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January 7, 2008

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RE: QUESTIONS FOR PANEL 1

This letter provides answers to questions for Panel 1 that were specifically addressed to me. Because none of the questions in Part I ("Barriers to Entry") were addressed to me, the letter begins with Part II ("Competitive Impact of Entry"). I will note, however, that in addition to the local franchising process, perhaps the most significant barrier to entry for telephone companies in local video markets is access to cable-affiliated local sports programming. My recent paper with J. Gregory Sidak analyzes how a cable firm can leverage its control of a regional sports network (RSN) to foreclose entry in the provision of video service.[1] I also wanted you to be aware of a developing story in Portland involving Comcast and its affiliated RSN.[2] These practices deserve close scrutiny by antitrust authorities.

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II. COMPETITIVE IMPACT OF ENTRY

(For Verizon/Singer) Singer et al calculate a 5 year NPV of annualized savings from telco entry of $26.52 billion. However, Charter mentioned that Verizon has raised the price of its FiOS video service by almost 20% in the past two years.

- *Has Verizon raised the price of its FiOS service in Keller, TX? If, by how much?*

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1. Hal J. Singer & J. Gregory Sidak, *Vertical Foreclosure in Video Programming Markets: Implication for Cable Operators*, 3 REVIEW OF NETWORK ECONOMICS 348 (2007).
2. Brent Hunsberger, *Blazers' fans caught in a cable turf battle Televised sports—Only Comcast subscribers get the games—there's no deal with satellite or other providers*, THE OREGONIAN, Dec. 12, 2007, available at http://www.oregonlive.com/blazers/oregonian/index.ssf?/base/business/1197431710275010.xml&coll=7.

Using a Factiva search, I could not identify any public evidence of a targeted price increase for Verizon FiOS in Keller. I understand that Verizon has increased the price of FiOS nationally since Verizon launched service in Keller, and that as a result, *new* FiOS customers in Keller would face a "price increase" relative to Verizon's introductory price. Because existing FiOS customers in Keller were grandfathered by the introductory contract, however, existing FiOS customers in Keller did not experience a price increase.

As I demonstrate below, even if Verizon were to increase prices above its introductory rate for all FiOS subscribers (both new and existing customers), my analysis of the welfare effects of telephone entry into video markets would not be affected. Indeed, the analytical framework used by Brookings scholars Robert W. Crandall and Robert E. Litan[3] upon which I relied for my presentation anticipates such an increase in prices (relative to the introductory rate offered by telephone providers).

It is important to understand the competitive environment in which Verizon sets its introductory price for FiOS in Keller. Several industry observers noted that that Charter decreased its prices by about 25 percent in Keller in anticipation of Verizon's entry in the local video market.[4] By comparison, Charter increased its prices by 25 percent in neighboring Fort Worth (not served by Verizon's FiOS).[5] Charter's preemptive rate reduction in Keller likely entered into Verizon's introductory-rate-setting calculus.[6][7]

Given the potentially unanticipated demand response to Verizon's offering in Keller, it is conceivable that Verizon's introductory rate was set below the profit-maximizing price. According to a Verizon spokesperson, six months after its launch in Keller, nearly one-third of Verizon's voice customers in Keller had signed up for FiOS television service.[8] According to Christopher King, a telecom analyst with Stifel Nicolaus, Verizon's penetration in Keller was "not surprising considering Verizon has priced its television service lower than Charter's."[9] A Fort Worth Star-Telegram review of two similar packages from Verizon and Charter indicated that stand-alone video service is $12 to $16 cheaper per month with Verizon.[10] In light of this demand response, I would not be surprised if Verizon increased (or at least planned to increase) its introductory rates.

- *Is a price increase anticipated for next year?*

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3. Robert W. Crandall & Robert E. Litan, The Benefits of New Wireline Video Competition for Consumers and Local Government Finances, Criterion Working Paper, May 2006.
4. Aman Batheja, *TV competition in Keller is touted*, FORT-WORTH STAR-TELEGRAM, Feb. 16, 2006, at 1.
5. *Id.*
6. In an apparent effort to diminish the competitive impact of Verizon's entry in Keller, a Charter spokesperson claimed that Charter had introduced a discount package nearly a year before FiOS debuted in Keller. Charter also claimed that its price decrease was not affected by FiOS but by a long-standing competition with satellite providers, and that Charter had since raised prices in Keller. *See id.*
7. *Id.*
8. Aman Batheja, *Fiber-optic service popular*, FORT-WORTH STAR-TELEGRAM, Mar. 21, 2006, at 3.
9. Aman Batheja, *Fiber-optic rollout costs raise worries; Verizon FiOS TV service gaining market share*, FORT-WORTH STAR-TELEGRAM, Mar. 23, 2006, at 1.
10. *Id.*

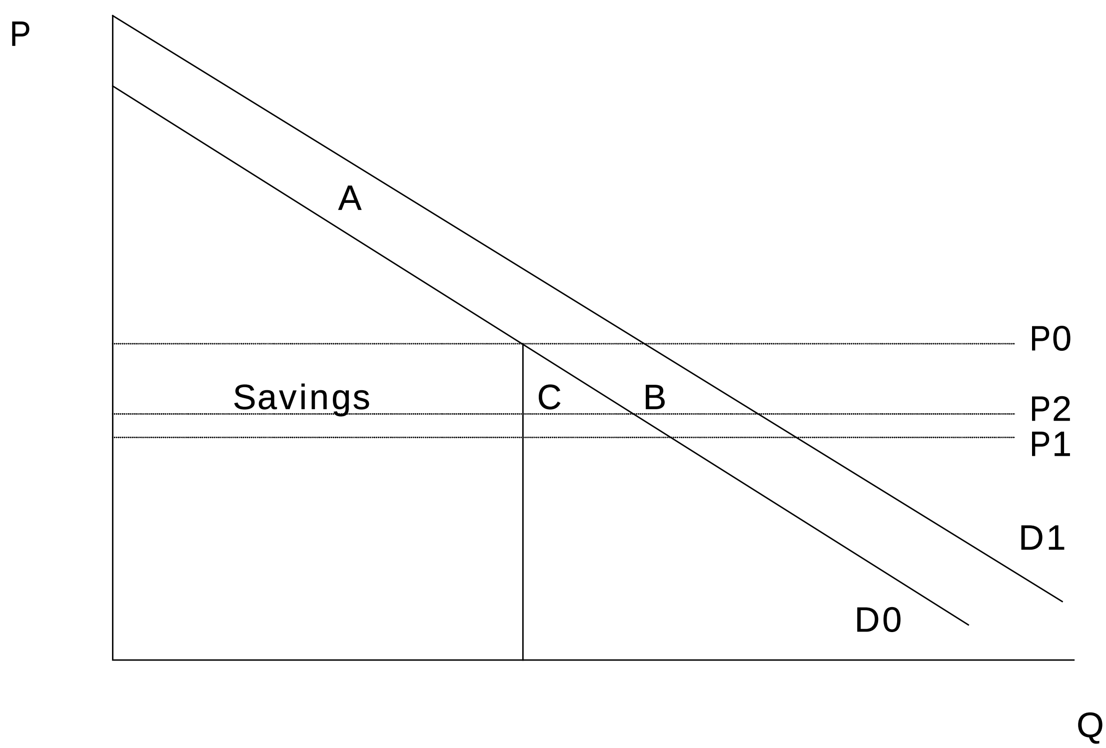
Not-applicable (question goes to Verizon).

- *How does this price increase impact your analysis of the cost savings from telco entry?*

The question pre-supposes an event that may not be true—that is, it assumes the existing FiOS customers experienced an actual rate increase. Assuming *arguendo* that FiOS rates for all customers increased in Keller, the framework for analyzing the welfare effects from telephone entry need not be altered.

Slide 3 of my presentation, which is reproduced here, depicts graphically the consumer welfare effects of telephone entry into video markets. Price (P) is depicted on the vertical axis and quantity (Q) is depicted on the horizontal axis. The original demand for video service, including cable, DBS, and fiber-based offerings by telephone companies, is depicted by the download sloping line D0.

SLIDE 3: CONSUMER WELFARE INCREASE FROM TELEPHONE-COMPANY ENTRY
PRICE AND QUALITY EFFECTS



As slide 3 shows, the initial effect of telephone entry is a reduction in the price of video services, holding quality constant. This is depicted in the movement from P0 to P1. There is a large body of empirical evidence showing that incumbent cable operators reduce their prices significantly in response to wireline competition.[11] The reduced price of video service

11. *See, e.g.*, 21 FCC Rcd 15087, ¶2 ("Expanded basic prices rose more than 6 percent or twice the rate of inflation last year. Prices are 17 percent lower where wireline cable competition is

generates savings for "infra-marginal" video customers and surplus for "marginal" video customers—that is, customers who were just not willing to subscribe to video service at the pre-entry prices. Because the fiber networks employed by the telephone companies will be able to carry more channels and offer more interactive services than extant cable networks, cable operators are likely to react to telephone entry by increasing the quality of their offerings (for example, by offering high-definition video on demand). This quality increase comes at a price (the movement from P1 to P2), but consumer welfare increases on net so long as the willingness to pay for the quality improvements exceeds the incremental price of those improvements (the outward shift of the demand from D0 to D1).[12] Thus, the total welfare gain is equal to the sum of the areas Savings, B, and C.

Although the price movement from P1 to P2 was originally conceived to reflect an increase in the cable operator's cost of improving the quality of its video offering, it could also represent a recalibration of prices by the entrant in response to the initial demand response. The mere fact that prices rise in certain local markets relative to the initial introductory rate, however, does not negate the substantial benefits created by telephone entry into video markets.

III. Competitive Effect of Bundles

(For ALL) Many of you have mentioned the value to consumers of the so-called tripleplay of voice, video and high-speed Internet services.

- *Do consumers really want the bundle or do they take it in order to get a lower price for one of the component services?*

There is a growing economic literature on what constitutes an "optional" bundle versus a "forced" bundle.[13] In the case of an optional bundle, the firm offering the bundle leaves the original, standalone offer on the table. In the case of a forced bundle, the firm removes the original offer[14] or requires the buyer to purchase the primary product at a price in excess of the standalone monopoly price.[15] An optional bundle can be shown to generally increase consumer welfare.[16]

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present."); GAO-05-257 at 33 (Apr. 2005) ("cable prices were approximately 16 percent lower in areas where a second cable company—known as an overbuilder—provides service."); GAO-04-8 at 10 (Oct. 2003) ("cable rates were approximately 15 percent lower in areas where a wire-based competitor was present.").

12. For a more detailed explanation of these effects, see Crandall and Litan, *supra* note 3.

13. *See, e.g.*, Barry Nalebuff, *Bundling as a Way to Leverage Monopoly*, Yale School of Management, National Bureau of Economic Research Working Paper # 36, Sept. 2004, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=586648.

14. *Id.* at 4 ("In the forced bundle case, the monopolist replaces its offer of (m, c) with (m, c+δ). Thus, a customer who wants to buy A has no other choice but to buy the monopolist's overpriced B good.").

15. *See, e.g.*, Patrick Greenlee, David S. Reitman & David S. Sibley, An Antitrust Analysis of Bundled Loyalty Discounts, Economic Analysis Group Discussion Paper No. 04-13, Oct. 2006, at 32, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=600799 (". . . there may be

Thus, to determine whether "consumers really want the [triple-play] bundle" offered by a certain provider, one could compare the standalone price of the primary product to the price in the pre-bundle offer. In the case of the cable bundle, for example, the primary product could be the video service and the secondary product could be telephony. If the cable bundle is determined to be forced—that is, if the standalone price of cable television exceeds the independent monopoly price—then acceptance of the bundle by cable customers does not imply that "consumers really want the bundle." In contrast, if the bundle is determined to be optional, then acceptance of that bundle implies that "consumers really want the bundle." I have not performed such an analysis.

Based on survey data of subscribers in Keller, however, it appears that consumers select the triple-play bundle offered by Verizon for non-price reasons. In Keller, several FiOS TV customers said in interviews with the Star Telegram that a big reason they switched from Charter or satellite television to Verizon FiOS was that "they wanted all three services on one bill."[17] National surveys appear to confirm this preference for bundles for non-price reasons.[18]

(For ALL) In its written submission, Charter argues that voice, video and data today constitute a single product market – the market for "integrated communications services, divided between residents and commercial/enterprise sub-markets."

- *Do you agree/disagree with this characterization?*

From the perspective of antitrust market definition, an antitrust product market represents the *smallest* set of services such that a hypothetical monopoly provider of such services could profitably impose a "small but significant and nontransitory" (SSNIP) increase in prices.[19] To the extent that a hypothetical monopoly provider of any component of the triple play could profitably impose a SSNIP, the bundle would be too broad a product market. The fact that certain providers such as direct broadcast satellite firms can profitably offer one component (video) of the triple play suggests that the triple play might be too broad a product market. This is not to say that suppliers do not compete for bundled offerings.

For example, in a (hypothetical) monopolization case, market definition depends on the nature of the alleged anticompetitive conduct. Consider a case in which a cable firm with 75 percent of video subscribers in a given market acquired a RSN and then denied access to

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useful tests for consumer welfare changes based on a comparison of the monopoly price of A before and the standalone price of A after the institution of bundled rebates.").

16. *Id.*

17. Aman Batheja, *Fiber-optic rollout costs raise worries; Verizon FiOS TV service gaining market share*, FORT-WORTH STAR-TELEGRAM, Mar. 23, 2006, at 1.

18. THE YANKEE GROUP, THE COMMUNICATIONS BUNDLE: THE TIME IS NOW 5 (2006) (showing that 81 percent of consumers are interested in a bundle because of the benefits of receiving a single bill).

19. U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, revised Apr. 1997, at § 1.11 ("The Agency generally will consider the relevant product market to be the smallest group of products that satisfies this test.").

that programming to its downstream video rivals. Suppose that the cable firm had 45 percent of all local triple-play customers (with the local telephone company supplying the remaining 55 percent). It would be a mistake to tolerate behavior that blatantly preserves power in the market for video services because the defendant lacked power in the purported "residential market for integrated communications services."

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I hope you find this letter to be responsive to your questions. If you have additional questions, please do not hesitate to contact me.

Sincerely,

Hal J. Singer