural Utility Service (RUS) Broadband Pilot Grant Program for broadband transmission service in rural America. ***See. e.g., Notices, Dept. of*** *Agriculture,* ***Foresr Sen,. Siuslaw Resource Advisor), Comm. Meeting. Monday, July 8,*** **2002,** 67 Fed. Reg. **45079.** 2002 **WL 1446457** ($20 million available for fiscal year 2002 for proposals to provide broadband transmissions on a "community oriented connectivity basis."). ***available*** *at* http://www.rurdev.usda.gov/rd/nofas/2002/bbpgp070802.pdf.

demonstrated that the potential harms to broadband markets from additional concentration of imponant assets and inputs resulting from the merger would either be insubstantial or could be cured by a national pricing commitment. Thus, in our overall balancing of potential public interest harms and benefits. we will afford little weight to this alleged merger benefit. even absent our determination that the proposed transaction appears more likely to harm than to benefit the markets for both narrowband and broadband satellite-delivered Internet services.

VI. OTHER ISSUES

A. Vertical Effects

1. Potential Harms in the Video Programming Market

248. *Introduction.* In this section. we consider the effects of the merger on the market for the sale of video programming. delivered via satellite or terrestrial technologies. in the form of networks. We have described the video programming market extensively in our previous orders."" Companies that own programming networks both produce their own programming and acquire programming produced by others.[592] These companies then package and sell this programming as a network or networks to MVPD providers for distribution to consumers.[593] MVPDs purchase programming and combine it with transport on their cable. satellite. or wireless distribution networks to provide delivered video services to subscribers.

249. Participants in the market for the packaging of video programming consists of entities of various sizes, from unaffiliated packagers that own one programming network to large corporations, such as AOL Time Warner and Viacom. that own many 24-hour networks."" We understand that the video programming networks sell programming to MVPDs baaed on contracts generally lasting several years.[595] Video programmers are Compensated in pan through license fees that are based on the number of subscribers served by the MVPD. These license fees are negotiated based on "rare cards" that specify a top fee, but substantial discounts are negotiated based on the number of MVPD subscribers and on other factors. such as placement of the network on a particular programming tier.[596] Most video programmers also derive revenue by selling advertising. Advertising time on programming network is generally split between the programmer and the MVPD.[597]

250. Some programming networks offer programming of broad interest and depend on a large, nationwide audience for profitability; other5 also reek large nationwide audiences but offer content that is more focused in subject; yet others still seek nationwide distribution, but offer narrowly tailored

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[591] *See, e.g., Implementation of Secrion 11 of rlie Cable Television Consumer Protection and Competition Act of 1992. Implenienrarion of Cable Acr Reform Provisions of rlie Telecommunications Acr of 1996. the Commission's Cable Horizonral and Vertical Ownership Limirs and Attribution Rules, Review of rhe Commission's Regulations Governing Arrriburion of Broadcasr and Cable/MDS Interests, Review of the Commission's Regulations und Policies Affecting Invesrmenr in rhe Broadcast Indusrry. Reexamination of rlie Commission's Cross-Interest Policy*, 16 FCC Rcd 17312 (2001) *("Ownership further Norice").*

[592] *Id.* at 17321-22.

[593] *Id.*

[594] *Id.*

[595] *Id.* at 17322.

[596] *Id.*

[597] *Id.*

programming. focusing on a "niche within a niche.""' Some programming networks do nor seek a national audience but are regional or even local in scope. including regional sports and news networks. Some programming networks likely can survive with distribution to a few million subscribers within a certain region, while others may need nationwide distribution to a large percentage of MVPD homes in order to remain viable.'" Program packagers seek to reach the widest range of subscribers for their type of programming on **a** regional or national basis to increase the value of their programming to advertisers, and to build brand recognition that will in turn spur other MVPDs to carry their programming and allow them lo reach yet more subscribers.[600]

251. If the transaction is approved, New EchoStar will be the only major DBS purchaser of video programming, one of the largest MVPD purchasers. and the only major MVPD purchaser with a national footprint. CWA states that, as a result, prices will increase **for** program providers and program distributors."' It argues that program providers and distributors will have no alternative but to sell to New EchoStar, since it will be the largest national distributor of MVPD programming, with more than 17 million customers.[602] NAB claims that broadcasters will be harmed because they will have weakened power to negotiate retransmission consent terms.[603]

252. ACA claims that New EchoStar will exert bottleneck control over programming, thereby allowing it to harm small cable systems with which it competes. ACA states that today EchoStar refuses *to* negotiate with small cable systems regarding program distribution. although DirecTV does enter into "dish-overlay" arrangements on a limited basis. Under these arrangements. the small cable company installs a DBS dish on a subscriber's home. The subscriber then receives some programining via cable and some via the satellite dish. In markets where DBS does not deliver broadcast **signals,** and where low density of cable subscribers cannot support a system upgrade. such an arrangement enables rural consumers to receive expanded programming." ACA argues that New Echostar, which will be the only major provider of DBS services, will be able to refuse to enter these overlay arrangements, or do so on onerous terms, in order to drive small cable systems out of business and achieve a monopoly.

253. Applicants respond that, contrary io the Opponents' arguments, the proposed merger will enhance performance in the programming market because the additional spectrum made available through the elimination of their duplicate programming carriage will allow New EchoStar to serve as an outlet for new programming services.[605] Applicants disavow any intent to pursue a strategy of vertical integration with programmers and claim that the merged entity will serve **as** an important outlet for promoting the

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[598] *Id.* at 17322-23. Examples of the first type of programming include TNT and USA: examples of the second type include ESPN for sports and CNN for news: and examples of this third type of programming include Discovery Health. the **Golf** Network. and Home and Garden.

[599] *Id.* at **17323.**

[600] *Id.*

[mi] CWA Petition at **2.** Although CWA argues **that** program distribuiors will pay an increased price to New EchoStar. we note that almost all program distributors are paid by DBS and other MVPD providers. We take CWA's argument to mean thai program producers and distributors will receive less for their programs money after the merger because of New EchoStar's market power.

[602] ***Id.***

[603] NAB Petition ai 57-58.

[604] ACA Petition at 16-18.

[605] Applicants' Reply Comments at 118-1 **19.** ***See also*** Applicaiion ai 6. **29.**

development of new independent programminf services.[606] Regarding retransmission consent, the Applicants disagree with NAB, and insist that broadcasters can always rely on must-carry and can use the existence of competitive cable systems as a bargaining tool.[607] Moreover, the Applicants claim that the merger is necessary to promote competition among MVPD providers for programming in light of cable and broadcast consolidation, such as the proposed AT&T–Comcast merger.[608]

254. *Discussion.* Opponents raise two areas of concern. The first is the exercise of monopsony buying power. The second is the possibility of vertical foreclosure (*e.g.*, refusing to provide programming to a rival cable system) We address each in turn.

255. With regard to monopsony power in the market for programming, the economic literature does not identify a single point at which moiiopsony power becomes likely. In general, large purchasing power delivers both benefits and potential costs to consumers. Ths benefits come from the fact that large MVPDs that receive programming discounts may pass on some of these reduced costs to subscribers (for example, in the form of lower prices). The potential cost to consumers come) from the fact, discussed further in the next paragraph, that these discounts may discourage or preclude competitive entry. and thereby result in higher prices or reduced service quality.[609] If we were to approve the transaction. New EchoStar would become either the first or the second largest purchaser of video programming,[610] and, according to the Applicants, would pay less for programming costs than before the merger.[611] The new entity, however, would only represenr slightly more than 20 percent of the total purchases of video programming. Twenty percent is well below levels of concentration at which the Commission historically has had cause for concern.[612] Also, with regard to both national and regional programming, there are several other large and many smaller venues (chiefly other MVPD providers) through which programmers can distribute their programming, We therefore find no basis on this record to conclude that New EchoStar would be able to exercise monopsony power over national and regional programmers.

256. The situation would be different. however. with regard to programmers attempting to reach some niche audiences, those who live in low density areal. many of which are rural. As described above, such viewers would have few choices of MVPD providers and many would be reduced to a single provider if we were to approve the transaction. New EchoStar would effectively be the only MVPD provider to between 4% and 21% of the population. It would lace competition only from low-capacity

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[606] *Id.* at 6.

[607] Applicants' Reply Comments ai 129

[608] *Id.* at 125-26

[609] *See generally* Chipty. Tasneem, "Horizontal Integration for Bargaining Power: Evidence From the Cable Television Industry," *Journal of Economics & Management Strategy*, Vol. 4, Summer 1995, Ai 375-397; Ford, George S. and John D. Jackson, "Horizontal Concentration and Vertical Integration in the Cable Television Industry. *Review of Industrial* Organization, Vol. 12, *at* 501-518; Waterman. David and Andrew A. Weiss, *Vertical Integration in Cable Television,* The MIT Press and The AEI Press, 1997. *especially* Chapter 7 ("Waterman and Weiss *(1997)");* and Shooshan, Harry M. :"Cable Television: Promoting a Competitive Industry Structure." in *New Directions in Telecommunications Policy: Volume 1, Regulatory Policy: Telephony and Mass Media.* Paula R. Newberg, ed.. Duke University Press. 1989. at 222-246.

[610] If we approve the license transfers involved in the pending merger between AT&T Cop. and Comcast Corp., MB Docket No. *02-70.* AT&T Comcast Corp. will become the country's largest MVPD provider.

[611] We have addressed Applicants' claims about the extent of their lower programming costs. *supra*

[612] *See Ownership Funher Norice.* 16 FCC Rcd at 17335 (discussing Commission's horizontal ownership limit. under review. that bars cahle operators from owning systems that reach more than 30% of MVPD subscribers nationwide).

cable systems for another substantial segment of the population. Such cable systems, because they have low capacity that is already filled by established networks. would be unlikely to carry new program networks. Thus, if there were programmers that wished to focus on audiences in low density areas. New EchoStar would effectively provide the only outlet for their programming. For these niche programmers, New EchoStar would indeed be able to exercise monopsony power and could be the "gatekeeper" that some commenters have described. On the other hand, it may also be true that without the capacity freed up by the consolidation of the Applicants' satellites. neither DirecTV nor EchoStar would carry these niche programs. instead using their resources to carry programs with broader reaches. Moreover. it may be that the audience that lives in low density geographic areas do not form an identifiable niche. For example. there may be many "rural" viewers who live in areas served by high capacity cable systems, and thus a programmer attempting to reach "rural" audiences may have alternative outlets from which to choose. The record contains insufficient evidence for us to determine the precise impact of the transaction on the niche programmers described in this paragraph. and accordingly. we designate this question for hearing.

257. The second concern involve.; the possibility of vertical foreclosure. As described in the Background section, Vivendi, an owner of programming networks, will own approximately five percent of New EchoStar if the merger occurs. In return for its investment. Vivendi has secured five of Echostar's channels. The agreement between EchoStar and Vivendi is non-exclusive. *i e.*. EchoStar is not contractually prohibited from carrying networks that compete with Vivendi. and Vivendi is not prohibited from being carried by other MVPD providers. Vertical foreclosure concerns in this case therefore involve two possibilities: Vivendi discriminating against New EchoStar's rivals, and New EchoStar discriminating against Vivendi's rivals.

258. In theory, Vivendi could deny it. programming to rivals of New EchoStar in order to induce consumers to switch to New EchoStar. In order tur this strategy to be profitable. the profits Vivendi would lose by discriminating against other MVPD providers would have to be more than offset by the increase in Vivendi's share of the profits that New EchoStar would earn from the new customers it would gain as a result of the discrimination. However, Vivendi would bear the full cost of the reduced revenues from MVPD providers but would pain only five percent of New Echostar's increased profits. We conclude that this type of vertical foreclosure is therefore highly unlikely to be profitable in this case.

259. Alternatively, New EchoStar could act in an anticompetitive manner against other programming providers in order to benefit its five percent shareholder, Vivendi. For example. New EchoStar could provide Vivendi's competitors with less desirable channel locations, or charge those programmers rates higher than it would if they did not compete with Vivendi. EchoStar, however. has a responsibility to the other 95% of its shareholdcra. It is therefore doubtful that New EchoStar would take actions that would decrease the profits of its other shareholders in order to increase Vivendi's.[613] Moreover, EchoStar has no incentive not to make its other channels available to Vivendi's closest competitors if EchoStar otherwise finds it profitable to do so. Vivendi is a part-owner of Echostar: EchoStar is not a par-owner of Vivendi: thus. New EchoStar would receive no pan of any additional profits Vivendi might make because of New EchoStar's discrimination against other programmers, and New EchoStar therefore has no incentive to fuvor Vivendi (apart from complying with the terms of its contract).[614] In short, other than providing it with five guaranteed channels, New EchoStar has no reason

[613] We note that no competitor of Vivendi has filed comments making a veriical foreclosure argument, perhaps because. for he reasons expressed above, the possibility of vertical foreclosure seems remote.

[614] A different analysis might apply if Vivendi controlled of EchoStar or was a very significant shareholder. but that is not the case here.

to discriminate in favor of Vivendi. We therefore do not find any problem in the area of vertical foreclosure.

2. Transfer of Control of PanAmSat

260. ***Background.*** Part of the Application before us involves the transfer of control of the licenses of PanAmSat from Hughes to New EchoStar. PanAmSat is a major provider of fixed satellite services ("FSS") in the United States and is currently 81% owned by Hughes. Most distribution of video programming to MVPD service providers (and to over-the-air television broadcasters) is carried over FSS. Upon consummation of the planned transaction, New EchoStar would both be a DBS provider and an FSS provider.

261. In delivering video services to consumers. MVPD operators typically retransmit programming received from distant points. rather than originate programming at the locale where transmission takes place. To obtain these signals, the MVPD operators rely primarily on FSS provided over a number of GSO satellites."" For national distribution of video programming within the United States, a full CONUS satellite "footprint" is needed.[616] Roughly 70% of the capacity on FSS satellites in the United States is dedicated to video distribution; only seven percent is unused.[617]

262. Information from various sources indicates that there are three major FSS operators licensed by the United States, with about $2 billion in revenues per year."* SES ASTRA and PanAmSat are the two dominant operators. with Loral Space a distant third. In addition. there are fringe providers. such as New Skies, Anik, and various Latin American satellites partly available for North American use. PanAmSat controls about 35% of FSS satellite transponder capacity and carries about the same amount of national video programming, as measured by transponder usage. SES ASTRA controls about 42% of FSS satellite transponder capacity and provides about the same amount of national video programming. One market observer describes the FSS market to have an "oligopoly-like market structure of highly profitable players in the longer term."[619]

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[615] FSS is defined as satellite service between fixed. as opposed to mobile. points and excluding broadcast satellite service such as DBS. Non-geostationary FSS also exist, but because of cost and oihsr considerations, video distribution is carried primarily by GSO satellites operating in the C- and Ku-Bands. In the rest of this issue paper, when we refer to FSS satellites. we mean CSO FSS satellites exclusively.

[616] This corresponds to orbital slots from about 61.5° W.L. to 155.5' W.L.

[617] See ING Barings' *Satellite Communications Industry*, March 2000, p. 149.

[618] See data tiled with the Commission in July 2001, together with data from LyngSat.com and ING Barings' *Satellite Conrmunicarions Industry*, March 2000. Worldwide FSS had 57.2 billion in 2000. according to SSB with 5.235 transponders and 82 percent utilization, with North America having 1.504 of those transponders *(29* percent) with 88 utilization.

[619] See Merrill Lynch. *Eye in the Sky*, 1Q02 Preview, April 12, 2002. The Hirschman-Herfindahl Index (HHI) of market concentration resulting from the market shares in the FSS market is between approximately 2,989 and 3.5 18. The DOJ-FTC Merger Guidelines describes such a market as highly concentrated. Typically, the Merger Guidelines contemplate a two-year time horizon in assessing whether market concentration could lead to anti-compeiitive effects. Most of our understanding of the future of the FSS industry relies on forecasts by Wall Street market analysts. See. *e.g.*, Merrill Lynch (April 12, 2002); Salomon Smith Barney, *Satellite Communications ond Towers,* Jan. 3, 2002. They generally believe that supply and demand will be in balance for the foreseeable future. This forecast is. however, subject to considerable uncertainty. On the supply side, new digital compression technology is generating a quantum leap in the amount of programming that can be transmitted over a single transponder. Preparations are under way for development of Ka-Band satellite services that could result in a substantial expansion of FSS capacity. The first launches of Ka-Band satellites arc. however. about three years away. On the demnnd (continued....)

263. The Applicants state that the acquisition of PanAmSat will provide significant benefits to consumers from the combination of FSS resource.; of DirecTV (Hughes) and EchoStar *to* bring broadband satellite services **to** marker faster. The Applicants also state that the transaction will not create any significant overlap in the provision of FSS services that should raise any concern. given that EchoStar does not currently provide any telecommunications cervices of the same type as PanAmSat in the United States or elsewhere.

264. Duke Law argues that the merger would result in the largest MVPD provider, New Echostar, having control over the most popular and heavily-used commercial satellite programming distribution network, PanAmSat.[620] According to Duke Law. the acquisition of PanArnSat would allow New EchoStar **to** use its gatekeeper role in the commercial programming distribution market to obctnict the availability of public interest DBS programming.

265. ***Discussion.*** Although Hughes controls ***35%*** of the **FSS** marker through its ownership of the PanAmSat satellites, EchoStar does not operate any FSS satellites. Thus. post-merger, New EchoStar would have approximately 35% of the FSS marker. With respect to the MVPD market. as of June 2002. DirecTV reported approximately 10.75 million subscribers,[621] approximately 11.5% of all MVPD subscribers,[622] and EchoStar reponed approximately 7.5 million subscribers,[623] or approximately 8% of all MVPD subscribers. Thus, Hughes currently controls approximately 35% of **the FSS** market and 11.5% of the MVPD market. and after the merger. New EchoStar would control approximately 35% of the FSS market[624] and 19.5% of the MVPD market.

266. We find it unlikely that the transfer of PanAmSat to New EchoStar. if the transaction ultimately were to be approved. would create any harms in the FSS and MVPD markets. First. because EchoStar today does not own any FSS satellites. the transaction does not increase the concentration in the **FSS** market. Second, PanAmSat is already undcr common control with a DBS provider – DirecTV – and the proposed transaction would not change that situation. Duke Law has suggested no reason why New EchoStar's ownership of PanAmSat, as compared to Hughes.' would affect the availability of public interest DBS programming

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side, market watchers anticipate that Internet broadhand applications (*e.g.*, streaming video) and the transition **to** HDTV. will eventually place great demands on **FSS.** The speed with which these nascent applications develop. however, is uncertain. **As** a result. there could be short-term shortages or **gluts** of **FSS** capacity. Such short-term imbalances are. however, typical in any market characterized by dynamic growth and technological innovalion.

[620] Duke Law Reply Comments at 27-28.

[621] *Hughes Second Quarter 2002 Results Driven By String DirecTV U.S. Financial Performance*, Hughes Elcc. **Corp.** Press Release (July **15, 2002).**

[622] **There** are approximarely ***94*** million MVPD subscribers nationwide.

[623] *EchoSrar Reports Second Quarter* 2002 *Financial Results*, EchoStar Corp. Press Release (Aug. **15.2002)**

[624] Although EchoStar does not currently operate any **FSS** satellites, **it** does have licenses **for** the deployment of three Ka-Band satellites. This, however, is a small percentage of the total Ka-Band licenses, many of which are held by PanAmSat and Hughes Communications Galaxy. as well **as** other companies. Thus even if Ka-Band development proceeds smoothly. merger ***of*** PanAmSat's and Hughes' assets with those of EchoStar would have little effect on the Ka-Band or **FSS as a** whole.

267. The economic literature describes cenain scenarios in which it would be profitable for an integrated firm to act strategically against downstream rivals that use the firm's good or services.[625] Thus, this literature suggests that New EchoStar might have an incentive to use its market power in the FSS market (assuming. arguendo, that it would have any) to competitively harm cable rivals, who use FSS. For instance, New EchoStar could degrade the quality of the FSS service provided to rivals. restrict supply, or raise price of FSS. all in an attempt Io gain additional share (and earn additional profits) in the MVPD market.

268. Although possible, we find that such an attempt is unlikely to occur and even more unlikely to succeed. With 35% of the FSS market. it is doubtful that New EchoStar would have sufficient market power to carry out such a scheme. Funher. there appears to be sufficient excess capacity in the FSS market at present so that if PanAmSat attempted Io raise rates, it would likely lose customers to the other FSS providers. Thus, unilateral restriction of FSS supply would likely he very costly to New EchoStar and would achieve little. Moreover. as mentioned above, New EchoStar would have only 3 slightly stronger percentage of the MVPD market than Hughes does currently. Based on the similarity between New Echostar's post-merger market shares and Hughes' current market sharec in both the FSS market and the national MVPD market. there is little reason to believe, and no evidence in the record to suggest, that New EchoStar would have a significantly greater ability to act anticompetitively than Hughes does now in the FSS market. Moreover. it is hard to imagine that New Echostar's strengthened presence in the MVPD market would enable it to increase the price of FSS service, as Duke Law suggests. We therefore conclude that New Echostar's acquisition of PanAmSat would be unlikely to cause competitive harm in the FSS or MVPD markets. Accordingly. we are not designating for hearing any issues regarding the transfer of control of PanAmSat's licenses to New EchoStar.[626]

B. Proposed Merger Conditions

269. Several merger Opponents and other commenters suggest that if the Commission were to approve the proposed merger, New EchoStar should be subject *to* one or more conditions. A number of parties propose conditions that they contend will increase competition. Cablevision. through its wholly-owned subsidiary, R/L DBS ("Rainbow DBS"), holds an authorization to provide DBS service over 11 DBS channels at the half-CONUS 61.5" W.L. orbital location. and plans to initiate DBS service by late August 2003. Cablevision proposes as a condition to merger approval that EchoStar be divested of 17 transponders from the 61.5" W.L. to "a new DBS entrant" (itself) in order to provide effective competition *to* New EchoStar.[627] Cablevision also requests that the Commission require EchoStar to lease capacity on its Echostar-3 satellite to Cablevision for not less than three years.[628] WSNet recommends

[625] *See. e.g.*, S. Salop and D. Scheffman. *Raising Rivals' Costs*, *73* Am. Econ. Rev. 267 (1983); T. Krattenmaker and S. Salop. *Anticompetitive Exclusion: Raising Rivals' Cosis io Achieve Power over Price*, 96 Yale L. J. 209. 293 n.73 (1986) (citing articles).

[626] As indicated *supra.* the Applicants have also stated that EchoStar has agreed to purchase Hughes' interest in PanAmSat in the event the proposed transfer of Hughes and EchoStar to New EchoStar is terminated under cenain circumstances. See Application at 2, and Application Vol. II at Tab 4. We cannot now predict either the outcome of the issues we designate for hearing or whether the circumstances described in *the* Applicants' agreements will come to pass. As no standalone application for the transfer of control of PanAmSat to EchoStar is pending before us, we do not address the question whether such a transfer would be in the public interest pursuant to Section 310 at the present time.

[627] See Cablevision Sept. 18 *ex pane.* Attachment. "Rainbow DBS. Opportunities to enhance DBS MVPD competition in connection with the EchoStar/DirecTV merger," at 2.

[628] See Cablevision July 11 ex parte.

that the Commission condition the merger on a requirement to provide WSNet. or some similarly situated entity. with permanent access to full-CONUS enhanced satellite facilities.[629] Satellite Receivers proposes that the Commission should condition the merger upon the licensing of MVDDS providers. and require New EchoStar to enter into a consent decree agreeing to share the 12.2-12.5 GHz spectrum.[630]

270. SES Americom is seeking Commission authorization to initiate a new DBS service known as AMERICOM2Home.[631] It argues that. unless cenain conditions are imposed, New EchoStar will have the market power and incentive to prevent the development of this new service.[632] SES Americom thus proposes that the approval of the merger be conditioned on the Commission requiring operator-lo-operator discussions of interference concerns. It also requests that New EchoStar be required to provide open access to customer premises equipment. including the satellite dish and receiver to competing satellite service providers. and to make its local television transmissions available on a wholesale basis at reasonable rates for resale to competitors' customers. SES Americom also request, that the Commission forbid anticompetitive arrangements between New EchoStar and its retail distributors and content providers. Northpoint also suggests that the Commission condition the approval of the merger on the creation and implementation of an open standard for DBS receivers that would allow DBS customers to access services from competing wireless MVPD providers using their DBS receivers.[633]

271. Several proposals for condition5 concern the provision of local-into-local service. Consumers Union, APTS, Eagle. Family. and Paxson propose that the Commission condition merger approval with various requirements and timetables for the carriage of local broadcast television stations by New EchoStar.[634] APTS also suggests that New EchoStar he required to display all local broadcast stations on its electronic program guide in a non-dizcriminatory manner within 30 days of the consummation of the merger.[635] Family suggests that the Commission waive or modify Section 76.66(c)(1)to stop New EchoStar from denying carriage based on technicalities relating to the timing or content of carriage requests and that we open a new carriage request window.[636] In addition, Paxson proposes that the Commission require New EchoStar to comply with all notice, carriage and election procedures set forth in SHVIA and to carry all local broadcast stations on a non-discriminatory manner.

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[629] WSNet Comments at 3. See *also* Letter from Jared Abbruzzese, Chairman WSNet. to Marlene Dortch, Secretary. FCC (May 28, *2002)* at 2. WSNet propowd specific language to require that New EchoStar provide control and use of a minimum of *24* channels of high-powcrcd capacity on one of its existing DBS satellites to an unaffiliated wholesale provider of DTH and digital programminf services nationwide at cost to ensure that alternative multichannel video programming services are offered in smaller markets and rural areas.

[630] Satellite Receivers Comments at *4.* In this regard. Consumers Union requests request that the Commission begin now to license MVDDS providers. Consumers Union Comments at 21-22.

[631] See *SES AMERICOM Inc.*, SAT-PDR-20020425-00071, Aug. 23, 2002.

[632] See Letter from Phillip L. Spector, Attorney for SES Americom. Inc., to Marlene H. Dortch, Secretary. FCC (Sept.*27.2002).*

[633] Northpoint Petition at 9-10. *See also* Consumers Union Comments at 24 (the Commission should impose open access requirements similar to those in the AOL-Time Warner consent decrees).

[634] Consumers Union Comments at 14 (carriage of all stations where technically feasible); APTS Comments at 5, *7* (carriage of local stations in 110 DMAs within 120 days *of* consummation of the merger); Eagle Petition at 4 (carriage of all local stations in a non-discriminatory manner): Family Petition at *5* (carriage of all local stations); Letter from Richard Swift, Esq.. counsel for RYF (April 15, 2002) (require local-into-local service in Puerto Rico); Paxson Petition at 19-20 (carriage of local stations in the top 75 DMAs within 90 of the consummation of the merger. in the top 150 DMAs within 180 days and in all DMAs within one year),

[635] APTS Comments at *7*

[636] Family Petition at *5.*

with respect to cost, receiving equipment. signal quality. digital and multicast signals. interactive capabilities, and program-related information.[637]

272. Consumers Union proposes that the Commission should (1) increase the set-aside requirements pursuant to Section 25(b) of the Cable Act from four percent to seven percent from DBS operators to off-set the loss of editorial diversity, (2) require that an entity other than the DBS operator select the programming for the set-aside channels. and (3) impose additional reponing and enforcement obligations.[638] The Local and State Government Advisory Committee ("LSGAC") proposes that New EchoStar make channel capacity available for PEG access and contribute PEG capital comparable to that contributed by cable operators. LSGAC and Paxson also recommend that the Commission impose specific enforcement mechanisms and penalties in case any of the conditions are not met."'

273. The State of Alaska proposes conditions relating to the provision of broadband service in Alaska to ensure that Alaska receives satellite Internet cervices within a reasonable time period and the next generation satellite broadband Internet services at the same time as they are offered in the contiguous United States.[640] The State of Alaska, the Regulatory Commission of Alaska ("RCA") and LSGAC suggest that New EchoStar be required to offer the same national pricing guarantees for broadband services as it proposes for DBS. and offer broadband equipment and installation prices in Alaska at prices equal to the prices offered to customers in the continental United States.[641] Similarly. Consumers Union suggest that the Commission obtain an enforceable guarantee that New EchoStar will offer non-discriminatory pricing, rates, terms, and conditions in rural areas that are comparable to those offered in competitive markets, including the same equipment subsidies. promotions and service options.[642]

274. In light of our decision to designate the Applications for hearing, we do not address the merits of any of these proposed conditions.

VII. BALANCING POTENTIAL PUBLIC INTEREST HARMS AND BENEFITS

275. The Applicants have failed to meet their burden of proof to show that, on balance, the proposed merger is in the public interest." In this case. the rrcord indicates that substantial potential public interest harms may result from the transaction, which in turn creates the need fur Applicants to deinonstrate that substantial and cognizable merger-specific public interest benefit, will flow from the combination. The record before us irrefutably demonstrates that the proposed transaction would eliminate a current viable competitor from every market in the country. whether thoae markets are currently served by cable systems or are markets in which no cable systems exist, at best resulting in a merger to duopoly. and at worst a merger to monopoly. It would combine two DBS competitors who are currently fairly evenly balanced in terms of the assets necessary for effective competition in the MVPD market. Each has, over a number of years. at great expense. acquired the necessary spectrum licenses,

[637] Paxson Petition at 18-19.

[638] Consumers Union Comments at 15.

[639] Letter from Kenneth Fellman, Chairman. Local and State Government Advisory Commission (April 12, 2002) ("LSGAC Letter") at 4.

[640] State of Alaska Comments at 8-9.

[641] *Id.* at 9; RCA Comments at 6: LSGAC Letter at 4.

[642] Consumers Union Comments at 22-23. In the alternative, they suggest that the Commission consider a structural condition such as requiring New EchoStar to divest a cenain amount of satellite capacity. *Id.* at 23.

[643] *See Time Warner-AOL Order,* 16 FCC Rcd at 65.17. *AT&T-MediaOne Order,* 15 FCC Rcd at 9816, *AT&T-TCI Order,* 14 FCC Rcd at 3160.

developed and deployed the necessary equipment (satellites. earth stations, and consumer premises equipment), developed the necessary resources for marketing and consumer support, and acquired a substantial base of customers. Perhaps most significantly, each holds licenses for approximately half the total available orbital slots that allow broadcast to the entire continental United States – licenses they seek in this proceeding to transfer to a single new entity. Accordingly, the barrier to entry for any entity seeking to compete in the market for satellite provision of MVPD service would be enormous. Sufficient widespread entry into MVPD markets via terrestrial wireless and wireline platforms, at least within the next two years. is not substantially easier in my respect.

276. As noted above, case law under the antitrust laws is generally quite hostile to proposed mergers that would have these impacts on the competitive structure, because such mergers are likely to increase the incentive and ability to engage in anticompetitive conduct.[644] Competitive impacts are an imponant aspect of the Commission's public interest standard. as is consistency with Communication\ Act policy and the Commission's rules. The landmark Telecommunications Act of 1996 set fonh 3 "procompetitive, de-regulatory national policy framework" that opened "all telecommunications markets lo competition" with the aim of accelerating "rapidly private sector deploymeni of advanced telecommunications and information technologies."[645] Competition in the communication\ industries is the cornerstone of our modem communications policy because it is well recognized that competition. rather than regulation of monopoly providers, has the greatest potential to bring consumer welfare gains of lower prices and more innovative services. Accordingly, a proposed transaction's consistency with the Act, our rules and competition policy in general is an integral pan of our public interest review.

277. This Commission has a long history of establishing spectrum-based commercial services with no fewer than two participants per service. with the aim of creating competitive markets for spectrum-based voice, video and data services. The Applicants have cited no example where we have permitted a single commercial spectrum licensee to hold the entire available spectrum allocated to a particular service.

278. With respect to MVPD services. our public interest standard also includes a consideration of the impact on program and viewpoint diversity. and the record indicates that elimination of an alternative MVPD provider in every market in the country is problematic with respect to at least one measure of diversity – viewpoint diversity.

279. The Applicants attempt to meet their burden by defining the only relevant competitive struggle as that between the dominant cable operators on the one hand and DBS service providers on the other. They assert that little competitive harm will result from the consolidation of the DBS industry. because the cable operators will provide a sufficient competitive check on DBS where cable is available, and a national DBS programming pricing commitment will extend this protection to areas not served by cable systems. They argue that competition in the MVPD marketplace will be more vigorous if their assets are combined into a single entity that will be better equipped to compete with cable than either of existing stand-alone DBS providers today.

280. Our analysis of the potential competitive harms to the MVPD market indicates that the proposed merger would significantly increase concentration in an already concentrated market, and thus the merger should be presumed to create or enhance market power or facilitate its exercise. In addition, because competitive entry that could defeat any attempt by the merged entity to raise prices is unlikely to occur within the relevant timeframes for both committed and uncommitted entrants. there appears to be a

[644] *See Heinz*, supra; *Staples*, *supra.*

[645] See Pub. L. No. 104-104, 110 Stat. 56 (1996). S. Conf. Rep. No. 104-230, at 1 (1996). The Telecommunications Act of 1996 Act amends the Communications Act of 1934.

substantial likelihood that the proposed merger will have significant adverse impacr on competition in the MVPD market. Our analysis of the likelihood that competition may in fact be harmed either through unilateral actions by the merged entity or through coordinated interaction among firms in the relevant market indicates that the proposed merger could result in substantial consumer welfare losses, even assuming realization of all of the cost savings alleged by the Applicants. Such a loss of competition within the MVPD market is likely to harm consumers by eliminating a viable service provider in every market, creating the potential for higher prices and lower service quality. and negative impacts on future innovation.

281. Thus, the record before us indicates that the combination of EchoSrar and DirecTV would eliminate the viable facilities-based intramodal competition that exists in a market with high barriers to entry. In its place of this viable competition. the Applicants offer a scheme of national pricing. to be administered by regulatory authorities. Our analysis, howcver, indicates that the Applicants. proposed national pricing plan is unlikely to be an adequate or effectivs remedy for the competitive harms likely to flow from the proposed merger. National pricing does not mean low pricing and the plan as proposed would leave Applicants free to price discriminate on a targeted basis, panicularly with respect to promotions. installation and equipment offers and to discriniinate with respect to service quality. The degree of regulatory oversight that would be needed to monitor such a plan to ensure against abuse would be substantial.

282. Thus, even if the national pricing plan were likely to be an effective competitive safeguard, its implementation would not be consistent with the Communications Act or with our overall policy goals. In essence, what Applicant\ propose is that we approve the replacement of viable facilities-based competition with regulation. This can hardly be said to be consistent with either the Communications Act or with contemporary regulatory policy and goals, all of which aim at replacing. wherever possible, the regulatory safeguard\ needed to ensure consumer welfare in communications markets served by a single provider, with free market competition, and particularly with *facilities-based* competition. Simply stated, the Applicants' proposed remedy is the antithesis of the 1996 Act's "pro-competitive, de-regulatory" policy direction. The merger would likely produce a more capable. but less effective. competitor to cable and would totally eliminate what appears to be a very healthy level of intramodal competition among the two facilities-based DBS providers.

283. The Applicants claim that the primary benefit from the combination would be in terms of the spectrum efficiencies gained by eliminating of the present duplicative carriage of identical national and local programming channels on each DBS system. The Applicants propose to "reclaim" the spectrum from this duplication over a period of several years and to use it to expand the combined entity's provision of carriage of to all local broadcast television stations in all 210 DMAs. They also claim that they will provide additional new services such as niche programming, HDTV, VOD and other forms of interactive television. Although recent statistics on new subscribers indicate that both Applicants continue to add subscribers at a far more rapid rate than the cable systems, Applicants predict that this additional spectrum will become increasingly critical to their ability to compete with cable as cable operators upgrade their systems and add advanced products that will counter the advantages that DBS has historically had in terms of product offerings and technical quality. The other primary alleged benefit derives from combining the subscriber.; of the two DBS systems into a single unit to take advantage of economies of scale and bargaining power with suppliers, particularly programming providers.

284. As we have stated in the foregoing sections, upon careful examination. the bulk of the Applicant's promised benefits with respect to MVPD services appear to be either inadequately supported by the data supplied; not merger-specific: achievable through means other than monopoly control over all available full-CONUS DBS spectrum; or are otherwise not cognizable under our public interest standard. Moreover, the Applicants have not demonstrated that their proposed merger is *necessary* to

achieve many, if not all. of their claimed public interest benefits – they merely allege that it will provide them the means with which to provide these benefits. Our central concern, however, is that with the resulting high degree of concentration in all MVPD markets, the Applicants' incentives to carry through on their promises of enhanced competition will be decreased, rather than increased. Thus, although we fully recognize the value of having free over-the-air broadcasting service in all 210 DMAs. we do not believe that the merger is more likely Io bring satellite delivery of such service than the status quo. If the provision of local-into-local service is as imponant to the Applicants' competitive ability as they claim. then we Fully believe that market forces will impel them Io each find a way to bring that service to as many markets as possible. Accordingly. based on the record before us. we cannot give very much weight to Applicants' claimed MVPD benefits.

285. Insofar as the broadband market is concerned. encouraging the development and provision of broadband service over competing platforms is an objective of the Communications Act and has been given special priority by the Commission.[646] The Applicants' promises of a future Ka-band broadband satellite product that is competitive on both service quality and price with cable and DSL products would be a significant advance. if these promises were to be realized. The potential harms. however, are equally significant. Allowing combination of the assets of the two companies with the strongest incentive and ability to compete in offering satellite broadband services would offend the Communication Act's strong overall preference for compelition unless it were demonstrated convincingly that another significant objective could not be achieved except through such a combination.

286. Moreover, the Applicants' claimed benefit here is weaker than in the MVPD market. since each broadband customer uses up additional spectrum. regardless of the number of providers. Instead. the Applicants rely on an economies of scale argument – that the merger is necessary to provide the minimum number of potential customers that will justify the investment necessary to create a competitive product. Parties have raised substantial issues with respect to both the need for the merger to create the necessary scale and the harm to competition that will result from combining the spectrum, customers. equipment, and support services of the two strongest existing potential entrants.

287. On balance, we cannot find that the Applicants have made a sufficient showing at this point either that the harms from the proposed transaction will be insubstantial or that the alleged benefits will outweigh them. Despite our effons to obtain additional information and data from the Applicants in suppon of their claims, serious questions remain as to whether the proposed transaction would do significant and irreversible damage to competition in several markets without sufficient offsetting and cognizable public interest benefits. Consequently, it appears that the Applicants will be able to justify the proposed transaction, if at all, only after the more comprehensive fact-finding capabilities available in an administrative hearing.

288. The framework for analysis contained in this Order should ensure an expedited hearing. We identify below the principal factual issues that must be resolved with respect to both the harms the merger may produce and the benefits that may flow from it.

VIII. ISSUES TO BE DETERMINED AT HEARING

289. For the reasons stated above, we are unable to find that the public interest, convenience and necessity would be served by approving the transfer of control to New EchoStar of the licenses and authorizations controlled by GM/Hughes and DirecTV and Echostar. We have concluded, based on the evidence before us that Applicants have failed to demonstrate that the proposed transaction would not cause anticompetitive and other harms. and have failed to demonstrate that the potential public interest

[646] See §706, Pub. L. 104-104, Title VII, Feb. 8, 1996. 110 Stat. 153. reproduced in the notes under 47 U.S.C. §157.

benefits resulting from the transaction would outweigh those harms. Accordingly. pursuant to Sections 309(e) and 409(a) of the Act, and taking into consideration the conclusions set fonh in this Order, we designate the above-captioned Applications for an evidentiary hearing before an Administrative Law Judge ("ALJ"), and we direct the ALJ to prepare an Initial Decision on the issues set fonh below. These issues have been designated for hearing because they reflect findings and conclusions that have been made based on the record we have compiled thus far, which prevent us from making a determination that the grant of the Applications will serve the public interest, convenience and necessity.

Issue 1: Whether the proposed transaction is likely to cause anticompetitive harm. In reaching a determination on **this** issue, as outlined above, the following should be considered:

(a) the product market (*e.g.*, whether the relevant product market is MVPD service, DBS service, or some other subset of MVPD service) (*see* paras. 106 - 116):

(b) the geographic market (*e.g.*, whether the proper geographic market is local. and whether. for purposes of analysis, the relevant geographic markets should be aggregated into three categories – markets not served by any cable system; markers served by low-capacity cable systems; market, served by high-capacity cable systems: and the relative number of households in each of thew categories) and the number of subscribers per market **(see** paras. 117 - 125);

(c) the marker participants, market shares and concentration ***(see*** paras. 126 - 139);

(d) the timeliness, likelihood, and sufficiency of entry to offset any potential adverse competitive effects that may result from the propowd transaction ***(see*** paras. 140 - 150);

(e) the effects of the proposed transaction on price. quality and innovation (considering the likelihood of coordinated behavior among competing firms and the ability ***of*** the Applicants to unilaterally take anticompetitive actions) (*see* paras. 151 - 177);

(f) the efficacy, potential harms, and potential benefits of Applicants' proposed national pricing plan **(see** paras. 178 - 187);

(g) the proposed transaction's effect on the ability of multichannel video programmers to reach certain niche audiences (*see* paras. 248 - 256); and

(h) any conditions proposed by the Applicants

Issue 2: Whether the proposed transaction is likely to cause other public interest harms. In reaching a determination on this issue, the following should be considered:

(a) the proposed transaction's effect on viewpoint diversity **(see** paras.42-43, 49-51 and ***55);*** and

(b) the proposed transaction's effect on the Commission's spectrum policies **(see** paras. 83 - 96).

Issue 3: Whether the proposed transaction is likely to yield any public interest benefits. In reaching a determination on this issue. as outlined above, the following should be considered:

(a) whether the cost savings and other benefits claimed by Applicants are non-speculative. credible and transaction-specific and are likely to flow through to the public **(see** paras. 188 - 217); and

(b) whether the proposed transaction's impact on the provision of Internet access service via satellite is likely to be beneficial or harmful. (*see* paras. 218 - 247).

Issue 4: On balance. whether the public interest. convenience and necessity would be served by the grant of the above-captioned application and the joint application submitted by EchoStar and Hughes requesting authority to launch and operate NEW ECHOSTAK I. a direct broadcast satellite that would be located at the 110° W.L. orbital location.

IX. ORDERING CLAUSES

290. Accordingly, IT IS ORDERED. That. pursuant to Section 309(e) of the Communications Act, the application for consent to transfer control of various Commission authorizations. including DBS and fixed satellite space station authorizations. earth station authorizations. and other related authorizations (as set forth in Appendices B. C and D) held by wholly- or majority-owned subsidiaries of EchoStar Communications Corporation (a Nevada corporation), General Motors Corporation, and Hughes Electronics Corporation to EchoStar Communications Corporation (a Delaware corporation): and the joint application submitted by EchoStar and Hughes requesting authority to launch and operate NEW ECHOSTAR 1, a direct broadcast satellite that would be located at the 110° W.L. orbital location (File No. SAT-LOA-20020225-00023) ARE DESIGNATED FOR HEARING. The Hearing shall be at a time and place and in front of an ALJ to be specified in a subsequent Order, on the issues set forth in paragraph 289.

291. IT IS FURTHER ORDERED. That pursuant to Section 309(e) of the Communications Act, the burden of proof with respect to the introduction of evidence and the burden of proof with respect to the **issues** specified in this Order shall be upon **GM.** Hughes. and EchoStar, the applicant parties in this proceeding.

292. IT IS FURTHER ORDERED. That the Commission's Consumer and Government Affairs Bureau, Reference Information Center. SHALL SEND copier of this Order to all parties by certified mail. return receipt requested.

293. IT IS FUTHER ORDERED, That the Chief. Enforcement Bureau, shall be a party to the designated hearing.

294. IT IS FURTHER ORDERED, That a copy of each dncument filed in this proceeding subsequent to the date of adoption of this Order SHALL BE SERVED on the counsel of record appearing on behalf of the Chief, Enforcement Bureau. Parties may inquire as to the identity of such counsel by calling the Investigations and Hearings Division of the Enforcement Bureau at (202) 418-1420. Such service SHALL BE ADDRESSED to the named counsel of record. Investigations and Hearings Division. Enforcement Bureau, Federal Communications Commission, 445 12th Street. S.W., Room 3-B431. Washington, D.C. 20554.

295. IT IS FURTHER ORDERED. That within 30 days of the mailing of this Order pursuant to Paragraph 292 above, the parties may file an amended application with the Commission to ameliorate the competition concerns identified in this Order and may also file a petition to suspend the hearing pending review of the amended application.

296. IT IS FURTHER ORDERED. That. to avail themselves of the opportunity to be heard. GM. Hughes, and EchoStar, pursuant to Sections 1.221(c) and 1.221(e) of the Commission's Rules, in person or by their respective attorneys. SHALL FILE in triplicate. A WRITTEN APPEARANCE. stating an intention to appear on the date fixed for the hearing and present evidence on the issues specified in this Order. Such written appearance shall be filed within 20 days of the mailing of this Order pursuant to Paragraph 292 above. Pursuant to Section 1.221(c) of the Commission's rules, if the parties fail to file an

appearance within the specified time period. the assignment application will be dismissed with prejudice for failure to prosecute.

297. IT IS FURTHER ORDERED, That National Rural Telecommunications Cooperative; American Cable Association; Northpoint Technology. Ltd.: National Association of Broadcasters: Pegasus Communications Corp.; The Word Network; Johnson Broadcasting, Inc. and Johnson Broadcasting of Dallas, Inc.; Family Stations, Inc. and North Pacific International Television. Inc.; Communication Workers of America; Paxson Communications Corp.; Carolina Christian Television. Inc. and LeSea Broadcasting Corporation: Univision Communications, Inc.; Eagle III Broadcasting, LLC: and Brunson Communications. Inc., are made parties to the proceeding pursuant to Section 1.221(d) of the Commissions rules. To avail themselves of the opportunity to be heard, pursuant to Sections 1.221(e) *of* the Commission's rules, each of these parties. in person or by its attorneys. SHALL FILE in triplicate. A WRITTEN APPEARANCE. stating its intention to appear on the date fixed for the hearing and present evidence on the issues specified in this Order. Such written appearance shall be filed within 20 days of this Order becoming effective pursuant to Paragraph 292 above. Such written appearance must also be accompanies **by** the fee specified in Section 1.1107 of the Commission's Rules or be accompanied by a deferral request pursuant to Section 1.1 I17 of ths Commission's Rules. If any of these parties fails to file an appearance within the time specified. it shall. unless good cause for such failure is shown. forfeit its hearing rights.

298. IT IS FURTHER ORDERED. That. pursuant to Section **1.223** of the Commission's Rules, any person seeking to participate as a pany in the hearing may file a petition to intervene. Such petition shall be filed within **30** days of the full text or a summary of this Order being published in the Federal Register. Such petition to intervene must either establish. under oath, that a person is a party in interest. in which case the petition shall be granted: or such petition **must** set forth the interest of petitioner in the proceedings, show how such petitioner's participation will assist the Commission in the determination of the **issues** in question, set fonh any proposed issues in addition to those already designated for hearing, and be accompanied by the affidavit of a person with knowledge as to the facts set fonh in the petition. in which case the A U may grant or deny the petition to intervene, and may limit intervention to a particular stage or stages of the proceeding. in his or her discretion. Pursuant to Section 1.225 of the Commission's Rules, no person shall be precluded from providing any relevant, material and competent testimony at the hearing because he or she lacks sufficient interest to justify intervention as a party.

299. IT IS FURTHER ORDERED, That the application for transfer of control *of* the licenses and authorizations at issue in this proceeding WILL BE HELD IN ABEYANCE PENDING THE OUTCOME OF THIS PROCEEDING.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch

Marlene **H.** Dortch
Secretary