Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Petition of Image Access, Inc. d/b/a New Phone for Declaratory Ruling Regarding Incumbent Local Exchange Carrier Promotions Available for Resale Under the Communications Act of 1934, as Amended, and Sections 51.601 *et seq.* of the Commission's Rules	WC Docket No. 06-129

OPPOSITION OF VERIZON TO
IMAGE ACCESS, INC'S PETITION FOR DECLARATORY RULING

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COMMENTS OF VERIZON[1]

INTRODUCTION AND SUMMARY

The Commission should deny the petition for declaratory ruling filed by Image Access, Inc. d/b/a NewPhone ("NewPhone"), because the rulings that NewPhone seeks are directly contrary to the 1996 Act and the Commission's current rules. As a federal district court recently confirmed, incumbent local exchange carriers ("LECs") are not required to sell the "value" of non-cash promotions at a wholesale discount, or to create an "effective" retail rate that takes into account the retail price of the non-cash promotional item, even when a promotion continues for more than 90 days. Nor are incumbent LECs currently required either to resell bundles of services that contain incumbent LEC retail telecommunications services and other services not subject to 47 U.S.C. § 251(c)(4), or to calculate the wholesale price for a stand-alone service based on the price of a bundle containing that service. The Commission, therefore, should deny NewPhone's petition, as it cannot change its current rules through a petition for declaratory ruling.

[1] The Verizon companies participating in this filing ("Verizon") are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

In addition to the fact that the Commission cannot change its rules through a declaratory ruling, NewPhone's arguments are incorrect. First, NewPhone seeks a new definition of "retail rate" for purposes of calculating the wholesale price under § 251(c)(4) and § 252(d)(3) when an incumbent LEC offers non-cash promotions — such as gift cards or tangible goods — on retail telecommunications services for more than 90 days. NewPhone's proposed treatment of non-cash promotions is contrary to the Telecommunications Act of 1996 ("1996 Act") and would result in uneconomic windfalls for competing LECs. Indeed, the resale provisions in the 1996 Act require incumbent LECs to make only their retail *telecommunications services* available for resale. Non-cash promotional items, whether in the form of a gift card, frequent flier miles, or a toaster, are not retail telecommunications services and, therefore, are not subject to either a resale requirement or a wholesale discount, nor, as NewPhone suggests, is the "value" of such items.

The Commission also should not modify its rules to permit resellers to receive the benefit of the face value of non-cash promotional items through a reduction in the "retail rate." It is a basic economic fact that a non-cash promotion is worth less to its recipient than its face value in cash, and the Commission could not ascertain an alternative value for non-cash promotions, as the value to consumers of such promotions varies both by promotion and by consumer. Finally, reducing the retail rate by the perceived value of a promotion is anti-competitive, because doing so would neutralize an important means by which carriers compete for consumers and which benefits those consumers. Where resellers are free to create their own non-cash promotions, there is no reason to permit them to free ride on the marketing efforts of incumbent LECs, discouraging incumbents from offering promotions and thereby harming consumers.

Second, NewPhone's arguments for changing the current rules governing so-called "mixed" bundles of services[2] are equally misplaced. NewPhone claims that a competing LEC should receive an extra discount when it purchases, on a stand-alone basis, a retail telecommunications service that is included in a "mixed" bundle. There is a good reason why the current rules do not treat bundles as promotions, even though such bundles are generally sold for less than the sum of the prices of their component parts: bundles result in efficiencies and real savings to sellers, who are able to pass on those savings to consumers in the form of lower prices. As the Commission and federal courts have recognized, bundling thus provides pro-competitive benefits to consumers and should be encouraged. In addition, in the specific context of "mixed" bundles, because incumbent LEC retail telecommunications services are generally sold at rates set in state tariffs, those tariffed rates are thus included in full in the price of the bundle, so there is no discount at all on the retail rate of the only service in the "mixed" bundle that is subject to § 251(c)(4).

In any event, when a competing LEC — or a retail customer, for that matter — purchases only *one* of the services offered as part of a "mixed" bundle of services, none of the efficiencies from bundling are achieved, and there is no basis to compel an incumbent LEC to offer that stand-alone service at an inferred "retail rate" based on the price of the bundle. Nor is there any basis to NewPhone's request that the Commission compel incumbent LECs to offer the "mixed"

[2] As noted above, NewPhone uses the term "mixed" to refer to a bundle of services that contains at least one incumbent LEC retail telecommunications service along with other services that are not subject to the resale obligation in § 251(c)(4). Although the term "mixed bundle" often has a different meaning among economists, for purposes of these comments Verizon adopts New Phone's terminology. *See, e.g.*, Declaration of David S. Evans ¶ 13, Attachment B to Comments of Verizon in Response to Notice of Inquiry, *BellSouth Telecommunications, Inc. Request for Declaratory Ruling*, WC Docket No. 03-251 (FCC filed June 13, 2005) ("Evans 2005 Decl.") (discussing a different meaning of the term "mixed bundle") (attached hereto as Exhibit 2).

bundle itself for resale. The 1996 Act plainly limits the resale obligation to an incumbent LEC's *retail telecommunications services*, and the Commission has no authority to expand upon that clear statutory limit. And, as with non-cash promotions, resellers are equally free to create their own bundles — combining the incumbent LEC's retail telecommunications services purchased at a wholesale discount with other services, whether self-provisioned or jointly marketed with a third party — and to benefit from the resulting efficiencies and ability to offer lower prices.

Finally, the Commission should reject NewPhone's request that it require incumbent LECs to reduce their "retail rate" for purposes of calculating the wholesale price on the first day that a promotion that runs for more than 90 days is offered. On the contrary, a promotion should affect the retail rate for purposes of determining the wholesale price only on Day 91, as is the case under the current rules. NewPhone's claim that a different rule should apply ignores the Commission's determination that "sales-based competition" in the form of promotional offers enhances competition in the short term. It would also be unworkable, as carriers frequently do not determine in advance whether a promotion will run for more than 90 days.

DISCUSSION

I. THE COMMISSION SHOULD DENY NEWPHONE'S PETITION BECAUSE IT SEEKS RULINGS CONTRARY TO THE COMMISSION'S CURRENT REGULATIONS

The 1996 Act requires incumbent LECs to make available "for resale at wholesale rates any telecommunications service that [they] provide[] at retail to subscribers who are not telecommunications carriers."[3] In implementing this duty, the Commission recognized that a determination of the wholesale price for a particular retail telecommunications service that an

[3] 47 U.S.C. § 251(c)(4)(A). The 1996 Act imposes on all LECs the "duty not to prohibit . . . the resale of [their] telecommunications services." *Id.* § 251(b)(1). Section 251(b)(1), however, does not require LECs to offer their retail services to other LECs at a wholesale price.

incumbent LEC offers requires two prior determinations: the retail rate for the service and the wholesale discount.[4] Section 252(d)(3) directs that the wholesale discount be determined based on "marketing, billing, collection, and other costs that will be avoided by the local exchange carrier" as a result of its obligation to provide its retail services at wholesale.[5]

While § 252(d)(3) specifies how to calculate the wholesale discount, it does not define "retail rate," as the Commission noted in the *Local Competition Order*.[6] The Commission accordingly adopted a definition in that order, for purposes of determining how promotional offers would affect the "retail rate." The Commission held that "*only* . . . price discounts from standard offerings . . . *i.e.*, temporary price discounts" on incumbent LECs' retail telecommunications services would affect retail rates, and then only if the discounts are offered for more than 90 days.[7] The Commission thus declined to include in the definition of a "promotion," for purposes of ascertaining the retail rate, the many items of value *other than* a price discount that an incumbent LEC might offer customers to induce them to sign up for

[4] First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, ¶ 949 (1996) ("*Local Competition Order*") (subsequent history omitted).

[5] 47 U.S.C. § 252(d)(3). Although the issue is not directly implicated by NewPhone's petition, the Commission should take note that wholesale discounts in effect in virtually every state were calculated using a standard that the Eighth Circuit vacated in 2000. *See Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 754-56 (8th Cir. 2000) (vacating, *inter alia*, 47 C.F.R. §§ 51.609, 51.611) (subsequent history omitted). Moreover, these existing discounts are significantly greater than those that would result from application of the correct legal standard. *See* Memorandum Opinion and Order, *Petition of WorldCom, Inc. et al. Pursuant to Section 252(e)(5)*, 19 FCC Rcd 1259, at App. A (Wireline Comp. Bur. 2004) (setting wholesale discounts approximately one-third *lower* than the rates the Virginia commission had established using the vacated standard). In addition, because the vacated rules presumed that *all* marketing costs are avoidable, *see Local Competition Order* ¶ 917, factoring in marketing expenses such as non-cash promotions into *both* the wholesale discount and the retail rate would result in double-dipping.

[6] *See Local Competition Order* ¶ 949.

[7] *Id.* ¶ 948 (emphasis added); *see also id.* ¶¶ 949-950.

service. As a federal district court in North Carolina recently held — in the decision that is the apparent genesis of NewPhone's petition — the Commission thus "stated in unambiguous terms that 'promotions' [that could affect the "retail rate" and thus the wholesale price] refers only to '*price discounts* . . .[,]'" not other, non-cash "marketing incentives."[8] "Had the [Commission] wished to include marketing incentives such as Walmart gift cards in the definition of 'promotions,' it could have easily done so."[9] This interpretation of the Commission's current rules makes sense, the district court continued, because "[m]arketing incentives" such as gift cards "do not give the customer a reduction or discount on the price of the telecommunications service" and a customer receiving a gift card to a retail store "will pay the same full tariff price for the service each month as customers who subscribed to the service without the benefit of the gift card."[10]

The Commission also addressed "bundles" of services in the *Local Competition Order*, holding that such bundles must be made available for resale under § 251(c)(4), but only when all of the components of the bundle would be subject to § 251(c)(4) if sold separately.[11] With respect to any such bundles that include only services that are subject to § 251(c)(4), the Commission held that the price of the bundle — which is normally lower than the sum of the prices of the components — is the "retail rate" when a reseller purchases the entire bundle.[12] But the Commission did not hold that the price of the bundle should be used to reduce the wholesale price of one of the components of the bundle when it is purchased on a stand-alone basis. That

[8] *BellSouth Telecomms., Inc. v. Sanford*, No. 3:05CV345-MU, 2006 WL 1367379, at *3 (W.D.N.C. May 15, 2006) (emphasis in original).

[9] *Id.*

[10] *Id.*

[11] *See Local Competition Order* ¶ 877.

[12] *See id.*

is, the lower price of the bundle is not a "promotion" under the Commission's rules governing the treatment of promotions; instead, it is a reflection of efficiencies and cost savings that are "procompetitive and beneficial to consumers."[13]

In addition, under current rules, incumbent LECs have no obligation to resell "mixed" bundles — containing telecommunications services subject to § 251(c)(4) and other services that are not subject to § 251(c)(4) (such as long distance, wireless, broadband Internet, and satellite television) — at all, much less to do so at a discounted rate. Indeed, the 1996 Act does not permit the Commission to require resale at a wholesale discount of non-telecommunications services or telecommunications services sold by a carrier other than an incumbent LEC. The incumbent LEC's retail telecommunication services, moreover, are generally sold at rates set in state tariffs. To the extent a "mixed" bundle costs less than the sum of the prices of its component parts, that is normally due to discounts on the non-tariffed components of the bundle, not on the tariffed incumbent LEC service, which means there is no retail rate reduction on the only service in the "mixed" bundle subject to § 251(c)(4).

The declaratory rulings that NewPhone seeks are directly contrary to the current rules, described above. First, NewPhone seeks a ruling that, when an incumbent LEC offers a non-cash promotion for more than 90 days, competing LECs should get the full face value of that non-cash promotion, either by purchasing at a discount the "value" of the promotional item (though not the item itself) or through a reduction in the retail rate used to calculate the wholesale price. *See* Pet. at 17-18. As shown above, that is exactly what the federal court found is not required under the Commission's current rules. Second, NewPhone seeks a ruling that an

[13] Report and Order, *1998 Biennial Regulatory Review — Review of Customer Premises Equipment and Enhanced Services Bundling Rules in the Interexchange, Exchange Access and Local Exchange Markets*, 16 FCC Rcd 7418, ¶ 14 (2001) ("*1998 Biennial Regulatory Review*").

incumbent LEC's decision to offer a retail telecommunications service as part of a "mixed" bundle is a "promotion" on the retail telecommunications service that reduces the "retail rate" of that telecommunications service when it is purchased on a stand-alone basis. *See id.* at 19-20. But NewPhone's position conflicts with the Commission's determination that the lower prices on bundles are not promotions, but reflect actual economic savings resulting from efficiencies, as well as the fact that "mixed" bundles normally include the full tariffed retail rate for the incumbent LECs' retail telecommunications services. NewPhone's position also conflicts with the Commission's determination, in the context of bundles of services that are subject to § 251(c)(4), that the price of the bundle has no effect on the price of a stand-alone service.

Granting NewPhone's petition for declaratory ruling, therefore, would result in changes to existing rules, and it is black-letter law that the Commission cannot change its current rules through a declaratory ruling.[14] Moreover, as the D.C. Circuit recognized, "[o]nce an agency gives its regulation an interpretation, it can only change that interpretation as it would formally modify the regulation itself: through the process of notice and comment rulemaking."[15] For these reasons, the Commission must deny NewPhone's petition.

[14] *See Southwestern Bell Tel. Co. v. FCC*, 28 F.3d 165, 169 (D.C. Cir. 1994) (holding that the Commission is "bound to follow" its own rules, including rules articulated in a Commission order, "until such time as it altered them through another rulemaking"); *see also AT&T Co. v. FCC*, No. 05-1096, 2006 WL 1970210, at *2 (D.C. Cir. July 14, 2006) (noting the judicial distinction between "agency decisions that 'substitut[e] . . . new law for old law that was reasonably clear' and those which are merely 'new applications of existing law, clarifications, and additions'") (quoting *Verizon Tel. Cos. v. FCC*, 269 F.3d 1098, 1109 (D.C. Cir. 2001)).

[15] *Alaska Professional Hunters Assn. v. FAA*, 177 F.3d 1030, 1033-34 (D.C. Cir. 1999) (internal quotation marks omitted); *see also AT&T*, 2006 WL 1970210, at *2 ("'[J]udicial hackles' are raised when 'an agency alters an established rule defining permissible conduct which has been generally recognized and relied on throughout the industry that it regulates.'") (quoting *NLRB v. Majestic Weaving Co.*, 355 F.2d 854, 860 (2d Cir. 1966) (Friendly, J.)).

II. IN ADDITION TO THE FACT THAT THE COMMISSION CANNOT CHANGE ITS RULES THROUGH A DECLARATORY RULING, NEWPHONE'S ARGUMENTS ARE MERITLESS

A. NewPhone's Arguments with Regard to Non-Cash Promotions Are Contrary to the 1996 Act and Unreasonable

1. NewPhone claims that the Commission should extend its rules on promotions to include promotions *other than* price discounts, including gift cards and other non-cash, one-time giveaways, whether they be toasters, frequent flier miles, or a caller-ID box. Specifically, NewPhone proposes that incumbent LECs be required either to sell resellers — at a discount — the face "value" of any non-cash promotion or to create an "effective retail rate" that reduces the actual, tariffed retail rate by the face value of the promotional item. Pet. at 17. Neither option is consistent with the statute or sound policy.

First, as NewPhone implicitly concedes, § 251(c)(4) cannot be read to require incumbent LEC's to sell promotional items to competitors at a discount. Toasters, gift cards, and the like are not retail telecommunications services, and the duty in § 251(c)(4) is plainly limited to such services. NewPhone attempts to get around this by proposing that incumbent LECs be required to sell the "value" of the item — for example, selling a competing LEC $50, rather than a toaster with a retail price of $50, for only $40, assuming a wholesale discount of 20 percent. *See* Pet. at 17-18. But the "value" of a toaster or a gift card is no more a retail telecommunications service than the toaster or the gift card itself. Section 251(c)(4) cannot lawfully be read to require incumbent LECs to offer either the item or its value to resellers, let alone to do so at a discount.

Second, NewPhone's alternative proposal — to create an "effective" retail rate by reducing the actual "retail rate" by the face value of a non-cash promotional item — ignores the basic economic difference between cash and non-cash promotions. It is well-established that a $50 gift card redeemable only at a particular store, for example, has less value to an incumbent

LEC's prospective customer than $50 in cash. *See* Declaration of David S. Evans ¶ 19 ("Evans Decl.") (attached hereto as Exhibit 1).[16] This is because a consumer has to expend efforts to obtain the value of the promotional item and because a non-cash promotion constrains the consumer's options, for example by directing the consumer's spending to a particular store. *See* Evans Decl. ¶¶ 17-21.

The same is true when a tangible good — whether a toaster or a caller-ID box — is the non-cash giveaway. *See id.* ¶ 20. Indeed, to the extent such items can be exchanged for store credit, they are the functionally the same as a gift card. *See id.* If the item cannot be exchanged, then it likely has less value to the customer than a gift card to that store, which could have been used to purchase either that item or any other item in the store. *See id.*

Nor could the Commission derive an easily administered proxy based on the face value of a non-cash promotion, because the value of any given promotion varies both by offer — a $50 toaster has a real value different from a $50 Target card, which has a real value different from a $50 Best Buy card — as well as by customer, because customers will have different levels of interest in purchasing from different stores. *See id.* ¶¶ 19-21. Determining the value of any

[16] *See also* Joel Waldfogel, *The Deadweight Loss of Christmas*, 83 Am. Econ. Rev. 1328, 1328 (1993) (finding that non-cash gifts given during the Christmas holiday are worth between one-tenth and one-third less to recipients than cash because the gifts leave recipients "worse off than if [they] had made [their] own consumption choice with an equal amount of cash"); Raymond Jackson, *Identifying Voucher Plans without Welfare Losses*, 30 J. Econ. Educ. 175, 175-76 (1999) (explaining the "traditional doctrine in the economics of consumer choice" that vouchers or in-kind gifts are less valuable than cash gifts); Joel Waldfogel, *The Deadweight Loss of Christmas: Reply*, 88 Am. Econ. Rev. 1358, 1358 (1998) ("It is a deeply held . . . tenet of economic theory that consumers' *own* choices maximize utility."); Lester Thurow, *Government Expenditures: Cash or In-Kind Aid?,* 5 Phil. and Pub. Aff. 361, 363 (1976) (a recipient benefits more from cash than an in-kind transfer); Lester Thurow, *Cash Versus In-Kind Transfers*, 64 Am. Econ. Rev. 190, 190 (1974) (same); George Daly & Fred Giertz, *Welfare Economics and Welfare Reform*, 62 Am. Econ. Rev. 131, 131-32 (1972) (explaining that the notion that recipients are better off "[w]hen they are given money rather than goods of the same market value" originates from the "fundamental proposition" that people are better off when they choose how to spend their money instead of another person choosing for them).

particular promotional offering would require identification of (1) the percentage of consumers that took advantage of the promotion, (2) the costs those consumers occurred to obtain the benefits of the promotion; and (3) the cash value equivalent experienced by each of those consumers. *See id.* ¶ 22. This would be a virtually impossible — and entirely unnecessary — undertaking.

For these reasons, if resellers were given a discount on the price of a telecommunications service equivalent to the face value of a non-cash marketing incentive, resellers would be given an unwarranted competitive advantage, as the following example illustrates. When an incumbent LEC promotes a particular retail telecommunications service with a $50 gift card to a particular store, a reseller could use the $50 reduction in the retail rate to offer consumers the exact same service, but with an incentive of $50 in cash — an economically superior offer. While the Commission has recognized that "a reseller can distinguish the services it offers from those of an incumbent . . . through . . . marketing efforts,"[17] there is no basis to require incumbents to subsidize those marketing efforts. Resellers are free to invest time and resources in creating their own non-cash promotions, and the Commission should not allow them to free ride on the effort incumbent LECs put into developing promotional offers that are most likely to attract customers.

In any case, requiring incumbent LECs to reduce the retail rate by the supposed "value" of a non-cash promotion that is offered for more than 90 days is contrary to the pro-competitive policies underlying the 1996 Act. Offering promotions is an important way in which incumbent and competitive carriers compete meaningfully for consumers. Incumbent LECs are constrained from competing based on price with resellers because, outside of the context of promotions, resellers receive discounts for every new low retail rate an incumbent adopts. Incumbents are

[17] *Local Competition Order* ¶ 332.

also limited in their ability to compete based on the offering of new or innovative services, because they must make any such services available to their competitors at a discount. As a result, promotions are an important arena in which incumbents can compete for customers. Consumers benefit from these promotions. These benefits will be lost, however, if incumbent LECs lose any incentive to offer promotions that last longer than 90 days because they will have to give their competitors discounts that are greater in value than the non-cash promotions themselves.

2. There is no merit to NewPhone's few arguments for requiring incumbent LECs to resell the value of non-cash marketing incentives or to deduct that value from the retail rate for purposes of calculating the wholesale price.

First, NewPhone incorrectly describes an incumbent LEC's refusal to allow resellers to benefit from a non-cash promotion as unreasonable restrictions on resale. *See* Pet. at 3, 13-15. But the 1996 Act requires incumbent LECs to sell at a wholesale discount those telecommunications services that they "provide[] at retail to subscribers."[18] There is no dispute that incumbent LECs make their telecommunications services available for resale, and that gift cards and the like do not, themselves, constitute telecommunications services.[19] The statute provides no support for NewPhone's claim that, when an incumbent LEC offers a gift card it has created a "telecommunications service[] subject to . . . [a] non-cash-back . . . promotional discount[]," Pet. at 3, that is distinct from the telecommunications service itself and that is separately subject to a resale obligation.

Second, an incumbent LEC's refusal to give resellers the "value" of a non-cash promotion is not a "restriction on resale" as the term is used in the 1996 Act. The prohibited

[18] 47 U.S.C. § 251(c)(4)(A).

[19] *See BellSouth Telecomms.*, 2006 WL 1367379, at *3.

"discriminatory conditions or limitations"[20] are those on what a reseller may do with the retail telecommunications services that it obtains at wholesale. NewPhone does not allege that any incumbent LEC prevents resellers from offering their own non-cash promotions in conjunction with their resale of the incumbent LECs' retail telecommunications services. Therefore, NewPhone has not alleged any unlawful restriction on resale. On the contrary, as explained above, NewPhone's position would undermine competition, by reducing incumbent LECs' incentives to offer non-cash promotions and harming the consumers that benefit from competition among carriers in offering these non-cash promotional items.

Third, NewPhone claims, contrary to the plain language of the *Local Competition Order* and the ruling of the North Carolina federal district court, that cash promotions that directly reduce the retail rate of a telecommunications service must be treated the same as non-cash promotions, which could be described as "indirectly" reducing the retail rate. *See* Pet. at 15-16. As that court correctly held, the Commission expressly distinguished between cash and non-cash promotions when it explained that, in establishing rules for promotions, it was "only referring to *price* discounts."[21] Nor does NewPhone provide any basis for changing the current rules, given that, as explained above, non-cash promotions are not economically equivalent to cash, and NewPhone's rule would enable resellers to offer superior promotions cash promotions by free riding on incumbent LECs' efforts to develop non-cash promotions that are attractive to consumers, thereby reducing incumbent LECs' incentive to develop such promotions and harming competition and consumers.

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[20] 47 U.S.C. §§ 251(b)(1), (c)(4)(B).

[21] *Local Competition Order* ¶ 948 (emphasis added); *see BellSouth Telecommunications*, 2006 WL 1367379, at *3.

Finally, NewPhone's reliance on the *Arkansas Preemption Order*[22] is misplaced. *See* Pet. at 15. That order had nothing to do with non-cash promotions. On the contrary, the *Arkansas Preemption Order*, like the *Local Competition Order*, dealt expressly with "promotional price[s], trial offering[s, and] temporary discount[s]" for telecommunications services.[23] At most, that order simply confirmed the Commission's previous statements that promotional *price discounts*, once they have gone on for more than 90 days, affect the retail rate for the telecommunications service being offered.

B. The Commission Should Reject NewPhone's Proposal To Treat Bundles As If They Were Promotions

1. NewPhone asks the Commission treat "mixed" bundles as if they were "promotions" on the incumbent LEC's retail telecommunications services that are offered as part of that bundle. Specifically, NewPhone argues that the rules should be changed to impute a lower "retail rate" for the retail telecommunications service component of a bundle that would be used when a reseller purchases that service on a stand-alone basis. The Commission should reject this rule. Bundles are not promotions, and the price of bundled services should not affect the price of stand-alone services.

Although a bundle of services typically costs less than the sum of the prices of the individual components, this feature of bundling does not constitute a "discount" or "promotion." Instead, the lower price reflects the efficiencies that result from packaging services together. Economists recognize that bundling allows sellers to take advantage of economies of scale and

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[22] Memorandum Opinion and Order, *Petitions for Expedited Declaratory Ruling Preempting Arkansas Telecommunications Regulatory Reform Act of 1997*, 14 FCC Rcd 21579 (1999) ("*Arkansas Preemption Order*").

[23] *Id.* ¶ 46.

other efficiencies that are not achievable when the components are sold separately.[24] These efficiencies, which include streamlined billing procedures and customer service operations, among others, allow sellers to offer lower prices for customers who buy the package, and these lower prices in turn benefit consumers. For this reason, the Commission has long recognized that "allowing all carriers to bundle products and services is generally procompetitive and beneficial to consumers."[25]

The Commission's rules on bundles of telecommunications services subject to section 251(c)(4) already correctly recognize that the price of a bundle is not a "promotion" merely because it is less than the sum of the prices of the stand-alone services. As noted above, while an incumbent LEC must use the price of such a bundle as the "retail rate" when all of the components in the bundle are the incumbent LEC's retail telecommunications services and a reseller purchases the *entire bundle*, the fact that a particular service is also available as part of such a bundle has no effect on the "retail rate" for that service when purchased separately. There is no reason for the Commission to adopt a different rule with respect to "mixed" bundles, nor could it lawfully do so because components of a "mixed" bundle are not subject to § 251(c)(4) at all.[26] Moreover, as noted above, because the "mixed" bundle normally reflects the full, tariffed

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[24] *See* Evans 2005 Decl. ¶¶ 20-29.

[25] *1998 Biennial Regulatory Review* ¶ 14; *see also* Report and Order, *Bundling of Cellular Customer Premises Equipment and Cellular Service*, 7 FCC Rcd 4028, ¶ 19 (1992) ("[T]here appear to be significant public interest benefits associated with the bundling of cellular CPE and service. . . . [B]undling is an efficient promotional device which reduces barriers to new customers and which can provide new customers with CPE and cellular service more economically.").

[26] NewPhone (at 19) asserts that the Commission should require incumbent LECs to make "the entire mixed service bundle . . . available for resale at wholesale rates," but does not even attempt to square its request for discounted access to wireless, long distance, DSL, and television services with the text of § 251(c)(4), which plainly excludes all of those services from the resale obligation, as they are not offered by the incumbent LEC, are not telecommunications services, or both.

retail rate of the included incumbent LEC retail telecommunications services that are subject to § 251(c)(4), such a bundle contains no reduction on the retail rate of that service, and there is no basis for giving a competing LEC a price reduction on that service when purchased on a stand-alone basis.

Finally, it would be illogical and unfair to require incumbent LECs to give a reseller the benefit of the efficiencies produced by bundling when the reseller purchases one of the bundle's components on a stand-alone basis — that is, when it does not purchase the very bundle that created the efficiencies. Moreover, resellers that buy stand-alone telecommunications components are equally free to realize efficiencies by reselling those stand-alone services on a bundled basis, or, for that matter, to create "mixed" bundles of their own, and to sell those bundles at lower prices to consumers.

2. NewPhone offers little in the way of support of a different rule for "mixed" bundles, and the arguments it does offer lack merit.

First, NewPhone asserts that its proposed rule is necessary to allow resellers "effectively [to] compete against ILECs" and to prevent incumbent LECs from "undercut[ting] their resale competitors." Pet. at 19-20. But incumbent LECs do not offer mixed bundles of services to compete with resellers selling stand-alone retail services. They do so because customers demand bundled services, and to compete with other providers — most notably, cable companies — who are offering similar bundles of services. Nor do resellers need extra discounts to compete with incumbent LECs' service bundles. Instead, they can compete by creating their own bundles, whether by self-provisioning the services other than those obtained from the incumbent LEC or by entering into joint-marketing agreements with third parties.

Second, NewPhone also asserts that incumbent LECs could "lock[] up" retail telecommunications services by offering them only as part of a "mixed" bundle. Pet. at 18-19. As an initial matter, NewPhone does not identify a single telecommunications service that any incumbent LEC currently offers as part of a "mixed" bundle that is not also available for resale, at a discount, on a stand-alone basis. Nor does NewPhone identify a single "mixed" bundle in which the price of the bundle reflects an actual discount on the incumbent LEC's tariffed rate for its retail telecommunications service. As such, NewPhone's alleged concern is entirely hypothetical. In any event, the Commission has previously rejected claims that an incumbent LEC must disaggregate a bundled product that, at the time, the Commission had held included both a telecommunications service subject to resale and an information service.[27] Similarly, the Commission has held that incumbent LECs are not required to disaggregate their bundled retail telecommunications service offerings into stand-alone offerings.[28] NewPhone provides no basis for the Commission to adopt a different rule now.

III. UNDER THE 1996 ACT AND THE COMMISISON'S REGULATIONS, PROMOTIONS AFFECT THE RETAIL RATE STARTING ON DAY 91

NewPhone asserts that incumbent LEC promotions that last more than 90 days should be reflected in the retail rate used to calculate the wholesale price "as of the first day the ILEC offers the promotion to retail subscribers," rather than on Day 91. Pet. at 4, 17-18. NewPhone,

[27] *See, e.g.*, Memorandum Opinion and Order, *Application by SBC Communications, Inc. et al., for Authorization to Provide In-Region, InterLATA Services in California*, 17 FCC Rcd 25650, ¶¶ 112-114 (2002) (holding that SBC had no obligation to resell DSL transport service at a wholesale discount because it did not offer that service to retail customers, but instead offered only a "DSL Internet service," which is not a telecommunications service).

[28] *See Local Competition Order* ¶ 877 ("[S]ection 251(c)(4) does not impose on incumbent LECs the obligation to disaggregate a retail service into more discrete retail services.").

however, never supports or defends this assertion with any argument on the point. In fact, NewPhone is wrong.

The Commission has interpreted the term "retail rates" in light of the 1996 Act's "pro-competitive policies" and in light of the Commission's recognition that "promotions that are limited in length may serve procompetitive ends through enhancing marketing and sales-based competition."[29] The Commission therefore held that only "when a promotional price ceases to be 'short term'" — which the Commission defined as *after* 90 days — must the promotional price "be treated as a retail rate for [the] underlying service."[30] NewPhone's proposal, under which resellers would get the benefit of a promotion *before* the promotional price ceases to be short term, directly contradicts the Commission's holding.

Nor would it make sense for the Commission to modify its rule as NewPhone proposes. Such a rule would undercut the Commission's determination that promotions are pro-competitive in the short term. During the first 90 days of any promotion, the carrier offering the promotion is marketing a special, newly-available deal to consumers, and the Commission has already determined that the marketing of such deals "serve[s] procompetitive ends."[31] Therefore, NewPhone's proposal is affirmatively anti-competitive, as it would reduce incumbent LECs' incentive to develop promotions and, moreover, would eliminate any incentive for resellers to develop their own promotions. Instead, resellers would have the incentive to free ride on the effort invested by incumbent LECs in developing promotions that are likely to yield the best return.

[29] *Id.* ¶ 949.

[30] *Id.* ¶ 950.

[31] *Id.* ¶ 949.

Second, NewPhone's proposed rule would be difficult to administer, because it is not always known, even to the carrier offering the promotion, whether a promotion will last for more than 90 days. Such decisions may be made in the middle of the promotion, or even inadvertently, if a carrier that means to terminate a promotion on Day 91 nonetheless offers it for one or two more days. Artificially requiring carriers to make a definitive decision about a promotion's duration at the outset would chill the market-enhancing effects of such promotions by reducing carriers' flexibility to determine, or change, the promotion's duration based on its commercial success and other economic factors.

CONCLUSION

The Commission should deny NewPhone's petition.

Respectfully submitted,

/s/ Scott H. Angstreich

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Of Counsel:

Michael E. Glover

July 31, 2006

Exhibit 1

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Petition of Image Access, Inc. d/b/a New Phone for Declaratory Ruling Regarding Incumbent Local Exchange Carrier Promotions Available for Resale Under the Communications Act of 1934, as Amended, and Sections 51.601 *et seq.* of the Commission's Rules	WC Docket No. 06-129

DECLARATION OF DAVID S. EVANS

I, David S. Evans, hereby declare and state as follows:

I. Qualifications

1. I am Managing Director, Global Competition Policy Practice, at LECG, LLC, based in Cambridge, Massachusetts. I am also Executive Director, Jevons Institute for Competition Law and Economics and Visiting Professor, Faculty of Laws, University College London and, beginning in the Fall of 2006, a Lecturer at the University of Chicago Law School. In addition, I am the Chairman of the editorial board of *Competition Policy International* which is a refereed journal that publishes articles on competition law, economics and policy. I was previously a Senior Vice President at NERA Economic Consulting; I was also a member of the Board of Directors and Management Committee. From 1985-1995, I was Adjunct Professor of Law at Fordham University School of Law, where I taught antitrust law and economics and law and economics. I was an Associate Professor of Economics at Fordham University from 1983-1989.

2. I have published extensively in the area of industrial organization. I have authored or co-authored more than 70 articles published in economic journals such as *The American Economic Review*, *The Journal of Political Economy*, *The Journal of Industrial Economics* and *Rand Journal of Economics,* and law reviews such as *Yale Journal of Regulation* and *The University of Chicago Law Review.* I have also co-authored or edited six books and a variety of monographs. My recent work has focused particularly on tying, bundling, and the architecture of product offerings.[1] In addition I have written and consulted extensively on the payment card industry,[2] and through this work, I am familiar with the card offerings that are the subject of some of the discussion below.

3. I have researched and consulted on various telecommunications issues since the early 1980s. I consulted for the U.S. Department of Justice in *U.S. v. AT&T*. I am also the co-author of *Breaking Up Bell: Essays in Industrial Organization and Regulation*, as well as several oft-cited articles on the cost characteristics of the telecommunications industry.

4. A copy of my curriculum vitae is attached as Exhibit A.

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[1] *See* D. S. Evans and M. Salinger, "Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law," *Yale Journal on Regulation*, 22, no. 1., 2004, pp. 37-89; D. S. Evans and M. Salinger, "An Empirical Analysis of Bundling and Tying: Over-the-Counter Pain Relief and Cold Medicines," in J. Pil Choi (ed.), *Recent Developments in Antitrust: Theory and Evidence*, Cambridge: The MIT Press, 2006; D. S. Evans and M. Salinger, "The Role of Cost in Determining When Firms Offer Bundles," 2006, available on SSRN at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=555818; and D. Evans and K. Webster, "The Architecture of Product Offerings," 2006, available on SSRN at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=900862.

[2] *See* David S. Evans and Richard Schmalensee, *Paying with Plastic*, Cambridge, MA: The MIT Press, 2005.

II. Summary

5. Image Access has asked the Federal Communications Commission ("FCC") to issue a declaratory ruling concerning certain promotional efforts engaged in by some incumbent local exchange carriers to sell their retail telecommunications services. In particular, Image Access has asked the FCC to require the incumbent local exchange carriers either to give telecommunications carriers that resell their services the value of these promotional efforts or to reduce the retail rate for those services to account for these promotional efforts before applying the wholesale discount.

6. I have been asked by Verizon to summarize the economics of the sorts of promotional offerings identified by Image Access and to comment on the desirability of the declaratory ruling sought by Image Access. I have three principal conclusions:

7. **Promotional offerings are routine but are not equivalent to a retail price cut.** Many products and services sold by businesses are subject to a variety of promotional offerings. All of us receive coupons, discounts, cash-back, loyalty rewards, entries into lotteries for prizes, and many other offerings on a regular basis. These promotional offerings are conducted as parts of marketing and advertising campaigns to encourage consumers to buy products and to deliver targeted incentives to consumers who are the most sensitive to price incentives. These promotional offerings are often not substitutes for, or alternatives to, an across-the-board price reduction for a product. It is therefore not correct that promotional offerings are equivalent to a retail price cut.

8. **The actual value of promotional offerings is very difficult to calculate but almost certainly is far less than the face value.** Determining the value of any particular promotional offering to consumers is complex and would require a detailed, individualized

investigation of each offering. Consider a seemingly simple and straightforward promotional offering such as "cash back." Consumers must incur transactions costs to obtain the cash back, which often comes in the form of a check that requires further transaction costs to convert into spendable cash. Many consumers do not find it worthwhile to seek the cash back and those who do, because they incur costs and must wait for the money, value the "cash back" at less than its face value. Thus, to determine the value of cash back to consumers one would have to know how many seek cash back and estimate the value they place on the offer. Promotional offerings that do not translate into cash at the end—such as gift cards that can only be used at particular merchants and are therefore not fungible money—are far harder to value. It would require enormous effort to estimate the value to consumers of the BellSouth offerings identified by Image Access in the appendix to its petition and in the end any such estimate is likely to be highly imprecise.

9. **Mandating the pass through of the value of promotional offerings would discourage if not eliminate the use of a valuable pro-competitive tool.** Promotional efforts are an important practical dimension of competition for businesses. Businesses are always vying for customers to try their products, to use their products more, and to keep customers loyal. Creative promotional efforts, just like creative advertising slogans, are part of the intellectual property that firms invest in to compete better in the marketplace. In my view, the declaratory ruling sought by Image Access is harmful to the competitive process because it would immediately convey creative selling efforts to the competition or require a complex valuation exercise that would most likely nullify the commercial value of these promotional efforts to the incumbent local exchange carriers. Either way, the requested declaratory ruling would tend to sharply reduce, if not eliminate, this form of competition to the ultimate detriment of consumers.

Moreover, the proposal to calculate the value of promotional offerings based on their face value is ill-advised because the actual value to consumers is almost certainly less than the real value as noted above.

10. The remainder of this declaration provides additional information supporting these conclusions. Section III explains the nature, purpose and pervasiveness of promotional efforts in the economy. Section IV describes the complexities in valuing promotional efforts. Section V then comments on the consequences for competition and consumers if the Image Access proposal were accepted.

III. Promotional Efforts

11. Promotional offerings are commonplace in the marketplace. Every day as consumers we are offered coupons that are included as circulars in our daily newspapers, products that include rebates if we mail something in, loyalty points that are redeemable for various kinds of merchandise, "gifts" if we buy certain products or services, and the entry into lotteries that yield a prize. Although there are no general statistics on the extent of promotional offerings, a few statistics help highlight the extent of these marketing devices. There were 323 billion coupons distributed in 2005 in the United States.[3] Americans earned close to two trillion frequent flyer reward miles from the major airlines up to 2004.[4] Other travel and entertainment businesses such as hotels have also developed reward programs that enable people to obtain products in return for points.

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[3] *See* B. Spethmann, "Clipping Slows," *Promo Magazine*, April 1, 2006, available at http://promomagazine.com/mag/marketing_clipping_slows/index.html, last visited on July 28, 2006.

[4] *See* "Funny money," *The Economist*, Dec 20, 2005. The article is available at http://www.economist.com/finance/displaystory.cfm?story_id=5323615&no_na_tran=1, last visited on July 28, 2006.

12. Loyalty programs have become a major business. A number of hotel chains, for example, have developed programs that reward frequent customers with a wide variety of promotions. Hilton has Hilton Honors, which covers a wide variety of hotels, including Hilton, Hampton Inn, Doubletree and Embassy Suites, and offers hotel, airline, rail travel, and car rental rewards, among others.[5] The Cendant Corporation has "triprewards", a program that covers a whole family of hotels, including Baymont Inn and Suites, Days Inn, Howard Johnson, Knights Inn, and Ramada, and offers hotel, restaurant, and gift rewards.[6] American Express has the so-called Membership Rewards Program, which provides access to over 20 airlines and 250 hotel partners.[7]

13. Promotional offerings serve a multitude of commercial purposes. Broadly speaking though they serve two major ones. First, they are a form of marketing or advertising that gets the consumers' attention and induces them to try a product they might not otherwise buy. Saying "cash back" in an advertisement, offering a loyalty points program, and other promotional efforts get the attention of consumers even though many of those consumers may never avail themselves of these offers (more on this below).

14. Related to this, promotional offerings are a mechanism for "acquiring" consumers. Companies often think of themselves as having to spend advertising, sales, and marketing dollars to acquire customers who will then become repeat customers. They earn a return on their investment in acquiring customers through the profit stream from repeat sales. Promotional offerings can be targeted to first-time customers as part of this acquisition strategy.

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[5] *See* http://hhonors.hilton.com/en/hhonors/index.jhtml, last visited on July 28, 2006.

[6] *See* http://www.triprewards.com/ip-tr/, last visited on July 28, 2006.

[7] *See* http://leisure.americanexpress-travel.com/Promotions/0,,AMEX|2981|mkt_main,00.html, last visited on July 28, 2006.

In addition, loyalty programs help retain customers and therefore are a mechanism to avoid the expenditure of marketing dollars to acquire those customers again. While one can think of loyalty programs as imposing a cost to the consumer of switching products, from the standpoint of the merchant they are a mechanism for securing the initial investment in acquiring the customer. Furthermore, the marketing literature suggests that companies should focus on retaining their most valued customers since the top 20 percent of customers account for 80 percent of revenues, and often for all of the profits.[8]

15. Second, promotional offerings are a mechanism for providing targeted incentives to certain groups of consumers without reducing the price to all consumers. For example, only a certain proportion of consumers who are offered a coupon actually use it. But those consumers are the most price sensitive—as reflected in their willingness to incur the cost of redeeming the coupon. In addition other promotional offerings can be offered by the sales force on a selective basis without reducing the price to all consumers. The advantage of making a promotional offer rather than a straight reduction in price is that, according to the view of marketing professionals, consumers are more sensitive to price increases than to price decreases.[9] Thus, if a manufacturer decides to increase the price, she can stop the promotion without affecting the price of the product. Furthermore, price discounts allow sellers to clear inventories, without cutting the list price. Promotional discounts may also induce purchases by exerting a psychological effect on consumers. For some customers, buying on promotional discounts provokes positive feelings of being smart or being lucky to avail of the deal.

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[8] *See* D. Bell and R. Lal, "The Impact of Frequent Shopper Programs in Grocery Retailing," Review of Marketing Science Working Paper, Harvard University, 2002, available for download at http://ssrn.com/abstract=357580.

[9] *See* J. Uhl, "Consumer Perception of Retail Food Price Changes," presented at Association for Consumer Research Conference, (Amherst, Mass.), August 1970.

16. Furthermore, it is worth pointing out that promotional offerings are not "just" like a regular price cut among other things because firms spend creative resources in formulating the promotions. Thus, promotional offerings share many of the traits of other forms of intellectual property. Among these features is the fact that if the inventor—the person or company that spends the resources to produce the "innovation"—cannot appropriate a sizable portion of the return to her/its investment, then there will be underinvestment in innovation from a social perspective. Precisely because imitation reduces the returns to producing valuable information (i.e., inventions of various sorts), governments have created intellectual property rights, including patents. The main purpose of these rights is to give the owner/inventor special protection against her invention being used by others without compensation and thus to provide future inventors with the proper incentives to engage in creative activities. Forcing a company to give away its intellectual creations, including its promotional offerings, without compensation distorts incentives and generates "too few" innovations from a social perspective.[10]

IV. Value of Promotional Efforts

17. Consumers almost always have to incur transaction costs to obtain the benefits of a promotional offering and that benefit once obtained is seldom fungible with cash. As a result one dollar of promotional offering is almost always worth less than one dollar to the people who avail themselves of the offer, and is worth even less to the people to whom the offer is made.

18. First, the nature of most promotional offerings is that consumers have to expend some effort to obtain the benefits of them. They have to cut out a coupon and bring it to the store, send in a form for a rebate, make phone calls or go on line to cash in loyalty points, and so

[10] *See, e.g.*, P. Samuelson and W. Nordhaus, *Economics*, at 179-80, Boston: Irwin McGraw-Hill, 1998.

forth. While these may seem like small costs, they are not necessarily small relative to the value of the promotional offering. Not surprisingly, many consumers do not avail themselves of promotional offerings even though, in some sense, they are leaving money on the table. According to industry statistics, consumers redeemed only one percent of all coupons distributed in 2005.[11] According to some sources, the redemption rate for rebates was about 40 percent in 2005.[12]

19. Second, the value of the promotional offering to consumers who receive it varies and is not equal to the cash value. To begin with, we need to deduct the transaction costs of obtaining a benefit from the value of that benefit. But even putting these transactions costs aside the value of the offering is usually less than its face value. Consider a gift card that allows the consumer to spend $50 at the Gap. For consumers who wanted to shop at the Gap and spend $50 there, this gift card is worth $50 putting the transactions costs of obtaining the gift card to one side. For consumers who did not necessarily want to shop at the Gap or to spend $50 there, the value of the gift card is worth less than $50. They would prefer a lesser amount of cash, which they could use at any store.

20. Similar observations apply to promotions involving tangible items rather than gift cards. Imagine the situation where a customer receives a toaster for signing up for some specific service. The value of the promotion to this customer is not equivalent to the retail price of the toaster. The customer may not have needed a toaster to begin with. Had she received the cash equivalent of the toaster, she might have spent the money on something else altogether. And,

[11] *See supra* note 3.

[12] *See* B. Grow, "The Great Rebate Runaround", *Business Week*, November 23, 2005, available at http://www.businessweek.com/bwdaily/dnflash/nov2005/nf20051123_4158_db016.htm.

even if she did need a toaster, she may not have wanted the particular kind of toaster that she received as gift. If given cash she might have purchased a cheaper, more expensive, or just different toaster. Most people would rather have less than $50 in cash instead of a toaster with a retail price of $50. Being able to exchange the toaster does not change this conclusion since the consumer would need to expend effort to make the exchange and might then only receive the ability to buy other merchandise at a particular store which is worth less than being able to shop at the consumer's first choice. The same considerations apply to all other gifts in kind. The complexities of calculating the value of physical gifts to consumers is just as great as calculating the value of gift cards, cash-back, and other monetary gifts.

21. The value of promotional offerings to those who avail themselves of them varies greatly. First, the transaction costs of obtaining the offering varies because people place differing values on their time. It is apparent that people place different estimates of the value of transaction costs given that a significant fraction of people decide that the transactions costs exceed the value of the offering and do not avail themselves at all. Second, the value of the offering to people, putting transactions costs aside, varies according to their individual preferences. The value that people place on loyalty rewards depends in part on their demand for the various goods for which the rewards can be redeemed. The value of a gift card to a particular retailer depends on the desirability of that retailer and its products to the consumer.

22. To determine the value of any particular promotional offering it would be necessary to (1) identify the consumers who have availed themselves of the offering; (2) estimate the costs that these consumers incurred in order to obtain the benefits of the promotional offering; and (3) estimate the cash value equivalent to these consumers. The first step may be possible from records maintained by the companies that are making the offers. The second and

third steps, however, would both require complex surveys of the relevant groups of consumers to assess the transaction costs and value of the offerings; these surveys would need to be sensitive to the fact that the values would vary across individuals and seek to obtain individual estimates which could then be aggregated.

V. Application of These Principles to the Image Access Proposal

23. Image Access has requested that the FCC require the incumbent local exchange carriers to either (1) offer the telecommunications carriers the value of all promotional offerings or (2) calculate an effective retail rate that subtracts the face value of the promotional discounts. From an economic perspective, there are several problems with this proposal.

24. First, it is not appropriate to treat the promotional offerings as the equivalent of a retail rate reduction, which is what the Image Access petition seems to suggest. As discussed above in paragraphs 11 through 16, the promotional offerings offered by Bell South as described in the appendix to the Image Access petition appear to be the sorts of routine marketing and sales initiatives that many companies engage in.

25. Second, it is wrong as a matter of economics to take the face value of promotional offerings as reflective of their actual value of consumers. As explained above in paragraphs 17 through 21, the actual value is less, and probably significantly less in many cases, than the face value.

26. Third, promotional offerings are part of the dynamic aspect of competition between companies in the marketplace. Companies invest creative thinking into these offerings. Requiring companies to either turn over the promotional offerings to competitors, or to give in the former of lower resale prices an amount equal to or in excess of the value of these offerings,

would likely chill the use of promotional offerings, as we point out in paragraph 16. Such chilling would ultimately raise the cost of marketing to consumers, make selective price cutting more costly, and would harm consumers and competition.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: July 31, 2006

David S. Evans

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BIO/SUMMARY

David Evans is an authority on industrial organization. He is the co-author or editor of six books and more than 70 articles in journals ranging from the *American Economic Review*, *Foreign Affairs*, and *The Yale Journal on Regulation*. A specialist on competition policy in the US and European Union, a topic on which he has written and lectured extensively, he has served as an expert and testified before courts, arbitrators, regulatory authorities and legislatures in the US and Europe. He has led the economic analysis in several important antitrust cases over the last 25 years beginning with US v AT&T on behalf of the US Department of Justice. Most recently, he testified before the European Court of First Instance in *Microsoft vs. European Commission*. Dr. Evans has written and consulted extensively on high-technology and platform-based businesses.

Dr. Evans holds several academic positions. He is the Executive Director of the Jevons Institute on Competition Law and Economics at the University College London where he is also a Visiting Professor. He is also a Lecturer at University of Chicago Law School. He is the Chairman of the editorial board of *Competition Policy International* and, for 2006-2007, of *e-Competitions.*

Dr. Evans was an Adjunct Professor of Law at Fordham University Law School from 1985-1995 where he taught antitrust law and economics. Dr. Evans has BA, MA and Ph.D. degrees from the University of Chicago.

EDUCATION

Ph.D., M.A. Economics, University of Chicago, 1983 (specialized in industrial organization, econometrics, and labor economics).
B.A., Economics, University of Chicago, 1975

ACADEMIC AFFILIATIONS

Executive Director, Jevons Institute for Competition Law and Economics, University College London, 2006-
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EDITORIAL POSITIONS

Chairman, Editorial Board, *Competition Policy International* (2004-)
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Chairman, eSapience, LLC
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Founder, Market Platform Dynamics, Inc.

SELECTED PUBLICATIONS

Books

Catalyst Code: The Strategies of the World's Most Dynamic Companies (Massachusetts: Harvard Business School Press, forthcoming 2007) with R. Schmalensee.

Invisible Engines: How Software Platforms Drive Innovation and Transform Industries, (Massachusetts: MIT Press, 2006) with A Hagiu and R. Schmalensee.

Paying with Plastic (Massachusetts: MIT Press, 1999), with R. Schmalensee; second edition (2005; Chinese edition, 2006); first edition 1999.

Microsoft, Antitrust and the New Economy: Selected Essays (New York: Kluwer Academic Publishers, 2002), editor.

The Economics of Small Businesses: Their Role and Regulation in the U.S. Economy (New York: Holmes and Meier, 1986), with W. Brock.

Breaking Up Bell: Essays on Industrial Organization and Regulation (New York: North Holland, 1983), editor and co-author of eight of ten chapters.

Journals and Book Chapters

"The Role of Cost in Determining When Firms Offer Bundles and Ties," *Journal of Industrial Economics*, forthcoming.

"A Pragmatic Approach to Identifying and Analyzing Legitimate Tying Cases," in *European Competition Law Annual: What is an Abuse of a Dominant Position?* (Oxford: Hart Publishing, forthcoming), with A. Jorge Padilla and Michael A. Salinger.

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Exhibit 2

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
BellSouth Telecommunications, Inc.	)	
Request for Declaratory Ruling that State	)	WC Docket No. 03-251
Commissions May Not Regulate	)	
Broadband Internet Access Services by	)	
Requiring BellSouth to Provide Wholesale	)	
or Retail Broadband Services to	)	
Competitive LEC UNE Voice Customers;	)	
Notice of Inquiry	)	

DECLARATION OF DAVID S. EVANS

I, David S. Evans, hereby declare and state as follows:

I. Qualifications

1. I am Vice Chairman of LECG Europe and Managing Director of Global Competition Policy for LECG LLC, a global economic and financial consulting firm. I am also Chairman of eSapience LLC, a media and research firm that publishes *Competition Policy International* (CPI). CPI is a refereed journal that publishes articles related to antitrust economics, law and policy; I chair its editorial board. Finally, I am Visiting Professor, Faculty of Laws, University College London where I teach competition policy law and economics. I was previously a Senior Vice President at NERA Economic Consulting; I was also a member of the Board of Directors and Management Committee. From 1985-1995 I was Adjunct Professor of Law at Fordham University School of Law where I taught antitrust law and economics and

law and economics. I was an Associate Professor Economics at Fordham University from 1983-1989.

2. I have published extensively in the areas of industrial organization. I have authored or co-authored more than 70 articles published in economic journals such as *The American Economic Review*, *The Journal of Political Economy*, and *Rand Journal of Economics*, and law reviews such as *Yale Journal of Regulation* and *The University of Chicago Law Review*. I have also co-authored four books and a variety of monographs.

3. In recent years I have written extensively on the subject of bundling and tying. These writings include two strands of work. The first concerns the theoretical and empirical study of why firms engage in bundling. This work, co-authored with Michael Salinger, has appeared in *Yale Journal on Regulation*, a forthcoming chapter in *Antitrust Analysis and Policy* (MIT Press, ed. Jay Pil Choi), and several working papers. The second concerns the antitrust analysis of tying. This work, co-authored with Jorge Padilla and others, has appeared in *The Antitrust Bulletin*, *The University of Chicago Law Review*, and elsewhere.

4. I have researched and consulted on various telecommunications issues over the years. I consulted for the U.S. Department of Justice in *U.S. v. AT&T.* I am the co-author of *Break Up Bell: Essays in Industrial Organization and Regulation* as well as several oft-cited articles on the cost characteristics of the telecommunications industry.

5. A copy of my curriculum vitae is attached as Exhibit A.

II. Summary

6. I have been asked by Verizon to summarize the economic literature on the bundling and tying of products and to comment on the likely competitive effects of common

bundling arrangements in the telecommunications industry. My purpose is to assist the FCC in its notice of inquiry into the tying or bundling of telecommunications services. The FCC's notice concerns the examination of "the competitive consequences when providers bundle their legacy services with new services, or 'tie' such services together such that the services are not available independent from one another to end users."[1]

7. Most products are bundles of features that could be and sometimes are provided separately. Consider the morning in the life of a typical consumer. Her alarm clock goes off—this might be a radio alarm clock or the one on her mobile phone. From her doorstep she gets the *Washington Post*, which includes national and international news, sports, perhaps local Virginia news, and arts. For breakfast she has a bowl of Apple Cinnamon Cherrios though she has to add the milk herself. She turns her television on to watch CNN; she skips past House and Garden TV which she must take as part of her cable package but never watches. Then she steps into her SUV and turns on the radio, which came with it, and, if she does not know where she is going, perhaps even uses the built-in navigation system. Bundling does not cease when she gets to her office. The building probably bundles security services, cleaning, and other amenities. She boots up her computer, which is a bundle of an operating system, a computer chip, and perhaps a DVD player. As a surgeon her patients get a bundle of services from the hospital including nursing, anesthesiologists, and meals.

8. Consumers often benefit from these bundles because they save consumers the trouble of shopping for and combining features that they want to use together. Businesses can

[1] Memorandum Opinion and Order and Notice of Inquiry *In the Matter of BellSouth Telecommunications, Inc. Request for Declaratory Ruling that State Commissions May Not Regulate Broadband Internet Access Services by Requiring BellSouth to Provide Wholesale or Retail Broadband Services to Competitive LEC UNE Voice Customers*, Federal Communications Commission, WC Docket No. 03-251, March 25, 2005, ¶ 37.

realize savings from combining products and will pass some or all of these savings (depending on the degree of competition) on to consumers in the form of lower prices.

9. It is possible though that certain kinds of bundling could harm competition and consumers. Oftentimes businesses provide consumers with the option of buying packages of products or buying these products separately. Such "mixed bundling" is not seen as problematic for competition by economists or in the antitrust laws.[2] Sometimes businesses do not provide a product—or a component of a product—separately. One product is "tied" to another. In these cases, consumers have to take one product (the tied product) to get another product (the tying product). The antitrust case law has expressed concern about such ties when a firm has market power in the tying product. Economists have shown that *under some conditions* it is possible that such ties harm competition and consumers although *under other conditions* they do not. When tying is a competitive problem the solution is to require the firm to give consumers the option of getting the tying product without the tied product.

10. Telecommunications companies commonly offer mixed bundles. They offer consumers packages of services but also offer the individual services separately.[3] These do not pose competitive concerns.[4] In some cases telecommunications companies engage in tying. For example, the notice of inquiry specifically raises the fact that many incumbent phone companies require consumers to take local telephone service (the tied product) to get DSL broadband access

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[2] When consumers have a choice in name only—when the prices for the different bundles are such that consumers are effectively coerced into taking the bundle rather than the separate products—problems may arise. The issues are similar to those for "tied" products that are not available separately, which I discuss in Section III.

[3] There are some cases in which the individual services are not offered separately. For example, some firms do not offer local service without long distance service.

[4] The prices of the bundles do not appear to be coercive and many consumers in fact decline the package offerings.

(the tying product). In this case, as the FCC has found, incumbents have no plausible market power in the tying product. Therefore, this combination is not of concern to economists, nor is it analogous to the ties that the antitrust case law has concerned itself with.

11. The remainder of this declaration provides additional information supporting these conclusions. Section III documents the pervasiveness of bundling in the economy and explains how bundling tends to provide benefits to consumers and efficiencies to producers. Section IV considers the circumstances in which bundling can be used to harm consumers and the competitive process. Section V then reviews the bundling of telecommunication services generally in light of the preceding review of bundling.

III. The Economics of Bundling

12. Most products are bundles of components that could be provided separately and sometimes are. In all these cases firms are making two related decisions. The first concerns how they design their products. What should be included and how should the parts interrelate? The second concerns which products to offer. Should the firm offer only one product or should it offer several with different combinations of features? The answers to these questions depend on the demand for different product configurations and the cost of providing these to consumers.

A. Product Design and Offers

13. To illustrate the decisions that firms make about how to design their products and what products to offer to consumers, consider a simple case in which there are two components

A and **B**. Each is valuable to consumers in its own right.[5] The possible products are listed in Table 1. Three cases are particularly important.

1. *Components-selling* occurs when the firm offers **A** and **B** separately (cars and bicycle racks).
2. *Pure bundling* is when the firm only offers **A** and **B** together as the bundled product **AB** (men's laced shoes).
3. *Mixed bundling* refers to when the firm offers the bundle **AB** and either or both of its components **A** and **B** (The Sunday *New York Times* and the *New York Times Book Review*).

14. With two components, there are three possible "products" and seven possible product configurations as shown in Table 1. The number of products and configurations increases exponentially with the number of components. Thus with three components there are seven possible products and 127 possible product configurations.

15. It is useful to introduce a legal concept of bundling called a "tie" at this point—I will return to this in discussing the possible anticompetitive uses of bundling. A product configuration is said to involve a "tie" when it is possible to get one component only as part of a bundle. That is the case with product configurations 4-6 in Table 1. Pure bundling necessarily involves a tie. Mixed bundling involves a tie when it is not possible to get one of the components. Generally, antitrust policy concerns itself only in those situations when buyers can only get a tying component for which the firm has market power by taking another component (the tied component).

[5] David S. Evans and Michael Salinger. "Why Do Firms Bundle And Tie? Evidence From Competitive Markets And Implications For Tying Law," *Yale Journal on Regulation,* Vol. 22, 2005, pp. 37-89.

Table 1: Products that can be sold based on two components

	A	B	AB
1. Components selling	X	X	
2. Components selling	X		
3. Components selling		X	
4. Pure bundling/Tie			X
5. Tied Mixed bundling	X		X
6. Tied Mixed bundling		X	X
7. Full Mixed bundling	X	X	X

16. Firms make different decisions on product designs and offers within the same industries. Some may offer only components while others may offer only bundles and still others may engage in mixed bundling. Consider the most popular mid-sized automobiles sold in the United States: Ford Taurus, Honda Accord, and Toyota Camry. The Accord comes in six models that have between zero and two options. The Camry has three models with between nine and 12 options. And the Taurus has four models with between three and 13 options. Across car segments there is even greater variation. For example, Porsche is famous for having an enormous number of options that allow purchasers to customize their cars. All of these automobile makers include tires on their cars. They purchase these from tire manufacturers and not one of these auto makers sells tires separately.[6]

17. The framework above can also be used to think about another form of bundling—selling multiple units of a product or other volume-based arrangement. The components are the individual units of the product. A pure bundle would be a fixed number of units—say a package

[6] David S. Evans and Michael Salinger. "Why Do Firms Bundle And Tie? Evidence From Competitive Markets And Implications For Tying Law," *Yale Journal on Regulation,* Vol. 22, 2005, pp.37-89.

containing 100 units. And mixed bundling would entail different package sizes: say 25, 100, and 500 units.

18. Economists have identified a number of factors that influence the business decisions on which products to offer. I consider these next. In addition, economists have identified a number of ways in which bundling can be used profitably to increase consumer demand.

B. Reducing Producer and Consumer Costs

19. Bundling decisions affect costs for both producers and consumers.[7] In both cases it is useful to divide these into costs that vary with each unit (marginal costs) and costs that are lumpy over a range of units (fixed costs).

1. Producers

20. For producers, multiple offerings can raise the fixed costs of production and sales in several ways. There may be diseconomies of scope of producing multiple separate products. For example, studies of automobile manufacturing have found that making many options available increases what are called "complexity costs." Maintaining and managing different SKUs (Stock Keeping Units) also costs money. Separate products require separate packaging

[7] Jean Tirole, Patrick Rey, and Paul Seabright, "The Activities of a Monopoly Firm in Adjacent Competitive Markets: Economic Consequences and Implications for Competition Policy," IDEI Working Paper, No. 132, 2001, revised 2002; Paul Seabright and Xavier Vives, "Tying and Bundling: From Economics to Competition Policy," Edited Transcript of a CNE Market Insights Event, September 19, 2002. Available at http://www.cne.org/pub_pdf/2002_09_19_tying_bundling.htm; David S. Evans and Michael A. Salinger, "The Role of Cost in Determining When Firms Offer Bundles and Ties," 2004. Available at http://ssrn.com/abstract=555818.

and shelf space, each of which raises costs.[8] Marginal costs also vary for some products. It is cheaper to produce one pill that contains headache and pain reliever medicine than to produce two separate products.

21. It is also possible that there are diseconomies in both fixed and marginal costs of offering components together. Combining features may increase costs directly by making these products more complex and much harder to make. And complexity may have indirect effects as well such as raising the likelihood of products breaking down, raising support costs for customers, and increasing the costs of repair. The marriage of computers and automobiles is an example. Owners of Dodge 2001 minivans have, according to the *New York Times*, "posted anguished cries ... about electronic gremlins that stop windows from rolling all the way up, that unexpectedly dim the interior lights, that drain batteries or that make engines sputter."[9]

2. Consumers

22. Consumers may realize savings when getting things together, assuming they value the products at all. If you like to read about sports and arts every day it is cheaper to get a newspaper with both. And if you have a cold and a headache it is more convenient to get a single package of pills. Letting the producer make choices for you saves you time as well. When we go to the hospital for surgery most of us would prefer to leave most of the choices of the components to the experts rather than make them ourselves. Although downloadable music lets us pick individual songs for our collections, many might prefer the bundles the artists and publishers put together themselves. Choice is costly because it takes time and effort to make

[8] David S. Evans and Michael A. Salinger, "The Role of Cost in Determining When Firms Offer Bundles and Ties," http://ssrn.com/abstract=555818, 2004.

[9] Tim Moran, "What's Bugging the High-Tech Car?", *The New York Times,* Sunday, February 6, 2005, p. 14.

informed decisions, ones that others may be able to do more efficiently. More generally, bundling reduces transaction and search costs for consumers.

23. In some cases, bundling may also have disadvantages. Some consumers may prefer to mix and match components—a common strategy in building home entertainment systems and increasingly popular for music collections. Although automobile manufacturers have reduced variety over time, many car buyers like having some choice and no doubt some resent option packages that require them to take a moon roof to get a more powerful engine.[10]

3. Implications for Product Design

24. These costs and benefits for consumers and firms help explain the products that businesses actually do offer among the many they could offer. Firms have to weigh the demand for a particular product offering against the costs of making it available as a stand-alone product or as part of another product. Many products are not offered at all because there is not enough demand to warrant businesses to incur the costs of producing and distributing them. Some men would no doubt prefer to get their shoes without shoelaces because they have a favorite shoelace they like to use. But the number is probably so few that it would not pay to offer this option at shoe stores. Other products are offered only separately because few people want them as a system. Although this is changing, many families buy their own ingredients for dinner rather than prepackaged meals. And in other cases there is enough demand for the components and the bundle for producers to offer it both ways.

[10] David S. Evans and Michael Salinger. "Why Do Firms Bundle And Tie? Evidence From Competitive Markets And Implications For Tying Law," *Yale Journal on Regulation,* Vol. 22, 2005, pp.37-89.

25. In some cases, it is not profitable for producers to offer bundles versus the individual components. Consider a simple example. 100 consumers would pay \$10 for **A**; 50 would pay \$5 for **B** and 10 would pay \$20 for **AB**. It costs \$1 to produce each unit of **A** and **B** and \$2 to produce each unit of **AB**. Fixed costs are \$200 for each of these three products. In this case the unit cost, for meeting all demand, of **A** is \$3, the unit cost of **B** is \$5, and the unit cost of **AB** is \$22. Each component could be provided separately for a profit—since the consumer willingness to pay for each unit is greater than the cost of producing each unit (\$10 vs. \$1 for **A** and \$5 vs. \$2 for **B)**. However, the bundle cannot be provided profitably because the unit costs exceed what people will pay (it costs \$22 to make **AB** and consumers will only pay \$20). The problem here is lack of demand. Not enough people want the bundle to make it profitable to provide.

26. Firms sometimes offer pure bundles because, even though some consumers do not want portions of the bundle, it is cheaper to sell the components together. To see the intuition consider the extreme case in which each of several types of consumers want one component but none of the others. If the fixed costs of providing each of the components is high enough, it pays to combine these together. It is cheaper to give consumers a component they do not want than to provide the component they do want separately. The manufacturer saves money and the consumer often gets a lower price than she would otherwise.

27. A simple example illustrates this. There are two consumers. Person 1 is willing to pay \$5 for **A** and nothing for **B**; person 2 is willing to pay \$5 for **B** but nothing for **A**. It costs the manufacturer \$2 for **A** and **B** separately. The fixed cost of offering a product at all is \$1. The manufacturer could sell a unit of **A** and **B** separately for \$5 each, collect \$10 in revenue, incur \$4 in manufacturing cost and \$2 in product-offering cost, and make a profit of \$4. Or it could sell a

bundle **AB** to both consumers for $5 each, collect $10 in revenue, incur $4 in manufacturing cost and $1 in product-offering cost, and make a profit of $5.

28. Bundling is the best strategy in this example. In this case the manufacturer pockets the difference but some of the cost savings would get passed on to the consumer in a competitive market. Moreover, if the fixed cost of offering a product was $5 it would not be profitable to offer **A** or **B** (the additional $4 in fixed cost wipes out the profit of $4)—but it would be profitable to offer **AB** (the manufacturer earns $1 of profit). We will see later that being able to segment consumers is one of the explanations for this phenomenon. But the other one—and the one emphasized here—is that the manufacturer can avoid the multiple fixed costs of offering separate products. Electrical plug adapters for outlets used in other countries provide a useful illustration. At its retail stores, RadioShack generally sells a package of four plug adapters for outlets that, roughly, are used in Europe, the United Kingdom, New Zealand/Australia, and North America.[11] A U.S. traveler needing plug adapters for an overseas trip would typically buy this package. RadioShack also sells separately an adapter for North America that a visitor from Europe would buy if traveling to the United States. But there is insufficient consumer demand to cover the costs of selling the other adapters separately, or in other bundled configurations.

29. It is easy to see from these considerations why firms offer only a fraction of the products—defined by the combination of components—they could. The examples above involve just two components for which there are three possible products. With three components there

[11] See David S. Evans and Michael Salinger, "Why Do Firms Bundle And Tie? Evidence From Competitive Markets And Implications For Tying Law," *Yale Journal on Regulation,* Vol. 22, 2005, pp. 37-89. The "North American" adapter in the package can be used to convert a European plug to fit a North American outlet.

would be seven possible products (**ABC, AB, AC, BC, A, B, C**); with ten there would be 1023. Even minimal fixed costs of offering these configurations to manufacturers or consumers would encourage producers to reduce the number of offerings to those for which there is significant demand. If you think about the products you buy, while you may have a great deal of choice you have infinitely less than you could if firms offered all possible combination of components that some customers might like.

C. Exploiting Demand

30. Firms bundle components because it enables them to sell more and usually make more profits. That can be true for three demand-related reasons.[12]

1. Complementary Components

31. The "give away the razor to sell the blades" strategy is famous in business and economics. This approach is profitable because the razor and the blades are complements—a decrease in the price of one increases the demand for the other. In some cases decreasing the price of one component to nothing makes sense. The firm loses money on that component. But it stimulates the demand for the other component on which the firm does make money. With products that are strong complements the profits from the positively priced component make up for losses on the zero-priced component.

32. So far this does not say anything about bundling. But it often saves distribution and packaging costs to sell two goods together. If the firm is giving one away for free anyway it

[12] William James Adams and Janet L. Yellen, "Commodity Bundling and the Burden of Monopoly," *Quarterly Journal of Economics*, Vol. 90, 1976, pp. 475-498; Michael S. Salinger, "A Graphical Analysis of Bundling," *Journal of Business*, Vol. 68, 1995, pp. 85-98; Richard Schmalensee, "Pricing of Product Bundles," *Journal of Business*, Vol. 57, 1984, pp. S211-S230.

might as well avail itself of these cost savings. Not surprisingly, razors and blades are usually included in the same package. Consumers can benefit from the convenience of getting the bundle and from the lower cost.

To see how complementary demand leads to bundling, consider a firm that produces **A** and **B**. Each costs \$2 to produce and there are no fixed costs of product offering. Assume the firm faces these demand schedules:

$$\mathbf{Q_A = 2a_A - b_A p_A - d p_B}$$

$$\mathbf{Q_B = 2a_B - b_B p_B - d p_A}$$

If $\mathbf{a_A}$=7, $\mathbf{a_B}$=6, $\mathbf{b_A}$=1, $\mathbf{b_B}$=2, and **d**=1, the profit maximizing prices would be \$9 for **A** and \$0 for **B.** The firm incurs losses on sales of **B**.

Assuming it costs something to distribute these products, the firm will generally increase profits by including the "free product" with the "not-free" product.

2. Aggregating Across Consumers

33. Firms may also find that it pays to bundle even if demands are not complementary. We already saw an example of this above. Bundling persuaded two consumers to buy a product even though each wanted only a single component. This saved the manufacturer costs.

34. More generally, businesses can exploit the law of large numbers when they are producing products that have many components.[13] Consumers place different valuations on the

[13] See Richard Schmalensee, "Commodity Bundling By Single-Product Monopolies," *Journal of Law and Economics,* Vol. 25, April 1982; and Yannis Bakos and Erik Brynjolfsson, "Bundling Information Goods: Pricing, Profits, and Efficiency," *Management Science*, Vol. 45, No. 12, December 1999, pp. 1613-1630.

various features available to them. You value the arts section of the newspaper highly while your spouse does not care much for it; your spouse values the sports section highly while you do not care much for that section. The valuations for any component can be quite dispersed across consumers with different tastes. If you combine all these components into a single product the variations tend to cancel each other out. At any given price there will be more people who will buy the bundle than would buy any component or subset of components.

35. This of course means that many people are getting components that they do not care for. But if it does not cost much to provide these components and if it is expensive to offer multiple product versions, bundling components together into a single product typically expands demand. These assumptions are especially likely to hold for information goods for which the marginal cost of providing the product (and any component of it) is low and the costs of developing and distributing the product is high. Newspapers are a good example. They provide many features from crossword puzzles, to astrology tables, to business, to dance that only a portion of their readers care about. But relative to the cost of producing the newspaper, these features are not that expensive to add. By including them the newspaper brings in more readers at its typical price, sells more copies, and therefore covers more of the fixed costs of producing the paper.

36. Generally, consumers are better off as a result of such bundling because they can get products they want that either would not be produced or would be more expensive absent bundling.[14]

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[14] Yannis Bakos and Erik Brynjolfsson, "Bundling Information Goods: Pricing, Profits, and Efficiency," *Management Science*, Vol. 45, No. 12, December 1999, pp. 1613-1630.

Suppose that the first tenth of the population of 100 persons would be willing to pay $10 for component 1, the second tenth $10 for component 2, and so forth up to component 10.[15] Each would be willing to pay only $2 for the other nine components. If the firm sells each component separately, it finds it optimal to charge $2 for each of them, sell to all customers and thereby make $200. However, every consumer would pay $28 ($10 + 9*$2) for the bundle of all ten components. By bundling the firm can get all 100 consumers to buy the bundle and makes $280.

3. Customer Segmentation

37. Firms also practice customer segmentation by combining components into different bundles to appeal to different groups of consumers. Some consumers may prefer a fully loaded bundle while others want a bare bones bundle. It is possible to design packages that segment these consumers. Some will want the car with the sports package, while others will want the basic package. One basic reason firms do this is to meet consumer demand—to offer the packages that their customers want to buy.

38. Customer segmentation also facilitates a variant of price discrimination. Firms practice price discrimination by setting different prices to different consumer segments in order to extract more of their willingness to pay. For example, movie theaters may offer senior citizens a discount. Despite its name economists generally view price discrimination as benign or welfare

[15] See Steven J. Davis, Jack MacCrisken, and Kevin M. Murphy, "Economic Perspectives on Software Design: PC Operating Systems and Platforms," in David S. Evans, ed., *Microsoft, Antitrust and the New Economy: Selected Essays*, 2002, pp. 400-403.

enhancing since it enables firms to increase output and recover the fixed costs.[16] If movie theaters were prohibited from price discrimination, for example, they might keep prices unchanged but remove the senior citizen discounts. The movie theaters would be worse off because some senior citizens would not buy a ticket at the higher price.[17] Those senior citizens would also be worse off, as would other senior citizens that continue to buy tickets but face a higher price. And society overall would be worse off.

39. With bundling, firms may be able to practice a form of price discrimination by charging a premium to groups that have a particularly high demand for a particular package, and offer an especially aggressive price to consumers that are very sensitive to price but are also willing to take the no frills deal. It is not literally price discrimination as the products sold to different groups are different, but the concept is similar. For this to work there must be a predictable correlation between combinations of components and demand (e.g. elastic demand, low demand for frills). A number of studies have found, for example, that automobile companies have much higher markups on luxury models than base models.[18]

D. Summary of Optimal Product Design and Product Offerings

40. There is no single explanation as to why businesses offer pure components, mixed bundling, or pure bundling. The most profitable strategy depends on the particular cost and

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[16] See the discussion of price discrimination in Dennis W. Carlton and Jeffrey M. Perloff, *Modern Industry Organization*, 4th edition, 2005, pp. 293-312.

[17] This would be partially offset by higher prices paid by senior citizens who continue to purchase at the higher price, but only partially as the movie theaters found it profitable to offer the discount in the first place.

[18] Steven Berry, James Levinsohn, and Ariel Pakes, "Automobile Prices in Market Equilibrium," *Econometrica*, Vol. 63, No. 4, July 1995.

demand situation faced by the firm as well as what the competition is doing. But there are some general tendencies.

41. Firms offer pure bundles of components when:

- There is little demand for other combinations of these components relative to the cost of offering them.
- The marginal cost of including components is very low relative to the additional customers that are pulled in.
- Pure bundling is an effective method for appealing to different customer segments.

42. Firms offer mixed bundles when:

- There is sufficient demand for a product configuration relative to the cost of offering it.
- Different bundled offerings facilitate segmenting customers.

43. Firms offer components without any bundles when:

- There is little demand for combining components or consumers can do this themselves very easily.
- The fixed or marginal costs of combining components are prohibitive relative to demand.

44. Economists have identified circumstances in which firms may not offer the product configurations that are identical to what an all-knowing planner, seeking to maximize social welfare, would do. For example, under certain assumptions firms offer too much product variety and offer bundles that are socially inefficient. Under other assumptions, they might not offer bundles that would benefit consumers. But there is no theoretical basis for concluding that there are systematic biases or ones that can be identified, much less corrected, through regulatory intervention.[19] And these possibilities should not make us lose sight of the fact that bundling of

[19] See David S. Evans and Michael Salinger. "Why Do Firms Bundle And Tie? Evidence From Competitive Markets And Implications For Tying Law," *Yale Journal on Regulation,* Vol. 22,

features saves producers and consumers money, provides consumers with products they want, and is often a source of product innovation in industries.

IV. Possible Anticompetitive Uses of Bundling

45. Antitrust courts and regulators have expressed concerns over the possible anticompetitive use of bundling by firms with significant market power to foreclose otherwise competitive markets. Economists have found that many of these concerns are misplaced. But economists have also found that there are a few situations in which firms may use bundling strategically to harm competition and consumers. I begin by summarizing the famous Chicago single-monopoly profit theorem, which shows that under certain assumptions firms with monopoly power in one market do not have the incentive to attempt to extend their monopoly power to other competitive markets. I then examine economic theories which show that under some conditions firms with monopoly power have both the incentive and the ability to engage in tying to either extend their monopoly to another market or to protect their current monopoly.

46. The potential for anticompetitive effects depend on highly specific circumstances. The economists who have identified models suggesting potential anticompetitive effects from tying caution that the results cannot be interpreted broadly. Michael Whinston writes, "Even in the simple models considered here, which ignore a number of other possible motivations for the practice, the impact of this exclusion on welfare is uncertain. This fact, combined with the difficulty of sorting out the leverage-based instances of tying from other cases, makes the

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2005, pp. 37-89. See also Yannis Bakos and Erik Brynjolfsson, "Bundling Information Goods: Pricing, Profits, and Efficiency," *Management Science*, Vol. 45, No. 12, December 1999, pp. 1613-1630.

specification of a practical legal standard extremely difficult."[20] Carlton and Waldman note, "[W]e would like to caution that trying to turn the theoretical possibility for harm shown here into a prescriptive theory of antitrust enforcement is a difficult task. For example, the courts would have to weigh any potential efficiencies from the tie with possible losses due to foreclosure, which by itself is challenging due to the difficulty of measuring both the relevant efficiencies and the relevant losses."[21]

A. Single Monopoly Profit Theorem

47. Early theories of tying argued that a firm could tie a monopoly in one product to a second, otherwise competitive, product and gain a monopoly in the second product. The single monopoly profit theorem shows that this is theoretically impossible under certain circumstances. Suppose a firm has a monopoly in ***A***. Consumers use ***A*** and ***B*** in fixed proportions—for example cars and radios and computers and microprocessors. The marginal cost of supplying ***B*** is c which equals its price under competitive supply. Consumers have a demand for the combination ***A+B***—they do not demand ***A*** separately from ***B***, or vice-versa. The monopolist maximizes profit by determining the profit-maximizing price for this combination. That gives the monopolist the most profit it could possibly obtain. The monopolist can achieve this profit in several possible ways. It could offer the bundle at a combined price p_C. It could offer ***A*** only at a price p_C-c and have consumers purchase ***B*** from competitive suppliers. It could also offer ***A*** at a price of p_c-c and ***B*** at a price of c along with the other competitive suppliers. From the monopolist's

[20] See also Michael D. Whinston, "Tying, Foreclosure, and Exclusion," *The American Economic Review*, Vol. 80, September 1990, pp. 855-856.

[21] See Dennis W. Carlton and Michael Waldman, "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," *RAND Journal of Economics*, Vol. 33, No. 2, Summer 2002, p. 215.

standpoint, it has nothing to gain by getting a monopoly in ***B*** because it would still collect the same monopoly profit based on the combined price of p_C.

48. Indeed, the only incentive for the monopolist in this example is to make sure that someone is combining ***B*** competitively. This is known as the "double monopoly markup".[22] If another firm had a monopoly in ***B*** that firm would restrict the output of ***B*** and raise its price above c. That would tend to reduce the sales of ***A*** and hurt the ***A*** monopoly's profits. So in this case monopoly ***A*** has an incentive to create competition in ***B*** perhaps by producing ***B*** itself.

49. The same principles apply when ***A*** and ***B*** are used in variable proportions. However, in that case there are possibilities for increasing monopoly profit through bundling that would need to be considered. In many of these cases, however, profits can be increased because bundling facilitates price discrimination. For example, IBM used to require its mainframe customers to also purchase the punch cards used with the mainframe from IBM, and at a higher price than supplied elsewhere. Customers agreed to this because they had limited alternatives for IBM's mainframes. This helped facilitate price discrimination. Customers who valued the mainframes more were also those that generally used more punch cards, so they paid more. Customers who used fewer punch cards and valued the mainframes less, paid less. With profitable price discrimination such as this, firms' profits increase, but social welfare and consumer welfare often increase as well. For example, without the ability to price discriminate, IBM might have simply priced the mainframes above the value placed on them by the low use customers, and made its money from the high use customers.

[22] See the discussion of "double monopoly markup" in Dennis W. Carlton and Jeffrey M. Perloff, *Modern Industry Organization*, 4th edition, 2005, pp. 415-419.

B. Acquiring or Maintaining Monopoly Through Tying

50. Economists have identified two sets of circumstances in which monopoly firms have the incentive and the ability to tie their monopoly product to a non-monopoly product when ***A*** and ***B*** are not used in fixed proportions. The crux of these theories is that there are scale economies in the production of ***B***. By foreclosing enough demand to competing producers of ***B***, the monopolist denies them scale economies and captures the ***B*** market.[23]

51. In these cases it is possible to identify situations in which (1) the monopolist finds that it is profitable to tie ***B*** to ***A*** to foreclose the market to competing ***B*** suppliers and (2) raise the price of ***B*** higher than it would be in the absence of this foreclosure and (3) thereby reduce consumer welfare. Carlton and Perloff give the example of a hotel on an island whose guests like to play tennis. By tying the use of the hotel to a tennis club the hotel can deny enough volume to other tennis clubs and end up with a tennis club monopoly. It will then be able to charge guests and non-guests a higher price for playing tennis.

52. It is also possible to find situations where the monopolist finds it beneficial to monopolize the ***B*** market because it is possible that the ***B*** producers will evolve over time into competitors in ***A***. Therefore, the monopolist engages in foreclosure to prevent an erosion of its profits in ***A*** rather than to obtain profits in ***B***.[24]

53. As noted above, the economists who have authored papers identifying these possible anticompetitive uses of tying have been careful to note that they are special cases and

[23] Jean Tirole, "The Analysis of Tying Cases: A Primer," *Competition Policy International,* Vol. 1, Spring 2005.

[24] Dennis W. Carlton and Michael Waldman, "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," *RAND Journal of Economics*, Vol. 33, No. 2, Summer 2002.

that one would need to determine whether the conditions under which they could occur apply in the particular case in question.[25] However, three observations are worth keeping in mind:

1. Tying strategies are costly—the monopolist provides a suboptimal package to consumers (it denies them choices they would like to have) and therefore sacrifices profits. It must weigh these loses against future gains resulting from foreclosure.
2. These tying strategies only work if the monopolist can completely foreclose competition in the tied-good market, or at least substantially reduce it. Therefore, the success of the strategy depends on there being barriers to entry into the tied good market.
3. Foreclosure of competition in the tied good market does not necessarily lead to lower consumer welfare.

V. Bundling Practices in Telecom

54. Package offerings are pervasive from land-line providers, wireless providers, and cable providers. Some packages have been around for a long time. For example, basic cable comes with a fixed number of channels for the same price. You cannot take only the channels you want to watch. More recently, package offerings have become more common, as technology and changes in the regulatory environment has facilitated the convergence of voice, data, and video services, and as firms have competed to offer appealing bundles of services to consumers.

55. Wireless telephone competitors were the first to offer bundled packages of local and long distance service. Wireless telephone service commonly comes bundled with calling features such as voicemail and caller ID, as well as a bucket of minutes. In competition with the wireless providers, and in competition with each other, land-line providers also began to offer bundled packages, commonly including local and long distance service, as well as a choice of calling features. With the growth of cable modem broadband access and Voice over IP (VoIP)

[25] See Dennis W. Carlton and Michael Waldman, "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," *RAND Journal of Economics*, Vol. 33, No. 2, Summer 2002. See also Michael D. Whinston, "Tying, Foreclosure, and Exclusion," *The American Economic Review*, Vol. 80, September 1990, pp. 837-859.

telephone service, as well as cable-provided circuit switched phone service, cable companies and other providers have further broadened their bundled offerings. Cable providers commonly offer packages or discounts that include cable television service, cable modem service, and voice service (either circuit-switched or VoIP). Land-line telephone providers have offered DSL broadband access to compete with the cable companies and are also exploring ways to counter the video services offered by cable. For example, Verizon partnered with DirecTV to offer a competitive bundle to the cable providers.[26] In addition, wireless providers are developing ways to offer broadband access and some limited video services.

56. I describe below the types of package offerings commonly available today from different providers, using services available in the Boston area, where my home and office are located, as an example.

1. Wireless Telephone Service

57. In the Boston area, wireless carriers typically offer bundled packages of services. For example, T-Mobile offers both nationwide and regional calling plans in the Boston area. The Basic Individual Calling Plan for $19.99 offers 60 whenever minutes and 500 weekend minutes. Additional minutes are 45 cents per minute. The following features are included with the plan: voicemail with paging, caller ID, conference calling, call waiting and call hold, customer care, directory assistance, emergency calls, and detailed billing. T-Mobile's Boston Regional Rate Plan costs $49.99 and provides 3,000 whenever minutes. Additional minutes cost

[26] Jim Smith, "Combined Bill for Telecommunications and DIRECTV Service Sweetens Deal for New Bundle Customers," Press Release, February 8, 2005, available at http://newscenter.verizon.com/proactive/newsroom/release.vtml?id=89219.

35 cents per minute. The same calling features included with the national plan are included with the regional plan.

58. T-Mobile customers therefore do not have the option of purchasing wireless service without the included calling features. Nor do they have the option of purchasing a basic plan without included minutes. The same is true for all other major wireless providers: Cingular Wireless, Nextel, Verizon Wireless, and Sprint. With minor exceptions, their plans include bundled calling features.[27] And all plans include a bucket of minutes as part of the plan.[28]

2. Circuit-Switched Telephone Service

59. Comcast offers phone service in the Boston area.[29] The Any Distance Plan for $48.95 provides unlimited local and long distance service, as well as standard calling features. The Connection Plus for $22.95 offers unlimited local calling, 7 cents per minute out-of-state calls, 5 cents per minute out-of-local-area calls, and standard calling features. The most basic plan available provides no standard features and no long distance for $16.00. As is common with Comcast, discounts are available for bundling digital phone services with high-speed internet and/or digital cable.[30]

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[27] The one exception I am aware of from reviewing these companies' web sites and in some cases calling for clarification is that certain Nextel plans (its National Power Plan, National Team Share, and Local Instant Connect Plan) do not include either voicemail or caller ID.

[28] One Nextel plan (Local Instant Connect) included unlimited calls to other subscribers but does not include minutes to call non-subscribers. Also, certain prepaid plans require customers to fund their accounts. The prepaid amounts expire after a set period of time, which is the same as a consumer paying a fixed fee and obtaining the minutes covered by the fee.

[29] Information obtained through a conversation with a sales representative, June 7, 2005.

[30] See "Special Offers," available at http://www.comcast-ne.com/bundle_offers.html, downloaded on June 8, 2005; and "Products and Services," available at http://www.comcast-ne.com/bundle_packages.html, downloaded on June 8, 2005.

60. Other providers also offer local plans. SBC and Trinsic Communications—providers of local service in the Boston area—offer only local plans that include unlimited local calls, as well as at least some calling features.[31] RCN's basic plan includes unlimited local calling with no standard features.[32] Like Comcast, Trinsic and RCN offer packages that include unlimited local and long distance calling for a fixed rate.

61. Verizon offers similar packages to its competitors, but offers more a la carte options. Verizon customers can purchase metered local service, with no local minutes or calling features included as part of the plan. Verizon customers can also purchase local service without purchasing long distance service from Verizon, and can purchase long distance service without purchasing local service from Verizon. In the bundling taxonomy described above, Verizon is engaging in full mixed bundling, while other local providers generally offer tied mixed bundling with respect to some features.

3. Voice Over IP Telephone Service

62. Voice over IP (VoIP) services are also typically offered in bundles. AT&T, for example, offers VoIP plans in the Boston area. For $19.99 per month, the AT&T CallVantage Local Plan offers unlimited local calling and 4 cents per minute long distance calls. The package includes the following calling features: conference calling, voicemail, call log, phone book, locate me, speed dial, do not disturb, three-way calling, alternative 911 or alternative E-911 Service, call forwarding, call waiting, caller ID, safe forward number, fax and modem support,

[31] According to a conversation with an SBC sales representative on June 8, 2005, extended local area calls are outside the local calling area are treated as long distance. SBC's local plan calling features are available at http://www.sbc.com/gen/general?pid=1106. Trinsic's local plans are available through www.trinsic.com/teloa/getTN.do.

[32] Information provided by an RCN sales representative on June 10, 2005.

and directory assistance. AT&T CallVantage Service Plan adds unlimited long distance calling in the United States and to Canada for an additional $10.00 a month.

63. Vonage offers two residential plans. Its $24.99 monthly Premium Unlimited offers unlimited calling anywhere in the U.S. and Canada and includes standard calling features. And its Basic 500 Plan offers 500 minutes for calls throughout the U.S. and Canada, with a 3.9 cent rate for additional minutes. This $14.99 monthly plan also includes standard calling features.

4. Internet Access

64. DSL and cable modem service are the two most common types of broadband internet access in the United States. Both types of service are generally sold at a flat rate for unlimited use. Higher speed access is sometimes available for a premium. In the Boston area, Comcast offers cable modem access at $42.95 per month for customers who also subscribe to its cable television plans and for $57.95 for customers who do not subscribe to cable television. RCN also offers discounted packages with cable modem and cable television service.

65. Verizon offers DSL for $29.95 per month with a one year commitment, and offers a $5 monthly discount for customers who also subscribe to one of its local and long distance packages.[33] Verizon has explained elsewhere that its DSL subscribers can cancel their Verizon phone service, keep their Verizon DSL service, and start receiving their voice service from a VoIP provider, cable company, or wireless provider.[34] Verizon has also explained that it will be

[33] Regional and Freedom package customers are eligible for this discount with the purchase of a qualifying affiliate product, which includes DSL, dial up internet access, DirecTV service, and Verizon's One-Bill service.

[34] See, e.g., Verizon Tariff FCC No. 1, Section 16.8(d)4.

expanding its standalone DSL offer shortly.[35] America Online has also started offering DSL service in some locations, with plans to expand nationally.[36]

B. Reasons for Package Offerings

66. The packages commonly offered for telecommunications services offer benefits to consumers. Consider, for example, a consumer going to Verizon's web site. On the initial web page for local service, the consumer is offered a choice of three packages that fit the needs of (a) households that primarily make local calls, (b) households that primarily make local and regional toll calls, and (c) households that make local, regional, and long distance calls.[37] The consumer can review the features of each of the three packages and simply pick one if it fits well with her needs. She can also review additional package offerings that are variants of the three initial offerings.

67. If none of them seem satisfactory, or if she wants to research further, she can choose the a la carte route. But doing so involves going through a time consuming set of choices. She starts by picking a local service plan. She can choose to only get the "Measured Rate Service" plan and pay $12.70 monthly to make calls within the local calling area. This plan includes no regional or long distance calling, and does not include any calling features or

[35] Reply Declaration of Michael K. Hassett, Tom Maguire, Michael O'Connor, and Vincent J. Woodbury, submitted in *In the Matter of Verizon Communications and MCI, Inc. Applications for Approval of Transfer of Control*, WC Docket 05-75, and Redacted for Public Inspection (May. 24, 2005).

[36] David A. Vise, "AOL Aims to Get Up to Speed with DSL," *Washington Post* (June 2, 2005).

[37] These are the "Verizon Basic Service" for $36.64 a month that includes unlimited local calling, a 10 cent per minute rate for long distance weekday calls, and a 7 cent a minute rate for long distance weekend calls; the "Verizon Regional Package Unlimited" for $37.00 monthly, which adds unlimited regional toll calling and standard calling features to the features in the local package; and for $49.95, the "Verizon Freedom Unlimited" package adds unlimited long distance calling to the features in the regional package.

minutes. She also could choose the other local calling plan, the "Flat Rate Service." With this plan, she can have unlimited local calling in her calling area for $19.64 per month. No calling features are available in this plan either. After she chooses one of these local plans, she can add any of the calling features available under the package options, either individually, or in a discounted package.

68. She can choose to add Verizon as her regional toll provider with no monthly fee and a 7 cents per minute rate. She can also add Verizon as her long distance carrier, with a choice of a monthly fee of $1.50 and a rate of 10 cents per minute weekdays and 7 cents per minute weekends, or a monthly fee of $4.95 and a rate of 5 cents per minute anytime.[38] She can choose Verizon to provide only regional toll service or only long distance service or both. She can also choose from over 100 carriers for regional or long distance service. Or she can choose not to have a regional or long distance carrier.

69. The package offerings bypass this maze of decision making. Instead, consumers decide whether they like the configured packages. They can pick the most attractive package, as well as compare it to alternatives offered by competitors.

70. When most consumers want certain features, firms will offer those features as part of a package for consumer convenience. When enough consumers want those features, firms may not even offer a package that excludes those features. For example, as I discussed above, wireless telephone operators typically include calling features such as voicemail, caller ID, call waiting, and three-way calling as part of every package they offer.[39] These wireless companies

[38] For simplicity, I do not discuss the international long distance or calling card options.

[39] This is true for major wireless operators such as Cingular, Sprint, T-Mobile, and Nextel. Examples of plans with standard calling features can be found through links at the following web

operate in highly competitive environments.[40] It is implausible that they bundle for anticompetitive rather than efficiency reasons.

71. Consumers also benefit from one stop shopping. Consider grocery shopping. Many consumers benefit from going to one supermarket for all of their food needs. While one store might not be perfect for all needs—a different store might have a better produce department—many consumers find the efficiencies in making one trip worthwhile. They might switch supermarkets altogether but they will switch from one one-stop shop to another. That is, they are comparing bundles, rather than shopping for each item in the bundle. The same is true for many consumers in regard to telecommunications services. Rather than make separate decisions about local telephone service and long distance service, or separate decisions about telephone service and internet access, some consumers benefit from being able to compare one bundle of services to another. And they also benefit from only having to review and pay one bill.

72. There are also cost savings for firms in offering bundles. While the costs of consumers ordering on the web site are lower, most sales are still made over the telephone, where there are significant costs involved. Offering consumers a few bundles, rather than going through every a la carte option as above, can save firms significant telemarketing costs. There is also an efficiency benefit for the consumer from spending less of her time on the call. For packages that offer unlimited calling, firms can also save when they do not have to retain the call detail information necessary for itemized call billing.

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sites: www.cingular.com, www.sprint.com, www.tmobile.com, and www.nextel.com. See *Supra* Note 26 for three Nextel plans that do not include voicemail or caller ID.

[40] According to the Federal Communications Commission, roughly 87 percent of the U.S. population lives in a county with at least five wireless companies competing to offer wireless service. See Ninth Report, *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, FCC WT Docket No. 04-111, Released September 28, 2004, ¶ 49.

73. There are also demand side reasons for offering packages. Industries that have high fixed costs and low marginal costs cannot price at marginal cost and cover the fixed costs that have to be incurred in the long run to maintain investment in the system. Firms in these industries often have to find ways of offering bundled pricing.[41] Wireless telephone providers, which operate in competitive environments, again provide a useful illustration. As I discussed, every calling plan from every major wireless operator includes some bucket of minutes as part of the plan.[42] The base national plan offered by Cingular, for example, includes 450 anytime minutes and 5,000 nights and weekends minutes.[43]

74. The buckets of minutes in wireless plans also offer consumers benefits in increased certainty of their wireless costs. They get a sizeable number of minutes and a fixed monthly fee, as long as they stay within their package limits. Cost certainty is, of course, greatest with services that offer unlimited usage for a fixed fee. Local and long distance telephone providers offer such fixed fee plans, as do internet access providers.

C. Evaluation of Anticompetitive Explanations

75. The previous section suggests that there are significant efficiencies associated with the bundled packages offered in this industry. In this section, I assess the plausibility of anticompetitive explanations for the bundling practices seen in the telecommunications industry.

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[41] Carl Shapiro & Hal Varian, *Information Rules*, Cambridge, MA., Harvard Business School Press, 1999.

[42] See Cingular rate plans available through "Shop Cingular" at http://www.cingular.com/indexc, Nextel individual and group plans available at http://www.nextel.com/, T-Mobile plans available at http://www.tmobile.com/, Sprint plans available at http://www.sprint.com/, and Verizon plans available at http://www22.verizon.com/wireless/?ID=Home.

[43] Available under "Individual Plans" at http://onlinestorez.cingular.com/cell-phone-service/get-started/shopping_options.jsp;dsessionid=V5TWSG3LQFDLVB4R0HZSFFA?returnURL=/cell-phone-service/wireless-phone-plans/cell-phone-plans.jsp&_requestid=37980.

It is important to note that, in many cases, firms are offering full mixed bundling. For example, consumers can get local and long distance telephone service separately from many providers. Full mixed bundling—the ability to get any good separately—is often viewed as the remedy in tying cases.[44] This alone suggests that it is unlikely that these practices are likely to be anticompetitive.

76. These discounted packages offered could, however, raise a potential anticompetitive issue if:

1. The discounts amounted to an effective tie (consumers would almost always choose the bundle);
2. Other firms could not offer similar packages;
3. There was a significant likelihood that one firm could drive others out of providing an effectively tied service; and
4. The remaining firm could recoup the losses sustained from any such predatory behavior.

77. If those four conditions were met, then potential offsetting efficiencies would also have to considered. I have considered four main categories of potential "tied" markets that could hypothetically be monopolized by an effective tie: calling services, long-distance telephone services, video services, and broadband internet access. I discuss below why none of the four conditions for potential anticompetitive effect are met for these bundles.

1. Calling Features

78. Calling features, such as caller ID or call waiting, are enhancements to the basic service rather than separate products. It is infeasible for a customer to get local telephone service

[44] For example, the remedy sought by the European Commission in its case against Microsoft's inclusion of Windows Media Player in Windows is for Microsoft to offer a version of Windows without Windows Media Player.

from one provider and calling features from another. For example, Comcast does not sell calling features to Verizon subscribers, or vice versa. There is therefore no market consisting of calling features, separate from local telephone service, let alone one that is a plausible tied market that could be monopolized. Moreover, land-line, wireless, and VoIP providers all offer similar calling features, so there is no provider that is disadvantaged by an inability to offer calling features.

2. Long Distance Service

79. Telephone providers do not typically require customers to purchase both local and long distance service from the same company. Customers can typically buy local service from land-line, wireless, and VoIP providers without buying long distance service.[45] These firms do typically offer discounted packages of local and long distance serviced. These discounts can only raise a potential anticompetitive issue if the four conditions listed above are met, which they are not.

80. First, the existence of the discounted package does not mean that all consumers buy local and long distance service from the same provider. For example, many consumers buy land-line local service from one provider and land-line long distance service from another. Other consumers may use land-line for local service and wireless for long distance.

81. Second, discounts for buying bundles of local and long distance service are common from all providers—land-line, wireless, and VoIP. One firm's discounted package does not therefore prevent other firms from competing for customers.

[45] The limited exceptions I am aware of in the providers I discuss above are Trinsic, whose base local plan includes 50 minutes of long distance service; and Vonage, whose base local plan includes 500 long distance minutes.

82. Third, it is unlikely that any firm could monopolize the provision of long distance services. For example, in the Boston area, customers can choose from over 100 land-line long distance providers.[46] They can also use long distance services from wireless companies and VoIP providers. Many customers might prefer to get both local and long distance service from one company—for example, because of the one stop shopping benefits discussed above. They can shop around among different providers. It is implausible that one firm could offer sufficiently low package prices to drive other long distance providers from its service areas. The capacity to provide land-line, wireless and VoIP long distance service has already been sunk. Having made those investments, firms are unlikely to exit.

83. And fourth, even if competitors could hypothetically be driven out, recoupment is similarly implausible. As with any potential predation, there would be losses from setting below cost prices in the short run—and consumers would benefit. There is no likelihood that a firm could recoup those losses. Even if other long distance providers were to temporarily exit, given their existing capacity they could and would quickly re-enter when any attempt at recoupment is made.

3. Video Services

84. Television providers do not typically require customers to purchase other services they sell, such as broadband internet access or telephone services. Cable providers commonly offer discounts for bundled packages. Comcast, for example, offers a $20 monthly discount to customers who subscribe to both cable television and cable modem services, and a $10 monthly discount for customers who subscribe to both cable television and telephone service. RCN also

[46] See, for example, the number of long distance carriers available for customers purchasing residential service from Verizon. Available through http://www22.verizon.com/.

offers discounted packages of cable television with cable modem and/or telephone service.[47] Similarly, DirecTV also has a partnership with Verizon, under which Verizon Regional and Freedom plan customers receive a $5 monthly discount. The analysis of potential anticompetitive effects differs for the bundles offered by the cable companies versus that offered by DirecTV and Verizon.

85. For DirecTV/Verizon, the discounts can only raise a potential anticompetitive issue if the four conditions listed above are met, which they are not. First, most Verizon telephone customers do not subscribe to DirecTV. Second, cable companies offer similar bundles of video and telephone services to consumers. As noted above, the DirecTV/Verizon partnership was in part a response to the bundled packages offered by cable providers. Third, it is implausible that DirecTV and Verizon could monopolize the provision of television services through this discount plan. There is no likelihood that DirecTV will achieve anything approaching a monopoly position. DirecTV is significantly smaller than its cable competitors.[48] And even if DirecTV could monopolize the provision of television services, there is no likelihood that it could recoup its losses. As with telephone services, much of the cost of providing cable television is from infrastructure with sunk costs. Cable television providers would therefore quickly re-enter if any attempt at recoupment is made.

86. The analysis differs in regards to cable companies. The standard claim of tying is that a firm is extending monopoly power from the already monopolized tying product to the

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[47] Various bundle options are available at http://www.rcn.com/.

[48] As of June 2004, cable companies had a 72 percent share among multichannel video programming distribution providers, compared to a 25 percent share for satellite companies. See Eleventh Annual Report *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Federal Communications Commission, MB Docket No. 04-227, February 4, 2005, p. 4.

otherwise competitive tied product. The cable companies' core service has historically been cable television, so it would not appear plausible as a market they are seeking to monopolize through tying.

4. Broadband Internet Access

87. Some broadband internet access providers do not require customers to purchase other services they sell. For example, cable modem access is often available without buying cable television service, although discounts are offered for the bundled packages. For example, in the Boston area, Comcast cable modem service is about 35 percent higher to non-cable TV subscribers than to subscribers ($57.95 to $42.95). The $15 difference is greater than the cost of the required base level of Verizon local telephone service required to get DSL. And, as discussed above, Verizon's DSL customers can cancel their Verizon phone service while keeping their standalone DSL service.

88. Some local exchange carriers require customers to get local telephone service in order to get DSL. In those circumstances where a customer must take local phone service to get DSL broadband access, there is no potential for this tie to have anticompetitive effects.

89. As noted above, the standard tying claim is that a firm is extending monopoly power from the already monopolized tying product to the otherwise competitive tied product. That is implausible here as DSL faces very substantial competition among broadband providers. As the Commission has observed, "the competitive nature of the broadband market, including new entrants using new technologies, is driving broadband providers to offer increasingly faster

service at the same or even lower retail prices."[49] The Commission has also rejected arguments that "BOCs either are not subject to competition with respect to their broadband offerings, or are constrained only by a duopolistic relationship with cable operators. . . . broadband technologies are developing and we expect intermodal competition to become increasingly robust, including providers using platforms such as satellite, power lines, and fixed and mobile wireless in addition to the cable providers and BOCs."[50]

90. Cable modem service accounts for more than 61 percent of residential and small business customers receiving download speeds of 200 Kbps and 83 percent of customers that receive more than 200 Kbps in both directions.[51] It is implausible that Verizon or other local exchange carriers have any market power in DSL to leverage to another market.

91. Moreover, given the competition in broadband internet access it would also appear implausible that the tie here could foreclose these competitors—many of whom are large and well-capitalized firms—from selling broadband. Comcast, for example, has already invested in the infrastructure to provide broadband cable modem service. Much of its costs are sunk. It is implausible that Comcast could be driven out of the broadband business. It is similarly

[49] Fourth Report to Congress, *Availability of Advanced Telecommunications Capability in the United States*, 19 FCC Rcd 20540, 20547 (2004).

[50] Memorandum Opinion and Order *In the Matters of Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c), SBC Communications Inc'.s Petition for Forbearance Under 47 U.S.C. § 160(c), Qwest Communications International Inc. Petition for Forbearance Under 47 U.S.C. § 160(c), and BellSouth Telecommunications, Inc. Petition for Forbearance Under 47 U.S.C. § 160(c)*, Federal Communications Commission, WC Docket No. 01-338, WC Docket No. 03-235, WC Docket No. 03-260, WC Docket No. 04-48, October 27, 2004, ¶ 29; *see also id.* ¶ 22 (the "broadband market is still an emerging and changing market, where . . . the preconditions for monopoly are not present").

[51] *See* Indus. Anal. & Tech. Div., WCB, FCC, *High-Speed Services for Internet Access: Status as of June 30, 2004*, Tables 3 & 4 (Dec. 2004).

implausible that even if local exchange carriers could drive out competitors such as Comcast, they could then raise prices without the reentry of these competitors.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

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BIO/SUMMARY

David Evans is an authority on the economics of high-technology and platform-based businesses, primarily as it relates to competition policy and intellectual property. He is the author of four books and more than 70 articles in journals ranging from the American Economic Review, Foreign Affairs, and The Yale Journal on Regulation. His many opinion pieces have appeared in newspapers around the world including the Washington Post, Wall Street Journal, Financial Times, Les Echos, and El Pais. A specialist on competition policy in the US and European Union, a topic on which he has written and lectured extensively, he has served as an expert and testified before courts, arbitrators, regulatory authorities and legislatures in the US and Europe. He has led the economic analysis in several important antitrust cases over the last 25 years including US v AT&T. Most recently, Dr. Evans has led an international economic team on a landmark series of cases involving a large global technology firm in the US and Europe.

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Books
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Microsoft, Antitrust and the New Economy: Selected Essays (New York: Kluwer Academic Publishers, 2002), editor.
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CERTIFICATE OF SERVICE

I hereby certify that, on the 31st day of July 2006, I caused a copy of the foregoing Comments of Verizon to be served upon the parties on the service list below by first-class mail, postage prepaid.

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