

Further Report
On the Packaging and Sale of
Video Programming Services
To the Public

February 9, 2006

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I. INTRODUCTION AND BACKGROUND

1. In response to requests from several members of the U.S. House of Representative's Committee on Energy and Commerce and, separately, from the Chairman of the U.S. Senate's Committee on Commerce, Science and Transportation, the Media Bureau of the Federal Communications Commission prepared and, on November 18, 2004, released a *Report on the Packaging and Sale of Video Programming Services to the Public* ("First Report") addressing issues relating to "the efficacy of providing a la carte and themed-tier services to cable and satellite subscribers."¹ The First Report addressed both constraints on the ability of multichannel video programming distributors ("MVPDs") to offer such a la carte and themed-tier services, resulting from the contractual agreements entered into with sellers of programming (wholesale issues), and economic and consumer welfare issues associated with the manner in which content distributors package and market such programming (retail issues). The First Report concluded that a la carte regulation would increase operational expenses for MVPDs, increase the marketing costs and reduce the revenues of programming networks, and provide little economic benefit to consumers.² The First Report thus implied that a la carte regulation is undesirable and focused its policy recommendations on methods to increase competition and investment in new technologies in the retail MVPD market.

2. The staff has undertaken a Further Report ("Further Report") to respond to questions that have arisen regarding the appropriateness of the assumptions relied upon and the conclusions reached in the First Report. The Further Report concludes that the First Report relied on problematic assumptions and presented incorrect and biased analysis. Based on a more complete analysis of the costs and benefits of bundling and the potential costs and benefits of a la carte, the Further Report concludes that a la carte could be in consumers' best interests. Moreover, it explores several alternatives for increasing consumer choice in purchasing multichannel video programming that could provide substantial consumer benefits.

¹ Federal Communications Commission, Media Bureau, *Report On the Packaging and Sale of Video Programming Services To the Public*, rel. Nov. 18, 2004 ("First Report").

² First Report at 6.

3. Specifically, Section II of this report provides the following conclusions regarding the First Report, which are more fully discussed below:

- To predict the effects of a switch to a la carte, the First Report relies on a study by Booz Allen Hamilton (“Booz-Allen-Hamilton Study”) conducted on behalf of an industry association and based largely on unsupported and unrealistic assumptions.³ Based on a mistake in its calculations, the study concludes that under a la carte, “consumers that purchase at least 9 networks would likely face an increase in their monthly bills.”⁴ To the contrary, even under the assumptions of the Booz-Allen-Hamilton Study, if there are 6 broadcast stations, consumers could receive as many as 20 channels without seeing an increase in their monthly bills.⁵ That is actually 3 more channels than the average cable household watches today.
- Although the Booz-Allen-Hamilton Study concludes that an average consumer would face a bill increase ranging from 14% to 30% under a la carte, correcting for the Study’s mistake as described above, the Study’s own assumptions show that a consumer purchasing 11 cable channels would face a change in his bill ranging from a 13% *decrease* to a 4% increase, with a decrease in 3 out of 4 cases.
- The results of the Booz-Allen-Hamilton Study are highly sensitive to the assumed parameters of the study, many of which are questionable. For example, the Study assumes, without any basis, that a shift to a la carte would cause consumers to watch more than 2 hours less television per day. That is, the Study assumes consumers would watch nearly 25% less television and states that consumers watch on average 9 hours a day.⁶ There is no reason to believe that total viewership would decline so significantly simply because consumers were able to purchase only the channels they most preferred. Thus, the predictions of the Booz-Allen-Hamilton Study are suspect.

³ Booz Allen Hamilton, *The a la Carte Paradox: Higher Consumer Costs and Reduced Programming Diversity: An Economic Analysis of the Implications of a la Carte Pricing on Cable Customers* (July 2004) (“Booz-Allen-Hamilton Study”).

⁴ First Report at 6. As Booz Allen Hamilton has since conceded, “as Chairman Martin’s statement suggested, revenues from the broadcast basic tier should have been excluded from the operators’ video average revenue per user (ARPU) before calculating the average cost per channel under a la carte.” Letter from John Frelinghuysen, Vice President, Booz Allen Hamilton Inc., to Dr. Leslie Marx, Chief Economist, Federal Communications Commission (Dec. 16, 2005).

⁵ According to a General Accounting Office report, the average cable household watches approximately 17 channels, including broadcast stations. *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, GAO-04-8, at 31 (Oct. 2003).

⁶ See Booz-Allen-Hamilton Report at 14.

- The First Report focuses primarily on the potential benefits of bundling video programming in tiers and so neglects to consider fully the potential harms thereof. A more balanced analysis finds that bundling may drive up retail prices, making video programming less affordable and causing some consumers not to purchase MVPD services. A la carte and increased themed tiers could give consumers the opportunity to lower their cable bills by purchasing fewer channels or smaller packages.
- The First Report provides insufficient analysis of the likely impact of a switch to a la carte on networks' revenues. Contrary to the First Report's assumptions, there is little reason to suspect that consumers would watch less video programming than they do today, under a la carte, and there is no basis whatsoever for the assumed decrease of almost 15 hours of television watching per week. Absent a change in audience levels, significant decreases in advertising revenue or increases in licensing fees are unlikely. Indeed, for many popular networks, advertising and subscription fees might rise from the shifts in viewers. Consumers who watch only those channels may then find a significant savings in their total bills from switching to a la carte, as well as a drop in the per-channel costs of the networks they watch.
- Contrary to the First Report's analysis, a la carte could make it easier for some networks to enter the market. Advertisers and MVPDs might find it easier to judge the value of smaller networks if consumers were able to express their interests through subscriptions.
- The First Report fails to analyze fully the difficulties and costs that industry commenters alleged MVPDs would incur in implementing a la carte. Most significantly, the First Report fails to examine any means by which implementation costs could be reduced, in particular, the potential reduction in implementation costs if a la carte were offered only for digital channels.
- The First Report fails to address the consumer benefits that offering programming a la carte could provide. Offering programming only in very large bundles as has been the past practice in the cable industry may fail to provide consumers the programming they desire. Consumers may find that they are purchasing programming that they do not watch and that programming that they find valuable is not offered under bundling. A la carte could be preferable to bundling in providing diverse programming responsive to consumer demand.
- In sum, many consumers could be better off under an a la carte model.

4. Section III of the Further Report explores three alternatives to bundling that have the potential to provide consumers economic benefits and additional choice. Given the on-going digital transition and the large number of consumers currently receiving their multi-channel programming digitally, as well as the expectation that implementation

costs could be reduced in a digital environment, the proposals focus on providing greater consumer choices for channels that already are transmitted digitally. In the first alternative, called “mixed bundling,” MVPDs would provide all of the digital networks that they currently carry on an a la carte basis, in addition to providing any bundles they choose to offer.⁷ Under the second alternative, MVPDs would introduce one or more additional tiers composed of channels that are currently being transmitted in digital format and that are related to a particular theme (such as family friendly programming), so-called “themed tiers.” Pursuant to the third alternative, “subscriber-selected tiers,” MVPDs would give consumers the option of buying a small or larger number of digital networks, where the consumers select the networks from among those available on the system. In the context of an increasingly competitive MVPD marketplace, presenting such options should help MVPDs compete for consumers, while enhancing overall consumer welfare.

II. ASSESSMENT OF FIRST REPORT’S ANALYSIS AND CONCLUSIONS

A. INTRODUCTION

5. The First Report relies on incomplete and incorrect analyses regarding the alleged costs and benefits of bundling as opposed to the potential costs and benefits of a la carte. A reexamination of the First Report indicates that many consumers could benefit from the ability to purchase network programming on an a la carte basis.

6. The First Report fails to examine critically industry allegations of potential economic harms from a la carte. Moreover, it does not investigate the appropriateness of various assumptions underlying the analysis provided by industry commenters. Much of this analysis, including a study conducted by Booz Allen Hamilton on behalf of an industry association, is based on assumptions that are not properly supported and that, in some cases, appear unreasonable. In addition, the Booz-Allen-Hamilton study contains

⁷ Under “mixed bundling,” consumers can purchase programming networks either individually or as part of a bundle. In contrast, under “pure bundling,” consumers can only purchase programming networks as part of a bundle, and under “pure a la carte,” consumers can only purchase programming networks individually.

errors.⁸ Further analysis raises questions about the predictions in the First Report that a la carte would produce increases in consumer bills and negatively affect networks and MVPDs. Moreover, the First Report appears to overstate the costs of implementing an a la carte regime, as it fails to consider adequately ways of minimizing such costs.

7. A more balanced analysis suggests that a la carte could produce many consumer benefits that the First Report fails to consider. A la carte may reduce consumers' prices, thereby potentially increasing demand for MVPD services. Moreover, under a la carte, production of programming may be both more economically efficient and more responsive to consumer demand.

B. IMPACT OF A LA CARTE ON THE PRICE OF PROGRAMMING

1. First Report Relies on Booz-Allen-Hamilton Study That Contains Errors and Relies on Unsupported Assumptions

8. Section II of the Economic Appendix to the First Report summarizes a study prepared by the management consulting firm Booz Allen Hamilton that models the likely outcomes if a la carte were introduced in some form. The First Report relies upon the study significantly to support the contention that a shift to a la carte would raise prices and reduce programming diversity.⁹ As discussed below, the study contains mistakes and relies too heavily on untested assumptions, some of which appear unlikely to occur. Correcting solely for the mathematical mistakes in the Booz-Allen-Hamilton Study, even with their questionable assumptions, we find that consumers could be better off. Moreover, using a different set of assumptions, the results could be significantly different.

9. A critical limitation of the study is its reliance on projections without underlying data. Only the study's first step, which divides programming networks into segments like

⁸ As Booz Allen Hamilton subsequently stated: "We reviewed the July 2004 analysis in light of the Chairman's statement and found the following: To be consistent with the assumptions in our analysis, the anticipated charges for the basic tier of broadcast stations (which, under current law, must be purchased by all customers) should have been consistently removed from the calculation of the 'breakeven' number of cable channels that a customer could buy without seeing an increase in his or her bill." Letter from John Frelinghuysen, Vice President, Booz Allen Hamilton Inc., to Dr. Leslie Marx, Chief Economist, Federal Communications Commission (Dec. 16, 2005).

⁹ See First Report at 26-27.

“general entertainment,” “sports,” and “news” is based on real-world data and econometric techniques, but the validity of this process is impossible to assess, because it is not described in any detail.¹⁰ All further study results are simply illustrations of what might happen in a theoretical world, given the assumptions made. And many of those assumptions are based on interviews with parties opposed to a la carte whose responses may therefore be biased.

10. The calculations in the Booz-Allen-Hamilton Study do not consistently recognize differences among networks and network segments. They assume that under a la carte, consumers would be three times as likely to purchase programming in segments such as "general entertainment and sports" than in segments such as "emerging niche" and "emerging mass."¹¹ Thus, one might expect a la carte prices for different channels, especially channels in different segments, to be markedly different. However, the Study bases its analysis of how many channels a consumer could purchase on the average price per channel.¹² The Study neglects the fact that under a la carte, consumers could choose to purchase a large number of less expensive channels, or a small number of more expensive channels, to maximize the benefit they receive from cable television viewing. Furthermore, to the extent that there is a large degree of overlap in the choices consumers make, viewership of the most popular channels may increase. To see this, note that if a large percentage of consumers choose to purchase a channel, then the channel's subscriber base would be relatively unchanged, and with fewer alternative channels to surf through, we would expect consumers purchasing the channel to watch it with greater intensity.

11. The overall approach of the Booz-Allen-Hamilton Study is itself problematic. Briefly, the study assumes take rates under a la carte, predicting that the average

¹⁰ The Booz-Allen-Hamilton Study divided networks into different segments in order to examine different effects on different kinds of networks.

¹¹ Booz-Allen-Hamilton Study at 24.

¹² There is some inconsistency within the Booz-Allen-Hamilton Study on this point. For example, the Study states that "[o]perators would price channels at \$4 to \$5 each." Booz-Allen-Hamilton Study at 33. This conclusion is unsupported and contradicts other parts of the Study, which say that the "average price per channel for a la carte would be approximately \$4 to \$5. This represents the likely range for the average cable network." *Id.* at 6, 34.

consumer would purchase 11 cable channels, and estimates costs and prices based on that assumption.¹³ From an economic perspective, it does not make sense to develop an assumption about the quantity demanded without regard to price and then to estimate prices based on that assumption. Instead, a standard approach to consumer behavior would take prices as fixed and estimate how much consumers would demand given those prices. Then, one could examine what prices would be chosen by profit-maximizing MVPDs, taking into account the consumer reaction to different possible prices.

12. The First Report relies on the Booz-Allen-Hamilton Study for its conclusion that the average household would likely face an increase in its monthly cable bills of 14% to 30% under a la carte.¹⁴ The Booz-Allen-Hamilton Study, in fact, shows that the “applicable bill increase” is between -2% and +15%. That is, if it were not for the cost of set-top boxes, the Booz-Allen-Hamilton Study would show that monthly bills could decrease by as much as 2% as a result of a la carte.¹⁵ Furthermore, although the Booz-Allen-Hamilton Study concludes that an average consumer would face a bill increase ranging from 14% to 30% under a la carte, correcting for the Study’s mistake as described above, the Study’s own assumptions show that a consumer purchasing 11 cable channels would face a change in his bill ranging from a 13% *decrease* to a 4% increase, with a decrease in 3 out of 4 cases.¹⁶

¹³ According to the Booz-Allen-Hamilton Study at 24, their assumptions on the maximum take rates for networks imply that an a la carte household would subscribe to 11 cable networks.

¹⁴ The Booz-Allen-Hamilton Study assumes that cable operators would price a la carte offerings so as to maintain their earnings (EBITDA), which they claim are currently at 36%. Booz-Allen-Hamilton Study at 32. For example, the Study shows that cable providers’ current earnings per subscriber are \$22.70. *Id.* at 52.

¹⁵ Booz-Allen-Hamilton Study at 54. If the switch to a la carte is only made for customers that already receive digital programming, and thus already pay for a set-top box, then it is inappropriate to associate the entire cost of a new set-top box with a la carte. *See infra* II.B.8.

¹⁶ A General Accounting Office Report finds that it is “difficult to ascertain how many consumers would be better off and how many would be made worse off under an a la carte approach.” *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, GAO-04-8, at 6 (Oct. 2003). Despite this, the General Accounting Office notes that, “for subscribers who purchase only a few cable networks, rates would likely decline [] because they would only have to pay for the limited number of networks that they choose to purchase.” GAO also notes that an a la carte approach would provide consumers with greater control over their cable choices, even if, on average, consumer bills did not decline.” *Id.* at 36.

13. The First Report also relies on the Booz-Allen-Hamilton Study for its conclusion that consumers that purchase at least 9 networks would likely face an increase in their monthly bills.¹⁷ First, note that the correct conclusion from the Booz-Allen-Hamilton Study is that a consumer that purchases 9 networks in addition to the broadcast stations would likely face an increase in his or her monthly bill. Assuming 6 broadcast stations, this implies that a consumer could receive 15 channels without seeing an increase in his monthly bill.¹⁸

14. Furthermore, there is a mistake in the Booz-Allen-Hamilton Study's calculations regarding the number of networks consumers can purchase without increasing their monthly bills.¹⁹ When calculating the average price per a la carte channel, the Booz-Allen-Hamilton Study fails to net out the cost of broadcast basic stations.²⁰ When this mistake is corrected, the break-even number of a la carte channels is between 10 and 14, depending on which of the Booz-Allen-Hamilton assumptions one

¹⁷ First Report at 6.

¹⁸ 92.2% of the population receives at least 6 full-power broadcast stations. BIA Financial Network, Inc., Media Access Pro Database, Nov. 18, 2005.

¹⁹ Indeed, Booz Allen Hamilton even concedes that the cost of broadcast channels should have been "netted" out. Letter from John Frelinghuysen, Vice President, Booz Allen Hamilton Inc., to Dr. Leslie Marx, Chief Economist, Federal Communications Commission (Dec. 16, 2005).

²⁰ In particular, the Booz-Allen-Hamilton Study calculates as a subtotal the amount of the consumer bill related to the purchase of programming and then divides by the number of cable channels to obtain a price per channel. The correct calculation would subtract the cost of broadcast basic (assumed \$15.00) from the subtotal before dividing by the assumed 11 a la carte cable channels. Booz-Allen-Hamilton Study at 54. To explain this mistaken calculation further, consider the following word problem: If basic cable (broadcast only) costs \$15.00 and a consumer's total bill is \$45.00 and the consumer receives 10 cable channels, what is the average cost per cable channel? The correct calculation would involve first calculating the total amount spent on cable programming, which is $\$45 - \$15 = \$30$, and then dividing by 10 channels to get \$3.00 per channel. The mistake made by Booz-Allen-Hamilton is the equivalent of dividing the total bill of \$45 by 10 channels to get an average cost of \$4.50 per cable channel. Thus, the Booz-Allen-Hamilton Study estimates an average cost per cable channel under a la carte that is too high. Due to the mistake in the calculation of the average cost per channel, the Booz-Allen-Hamilton Study's estimates of the breakeven number of cable channels are incorrect. To continue with the above example, suppose we want to know how many cable channels a consumer could buy and still have his total cable bill be less than \$45, assuming each channel is priced at the average price. Then, using our calculation above of \$3.00 per channel, we see that a consumer could purchase 10 channels ($\$15 + \$3 \times 10 = \$45$). However, if we use the Booz-Allen-Hamilton cost of \$4.50 per channel, we find that a consumer could purchase only 6 channels without seeing an increase in the total bill (purchasing 7 would result in a bill of $\$15 + \$4.5 \times 7 = \$46.5$, which is larger than the target of \$45). So the calculation mistake causes Booz-Allen-Hamilton to underestimate the number of cable channels a consumer could purchase without seeing an increase in his bill.

adopts. Thus, even under the Booz-Allen-Hamilton assumptions, if there are 6 broadcast basic stations, then consumers could receive as many as 20 channels without seeing an increase in their monthly bills.

15. The Booz-Allen-Hamilton Study concludes that all networks would suffer from the imposition of a la carte for two reasons.²¹ First, the study assumes that all networks would face increased marketing costs under a la carte, to gain subscribers to the network.²² We note, however, that some larger, established networks might be able to rely on existing brand name and thus avoid increased marketing costs. Second, the study makes the questionable assumption of substantially reduced viewership, and therefore reduced advertising revenue, for all networks under a la carte.

16. The Booz-Allen-Hamilton Study assumes that program networks would lose at least 70% of their subscribers but would realize only a 10% increase in viewing from their remaining subscribers, with the implication that under pure a la carte there would be a 23% decrease in overall viewing.²³ In real terms both the Booz-Allen-Hamilton Study and the First Report assume that the average household would watch 2.07 fewer hours of television per day and 14.49 fewer hours of television per week if he were able to choose the channels he wanted to watch. Not only is there no support for such an assumption, but it seems unlikely that the average consumer would spend 2 hours more reading, listening to music, or working per day instead of watching television merely because he is no longer required to buy a particular channel of programming. For example, if a consumer regularly watches only 10 channels and under a la carte continues to subscribe to those 10 channels, one would not expect the time the consumer spends viewing video programming to change dramatically.

17. Based on its regression analysis, the study concludes that two of the most important factors that explain the variance in advertising rates across different segments of networks are the demographic composition of the audience and the degree of targeting,

²¹ See Booz-Allen-Hamilton Study at 22-29.

²² Booz-Allen-Hamilton Study at 26-27.

²³ Booz-Allen-Hamilton Study, Figure 15, at 26.

meaning the degree to which programming on the network is targeted toward specific consumer interests. After so concluding, however, the study fails to consider those very factors in its subsequent analysis of the effects of a la carte on advertising revenues. If properly applied, the study's conclusions regarding advertising rates suggest that a la carte could lead to increased advertising on niche programming networks, particularly for products with narrow and well-defined demographics. Accordingly, it is not clear whether the niche networks will experience a net reduction of 10% to 20% in their ad revenues due to an a la carte provision, as claimed by the study.²⁴

18. The Booz-Allen-Hamilton Study assumes that a la carte would reduce audience size for cable networks, thereby lowering per subscriber revenue from carriage fees and advertising for those networks and increasing costs for digital boxes and marketing. It suggests that MVPDs and programmers would seek to regain some (or all) of these revenues through increased fees and/or decreased costs if program demand for viewers and advertisers tended to be relatively price inelastic. However, the final effect on revenues for providers and subscription fees for consumers is unclear because it would depend on pricing and demand data that are unavailable.

19. Under the assumption of reduced revenue and increased costs for networks, the study compares two possible programming network responses to the implementation of a la carte: raising license fees and lowering programming expenses.²⁵ Even if per-subscriber license fees increased under a la carte, this might not have a large effect on consumers, because under a la carte consumers would only be paying for the networks they watch or plan to watch and would not have to pay for the networks they do not plan to watch.²⁶ Thus, under a la carte, the license fees could be charged for people who

²⁴ Booz-Allen-Hamilton Study at 26-27.

²⁵ Booz-Allen-Hamilton Study at 29.

²⁶ For example, if a consumer receives 5 channels in a bundle and watches only one of them, all five networks are getting license fees for that consumer. Under a la carte only the channel the consumer watches will get a license fee. Even if that channel doubles or triples its license fee under a la carte, the consumer would still be paying less to watch that channel than was paid under bundling. Thus under a la carte the price paid per channel *watched* could significantly decline, even as the price paid per channel *received* rises. Moreover, any increases in license fees for channels that are actually watched would allow those channels to cover more programming costs and so could lead to increases in quality.

subscribe to the particular network, and therefore are presumably more likely to watch the network, while under bundling they are charged for people to have the network available.²⁷ Similarly, as discussed elsewhere, smaller networks that are not currently reported on by Nielsen Media Research (“Nielsen”) might be able to increase advertising revenue, because a la carte sales would be a strong, if indirect, indication of actual viewers.²⁸ Currently, many networks, especially smaller ones, simply report subscribership to the tiers on which they are carried, and purchasers of advertising may wonder if anyone at all is watching.

20. In addition, even if the study were correct in its contention that under the increased license fee scenario, the average price per a la carte channel would be approximately \$4 to \$5,²⁹ it is not clear that this is significantly different or worse than the current environment, as it is difficult to ascertain the “price” of a particular channel in a bundled environment. For example, assume that a consumer pays \$55, \$15 of which is for broadcast channels, and receives 75 non-broadcast channels (i.e., \$0.53 per channel), but that the consumer watches only 10 of those non-broadcast channels. This amounts to a per channel rate of \$4, a rate not unlike the per-channel rate that the Booz-Allen-Hamilton Study contends would be charged under a la carte.

21. The Booz-Allen-Hamilton scenario of lower programming expenses suggests the possibility that programmers would reduce quality under a la carte. However, the nature of the programming industry undermines the idea that programmers would react in this way. Given that substantial sunk costs are present in the industry, under certain conditions, sellers have incentive to compete on quality and may even engage in a race for dominance, in which all invest in quality with one or two survivors. In the programming industry, evidence of this kind of competition is already present within programming niches. For example, in the sports category, ESPN has long been recognized as the dominant player. Still, both Time Warner and Fox attempted to enter

²⁷ See *infra* II.B.4.

²⁸ See *infra* II.B.4.

²⁹ Booz-Allen-Hamilton Study at 7. Note that if one corrects for the math error described above, the average cost per channel would range from \$2.54 to \$3.37.

the national sports network market, more specifically, Time Warner by launching CNN/Sports Illustrated in December 1996 and News Corporation by acquiring a group of regional sports networks and redirecting a portion of their programming toward national sports. ESPN did not respond by slashing prices, but instead by spending heavily on exclusive sports rights (such as the National Football League and Major League Baseball) and original programming. Despite the backing of large corporations, strong brand names, and a guaranteed distribution system, neither new sports network was able to survive. Similar examples can be found in financial news (where CNBC is dominant) and programming aimed at women (where Lifetime is dominant).

22. While it is possible that some networks would react to a la carte by reducing quality, it is also possible that other networks would react to a la carte by increasing quality. For example, if a la carte does not cause a significant decline in viewership, but does cause shifts in viewing so that viewership for some networks increases, then these networks would expect increases in revenue that could be used to improve quality. In addition, if a la carte results in more competition among networks for subscribers, then one outcome of this increased competition could be higher quality offerings from the networks. Finally, under a la carte, consumers could cancel their subscriptions to networks whose offerings do not provide them with sufficient value, which could create an environment in which networks are more responsive to consumer preferences in terms of the content, quality, and consistency of their programming.

23. In general, contrary to the overly broad conclusions stated in the Booz-Allen-Hamilton Study, while some networks may suffer from a la carte, others may benefit. Indeed if overall television watching does not decrease under a la carte, if one programmer is “harmed” by not being selected, the programmer that is selected is “helped” to the same degree. It may be the case for many networks that their true value to consumers is hidden because they are bundled with other networks and they lack a means to extract that value by selling directly to consumers. A la carte would allow these networks to increase revenue, both from license fees and from advertising, by more directly interacting with their ultimate audience, viewers.

2. First Report Understates Benefits of A La Carte and Harms of Bundling

24. Generally, the text of the First Report lacks in-depth independent economic analysis, tending to rely instead on assertions of industry commenters. Almost all of the economic analysis relied upon in the First Report is placed in the Economic Appendix, which is the focus of much of the discussion below.

25. Specifically, the First Report's analysis does not provide a balanced view of the consequences of implementing a la carte. It fails to consider fully or to appreciate the benefits that consumers could gain from a la carte, including reduced programming bills.

26. The First Report neglects the discussion in the economics literature concerning when bundling causes harm to consumers and to social welfare. For example, results in the economics literature show that a change from bundled pricing to a la carte may either increase or decrease economic efficiency,³⁰ depending on the environment, but the Economic Appendix of the First Report provides only an example in which a la carte decreases economic efficiency. The Economic Appendix of this Report presents a number of examples in which a la carte increases economic efficiency relative to bundling.

27. In its analysis of bundling, the economics literature typically compares three different regimes for selling goods, in which goods are sold either strictly in a bundle, strictly individually, or both individually and in a bundle.³¹ In the retail MVPD market, these alternatives correspond to consumers purchasing programming networks either strictly as part of a bundle ("pure bundling"), individually ("pure a la carte"), or with the choice of buying either bundles or individual channels ("mixed bundling"). As pointed out in the First Report, economists have posited that firms choose to sell their goods in bundles, as opposed to selling them individually, for the following reasons: (1) as a

³⁰ See, e.g., Barry Nalebuff, *Bundling, Tying, and Portfolio Effects: Part 1 – Conceptual Issues*, DTI Economics Paper No. 1, February 2003 (available at <http://www.dti.gov.uk/economics/paper1-nalebuff-p1.pdf>); Dennis W. Carlton & Jeffrey Perloff, *Modern Industrial Organization*, 289-90 (3rd ed. 2000) ("Carlton & Perloff"); W.J. Adams and Janet L. Yellen, *Commodity Bundling and the Burden of Monopoly*, 90 *Quarterly Journal of Economics* 475-498 (Aug. 1976) ("Adams & Yellen").

³¹ These are usually referred to as "pure bundling," "pure components," and "mixed bundling" strategies, respectively. See Adams & Yellen at 475-498

means of price discrimination (rather than charging a single price for each good, the bundle price incorporates the fact that some consumers value some goods more than others do); (2) as a means of reducing production costs (due to economies of scale and economies of scope), reducing transaction and information costs, and improving quality; and (3) as a strategic device for deterring entry of new competitors.³² Most of the literature focuses on the price discrimination explanation for bundling and why bundling can increase profits for firms in a variety of circumstances.

28. The First Report focuses its economic analysis on the comparison of pure bundling with pure a la carte. The First Report relies on two key economic theories to support its contention that bundling is welfare-enhancing: (1) the non-rivalrous nature of the consumption of programming; and (2) the use of bundling as a means of price discrimination. Careful consideration shows that neither of these theories leads to the First Report's conclusions.

29. First, the First Report claims that bundling is more efficient than a la carte, because the consumption of programming is non-rivalrous. That is, once programming has been produced, everyone can watch it without diminishing others' ability to watch it.³³ While the First Report is correct that efficiency is increased if programming with a positive value is distributed more widely, since this can be done at close to zero marginal cost, it is not correct that pure bundling will better achieve this result than pure a la carte or mixed bundling. As demonstrated below, sales of some desirable networks could be greater under a la carte than under bundling. Moreover, the First Report ignores the impact of such a mechanism on the amount of programming that is produced; i.e., it assumes that because programming is produced it should be widely distributed, without considering whether the appropriate amount of programming is produced.

³² First Report at 83-87; *see also* Adams & Yellen; Barry Nalebuff, *Bundling, Tying, and Portfolio Effects: Part I – Conceptual Issues*, DTI Economics Paper No. 1, February 2003 (available at <http://www.dti.gov.uk/economics/paper1-nalebuff-p1.pdf>).

³³ Information goods almost always tend to exhibit this quality, in contrast to physical goods, which tend to have rivalrous consumption. One person's purchase of a car, for example, prevents others from consuming that good.

30. Second, the First Report touts the benefits derived from bundling as an improved means of price discrimination.³⁴ The First Report explains that bundling permits MVPDs to recover a larger portion of the cost of a given network from customers who value that network more highly and a lower portion from customers who value it less highly. The First Report contends that such price discrimination facilitates the MVPDs' ability to generate sufficient revenue to cover the cost of offering the networks that consumers want, thereby enhancing welfare.³⁵ As the economics literature indicates, however, it is unclear whether *consumers and society* are better off with the use of price discrimination schemes (like bundling of programming) than with the use of single market prices (like offering programming a la carte).³⁶ Indeed, that literature discusses the potential problems caused by bundling,³⁷ in some cases finding that bundling can be bad for consumers³⁸ and can create greater inefficiency than a la carte.³⁹

³⁴ The economics literature says that firms gain increased revenue from bundling compared to a pure components approach because customer valuations of a bundle of goods are more homogenous, either because they are negatively correlated (so customers with low values of one good have a high value for another) or because the effective dispersion of values is smaller for a bundle of goods than for the individual goods (assuming the valuations are not perfectly correlated), due to statistical averaging. Richard Schmalensee, *Gaussian Demand and Commodity Bundling*, *Journal of Business*, S211-46, (January 1984) ("Schmalensee 1984"); Yannis Bakos & Eric Brynjolfsson, *Bundling Information Goods: Pricing, Profits, and Efficiency*, *Management Science*, 1613-30 (Dec. 1999) ("Bakos & Brynjolfsson 1999"); Yannis Bakos & Erik Brynjolfsson, *Bundling and Competition on the Internet*, *Marketing Science*, Vol. 19(1), 63-82 (2000) ("Bakos & Brynjolfsson 2000").

³⁵ As discussed below, such price discrimination also allows the MVPDs to extract greater profits from their customers.

³⁶ See, e.g., Carlton & Perloff at 289-90; Adams & Yellen at 490-95. There is one notable exception to this finding of ambiguous results – economic theory says that perfect price discrimination (charging exactly each consumer's valuation of a good) maximizes social welfare, but yields zero consumer surplus. Perfect price discrimination, however, is generally considered to be unobtainable since it requires that different prices be charged to each consumer, with those prices tailored to each consumer's individual preferences.

³⁷ Doubts about bundling's impact on efficiency are well known in the literature. See, e.g., Steven S. Wildman and Bruce M. Owen, *Program Competition, Diversity, and Multichannel Bundling in New Video Industry*, in *Video Media Competition*, 258 (Eli Noam ed., 1985).

³⁸ Using certain assumptions, Schmalensee found in his model that bundling is usually bad for buyers. Schmalensee 1984.

³⁹ In their seminal paper, Adams and Yellen argued that bundling can create both allocative inefficiency (whether the right quantity of the good is produced) and distributive inefficiency (whether the good is distributed to those consumers that value it most highly). They also determined that the deadweight loss from bundling (which is a measure of inefficiency used by economists) could be higher than the loss associated with simple a la carte by a monopolist. Adams & Yellen at 490-95.

31. Therefore, the First Report's economic arguments are incomplete and thus misleading or at least do not paint a complete picture of whether bundling programming networks is in consumers' and society's best interest. To assess the desirability of switching to a la carte properly, one must also consider the potential harms that bundling may cause. Specifically, as discussed below, bundling may raise consumers' programming costs and provide consumers with programming packages less valuable to them than those they could purchase under a la carte. For many consumers, these harms could outweigh any benefits gained from bundling.

32. As discussed below, bundling can cause harm in two basic ways. First, bundling is a means of price discrimination, so it can reduce consumer surplus and cause consumers to purchase fewer services.⁴⁰ Second, an MVPD determines which networks to carry based on how much each network adds to the profit from its bundles, either by raising the bundle's price or increasing the MVPD's subscription base. The incremental revenue gain from adding a network is only imperfectly related to its value to consumers. Thus, the use of pure bundling may give MVPDs an incentive not to carry some valuable and desirable programming, while making other less valuable programming profitable to carry.

3. First Report Overstates Costs of A La Carte

33. The First Report's conclusion that total consumer payments for multichannel video programming service will rise under a la carte is suspect. A more careful and balanced analysis shows that many consumers' video programming bills could decrease under a la carte. Indeed, providing a la carte would give all consumers an opportunity to lower their video programming bills. There are three reasons why the First Report erred in concluding that bundling likely would lower prices to consumers.⁴¹ First, the First Report overstates the cost savings that bundling may provide. Second, the First Report

⁴⁰ Consumer surplus is the difference between a buyer's personal use value of the good purchased and the price at which the good is purchased or, in other words, the benefit an individual (or, summed across all individuals, the total consumer benefit) gains from purchasing a good.

⁴¹ See First Report at 6.

discounts bundling's potential to inflate programming prices. Third, the First Report overstates the complexity associated with a la carte.

34. First, the First Report overstates the cost savings benefits that bundling may provide.⁴² It concludes that bundling keeps the per-channel cost of MVPD service down, because it allows sellers to take advantage of scale and scope economies and keep average costs down.⁴³ It asserts that since there are fixed costs in providing MVPD service, and consumers will likely receive more channels under bundling than under a la carte, bundles will likely have lower per-channel costs than a la carte purchases of channels.

35. In reaching these conclusions, the First Report focuses inappropriately on the per-channel cost of networks received, rather than the costs that are likely more important to consumers -- the per-channel cost of networks *watched* and the total video programming bill.⁴⁴ Although bundling could allow MVPDs to spread the fixed distribution costs over more channels, such cost spreading does not necessarily benefit those consumers who do not want the extra channels to begin with. Some consumers would prefer to buy fewer channels even with slightly higher average distribution costs

⁴² First Report at 22-23. The First Report uses an inappropriate analogy to the newspaper business to analyze the alleged cost-savings generated by bundling. The First Report indicates three reasons why a newspaper is sold as a bundled product: "(1) . . . the economies of having all sections delivered at once rather than having separate distribution mechanisms for each section; (2) . . . the value to subscribers of having the option to look at all of the sections, even if they do not read all sections every day; and (3) . . . the efficiencies for advertisers who prefer paying a single price to reach all of the newspaper's readers with a single advertisement." First Report at 22. Of the three reasons for newspapers to be sold as bundled products, the first and third points do not translate to the video programming world. On point (1): the economies of having all sections delivered at once would be available to a la carte customers, since they would be getting all of their service from the MVPD. On point (3): the bundle does not make it easier for an advertiser to reach many subscribers, compared to a la carte. Only the second point could apply, that some customers may like having the option of looking at all the sections of the newspaper, or for video programming, having the ability to watch a different channel when they feel like it. Moreover, while it is true that some subscribers may value having the option to look at all the sections, even if they do not read them every day, the analogy is incomplete for another reason. Newspaper readers have the option of receiving the newspaper only on days when they want to read more sections. For example, they could subscribe only to the New York Times Sunday edition. No such option is available to the cable subscribers.

⁴³ First Report at 22-23.

⁴⁴ As noted previously, based on a 2000 Nielsen Report, a 2003 Government Accountability Office report concluded that "households receiving more than 70 networks only watch, on average, about 17 of these networks." *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, GAO-04-8, at 31 (Oct. 2003).

factored in. If consumers do not watch the extra channels, then the addition of those channels would actually raise the per-channel cost of networks watched, thus making consumers worse off.

36. In this regard, another way to provide increased consumer choice would be for cable providers to continue to bundle, but then to reimburse consumers for any channels the consumers choose to have blocked. Under that approach, cable operators would presumably set prices in such a way that they continue to cover their fixed costs. If such an option were available, additional consumers might choose to subscribe to cable, potentially increasing cable operators' revenues.

37. Second, the First Report provides little analysis of how bundling may inflate prices charged to consumers. Since bundling is a means of price discrimination, it enables MVPDs to extract consumer surplus better than does a la carte. The economic analysis of pricing provided in the First Report's Appendix focuses on the need to cover the cost of the networks provided and says little about how bundling might increase prices to consumers.⁴⁵

38. The First Report characterizes bundling as valuable because it allows MVPDs to extract additional surplus that can be used to cover programming costs.⁴⁶ But this ignores the primary role of bundling, which is to extract surplus to enhance profits, and it also ignores the fact that bundling may allow MVPDs to extract so much surplus that they have an incentive to carry programming that is so costly to produce that its cost is greater than the total value to consumers of that programming.⁴⁷ Thus, the cross-subsidization that the First Report portrays as a valuable feature of bundling⁴⁸ can actually be harmful to consumers and society.⁴⁹

⁴⁵ First Report at 84-86.

⁴⁶ See First Report at 84-85.

⁴⁷ See *infra* II.C.2.

⁴⁸ See First Report at 5.

⁴⁹ In addition, bundling creates the additional harm of putting some consumers in the position of having to pay for programming that they do not value in order to receive programming they do value.

39. Careful analysis shows that prices for video programming service could be lower under a la carte than under bundling. As an example, one need only reconsider an example in the Economic Appendix to the First Report.⁵⁰ That example illustrates that *under certain conditions* bundling is better at covering the cost of networks and providing consumer benefits. These benefits, however, do not hold under all conditions, as demonstrated by making just a small change to the original example (changing the value of the networks to the consumers), as is done in Example 1 in the appendix to this Report.⁵¹

40. As Example 1 demonstrates, pure a la carte can yield lower prices for consumers than bundling, while still generating sufficient revenue to cover network costs. In this example, the bundled price is higher than the total price of the individual items in the bundle priced under a la carte, because bundling enables the MVPD to extract more revenues from consumers than it could using a la carte.⁵² The example demonstrates that bundled prices may be inflated above cost, since bundling often enables MVPDs to extract consumer surplus better than a la carte does. Therefore, under bundling, some consumers pay more than they would under pure a la carte without getting more service.

41. As the second part of Example 1 demonstrates, the high price of bundled networks can also preclude some consumers who might otherwise do so from purchasing programming. Some consumers who do not want to pay the bundle price might be willing to purchase a few channels at a lesser total price. That is, bundling can raise prices sufficiently to drive some consumers out of the market. Making networks available a la carte can lower the price of MVPD service and thereby increase consumer purchases of programming networks.⁵³

⁵⁰ First Report at 82-83.

⁵¹ See *infra* Economic Appendix B.1.

⁵² Note that there is no assurance that the higher rates paid under bundling will be passed through to the networks, particularly if the market for programming is competitive and networks lack market power.

⁵³ With mixed bundling, which provides both a la carte and bundled options, consumers could still take advantage of the lower average per-channel costs by buying the bundle, if that is their preference. On the other hand, they would also have the option of buying only a few channels, potentially limiting their total bill.

42. The First Report also argues that bundling promotes fiercer competition between MVPDs, thereby yielding lower prices for consumers. To support this contention, the First Report inappropriately relies on research by two economists, Yannis Bakos and Erik Brynjolfsson, who found that two competing firms with large bundles of information goods (i.e., goods with non-rivalrous consumption) will have lower prices than firms competing with a la carte sales of the same goods.⁵⁴ Their research assumes, however, that all consumers are alike in the sense that their values for the component products can be viewed as random draws from the same range of possible values,⁵⁵ an assumption that does not ring true with regard to video programming bundles. Their assumptions about the workings of the marketplace also differ from the retail video programming market. In their paper, competition between the two suppliers in their model results in prices such that all consumers buy bundles from both suppliers.⁵⁶ Clearly, this type of competition does not exist in the retail video programming market, in which prices have generally been rising at a rate faster than inflation, and few consumers buy video programming from more than one MVPD.

43. Finally, the First Report notes that a la carte choice might be too confusing for consumers because of the large number of options available and the complexity of the bills received, thereby imposing another potential cost on consumers.⁵⁷ Further consideration suggests that the First Report overstates the issue. Many consumers in other contexts are able to choose from a large variety of choices without undue confusion or frustration. And the MVPD consumer need make a simple yes or no decision on each channel only once. Moreover, nothing would prevent MVPDs from suggesting coherent combinations of channels to their customers.⁵⁸

⁵⁴ First Report at 23; Bakos & Brynjolfsson 2000.

⁵⁵ As noted in Bakos & Brynjolfsson 1999 at 1623, their results depend on sellers being better able to predict consumer demand by bundling more goods together. They assume that demand for each good is random, and thus bundling reduces the dispersion of values.

⁵⁶ Bakos & Brynjolfsson 2000 at 70-74.

⁵⁷ First Report at 22, 40-42.

⁵⁸ With mixed bundling, consumers would also have the simple option of buying a large bundle.

4. First Report Incorrectly Assesses Impact on Advertising Revenues

44. As described in the First Report, the costs of production of most cable programming networks are recovered from two sources of revenues: (1) network advertising; and (2) license fees paid by MVPDs for the right to distribute the network programming to subscribers.⁵⁹ Ultimately, both revenue streams are dependent on the number of subscribers who view the network. The First Report's analysis of the impact of introducing additional choice through a la carte took a pessimistic view of the associated costs and likely consumer responses.⁶⁰ Industry commenters projected significant drops in audience share, as well as in advertising revenues and license fees, for programming networks. Many of these projections, however, were based on unproven assumptions about the reactions of consumers to new options.⁶¹ The First Report's analysis of the impact of a la carte on network entry and funding contains conceptual errors and faulty assumptions that are re-examined below.⁶²

45. As stated above, the Booz-Allen-Hamilton Study, on which the First Report relied, predicts a la carte would cause consumers to view almost 25% less television and states that the average household watches on average 9 hours a day.⁶³ Thus, the Study assumes, without any basis, that a shift to a la carte would cause the average household to watch more than 2 hours less television per day or almost 15 hours less per week. While the First Report predicts substantial drops in audience shares following the introduction of a la carte, this is not the only possible response. There is little reason to believe that, given enhanced choice, consumers would watch video programming less than they do today, although they may make some changes in what they watch. If this is the consumer reaction, there would be little if any change in overall audience levels. In the absence of a change in audience levels, significant decreases in the advertising revenues of program networks are less likely.

⁵⁹ First Report at 89.

⁶⁰ First Report at 45-51.

⁶¹ See *supra* at II.B.1 (discussing assumptions regarding viewership in the Booz-Allen-Hamilton Study).

⁶² See First Report at 42-56.

⁶³ See Booz-Allen-Hamilton Report at 14.

46. As described in the First Report, a program network's revenue from advertising is based on the rate of service it can charge advertisers, which depends on the number of actual and potential viewers it has.⁶⁴ The ability of Nielsen to measure actual viewers ("reach") would not be affected by a change from bundling to a la carte. The number of potential viewers would change from the number of consumers choosing to purchase the bundle in which the network was included to the number of consumers choosing to purchase the network on an a la carte basis, which is arguably a better measure of the number of consumers who are likely to watch the network's programming, as it reflects a more affirmative decision by the consumer that he or she will view the channel. Thus, one would expect a move to a la carte to reduce advertisers' uncertainty regarding how many consumers their advertisements are actually reaching.

47. As the First Report notes, Nielsen does not rate smaller networks.⁶⁵ The First Report asserts that small, new, or independent networks may find it harder to attract advertisers if they are not in bundles, because a la carte distribution will reduce their potential viewership.⁶⁶ Although industry participants affirm that advertisers pay a premium to have access to a potentially larger audience through expanded circulation among consumers who rarely tune to that channel, ultimately advertisers pay to reach actual audiences, not potential audiences. If bundling adds many people to the distribution of a network who do not watch the network, then it is unlikely that this will significantly augment the network's advertising income.

48. Advertisers likely rely on a network's potential viewership today for determining their ad buys because they lack other measures to indicate the number of viewers the channel might actually have. Thus, advertisers might be more willing to buy ads on new networks with proof of popularity, such as strong a la carte sales, than they would on new networks that have achieved wide distribution but possibly few viewers. Distribution indicates only the cable operator's guess about a network's likely popularity

⁶⁴ First Report at 43.

⁶⁵ First Report at 43 (noting that "Nielsen only provides ratings for 59 of the over 300 national program networks").

⁶⁶ First Report at 43-47.

and the value it adds to the bundle, not its actual success with viewers.⁶⁷ A la carte reflects the viewer's guess about the likelihood of watching a channel, at least as accurate a prediction of likely viewership.

49. In addition, while the First Report focuses on a possible negative impact of a la carte on smaller networks, highly valued networks may find an increase in revenues under a la carte. As discussed below, a la carte could weed out those networks that consumers value at less than the networks' costs, thereby shifting some viewers to more valuable networks.⁶⁸ As a result of this shift, more valuable networks' ratings might rise, which could lead to additional revenues for those networks.

5. First Report Presents Incomplete Analysis of License Fees

50. The First Report contains a number of assumptions in its analysis of the license fees that networks are likely to collect under a la carte.⁶⁹ While many networks would likely experience a reduction in revenues without the superior revenue-generating capability of bundling, that loss may not be as deep as is implied. In addition, some networks could actually increase their revenue in an a la carte world.

51. The First Report's analysis of the impact of a la carte on license fees rests on the assumption that advertising revenues will decrease and license fees will have to increase to compensate.⁷⁰ As discussed above, advertising revenues would not necessarily

⁶⁷ The First Report's assertion that networks need distribution on popular tiers to get reliable counts of subscribers is puzzling, because this distribution does not indicate viewership. Subscribership to a channel under a la carte (or any plan with smaller tiers) would provide a much more reliable indicator of viewership than inclusion in a broad bundle. People who have chosen to pay for a particular channel are much more likely to watch it. *See* First Report at 44.

⁶⁸ *See infra* II.C.2.

⁶⁹ *See* First Report at 47-48.

⁷⁰ The First Report states that "[t]o make up the loss in advertising revenue, a program network will have to increase its license fee, which will, in turn, increase the cost of programming to cable and DBS subscribers." First Report at 47. This is directly counter to "Response B" of the Booz-Allen-Hamilton Study, which assumes that "operators hold affiliate fees constant despite the pressures on networks." Booz-Allen-Hamilton Study at 22. The Booz-Allen-Hamilton Study also states that "[w]e recognize that most networks or operators would likely respond somewhere in between these two extremes." Booz-Allen-Hamilton Study at 22. Thus, even the Booz-Allen-Hamilton Study, upon which the First Report relies so heavily, would characterize the statement in the First Report that networks would have to make up any lost advertising revenue with increased license fees as extreme.

decrease, unless the actual, as opposed to potential, number of viewers decreases. New, small networks that may demonstrate their popularity through a la carte sales could also be better able to attract advertising revenues.

52. While license fees are established on a fixed-rate “per subscriber” basis, this rate varies according to the importance of the network to the MVPD’s subscriber base and to the revenues gained from its bundle. In general, the total payment to the network should depend on its value to those consumers who are willing to pay the MVPD to be able to watch the network. Thus, if a network with a small dedicated (and well-paying) audience were removed from a bundle and made available on an a la carte basis instead, it might be able to generate almost the same revenue, through a higher per-subscriber license fee.⁷¹

6. First Report Presents Inadequate Analysis of Marketing Costs

53. The First Report provides inadequate analysis of industry allegations that marketing costs would increase dramatically in an a la carte regime, thereby deterring entry. It fails to consider adequately industry assertions regarding the size of these added costs and whether networks could find alternative means to market themselves in a pure a la carte or mixed bundling world.

54. Specifically, the First Report notes the importance of channel surfing as an inexpensive means of advertising a new network.⁷² As the First Report acknowledges, however, a study by the Cable and Telecommunications Association for Marketing found that less than half of viewers find new channels through channel surfing.⁷³ If less than half of viewers “surf” for new channels, by implication, networks today have to find ways to advertise their programming to the remaining MVPD viewers. So, networks are already confronting the problem of marketing themselves to non-surfers, even with bundling.

⁷¹ To maximize distribution, such networks could even offer themselves for free and rely exclusively on advertising revenues, just as broadcasting networks did prior to the introduction of cable.

⁷² First Report at 14-15, 48-50.

⁷³ See First Report at 15.

55. If indeed surfers place a higher value on getting a bundle than non-surfers, they could benefit from the sort of mixed bundling regimes explored in Section III of this Report. Under this scenario, switching to mixed bundling from pure bundling might not affect networks' ability to market to surfers and non-surfers nearly as much as the First Report suggests.

56. Finally, networks would likely find new ways to market were some form of increased consumer choice allowed. While having to solicit subscribers directly could raise networks' marketing and advertising expenses, countless products in numerous markets manage to establish one-on-one relationships with consumers. New networks could successfully enter by finding an underserved niche that is eager for their programming⁷⁴ or providing original high-quality programming.

7. First Report Ignores Benefits of A La Carte for Niche Networks

57. The First Report mentions but fails to discuss at any length the Urban Broadcasting Company's ("UBC") assertion that a la carte would benefit networks with smaller audiences trying to enter the market, such as a minority network like itself. As shown below,⁷⁵ networks with small, dedicated audiences may not be appealing to MVPDs providing bundles, because they may not generate enough revenue to MVPDs to be profitable to carry. But the dedicated audience of such a network may be willing to pay sufficient fees to more than cover the network's costs, in a manner similar to how premium networks and pay-per-view programs support themselves. As the UBC states, an a la carte regime could make it easier for niche networks to gain carriage, because they could demonstrate their popularity with the public through a la carte sales.⁷⁶ Under a la

⁷⁴ Marketing to special niches can be cheaper and easier. Echostar argues that micromarketing to niches is replacing mass marketing. First Report at 47.

⁷⁵ See *infra* II.C.2.

⁷⁶ UBC argues that minority viewers are currently underserved and that a la carte would change this. UBC's Comments state: "Fortunately, a la carte could open up the cable industry to minority cable television networks, such as UBC. If consumers were able to purchase minority cable television networks on an a la carte basis, cable carriers would have no excuse not to enter into carriage deals with minority cable television networks. Currently, cable carriers claim that they do not enter into such deals, because ... too many consumers are not willing to pay for minority cable networks to be added to their cable packages. This would not be an issue if minority cable television networks were offered on an a la carte basis,

carte, the network's success would depend on what the audience will pay just for that network, rather than what additional revenue the bundle generates from adding the network.

8. First Report Fails to Consider Ways to Mitigate Implementation Costs

58. The First Report correctly points out that a la carte would not benefit consumers if the costs of implementation were so high that MVPDs were forced to raise rates significantly.⁷⁷ The First Report alleges that implementing some kind of a la carte (either pure or mixed) would significantly increase operational expenses. It further contends that these increased costs would substantially raise subscription fees for all MVPD customers.⁷⁸ The First Report fails, however, to take into account any means by which the implementation costs could be reduced, in particular the potential reduction in implementation costs if a la carte were offered only for digital channels.

59. The costs of implementing additional consumer choice are generally analyzed in the First Report and the Booz-Allen-Hamilton study based on the historical model of how cable services have been distributed. It is assumed that cable operators would either have to: (1) deploy equipment (such as traps that block signals or set-top boxes to descramble channels) that can block analog channels that consumers do not purchase; (2) convert their systems to full digital transmission; or (3) simulcast their current analog offerings in a digital format and require customers who want to purchase a la carte service to receive digital service. Since industry considered the first option to be prohibitively expensive, the analysis focused on the latter two options, which would require consumers currently receiving analog service but desiring a la carte to purchase a digital set-top box.⁷⁹ The Booz-Allen-Hamilton Study assumed the second option would be used for pure a la carte and the third option for mixed bundling and themed tiers.⁸⁰

because then only consumers who want minority cable networks would have to pay for them.” UBC Comments in MB Docket No. 04-207 at 2 (“UBC Comments”).

⁷⁷ First Report at 27-33, 38-42.

⁷⁸ First Report at 27-33, 38-42, 95.

⁷⁹ First Report at 27-31, 39-41, 93-94.

⁸⁰ First Report at 94.

60. The cost of switching to full digital transmission accounted for a substantial share of the financial burden on MVPDs that was forecast to be passed on to consumers. Digital set-top boxes constituted 71% to 80% of the projected increased costs of cable operators to implement pure a la carte, excluding the possible rise in license fees that networks demand, the size of which this Report has already questioned.⁸¹ The Booz-Allen-Hamilton study claimed that the cost of adding set-top boxes would raise consumers' bills by about 15.7%.⁸²

61. Offering some form of additional consumer choice only for those channels that are carried in a digital format could reduce the extensive equipment costs hypothesized in the First Report. Presumably, in such a scenario, the MVPD would not have to simulcast its analog channels in a digital format and would not have to provide set-top boxes to all consumers immediately. In any event, cable's transition to digital is occurring independently of any a la carte options, in conjunction with broadcasters' digital transition, which is mandated by statute.⁸³ Thus, the cable industry's transition costs should not be regarded as attributable to the offering of greater consumer choice.⁸⁴

62. While limiting the roll-out of additional consumer choice to the digital realm would reduce the immediate benefits of the change for those customers receiving analog service, there are many consumers who already take digital service and could benefit from the availability of a la carte. Other consumers would reap the benefits of expanded choice as the transition to digital progresses.

63. Moreover, limiting a la carte to the digital realm could have some useful consequences beyond reducing infrastructure costs. Because much of the cable industry's equipment and institutional structure will likely be redesigned in the next few years, the digital transition provides a window of opportunity for implementing increased

⁸¹ First Report at 95.

⁸² Booz-Allen-Hamilton Study at 6, Figure 1, under Response B (Networks Reduce Programming Expense), A La Carte option, Scenario 1 (pure a la carte scenario).

⁸³ See 47 U.S.C. 309(j)(14).

⁸⁴ A la carte implementation costs would no doubt vary across cable systems and need further study. In addition, the cost of implementing a la carte for DBS, an industry using different technology than cable, merits further exploration. EchoStar states it could implement a la carte now.

consumer choice. Phasing in new options as these changes occur should allow industry participants, as well as consumers, to adjust to these new realities and limit possible disruptions.

64. Additionally, enhancing choice for digital subscribers is likely to prompt some analog subscribers to switch to digital service, thus potentially quickening the pace of the transition.

C. IMPACT OF A LA CARTE ON PROGRAMMING DIVERSITY

1. Introduction

65. A la carte could be preferable to bundling in providing diverse programming responsive to consumer demand. The First Report implies that bundling gives consumers the programming they desire when it argues that “bundling does not force consumers to pay for programming they do not want.”⁸⁵ Since no one alleges that consumers are being forced to buy bundles for more than they value them, this argument is a straw man. As the First Report notes, in a free market economy consumers will not purchase goods if the price exceeds the value they place on it.⁸⁶ The relevant question concerns not whether consumers are paying for bundles in excess of the bundles’ value, but rather whether consumers would prefer the service they could get under a la carte. If bundling, as compared to a la carte, causes consumers to pay more or prevents customers from getting the programming they want, then bundling has made them worse off.

66. To maximize revenue under pure bundling, MVPDs carry networks that either: (1) allow them to raise the price of the bundle; or (2) add to subscribership. This means that the networks that have value to consumers will not always get carriage under pure bundling for two reasons. First, because their goal is to maximize the price and sales of the bundle, there are many circumstances when MVPDs will have an incentive not to provide the networks preferred by some consumers. For example, some mainstream networks may not be added because, unlike niche networks, they do not increase

⁸⁵ First Report at 23, 85-86.

⁸⁶ First Report at 85.

subscribership.⁸⁷ Second, bundling can obscure signals regarding consumer valuation of individual networks. Under bundling, consumers provide no information about which networks they like best; while under a la carte, consumers' interest in a network can be measured by its a la carte sales. Thus, it is more difficult to ascertain the relative value of networks under bundling, especially for smaller networks that have no published ratings. The analysis below considers how these factors can affect the availability of diverse programming responsive to consumer demand.

2. Bundling Distorts Incentives to Carry Networks

67. Bundling may create incentives for MVPDs to include or exclude programming in a manner inconsistent with consumer preference. The First Report assumes that MVPDs will want to carry networks that are preferred by consumers. Because their goal is not to maximize sales of an individual network, but instead to maximize the revenue gained from the bundle, there are circumstances in which MVPDs will not carry the most desired networks. Indeed, consumers may be disappointed with the programming they receive in bundled packages either because it includes programming they find without sufficient value to justify its cost or because it excludes valued networks.

68. First, MVPDs that bundle may find it profitable to include content that some consumers do not watch, potentially forcing those consumers to pay more than they would under a la carte. The First Report takes the view that since programming is non-rivalrous in consumption, it is desirable to distribute all available programming to the largest possible viewing audience.⁸⁸ This ignores the possibility that some consumers might find some programming to be without value, so that they would prefer not to pay for the programming as part of the bundle price. Yet, bundling of such programming networks may be profitable to MVPDs, even though some consumers do not watch it.

69. It can be profitable to include networks that particular consumers do not watch if it raises the price other buyers are willing to pay for the bundle to a level that the former consumers remain willing to pay. This is demonstrated in Example 2, which

⁸⁷ Conversely, networks that appeal to a minority of viewers may not be added to the bundle if the addition of those networks does not raise the total value of the bundle to minority viewers up to the bundle price.

shows that the MVPD will find it profitable to include a network that one buyer does not value.⁸⁹ If the network in question were offered a la carte, the example shows that the consumer would be better off, because she would have the option to purchase fewer channels at a lower cost.

70. Second, some programming networks that appeal to mainstream consumers might find it more difficult to enter under bundling than under a la carte.⁹⁰ As stated above, an MVPD carries a network only if it either expands the base of subscribers willing to pay the bundle price or if it enables the MVPD to increase the price it can charge for the bundle. As Example 4 shows, an MVPD may prefer to add niche programming that appeals to a small set of subscribers rather than add additional mainstream programming that provides greater total value to consumers if existing mainstream programming is sufficient to attract the mainstream consumers. The example shows that programming additions that enhance the value to existing mainstream consumers may not increase subscribership and may not allow the cable provider to increase the bundle price without losing significant numbers of non-mainstream consumers.⁹¹ Thus, some mainstream programming may not be provided under bundling, even though it provides more total value to consumers than some niche programming that is provided. In contrast, under a la carte, the example shows that the most valued programming is provided.

71. Third, bundling may induce MVPDs to exclude from their bundles the networks some of their viewers most strongly value. This applies particularly to networks that

⁸⁸ First Report at 85.

⁸⁹ See *infra* Economic Appendix B.2.

⁹⁰ The First Report contends that smaller, niche networks, including those aimed at “minority interests,” (or, alternatively “minority cable television networks”) would feel the brunt of the damages that are alleged will befall networks under a la carte and thus presumably would be most likely to fail. First Report at 8, 56. However, in some cases, a switch to a la carte could actually increase program diversity, particularly with respect to minority-interest and niche programming. To see this, note that under bundling, MVPDs may not want to carry networks that appeal only to a minority segment of viewers who are otherwise unwilling to pay the bundle price. As Example 3 demonstrates, some minority programming that would be carried under a la carte might not be carried under bundling, even if its value to consumers exceeds its cost. See *infra* Economic Appendix B.3. This programming would be carried under a la carte, since the consumers would be willing to pay enough to cover the cost of providing it.

⁹¹ See *infra* Economic Appendix B.4.

attempt to serve a programming niche that is already served by one or more other networks. Networks that are less strongly preferred by viewers might better increase MVPD revenues from the bundle and thus gain carriage. The preferred networks could be available under pure a la carte, provided the value to the consumer of the preferred programming network exceeds the network's costs.

72. Example 5 demonstrates such a scenario.⁹² In that example, carriage of a network that appeals strongly to a group of viewers adds less revenue than networks that have broader, if more modest, appeal, so that the MVPD may exclude it from the bundle.⁹³ Even if a network is strongly preferred by a group of existing subscribers, if other subscribers do not value the network enough to raise their valuation of the bundle, then the MVPD may not be able to raise the bundle price charged to all subscribers. If the network also fails to attract many new subscribers, then the cost of paying for the network may exceed any revenue the MVPD could gain by carrying it, making carriage unprofitable. Under a la carte, however, programming of strong interest to a few subscribers might be profitable to carry, provided its value to those consumers exceeds its cost.

73. Finally, in its discussion of efficiency in the marketplace, the First Report fails to note that bundling may result in the production of programming for which the consumer value is less than the cost of production, leading to an inflated supply of programming. If a switch to a la carte eliminated such programming, the result would

⁹² See *infra* Economic Appendix B.5.

⁹³ Thus, the MVPD may not find it desirable to carry a new network serving an existing niche, such as a new weather channel, food channel, or science fiction channel, if the new network appeals only to existing customers and does not have demonstrated value to other subscribers or non-subscribers. Indeed, the First Report notes that the Urban Broadcasting Company (UBC), a minority cable network, has made this very complaint. The UBC says that it “has difficulty obtaining carriage deals, because many cable television carriers find little to no value in meaningful and tasteful programming that targets people of color.” It also argues that it is denied carriage because: “Cable carriers often tell minority cable television networks that there is already enough programming that targets people of color. Cable carriers also tell minority cable television networks that too many consumers are not willing to pay for minority cable networks to be added to their already expensive cable television packages.” UBC Comments at 2.

not be a blow to program diversity, as the First Report suggests,⁹⁴ but rather a restoration of programming to an efficient level, more consistent with consumer value.

74. Economists consider producing a good to be inefficient (and thus undesirable) if the benefits the good provides to buyers is less than the cost of producing it. The use of bundling can provide an incentive to carry a network for which the total value to consumers is less than the fixed costs, such that production of the network reduces economic efficiency. This can occur because the addition of a network to the bundle may allow MVPDs to extract additional revenue from consumers even if consumers' value for the additional network is less than its fixed cost. In this case, the addition of a network to the bundle can result in an increase in the cost of the bundle to a consumer that is greater than the increase in value to the consumer. Example 6 illustrates this point.⁹⁵

75. In Example 6, an increase in revenue made possible by the addition of a second programming network to a bundle induces the MVPD to carry that network even though the consumer value from the network is less than its fixed cost. Under pure a la carte, only one network would be carried. MVPD profit, however, is lower under the a la carte option, even though consumer welfare and economic efficiency are higher.

76. The First Report also suggests that bundling allows an increase in the quality of programming.⁹⁶ In a similar manner to that just described, however, bundling provides an incentive to networks to make economically inefficient investments in programming. Such increased programming costs inflate expenses, which can unnecessarily raise the price of the bundle to the detriment of consumers. Example 7 illustrates this scenario.⁹⁷

77. In Example 7, the programmer invests in content even though the cost of that additional content is greater than the incremental value created for consumers. The example demonstrates that what the First Report portrays as an increase in program quality may instead, as in this case, be merely a transfer of surplus from consumers to

⁹⁴ First Report at 56.

⁹⁵ See *infra* Economic Appendix B.6.

⁹⁶ First Report at 86.

⁹⁷ See *infra* Economic Appendix B.7.

networks and content providers. Networks do not have the same incentive with pure a la carte, because they cannot get consumers to pay more than the value of any improvement in programming. The example suggests that the First Report may overstate the benefits of bundling on program quality.

3. Bundling Limits Ability to Ascertain Demand

78. Even when the MVPD wants to carry the most-desired networks, it may have difficulty determining which ones are most popular with viewers under bundling. Whether or not a network gets carried depends on an MVPD's guess as to the popularity and profitability of carrying a network. Since consumers are buying a bundle of networks, and since Nielsen does not rate smaller networks, the MVPD may have little information about how much consumers value the ability to watch a particular network, even after carrying it for a while.

79. Under a la carte, consumers indicate their interest by agreeing to pay a fee for receiving the network. This provides the MVPD direct information about how many consumers place a high valuation on the network. Because the consumers who pay for a network are likely to be watching it a portion of the time, it also provides information to advertisers about the likely number of viewers. Since MVPDs want to carry networks that increase subscribers and revenues per subscriber, and since advertisers want to know which networks have large numbers of viewers, networks with large numbers of viewers might find it easier to get higher license fees and advertising revenues under a la carte than under bundling. Meanwhile networks with few interested viewers will likely get less revenue when it becomes obvious they have few subscribers under a la carte, and they may consequently lose carriage.

80. In addition, under bundling a network may have a reduced incentive to improve its quality, because a moderately higher number of viewers for a network may go unnoticed and unrewarded. Under a la carte, on the other hand, improvements in quality can lead quickly to an increase in the number of paying subscribers and the size of the fees they are willing to pay for the network, thus quickly providing a reward for the investment. The marketplace will thus be able more quickly to shed unpopular networks in favor of popular networks under a la carte than under bundling and in the process

become more responsive to consumer demand for better programming. Programmers may also have an increased incentive to improve their programming under a la carte.

III. ADDITIONAL OPTIONS FOR INTRODUCING CONSUMER CHOICE

A. INTRODUCTION

81. As Section II of this Report explained, the First Report did not present an accurate or balanced picture of the consequences of increasing consumer choice. In fact, there are significant benefits that may be gained by allowing consumers to choose. For example, a la carte could decrease many consumers' video programming bills. This section examines some alternative options for providing increased consumer choice that the First Report failed to analyze fully. These options are limited to channels currently offered in a digital format, in hopes of minimizing any cost and disruption associated with the transition to increased consumer choice.⁹⁸

82. Below we consider three options for increasing consumer choice. They are: (1) mixed bundling, in which consumers are allowed to choose from all the digital channels on an a la carte basis, in addition to bundles the MVPD may choose to provide; (2) themed tiers, in which MVPDs offer tiers of related digital programming, such as a children's programming tier or sports programming tier; and (3) subscriber-selected tiers, in which customers have the option of purchasing smaller bundles than are currently offered and choosing the channels that go into that bundle from among the MVPDs' digital offerings. All of these options provide consumers increased choice in selecting the programming they wish to pay for and receive. Likewise, all the options permit MVPDs to continue to offer their current bundled and a la carte selections,⁹⁹ so that consumers can continue to purchase pre-established bundles if those bundles best meet their needs. The following section discusses the advantages and disadvantages of each option and the implementation issues they present.¹⁰⁰

⁹⁸ See *supra* II.B.8.

⁹⁹ Premium channels are offered for the most part on an a la carte basis or as "mini-tiers."

¹⁰⁰ How prices are set would help determine whether consumers realize significant benefits from the additional choices they gain. High prices for the new options could negate the benefit from adding these

B. DISCUSSION OF OPTIONS

1. Mixed Bundling

83. Instead of receiving most of their digital channels exclusively in bundles as they do today, consumers could be allowed the choice of purchasing such channels either on an a la carte basis or as part of the bundles an MVPD chooses to provide (“mixed bundling”). That is, under this option, consumers could elect to purchase networks individually, at a set price for each network, or to pay the bundled price.

84. It is worth noting that MVPDs have some experience selling channels and features on an a la carte or smaller bundle basis. For example, consumers are able to purchase premium channels, pay-per-view features,¹⁰¹ and Video-On-Demand¹⁰² (VOD) programming either individually or as part of small packages, with a variety of approaches being taken for offering these services.¹⁰³ In counterpoint to industry claims that the increased complexity of a la carte will harm the market and impose undue costs on their operations, cable operators have been able to absorb the increased marketing and customer care requirements associated with their premium, pay-per-view, and VOD program offerings, which offer their subscribers essentially a la carte programming options. Moreover, many of the network and system costs are already in place to allow for premium, pay-per-view, and VOD offerings.

85. Mixed bundling would provide many benefits over pure bundling. First, consumers who are only interested in a few channels could buy the channels they want,

options, while excessively low prices could reduce MVPDs’ and networks’ incentives to maintain the quality of their services.

¹⁰¹ Pay-per-view programming is another type of video service that is offered by MVPDs on an a la carte basis. Rather than paying for a channel of programming, like HBO, a subscriber pays for a specific program. With pay-per-view, cable and satellite subscribers can order hundreds of recently released movies or current sports events on a per-program basis, which they can view at the time it is aired.

¹⁰² Video-On-Demand provides subscribers immediate access to video programming content on a program-by-program basis.

¹⁰³ Cable operators offer a mix of free and pay VOD. While some pay VOD is offered on a pure a la carte basis, certain operators are offering subscription video-on-demand (“SVOD”), which functions like VOD but has a different marketing structure. Rather than paying for each event viewed, the subscriber pays a monthly fee to access certain programming on an at-will basis. For example, a subscriber would pay an additional \$3.00 more per month for HBO SVOD, which would allow him to access a catalog of programming for immediate viewing.

possibly at a considerable cost savings to the bundle price. This could significantly lower these consumers' total bills for video programming. Moreover, a la carte could induce consumers to take MVPD service who would not otherwise be willing to pay the bundle price. Finally, mixed bundling would permit consumers to avoid paying for networks that they do not watch.

86. The fact that consumers could still buy the MVPD-established bundles would provide an additional layer of benefits. If there were significant savings from bundling channels that appeal to different sets of customers, as industry suggests in its comments, then the pre-established bundles should remain an attractive option to consumers. Similarly, any consumers who found the decisions presented by an a la carte programming option overwhelming could purchase bundled programming instead.

87. Increased choice for consumers of this sort could also increase competitive pressures among competing MVPDs, who might feel pressure to match each others' prices and offerings. The current programming packages that MVPDs offer tend to be remarkably similar and few in number, which may limit the strength of competition among MVPDs. Offering consumers additional options in programming packages could spur increased competition among MVPDs by opening up additional fronts on which MVPDs could compete to satisfy consumer demand.¹⁰⁴

88. Mixed bundling would also help to provide market signals that reflect the popularity of a network with consumers. Although not fully representative of the number of viewers (because many subscribers may have access through purchase of a bundle), the volume of a la carte sales could represent useful information to advertisers and MVPDs concerning the popularity of a network. This could increase advertising revenues for popular networks, allowing those networks to lower their license fees.

89. The availability of bundles under mixed bundling should also alleviate many of the concerns expressed by networks about the cost of marketing themselves under a pure

¹⁰⁴ Mixed bundling could also help ensure that consumers receive the minority and niche programming they want and prefer. As discussed above, some new networks might find it easier to enter under a la carte. If a new network had a dedicated audience, that audience might be willing to pay sufficiently to support the network outside the bundle, even if the network failed to attract new subscribers to the bundle or generate higher revenues from the bundle.

a la carte regime. Those consumers that like to channel surf could continue to buy the pre-established bundles.

90. As discussed further below, we lack information about what a la carte prices would be for individual networks.¹⁰⁵ Some a la carte network prices could be relatively low, but other network prices could appear relatively high to consumers. In any event, consumers would likely have the opportunity to lower their total programming bill by purchasing fewer channels.

91. Overall, a mixed bundling regime has the potential to provide great flexibility to consumers. Mixed bundling could produce reduced prices for some consumers, as well as make programming available to consumers with a limited interest in MVPD programming and a small budget. While consumers would have the option to purchase channels a la carte, they would retain the option of buying a pre-established bundle if that best suited their needs.

2. Themed Tiers

92. Another possible sales method is the themed-tier model, pursuant to which MVPDs would offer one or more tiers of digital programming with a particular theme.¹⁰⁶ The program networks in this type of tier would still be available in a larger, more

¹⁰⁵ Pricing would have an impact on the gains consumers get from a la carte purchases. Under mixed bundling MVPDs might have an incentive to set the a la carte prices high, in order to induce customers to buy the bundle. In some of the examples in the Appendix to this Report, it was assumed that the price was fixed at the pure a la carte profit-maximizing level. These prices are often lower than the per-channel bundle price. In example 1, the bundle price is \$8 for two channels, yielding an average per-channel price of \$4, compared to the a la carte price of \$3 for each network. However, the pure a la carte price could also be higher. Consider the example provided in the Economic Appendix to the First Report. If Aaron values X at \$5 and Y at \$2, and Betty values X at \$2 and Y at \$5, then the revenue-maximizing price is \$5. The bundle price is \$7, for an average per-channel price of \$3.50.

¹⁰⁶ Today, all major cable operators offer digitally-compressed video channels to cable subscribers on digital tiers. The digital cable services may be viewed on analog television receivers through use of a digital cable set-top box. Digital compression technologies allow anywhere from four to twelve video channels to be compressed into the capacity previously used to provide just one standard six MHz analog channel. The programming available on digital tiers includes a variety of genres, such as sports, movies, children's, and foreign-language programming. There are approximately 25 million digital cable subscribers in the United States. See *NCTA 2004 Year-End Industry Overview* at 6. There are approximately 25 million DBS customers, equipped with digital set-top boxes, as well. See Echostar Press Release, *Echostar Reports First Quarter 2005 Financial Results* (May, 5, 2005) (reporting that it has approximately 11.23 million subscribers); DirecTV Press Release, *The DirecTV Group Announces First Quarter 2005 Results* (May 2, 2005) (reporting that it has approximately 14.5 million subscribers).

general (and more expensive) package if the distributor so chose. A themed tier would allow a consumer to pay a subscription fee only for that genre of programming that he or she finds appealing.

93. Domestic cable operators are technically capable of offering such tiers, as evidenced by the sports, foreign language, and other themed tiers currently offered for sale. Charter, for example, offers a limited basic service tier consisting of broadcast stations and local access channels, an expanded basic tier, and many additional channels on four separate digital tiers (the “Family and Information Tier,” the “Movie Tier,” the “Sports Tier,” and the “Latino Tier”).¹⁰⁷ Bright House Networks has focused on expanding its digital offerings, which include, *inter alia*, a digital basic tier and a digital sports tier.¹⁰⁸ Cablevision offers seven separate tiers of foreign language programming catering to, among others, Russian, Korean, and Hispanic subscribers, as well as digital tiers for sports enthusiasts.¹⁰⁹ These examples and others like them demonstrate that such tiers are economically and technically feasible.¹¹⁰

¹⁰⁷ Charter Comments in MB Docket No. 04-207, at 3.

¹⁰⁸ Bright House Network Comments in MB Docket No. 04-207 at 8-9.

¹⁰⁹ See <http://www.io.tv/index.jhtml?pageType=international> (visited Dec. 8, 2005) and <http://www.io.tv/index.jhtml?pageType=sports> (visited Dec. 8, 2005). See also *CVC Tiers Up Again*, CableFax Daily, 1 (Apr. 13, 2005) (stating that Cablevision is launching another sports tier, which will include 10 national sports channels for \$4.95 per month). Comcast and Cox offer themed tiers as well. See Don Steinberg, *Comcast to Roll Out New Package for Digital Cable*, Philadelphia Inquirer, D2 (Aug. 1, 2004) (discussing Comcast’s digital sports tier which includes six channels for \$4.95); Mike Reynolds, *Cox Beefs up Hispanic Package*, Multichannel News, 24 (Sept. 27, 2004) (Cox offers a new Hispanic Package, named Paquete Latino, which includes 35 Spanish-language channels for \$34.95 per month).

¹¹⁰ Many examples of digital family tiers can already be found around the world. For example, Rogers Cable in Canada offers a “family fun” themed tier for \$5.99 (Canadian), that consists of BBC Canada, BBC Kids, Biography Channel, Country Canada, Detroit Public Television, Discovery Kids, National Geographic, and Treehouse. EastLink, serving Halifax, Canada, offers an “Education Pak” for \$6.95 (Canadian) consisting of the Documentary Channel, Biography, BBC Kids, National Geographic, Discovery Kids, Discovery Civilization, and Animal Planet. See <http://www.eastlink.ca/cable/channelguides/channelguide3.asp> (visited Dec. 8, 2005). CableBahamas, serving the Bahamas Islands, offers a “FamilyPak” in Grand Bahama for \$5.95 that consists of Noggin, History Channel, TV Land, Animal Planet, ABC Family, and Comedy Central. See <http://www.cablebahamas.com/tv.lasso?id=177&market=GrandBahama&package=FamilyPAK> (visited Dec. 8, 2005). NTL, a British cable operator, offers a Family Pack of over 100 digital television program networks and 40 radio channels for £29.00. See http://www.home.ntl.com/icat/television&source=ntlcomtv_link (visited Dec. 8, 2005). Starhub, a cable operator serving Singapore, allows its subscribers to purchase three themed tier packages for \$20.00. One of these packages is the “Kids” group, which consists of Cartoon Network, Nickelodeon, and Disney

94. Under a themed-tiers option, consumers could reap some of the economic benefits that bundling may provide, while still receiving and paying for only the kinds of networks that appeal to their interests. Indeed, consumers could potentially save money by purchasing themed tiers, either because themed tiers could be cheaper than existing bundles or because consumers could avoid purchasing networks they do not watch. Example 8, in which every consumer spends less by buying themed tiers rather than a big bundle, illustrates how themed tiers could reduce the overall cost of MVPD service for some consumers.¹¹¹

95. The cost of implementing themed tiers should be relatively low. In particular, the marketing and administrative costs of offering themed tiers would likely be low for MVPDs, since this option appears to be fairly simple to implement and to market to consumers. Domestic cable operators are technically capable of offering such tiers, as evidenced by the sports, foreign language, and other themed tiers currently offered for sale.

96. In summary, the provision of themed tiers appears to be an inexpensive option that would benefit some consumers by reducing their expenditures on multichannel video programming. Just how much consumers benefit from this increased choice will depend, of course, on the composition and pricing of the tiers.¹¹²

Channel. See [http://www.maxonline.starhub.com/cabletvnewplanportal/newplan_ns2.asp?section =](http://www.maxonline.starhub.com/cabletvnewplanportal/newplan_ns2.asp?section=) (visited Dec. 12, 2005).

¹¹¹ See *infra* Economic Appendix B.8.

¹¹² Recently a number of cable and DBS operators have announced plans to offer family-friendly programming tiers. In early 2006, Time Warner, Comcast, Cox, and Insight all will begin to offer approximately 15 channels of family-friendly programming that can be purchased in conjunction with the basic service tier of programming. Other cable operators, such as Midcontinent and Charter, have stated they are committed to developing family-friendly offerings but have not yet announced specific plans. DIRECTV and EchoStar both plan to offer a family tier with more than 40 channels. See Time Warner, *Time Warner Cable Launches Family Choice Tier* (press release), Dec. 15, 2005; Comcast Corp., *Comcast Announces Family Tier* (press release), Dec. 22, 2005; Cox Communications, Inc., *Cox Communications Announces Family Friendly Package* (press release), Jan. 10, 2006; Insight Communications Company, *Insight Communication Announces Plans for Family-Friendly Tier of Programming* (press release), Jan. 17, 2006; Midcontinent, *Midcontinent Communications to Develop Family Friendly Choice* (press release), Dec. 12, 2005; EchoStar Communications Corp., *DISH Network Offers 'DishFAMILY' Programming Tier, Providing Parents with Worry-Free TV* (press release), Feb. 1, 2006; Jean Spenner, *Cable TV Planning "Family Friendly" Tier*, THE SAGINAW NEWS, Dec. 16, 2005, at <http://www.mlive.com/business/sinews/index.ssf?/base/business-1/1134746428242260.xr>. (visited Dec. 29, 2005); Glen Dickson, *Family Tiering Gets Technical*, BROADCASTING & CABLE, Dec. 19, 2005, at 24.

3. Subscriber-Selected Tiers

97. An alternative to MVPD-established themed tiers would be a subscriber-selected tier. That is, the MVPD subscriber, rather than the MVPD, could choose the content of the tier to be purchased. For example, if a subscriber desired a mix of program network types, such as sports, movies, and children's programming, she would be able to select a prescribed number of channels for a set price from among the MVPD's digital offerings. This tier would be smaller than the MVPD's pre-established bundles. Thus instead of being required to purchase perhaps 80 networks as part of a larger bundle, a subscriber could purchase a smaller package of perhaps 20 or 40 or 60 networks for a reduced price, with the subscriber choosing the networks. Subscribers could continue to buy the pre-established programming packages if they so chose.

98. Subscriber-selected tiers would combine the potential benefits of bundling with the potential benefits and greater choice that a la carte could provide consumers and have therefore received some attention in the economics literature. Two FCC economists recommended examining this option in a recently published paper.¹¹³

99. Moreover, international examples suggest the feasibility of this approach. For example, Videotron, a Canadian cable operator, allows its subscribers to select certain types of digital program networks on an a la carte basis. Videotron customers must buy a basic digital tier that includes 22 government-mandated channels for a monthly fee of \$19.48. Customers then have a variety of additional choices. Customers can purchase channels one at a time, in small bundles of five or six, or in larger bundles of 20, 30, 65, or 106 channels.¹¹⁴

100. Rogers Cable, another Canadian cable operator, likewise offers subscriber-selected tiers. Subscribers who purchase a 30 channel basic tier for \$24.00 and lease a digital converter box for \$8.95 can then purchase certain digital networks on an a la carte basis for \$2.49 each. Alternatively, subscribers can create their own new digital "5-pack"

¹¹³ Keith Brown and Peter J. Alexander, *Bundling in Cable Television: A Pedagogical Note With a Policy Option*, *The International Journal on Media Management*, 6 (3&4), 162-67 (2004). They call this option "quasi-bundling."

¹¹⁴ See Bill McConnell, *Cheaper by the Dozen*, *Broadcasting & Cable*, July 19, 2004, at 22.

for \$9.95, “10-pack” for \$14.95, “15-pack” for \$18.75 and so forth.¹¹⁵ Other Canadian cable operators offer similar packages.¹¹⁶

101. Subscriber-selected tiers would allow consumers to purchase the networks they want, while avoiding receiving or paying for other networks that they do not watch. In contrast to themed tiers, with subscriber-selected tiers, consumers would not be restricted to the networks the MVPD bundled together in making their choices. The ability of consumers to choose which channels go into their bundles would also provide feedback to MVPDs and advertisers as to which networks are most popular. We would expect MVPDs to monitor closely which networks consumers select, as a yardstick of a network’s value to viewers. As discussed above, having this information available about consumer preferences would help make programming more responsive to consumer demand, since networks that are more popular and that have invested in raising their quality would find it easier to demonstrate their success to MVPDs and advertisers under subscriber-selected tiers, as compared to pure bundling.

102. The First Report raises the concern that networks have different costs and thus cannot be lumped together in a single package at a fixed price.¹¹⁷ The concern is that, because some networks cost more to provide than others, providing a single package with high and low cost networks could be difficult to price. The theory is presumably that consumers should pay more for the high cost networks. Yet this is not how the video programming industry works, either through broadcast television or MVPD bundling. Networks that cost more and provide greater quality would get more viewers and

¹¹⁵ See http://www.shoprogers.com/store/cable/DigitalTVPurchase/digitaltv_bestValueOptions.asp (visited Dec. 8, 2005).

¹¹⁶ See Access Communications at <http://www.accesscomm.ca/access?pageid=181> (permitting subscribers to create their own digital packages—5 channels for \$6.95 or 10 channels for \$11.95) (visited Dec. 8, 2005); Shaw Cable at <http://www.shaw.ca/en-ca/ProductsServices/BundlesAndPricing/ALaCarteServices.htm> (permitting subscribers to pick 5 channels for \$6.95 and 10 channels for \$10.95) (visited Dec. 8, 2005); Cogeco at http://www.cogeco.ca/en/alacarte_services_o.html (permitting subscribers to pick 5 channels for \$6.99, 10 channels for \$9.99, up to 30 channels for \$19.99) (visited Dec. 8, 2005).

¹¹⁷ The First Report casually characterized the option of allowing “subscribers to select a set number of channels from a menu of options at a flat rate” as “a highly unlikely scenario considering the programming cost differences among various channels.” First Report at 41. No analysis was provided to support this statement.

subscribers and thus are compensated with more subscription fees and advertising revenues. In addition, the price of the bundle, and the proportion of the price that goes to each network, could be adjusted to account for the average take rate of the different kinds of networks.

103. Subscriber-selected tiers would present issues, however, regarding how to set the size and price of the bundles. Indeed, the ability of subscriber-selected tiers to generate consumer savings is difficult to determine absent more pricing information. As discussed above, though, the concerns expressed in the First Report are overstated in terms of the difficulties smaller networks might face.¹¹⁸ Further, the inclusion of networks in bundles would mean that the networks and MVPDs would still get the benefits of bundling in terms of getting contributions from both high-interest and low-interest consumers to cover their costs.

104. In practice, the potential for significant consumer benefits from offering a subscriber-selected tiers option could outweigh any potential difficulties in determining how the size and price of these smaller bundles would be set. This form of increased consumer choice would provide some consumers lower prices and all consumers the ability to avoid paying for networks they do not watch. Meanwhile this option retains any potential benefits of bundling.

C. MVPD COMPETITION

105. The First Report correctly noted that “[m]arketplace forces and technological advances are poised to bring more competition and choices to the public.”¹¹⁹ MVPD competition continues to provide consumers with increased choice, better picture quality, and greater technological innovation. The Commission recently found that almost all consumers now have the choice between over-the-air broadcast television, a cable service, and at least two DBS providers. And in some areas, consumers also may have access to video programming delivered by emerging technologies, such as digital

¹¹⁸ See *supra* Section II.B.7.

¹¹⁹ First Report at 7, 62-65.

broadcast spectrum, fiber to the home, or video over the Internet.¹²⁰ Increased choice in providers should foster increased consumer choice.

106. DBS market share continues to grow, providing an alternative to cable service that offers many tiers of service, some with lower prices than those offered by cable operators. In response to DBS competition, cable operators have, among other things, expanded their channel line ups and bundled video service with other service offerings, such as cable modem service or telephone service. DBS operators in turn are offering local broadcast channels, additional sports and international programming, and advanced set-top boxes with digital video recorder (DVR) capabilities. Similarly, broadband service providers continue to offer a triple play of video, voice, and Internet access service that has proved to be price competitive with cable. In rural and small markets, LECs are upgrading their traditional copper facilities to digital subscriber line (DSL) and fiber-based platforms to allow them to offer a suite of video, telephone, and data services.¹²¹

107. Notably LECs, such as AT&T and Verizon, who continue to partner with DBS providers in order to offer video service, have spent the past year preparing to offer video in their operating areas and are building out their facilities to add video offerings.¹²² The larger LECs have accelerated their plans to roll out video services using DSL and fiber-based distribution platforms. Verizon is deploying an FTTH network under the brand name “FiOS TV” that will allow delivery of multichannel video services in addition to telephony and high-speed Internet access service at speeds above those of ADSL technology. Verizon has received franchises from local communities in California, Florida, Virginia, Texas, Massachusetts, and Maryland. It began offering multichannel video service in Keller, Texas, in September 2005, in Herndon, Virginia, in November 2005, and in Temple Terrace, Florida, in December 2005, and it planned to offer video

¹²⁰ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Twelfth Annual Report, MB Docket No. 05-255, paragraph 5.

¹²¹ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Twelfth Annual Report, MB Docket No. 05-255, paragraph 7.

¹²² *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Twelfth Annual Report, MB Docet No. 05-255, paragraph 6.

service in several additional communities by the end of 2005. AT&T is planning to deploy an IP-enabled broadband network called “Project Lightspeed” using both FTTN and FTTH to deliver video and other services to residential customers. The company reports that the network will be available to 18 million homes nationwide within three years.¹²³

108. As the First Report noted, “more consumer choices will appear as technology progresses and video competition flourishes.”¹²⁴ It is critical that the government “implement policies that unlease competition and motivate MVPDs to innovate.”¹²⁵

D. SUMMARY

109. In conclusion, the First Report fails to consider adequately viable options for introducing consumer choice in the MVPD market. As discussed above, mixed bundles, themed tiers, and subscriber-selected tiers all potentially offer benefits, as compared with pure bundling. These options potentially would allow some consumers to reduce their MVPD bills and others to purchase video programming that they do not currently receive because of bundled pricing. Moreover, these options would increase consumer control, allowing them to avoid paying for programming that they do not watch.

IV. CONCLUSION

110. The First Report presented an incomplete and flawed analysis of the costs and benefits of bundling in the MVPD marketplace, as compared to offering programming a la carte. Characterizing bundling as an economically efficient way of distributing programming, the First Report paid short shrift to the potential impact of bundling on consumers. Bundling may drive up the price of video programming, making programming less affordable and precluding some consumers from purchasing programming services all together. Moreover, bundling mutes signals from consumers about the programming they find most desirable. Consumers may find that the

¹²³ *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Twelfth Annual Report, MB Docket No. 05-255, paragraphs 127-130.

¹²⁴ First Report at 65.

¹²⁵ *Id.*

programming they pay for as part of a bundle contains networks they do not watch and fails to include other quality programming that they would enjoy.

111. In contrast, further examination reveals the promise of a la carte as a means of combating rising MVPD rates and lowering consumer bills. For example, under a la carte, a consumer could cut his programming bills merely by electing to purchase fewer networks. And a la carte could make service affordable to those who cannot afford bundled rates. A la carte also could offer consumers the ability to pay only for the programming that they value.

112. As outlined above, several alternatives for increasing consumer choice merit further consideration. Preliminary analysis suggests that mixed bundles, themed tiers, and subscriber-selected tiers all potentially offer consumer benefits, as compared with bundling channels into tiers of service. Each of these options would allow some consumers to reduce their MVPD bills and permit others to purchase video programming that they do not currently receive because of bundled pricing.

ECONOMIC APPENDIX

A. INTRODUCTION TO EXAMPLES

1. This appendix examines the examples discussed in the text regarding the impact of video programming sales strategies on consumers and MVPD profits. These examples help illustrate certain effects discussed in the text. They compare the consequences of an MVPD's provision of programming only through bundling (pure bundling) with those resulting from a pure a la carte scheme and those resulting from mixed bundling and themed tiers, each of which was examined in the Report. The examples are kept simple, often with just two networks and two customers, to illustrate the particular effects of each strategy, but the effects can be generalized to situations with many goods and consumers. A broader way to view these examples is to consider the networks and consumers to be types, such that there are two types of networks and two types of consumers in the market.

2. Each example is illustrated by a figure that contains the basic assumptions for that example. The figures indicate each consumer's valuation for each network. The examples assume that these are the maximum values consumers are willing to pay for a network and adopt the standard economic assumption that consumers benefit from buying the network (or bundle of networks) to the extent that the price they pay for the network (or bundle) is below the value they place on that network (or bundle of networks).¹ To keep the examples simple, demand for each network is assumed to be independent of whether or not other networks are consumed. Thus, purchasing network X does not change a consumer's valuation of network Y.

3. The cost of producing a network is assumed to be fixed. That is, the cost does not vary with the number of consumers that receive and view a network. We assume the MVPD chooses its a la carte or bundled prices to maximize the joint profit of the MVPD and the networks, i.e., to maximize revenue from consumers minus the fixed costs of

¹ Thus in Figure 1, Aaron places a value of \$5 on network X and \$3 on network Y. If he paid \$3 for each, he would gain (5-3) or \$2 of net benefit (called consumer surplus) from purchasing X and (3-3) or \$0 of surplus from purchasing Y. If the bundle price of X and Y (call it bundle XY) is \$7, since he values the bundle at (5+3) or \$8, he gains a surplus of (8-7) or \$1.

producing the networks. In Section B, when we refer to “profit” it is this joint profit to which we refer. We also consider the allocation of profit between the MVPD and networks in more detail.² For simplicity, we ignore advertising revenue. In choosing prices, the MVPD may set the price just low enough to get everyone to purchase the network/bundle³ or at the highest level, such that only one consumer purchases the network/bundle.⁴

4. As the examples illustrate, there are two reasons why MVPDs may not voluntarily provide increased consumer choice – through, for example, mixed bundling, themed tiers, or subscriber-selected tiers. First, providing increased choice, though in the consumers’ best interests, may not be profit maximizing for MVPDs in some circumstances. Second, even in those instances where providing a la carte would be profit maximizing, MVPDs may currently be contractually prevented from providing such an option.⁵

5. Note that in examples 1, 2, 6, and 7 below, a profit maximizing MVPD would offer pure bundling. In examples 1 and 2, that strategy would harm consumers by reducing consumer surplus, as compared to pure a la carte. In examples 6 and 7, such a strategy would be inefficient as compared to a la carte, because it would result in the production of inefficient programming or programming with inefficient quality increases.

² In Section C *infra* we discuss the effects on the decision to bundle and on pricing of market power by the MVPD and/or the networks.

³ This requires setting the price at a level equal to the smallest total valuation by all consumers, so that all consumers will want to purchase the network/bundle.

⁴ In figure 1.a, the MVPD can price network X at \$3 and get both consumers to buy it, or at \$5 and get just Aaron to buy it. In this case, the low price of \$3 yields the greatest revenue, \$6. By contrast, network Y in figure 2 would be priced at \$18, which is the maximum price that can be charged and still get Betty to buy it (Aaron will not buy at this price). This yields more revenue than pricing it at \$4 and getting two sales, for total revenue of only \$8.

⁵ MVPD executives have testified before Congress that their contracts with programmers prevent them from offering channels on an a la carte basis. *See* Letter from the Hons. Joe Barton, John D. Dingell, Fred Upton, Edward Markey, and Nathan Deal, U.S. House of Representatives, to the Hon. Michael K. Powell, Chairman, Federal Communications Commission (May 18, 2004); Letter from the Hon. John McCain, Chairman, United States Senate, Committee on Commerce, Science, and Transportation, to the Hon. Michael K. Powell, Chairman, Federal Communications Commission (May 19, 2004).

6. In examples 3, 4, 5, and 8 below, a profit maximizing MVPD would prefer to offer mixed bundling, combining bundles with a la carte, or themed tiers, but might not do so based on contractual obligations. Examples 3 and 5 demonstrate that bundling may result in less minority and niche programming, Example 4 shows that bundling may cause lower valued niche networks to be carried instead of higher valued mainstream networks, and Example 8 illustrates themed tiers.

B. EXAMPLES

1. Example of a la Carte Lowering Prices and Increasing Distribution

7. In this example, we demonstrate that a la carte can yield lower prices than pure bundling, while generating sufficient revenue to cover costs. In addition, we show that some consumers may increase their purchases of video programming if they are given increased purchasing options, such as a la carte.

8. Suppose that there are two buyers (Aaron and Betty in the table below) and two networks, X and Y, which are assumed to have \$6 in programming costs each. Suppose that Aaron values Networks X and Y at \$5 and \$3, respectively (instead of at \$5 and \$2, as described in the example in the Economic Appendix to the First Report), and Betty values Networks X and Y at \$3 and \$5 respectively (instead of at \$2 and \$5 as described in the example shown in the Economic Appendix to the First Report). Then the profit-maximizing a la carte price for each network is \$3, generating two sales of each network and total revenue to the cable operator of \$12. This revenue is sufficient to cover the assumed programming costs of \$6 for each network. The bundled price, however, is \$8, so that consumers are forced to pay \$2 more than under a la carte for the two networks. The total revenue under bundling is \$16, which covers the programming costs of \$12 and provides a profit of \$4.⁶ Thus, with bundling, consumers pay more than they would under pure a la carte without getting more service.

⁶ The bargaining power between the MVPD and the networks would determine how this profit is allocated among them.

Figure 1.a

		<u>Consumer</u>	
		Aaron	Betty
<u>Network</u>	X	5	3
	Y	3	5
<i>Value of bundle</i>		8	8

* The cost of each network is assumed to be \$6.

9. Furthermore, bundling can reduce consumers' programming purchases. If it is assumed that there is a third person (Charlie), who values network X at just \$3 and network Y at \$0, as shown in the table below, then this consumer would never pay the bundle price and would buy no services from the cable operator. Under a la carte, this consumer would buy one network at \$3. Thus, bundling can raise prices sufficiently to drive some consumers out of the market. Making networks available a la carte could lower prices and increase consumer purchases of cable networks.

Figure 1.b

		<u>Consumer</u>		
		Aaron	Betty	Charlie
<u>Network</u>	X	5	3	3
	Y	3	5	0
<i>Value of bundle</i>		8	8	3

* The cost of each network is assumed to be \$6.

10. Note that if there were mixed bundling and the price of network X were fixed at the pure a la carte level of \$3,⁷ Aaron and Charlie would prefer to buy service a la carte rather than the bundle at a price of \$8. This result would force the price of the bundle down to \$6. Thus, under mixed bundling, bundle prices could be forced down because of the a la carte availability of the individual channels, assuming that the prices of the a la carte items are not set at high levels.

⁷ With mixed bundling, the MVPD might have an incentive to set a high price for the individual channels offered a la carte to induce customers to buy the bundle.

2. Example of Bundling Networks with Zero Value to Some Consumers

11. The following example demonstrates how a network that carries content that some viewers do not value may be bundled profitably with other channels, while under a la carte, consumers would not have to purchase the network they do not value and would pay less for the programming they do value. Suppose that there are two consumers, Aaron and Betty, who are each offered three networks. Aaron values networks X, Y, and Z at \$12, \$5, and \$3, respectively. Betty values networks X and Y at \$5 and \$15, respectively. She does not value network Z, so she places a zero value on it. If the MVPD offers only networks X and Y in the bundle (bundle XY), it would charge \$17 for the bundle, earning \$34 in revenue. The provider would prefer to bundle all three networks together (bundle XYZ) for a price of \$20, yielding revenue of \$40. Betty would prefer that Z not be included in the package, such as under a mixed bundling scheme, where X and Y are offered in a bundle for \$17 and Z is sold separately for \$3. Under such pricing, Betty could pay less and still receive the channels she likes. The MVPD would get less revenue (\$37) under this scheme, however, so it prefers to include network Z in the bundle it offers, namely XYZ.⁸

Figure 2

		Consumer	
		Aaron	Betty
Network	X	12	5
	Y	5	15
	Z	3	0
<i>Value to consumers of bundle XYZ</i>		<i>20</i>	<i>20</i>

3. Example of Minority and Niche Programming Not Being Produced Under Bundling

12. This example demonstrates that networks that appeal to a minority of viewers may not be carried if those networks do not raise the total value of the bundle to those viewers up to the bundle price. In this example, Aaron values networks X, Y, and Z at

⁸ As in the previous example, the MVPD would have an incentive to raise the a la carte price to induce consumers to buy the larger bundle.

\$5, \$9, and \$0 respectively. Betty values networks X, Y, and Z at \$9, \$5, and \$0 respectively. Network Z appeals only to Charlie, who values it at \$6 but places \$0 value on networks X and Y. We assume that the cost of network Z is \$5 (any amount less than \$6 will give equivalent results).

13. Under pure bundling, the MVPD will choose to provide networks X and Y as a bundle (bundle XY) for a price of \$14. There is no benefit to including network Z in the bundle (creating bundle XYZ), because the MVPD would have to lower its price to \$6 for the bundle to get Charlie to purchase the bundle XYZ. Thus, as a consequence, the MVPD doesn't offer network Z, and Charlie cannot purchase it from the MVPD. Since we assume that Z costs less than \$6, it would be both good for consumers and economically efficient to carry and sell network Z to Charlie. Under a la carte, the MVPD would offer networks X and Y for \$5 each and network Z for \$6 and receive \$2 less revenue. Given that option, all three consumers would purchase the networks they valued. Increasing consumer choices may then increase program offerings, especially those that appeal to a minority of the population, including those who want to receive programming but may not value the full bundle enough to purchase it.

Figure 3

		Consumer		
		Aaron	Betty	Charlie
Network	X	5	9	0
	Y	9	5	0
	Z	0	0	6
<i>Value of bundle XYZ</i>		<i>14</i>	<i>14</i>	<i>6</i>

* The cost of network Z is assumed to be \$5.

14. Note that if X and Y are high-cost networks with a cost of \$12 each (as an example), then pure a la carte would generate insufficient revenues to cover their costs.⁹ A regime of mixed bundling, however, would allow a bundle of X and Y to be sold at a price of \$14, yielding revenue of \$28 and thus covering the networks' combined costs of

⁹ Note that if the cost of these networks is not particularly high (\$10 or less), then a la carte would generate sufficient revenues to cover the cost of these networks and would also lower the price of service to customers, as we found in Example 1.

\$24, while network Z could be sold separately for \$6. Mixed bundling would allow the MVPD to increase its revenue.¹⁰ As this example illustrates, mixed bundling can provide the benefits of both bundling and a la carte.

4. Example of Bundling Causing Less Valued Networks to be Carried

15. Bundling can give cable providers the incentive to carry networks that are attractive to small groups of consumers when other more mainstream programming would provide greater social value. For example, consider the example in the table below. There are four networks, including two mainstream networks, M1 and M2, and two niche networks, A and B. The mainstream networks appeal to mainstream consumers, Network A appeals to niche A consumers, and network B appeals to niche B consumers. The two mainstream networks provide the greatest social value.

Figure 4

		<u>Consumer</u>				
		Mainstream (10 people)	Niche A (5 people)	Niche B (5 people)	Fixed Cost	Total Value
<u>Network</u>	M1	10	0	0	5	95
	M2	8	0	0	5	75
	A	0	10	0	5	45
	B	0	0	10	5	45

16. By bundling networks M1, A, and B and charging a price of \$10 for the bundle, a cable provider obtains profit of $\$200 - \$15 = \$185$ (the 10 mainstream consumers, 5 niche A consumers, and 5 niche B consumers all purchase the bundle, and the total cost is \$15). The cable provider might consider adding network M2 to the bundle and raising its price to \$18, but then only the mainstream consumers would purchase the bundle. In this case, assuming only M1 and M2 are produced, profit would be only $\$180 - \$10 = \$170$. Thus, under bundling, the cable provider does not provide network M2, and instead provides the two niche networks, which offer lower social value.

17. Under a la carte, the cable provider maximizes revenue by charging \$10 for M1, \$8 for M2, \$10 for A, and \$10 for B. The mainstream consumers purchase M1 and M2,

¹⁰ This example suggests that a profit maximizing firm would use mixed bundling. *But see supra* n. 5.

and the niche consumers purchase their favored niche networks. All networks are provided and the cable provider's profit is $\$280 - \$20 = \$260$. Thus, under a la carte, all the networks are provided.

18. Furthermore, if the cable provider were constrained only to carry three networks, under bundling it would be M1, A, and B, i.e., the network M2, which provides more social value than A and B would not be carried. In contrast, under a la carte, the cable provider would carry M1, M2, and either A or B, and so social value would be maximized, conditional on only three networks being carried.

5. Example of MVPD Not Carrying Preferred Niche Programming Under Bundling

19. We show here how bundling may give the MVPD an incentive not to carry a network most valuable to a small group of consumers because it adds less to the revenue from the bundle than other networks less strongly valued by a larger group of consumers. In the table below, the MVPD has a choice of three networks to offer as part of a bundle, each of which has a cost of \$10. Aaron values networks X, Y, and Z at \$9, \$5, and \$0 respectively, and Betty values them at \$5, \$9, and \$16 respectively. Thus, networks X and Y yield total value of \$14 to customers, while network Z is more valuable in terms of total value provided, yielding \$16. Yet, Z is not an attractive addition to a bundle, because Aaron does not value Z and will not pay a higher bundle price for it. A bundle of X and Y yields the greatest profits of \$8, compared to the other pure bundles. Thus, under pure bundling, the network most preferred by Betty, which in fact is the most valuable network overall, is not carried, because its more narrow appeal means that the MVPD cannot gain much revenue from carrying it. Under pure a la carte and mixed bundling all three networks would be sold, with everyone buying all the networks that they value.¹¹

¹¹ This example suggests that a profit maximizing firm would use mixed bundling. *But see supra* n. 5.

Figure 5

		<u>Consumer</u>		Total value/ <i>max revenue</i>	Profit/loss per bundle*
		Aaron	Betty		
<u>Network Valuations</u>	X	9	5	14	
	Y	5	9	14	
	Z	0	16	16	
<i>Value of bundles and maximum revenue from bundles</i>	XY	14	14	28	8
	XZ	9	21	21	1
	YZ	5	25	25	5
	XYZ	14	30	30	0

* The cost of each network is assumed to be \$10.

6. Example of Including an Economically Inefficient Network in the Bundle

20. This example demonstrates that bundling can lead to an oversupply of economically inefficient programming, as compared to a la carte. Economists consider the production of any good to be inefficient (and thus undesirable) if the benefits it provides to buyers are less than the cost of producing the good. The use of bundling can provide an incentive to carry a network for which the total value to consumers is less than its fixed costs, such that production of the network reduces economic efficiency.

21. We can see this effect in the example below in which networks X and Y have costs of \$5 and \$9 respectively. In the example, Aaron values networks X and Y at \$5 and \$3 respectively, and Betty values them at \$3 and \$5 respectively, yielding a total value of \$8 to consumers for each network. If both consumers receive it, producing network X yields a net benefit of \$3 (the network value to Aaron and Betty of \$8, less the fixed network cost of \$5), while producing Y yields \$-1 (the network value to Aaron and Betty of \$8, less the fixed cost of \$9), so producing Y is economically inefficient. Providing just network X alone at a price of \$3 yields revenue of \$6 and profit of \$1. By including network Y in the bundle, and pricing the bundle at \$8, the MVPD gets revenue of \$16 and profit of \$2. Yet network Y costs more than the value it generates for consumers – society is \$1 worse off when the MVPD provides it.¹² So, because bundling

¹² Since consumers value it at \$8 (which is the most they are willing to pay for it), and the cost of producing it is \$9, the net gain to society from producing it is \$-1, and economists would consider this to be inefficient production. The \$9 spent on producing it would be better put to use elsewhere.

can generate greater revenues, the MVPD has an incentive to add a network whose cost exceeds its total value to consumers. Note that Aaron loses \$2 in surplus by buying the bundle at a price of \$8 instead of X alone at a price of \$3. He is therefore paying \$5 more for the addition of a good that he values at only \$3. The MVPD has therefore extracted more surplus from consumers by adding to the bundle a network whose production is economically inefficient.

Figure 6

		Consumer		Network Value	Fixed Cost	Net gain/loss to society*
		Aaron	Betty			
Network	X	5	3	8	5	+3
	Y	3	5	8	9	-1
<i>Value of bundle</i>		8	8			

* Defined as the total network value minus its fixed cost.

7. Example of Bundling Encouraging Inefficient Investments in Quality

22. Bundling can also encourage economically inefficient investments in quality, in which the costs of the investment exceed the consumer benefits. In the example below, Aaron values networks X and Y at \$2 and \$5 respectively, while Betty values them at \$6 and \$3 respectively. The MVPD bundles X and Y for a price of \$7, yielding revenue of \$14. Suppose that network Y has the opportunity to invest in higher quality (called Y' in the table), which raises its value by \$2 (to Aaron) at a cost of \$3. This would be an economically inefficient investment, since the cost exceeds the benefit of the investment, but it would be a profitable investment because it allows the price of the bundle to be raised to \$9, yielding \$4 more revenue and hence \$1 additional profit. Networks that can raise their value to those consumers who would otherwise place a low value on the bundle, such as Aaron in the example, may have an incentive to raise their quality, even if the increase in quality is inefficient, because doing so may allow them to increase their profits.

Figure 7

		Consumer		Network Value	Change in Fixed Cost	Net gain/loss to society*
		Aaron	Betty			
Network	X	2	6	8		
	Y	5	3	8		
Y'		7	3	10	+3	-1
<i>Value of bundle XY</i>		7	9			
<i>Value of bundle XY'</i>		9	9			

* Defined for the investment in quality in Y, raising the value of Y to Y'.

8. Example of Themed Tiers Enabling Consumers To Lower Costs

23. Themed tiers may help consumers to lower their programming costs by avoiding having to purchase networks they do not watch, as demonstrated by the following example. Aaron values networks X and Y at \$6 each but does not value networks Z and W and so places zero value on them. Betty, Charlie, and Darlene, however, all place a positive value on networks X, Y, Z, and W, in each case totaling \$17, as set forth in the figure below. Therefore, under pure bundling, the MVPD will provide the large bundle XYZW at \$17 and sell it to Betty, Charlie, and Darlene, but not to Aaron.

24. If themed tier XY were offered, the MVPD would want to price it at \$12, the maximum price Aaron would pay. Aaron would then be willing to buy the themed tier, while the other three would continue getting the large bundle. Aaron would then purchase MVPD service, paying only \$12 versus \$17 for the bigger bundle, while avoiding receiving and paying for the networks that he does not watch. The MVPD now earns greater revenue by making some channels available on a themed tier.¹³

¹³ This example suggests that a profit maximizing firm would offer themed tiers. *But see supra* n. 5.

Figure 8

		<u>Consumer</u>			
		Aaron	Betty	Charlie	Darlene
<u>Network</u>	X	6	4	3	2
	Y	6	2	6	4
	Z	0	5	6	3
	W	0	6	2	8
<i>Value of bundle</i>	XYZW	12	17	17	17
	XY	12	6	8	6

25. An assumption underlying the examples is that the MVPD (or programming distributor) has sufficient market power to raise prices above cost. As noted above, this is probably not an unreasonable assumption given the significant price increases in cable service in recent years.¹⁴ A question arises, however, as to whether it is the MVPD or the programming distributors that have the market power. Ultimately, it appears that the source of the market power might not affect the results of the analysis significantly. This can be demonstrated by reexamining Example 1 and Figure 1.b and considering how prices and sales change depending on whether the upstream wholesale market is competitive, the downstream retail market is competitive, or both are competitive.

26. If the MVPD has market power and the wholesale market is competitive, then the MVPD can purchase programming essentially at cost,¹⁵ in this case at \$6. The example works as presented, with the MVPD having an incentive to bundle the networks. The result is that Aaron and Betty each pay \$2 more under bundling than under a la carte and Charlie does not purchase any programming.

27. If, on the other hand, the MVPD has no market power, but network Y has market power, the same result occurs, though for somewhat different reasons. Assume that there are many MVPDs competing for customers and content, so that their profits are

¹⁴ See *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, 20 FCC Rcd 2718 (2005).

¹⁵ This is a standard economic assumption for competitive markets. “Cost” is generally assumed to include a reasonable profit, so that content providers have an incentive to produce programming. Here we ignore possible revenue streams from advertising.

driven to zero. Assume also that there are many providers of networks of type X, but only one of type Y. The providers of X will compete to get MVPDs to buy their programming, and the price of that programming will be reduced to cost (\$6), giving them zero profits. Note that network Y costs only \$6, but including Y in a bundle will raise the revenue generated by customers from \$6 to \$16. Thus, Y can demand up to \$10 for its network, far above the cost of its network, for two reasons: (1) it has market power because it is the only provider of its kind of programming, which Betty especially likes; and (2) bundling allows MVPDs to collect greater revenues from customers. Under pure a la carte, Y could demand only the incremental revenue it generates, which is \$6. Thus, Y benefits significantly from the use of bundling. In addition, the MVPD might prefer to use a la carte because its customers would prefer it, but it can no longer afford to do so. Since Y is demanding \$10 for its networks, only MVPDs that agree to pay this will get its service, and the only way for those MVPDs to cover their costs (which are now $\$6 + \$10 = \$16$) will be to use bundling, which can generate revenues of \$16. Thus, even in a competitive retail market, if some content providers have market power, MVPDs may have an incentive to use bundling to pay for the content they distribute. Pure a la carte thus could reduce the market power not just of MVPDs, but also of content distributors. If all MVPDs offered pure a la carte, Y would have to drop its price from \$10 to \$6, since no MVPD could afford to pay more than \$6.

28. If both retail and wholesale markets are competitive, the price of the bundle is forced down to the point where revenue equals cost, and so in this case the price of the bundle is \$6.¹⁶ Aaron and Betty each have consumer surplus of \$2, and Charlie does not purchase the bundle. In a competitive market with a la carte, the price for network Y would be \$3, but the price for network X would be only \$2 (all three consumers purchase at this price, and so revenue again equals cost). Thus, with a la carte, Aaron and Betty each have consumer surplus of \$3, and Charlie purchases network X and has consumer

¹⁶ We assume that when markets are competitive at both levels, an MVPD is able to purchase programming at cost and sets prices such that its profit is zero. Since the cost of the programming in the bundle is \$12, the price charged to just cover that cost is \$12 divided by the number of buyers. If three people buy the bundle, the price is \$4, and if two people buy it, the price is \$6. Since Charlie's value for the bundle is only \$3, only two people buy the bundle, and so the price is \$6.

surplus of \$1. This example shows that a move to a la carte can benefit consumers even when both retail and wholesale markets are competitive.