

The Costs and Benefits of Separating Wireless Telephone Service From Handset Sales and Imposing Network Neutrality Obligations

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ABSTRACT

Wireless operators in most nations qualify for streamlined regulation when providing telecommunications services and even less government oversight when providing information services, entertainment and electronic publishing. In the United States, Congressional legislation, real or perceived competition and regulator discomfort with ventures that provide both regulated and largely unregulated services contribute to the view that the Federal Communications Commission (“FCC”) has no significant regulatory mandate to safeguard the public interest. Such a hands off approach made sense when cellular radiotelephone carriers primarily offered voice and text messaging services in a marketplace with six or more facilities-based competitors in most metropolitan areas.

However the wireless industry has become significantly more concentrated even as wireless networking increasingly serves as a key medium for accessing a broad array of information, communications and entertainment (“ICE”) services. As wireless ventures plan and install next generation networks (“NGNs”), these carriers expect to offer a diverse array of ICE services, including Internet access, free from common carrier regulatory responsibilities that nominally still apply to telecommunications services. Wireless carrier managers reject the need for governments to ensure consumers safeguards such as nondiscriminatory access and separating the sale of radiotelephone handsets from carrier services. Indeed the carriers claim

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that any network neutrality responsibilities would create disincentives for NGN investment and have no place in a competitive marketplace.

This article will examine the costs and benefits of government-imposed wireless network neutrality rules with an eye toward examining the lawfulness and need for such safeguards. The paper will consider the difference between wireless network neutrality and an earlier debate about neutral Internet access via wired networks. For example, wireless network neutrality includes consideration of separating Internet access equipment from Internet services, an unbundling principle established for wired networks decades ago. Because wireless carriers package subsidized handset sales often with a blend of ICE services and consumers welcome the opportunity to use and replace increasingly sophisticated handsets, regulators have refrained from ordering handset unbundling. But for other services, such as cable television, the FCC has pursued public safeguards that attempt to allow consumers the opportunity to access only desired content using least cost equipment options.

The article also examines why wireless carriers could avoid becoming involved in a network neutrality debate for several years, despite the fact that their common carrier status, vis a vis voice services, provides a statutorily supported basis for imposing nondiscrimination responsibilities. The article concludes that the rising importance of wireless networking for most ICE services and growing consumer disenchantment with carrier-imposed restrictions on handset versatility and wireless network access will trigger closer regulatory scrutiny of the public interest benefits accruing from wireless network neutrality.

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I. Introduction

Wireless operators in most nations qualify for streamlined regulation ¹ when providing telecommunications services ² and even less government oversight when providing a converging blend of information services, ³ entertainment and electronic publishing. ⁴ In the United States, Congressional legislation, ⁵ real or perceived competition and a dichotomy between regulated

¹ “Developments in broadband and mobile technologies are resolving several issues related to the natural monopoly characteristics of traditional [public switched telephone networks] PSTNs. Economically viable alternatives in the form of mobile networks and end-to-end fibre-based networks are dissipating the PSTN’s last mile network access bottleneck. . . .” Dr. Andy Banerjee and Dr. Gary Madden, Regulatory Trends: New Enabling Environment, International Telecommunication Union, Background Paper, Document No. FoV/03, p. 232, 2007); available at: <http://www.itu.int/osg/spu/ni/voice/papers/FoV-Madden-Banerjee-Tan-Draft.pdf>.

² The Communications Act of 1934, as amended, defines telecommunications as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(43). Telecommunications service means “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” 47 U.S.C. § 153(46). The Communications Act defines telecommunications carrier as “any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in section 226). A telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services, except that the Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.” 47 U.S.C. § 153(44).

³ Information service is defined as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” 47 U.S.C. § 153(20).

⁴ See International Telecommunication Union, ITU New Initiatives Programme: The Regulatory Environment for Future Mobile Multimedia Services, Worldwide Web Site; available at: <http://www.itu.int/osg/spu/ni/multimobile/index.html>.

⁵ Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312, Pub. L. No. 103-66, Title VI, § 6002(b), amending the Communications Act of 1934 and codified at 47 U.S.C. §332(c) creates a hybrid, streamlined regulatory classification for Commercial Mobile Radio Service Providers, commonly known as cellular telephone carriers. The term “commercial mobile service” is

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telecommunications services and mostly unregulated information services ⁶ contribute to the view that the Federal Communications Commission (“FCC”) has no significant regulatory mandate to safeguard the public interest. Such a hands off approach made sense when cellular radiotelephone carriers primarily supplemented wireline services and offered voice and text messaging services in a

defined by the Communications Act of 1934, as amended (“the Act”), as “any mobile service ... that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by the Commission.” Communications Act § 332(d)(1), 47 U.S.C. § 332(d)(1). “Mobile service” is defined at Section 3 of the Act. Communications Act § 3(27), 47 U.S.C. § 153(27). The term “commercial mobile service” came to be known as the “commercial mobile radio service”. 47 C.F.R. §20.3.

⁶ The FCC interprets the Telecommunications Act of 1996 to create mutually exclusivity between telecommunications services, subject to Title II common carrier regulation, and information services, subject to limited regulation available under Title I. “Congress intended the categories of ‘telecommunications service’ and ‘information service’ to be mutually exclusive.” Federal-State Joint Board On Universal Service, CC Docket No. 96-45 , Report to Congress, 13FCC Rcd. 11501, 13 FCC Rcd. 11830, n. 79 (1998). “Based on our analysis of the statutory definitions, we conclude that an approach in which “telecommunications” and “information service” are mutually exclusive categories is most faithful to both the 1996 Act and the policy goals of competition, deregulation, and universal service.” *Id.* 13FCC Rcd. at 11530 (1998).

“In contrast with the Communications Act, [the Communications Assistance for Law Enforcement Act] CALEA does not define or utilize the term ‘telecommunications service,’ it does not adopt the Communications Act’s narrow definition of “telecommunications,” and it does not construct a definitional framework in which the regulatory treatment of an integrated service depends on its classification into one of two mutually exclusive categories, *i.e.*, telecommunications service or information service. As a result, structural and definitional features of the Communications Act that play a critical role in drawing the Act’s regulatory dividing line between telecommunications service and information service, and that undergird the Commission’s resulting classification of integrated broadband Internet access service as solely an information service for purposes of the Communications Act, are absent from CALEA.” Communications Assistance for Law Enforcement Act and Broadband Access and Services, ET Docket No. 04-295, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd. 14989, 14998 (2005). The lack of an telecommunications service/information service absolute dichotomy provided the basis for the FCC to interpret CALEA to require even information service providers to provide wiretapping cooperation. *See also* Rob Frieden, *Neither Fish Nor Fowl: New Strategies for Selective Regulation of Information Services*, J. TELECOMM. & HIGH TECH. L. (publication pending); available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1004100; *What Do Pizza Delivery and Information Services Have in Common? Lessons From Recent Judicial and Regulatory Struggles with Convergence*, 32 RUTGERS COMP. & TECH. L.J. No. 2, 247-296 (2006).

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marketplace with six or more facilities-based competitors in most metropolitan areas.

However the wireless industry has become significantly more concentrated⁷ even as wireless networking becomes a viable alternative to wireline services and serves as a key medium for accessing a broad array of information, communications and entertainment (“ICE”) services.⁸ As wireless ventures plan and install next generation networks (“NGNs”),⁹ these carriers expect to offer a diverse array of ICE services, including broadband Internet access, free from common carrier regulatory responsibilities that nominally still apply to wireless telecommunications services.¹⁰ Wireless carrier managers reject the need for government to implement consumer

⁷ The top four cellular telephone carriers in the United States have a combined market share of 88.1 percent. Leslie Cauley, *AT&T eager to wield its Weapon*, USA TODAY (May 21, 2007)(displaying statistics compiled by Forrester Research); available at: http://www.usatoday.com/tech/wireless/2007-05-21-at&t-iphone_N.htm.

⁸ “Few doubt that the future of telecommunications will rely mostly on broadband and wireless technologies. Wireless and broadband technologies are transforming the telecommunications market, offering users ubiquitous access to voice, data, and internet services. The number of mobile subscribers has already surpassed that of end-user switched access lines served by local exchange carriers.” National Regulatory Research Institute, *Methods for Analyzing the Effects of Broadband and Wireless Services on Competition in Local Telephony*, Project Announcement; available at: <http://www.nrri.ohio-state.edu/current-projects/telecommunications/methods-for-analyzing-the-impact-of-broadband-and-wireless-services-on/>.

⁹ See International Telecommunication Union, *What Rules for IP-enabled NGNs?*, Workshop, March 23-24, 2006; worldwide website available at: <http://www.itu.int/osg/spu/ngn/event-march-2006.phtml>; see also, International Telecommunication Union, *Background Sources on Delivery of Digital Content*, worldwide website available at http://www.itu.int/osg/spu/stn/digitalcontent/resources_topics.html; Organization for Economic Co-Operation and Development, Directorate for Science Technology and Industry, “Next Generation Networks: Evolution and Policy Considerations”, OECD Foresight Forum, (October 3, 2006); worldwide web site available at: http://www.oecd.org/document/12/0,3343,en_2649_34225_37392780_1_1_1_1,00.html.

¹⁰ Title II of the Communications Act, as amended, 47 U.S.C. §201 *et. seq.* (2007) requires providers of basic telecommunications services to operate on a nondiscriminatory basis, providing services on just and reasonable charges and also subject to numerous entry regulations, tariffing, interconnection, and operating requirements.

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safeguards, including policies that would require wireless carriers to decouple their sale of handsets to subscribers with their delivery of services.

Wireless carriers and some researchers offer more caustic opposition to initiatives that would require nondiscriminatory access, commonly termed wireless network neutrality.¹¹ The carriers claim that wireless network neutrality responsibilities have no place in the currently competitive and

¹¹ Network neutrality refers to the view that the Internet and other telecommunications and information processing networks should remain open, nondiscriminatory and largely managed by users rather than carriers. The principle supports end-to-end connectivity and the kind of access equality provided by “best efforts” network routing of traffic. Opponents of claim the concept would impose common carrier nondiscrimination responsibilities on information service providers, create disincentives for investment in NGN infrastructure and generate regulatory uncertainty. See *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Policy Statement, 20 FCC Rcd 14986 (2005) (articulating network neutrality policy objectives); Rob Frieden, *Internet 3.0: Identifying Problems and Solutions to the Network Neutrality Debate*, 1 INT’L J. OF COMM., 461 (2007); available at: <http://ijoc.org/ojs/index.php/ijoc/article/view/160/86>; Rob Frieden, *Network Neutrality or Bias?--Handicapping the Odds for a Tiered and Branded Internet*, 29 HASTINGS COMM. & ENT. L.J. No. 2, 171-216 (2007); Brett Frischmann & Barbara van Schewick, *Yoo’s Frame and What It Ignores: Network Neutrality and the Economics of an Information Superhighway*, 47 JURIMETRICS J. (forthcoming 2007); Barbara van Schewick, *Towards an Economic Framework for Network Neutrality Regulation*, 5 J. ON TELECOMM. & HIGH TECH. L. (forthcoming 2007); Barbara A. Cherry, *Misusing Network Neutrality to Eliminate Common Carriage Threatens Free Speech and the Postal System*, 33 N. KY. L. REV. 483 (2006); Bill D. Herman, *Opening Bottlenecks: On Behalf Of Mandated Network Neutrality*, 59 FED. COMM. L.J. 103 (Dec., 2006); Craig McTaggart, *Was The Internet Ever Neutral?*, paper presented at the 34th Research Conference on Communication, Information and Internet Policy, George Mason University School of Law, Arlington, Virginia (rev. Sep. 30, 2006); available at: <http://web.si.umich.edu/tprc/papers/2006/593/mctaggart-tprc06rev.pdf>; Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. TELECOM & HIGH TECH L. 141 (2005); available at: <http://ssrn.com/abstract=388863>; J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet*, 2 J. COMP. L. & ECON. No. 3, 349 (2006); Christopher S. Yoo, *Network Neutrality and the Economics of Congestion*, 94 GEO. L.J. 1847 (June, 2006); Adam Thierer, *Are ‘Dumb Pipe’ Mandates Smart Public Policy? Vertical Integration, Net Neutrality, and the Network Layers Model*, 3 J. Telecomm. & High Tech. L. 275 (2005); Christopher S. Yoo, *Beyond Network Neutrality*, 19 HARVARD J. L. & TECH. (Fall 2005); Christopher S. Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate*, 3 J. ON TELECOMM. & HIGH TECH. L. 23 (2004). Mark A. Lemley and Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. Rev. 925 (2001).

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innovative wireless marketplace, would create disincentives for NGN investment, and would generate regulatory uncertainty.

This paper will examine the costs and benefits of government-imposed rules that would mandate the right of subscribers to attach any technically compatible handset to wireless networks, as well as broader wireless network neutrality rules. The paper will examine whether and how liberalized wireless handset attachment rules jibe with policies announced decades ago by the FCC in its *Carterfone* decision¹² and related orders that mandated the decoupling of wireline handset rentals, inside wiring installation and maintenance¹³ and telephone service. Additionally the paper will consider the broader wireless network neutrality debate with an eye toward identifying differences in the factors and issues raised by the earlier established debate about neutral Internet access via wired networks.

¹² Use of the Carterfone Device in Message Toll Telephone Service; Thomas F. Carter and Carter Electronics Corp., Dallas, Tex. (Complainants), v. American Telephone And Telegraph Co., Associated Bell System Companies, Southwestern Bell Telephone Co., And General Telephone Co. Of The Southwest (Defendants), Decision, 13 F.C.C.2d 420 (1968), *recon. denied*, 14 FCC 2d 571 (1968); *Telerent Leasing Corp. et al.*, 45 FCC 2d 204 (1974), *aff'd sub nom.* North Carolina Utilities Commission v. FCC, 537 F.2d 787 (4th Cir. 1976), *cert. denied*, 429 U.S. 1027 (1976); *Mebane Home Telephone Co.*, 53 FCC 2d 473 (1975), *aff'd sub nom.* *Mebane Home Telephone Co. v. FCC*, 535 F.2d 1324 (D.C. Cir. 1976). *See also*, *Public Utility Comm'n of Texas v. FCC*, 886 F. 2d 1325 (D.C. Cir. 1989) (noting long established FCC policy that carriers and non-carriers alike have a federal right to interconnect to the public telephone network in ways that are privately beneficial if they are not publicly detrimental).

Previous FCC opposition to this principle failed to pass muster with a reviewing court that interpreted the Communications Act as mandating the right of consumers to attach equipment to the network in ways that were privately beneficial but not publicly harmful. *Hush-A-Phone Corp. v. U.S.*, 238 F. 2d 266 (D.C. Cir. 1956).

¹³ *Detariffing the Installation and Maintenance of Inside Wiring*, 51 Fed.Reg. 8498 (Mar. 12, 1986) (Second Report and Order), *recon.*, 1 FCC Rcd 1190 (1986), *further recon.*, 3 FCC Rcd 1719 (1988), partially remanded sub nom. *National Association of Regulatory Utility Commissioners v. FCC*, 880 F.2d 422 (D.C.Cir.1989); *on remand*, *Detariffing the Installation and Maintenance of Inside Wiring*, Second Further Notice of Proposed Rulemaking, 5 FCC Rcd. 3407 (1990), *partially modified*, 7 FCC Rcd. 1334 (1992).

For example, most wireless consumers currently appear to welcome the opportunity to use increasingly sophisticated handsets at subsidized sale prices to access a blend of ICE services, while before the FCC implemented its *Carterfone* policy wireline consumers objected to limited choices and having to pay a package monthly rate that obscured the fact that they overcompensated carriers for handset rentals. But for other services, such as video programming, the FCC, largely on its own accord, has pursued regulatory safeguards that accord consumers the opportunity to access only desired content using least cost equipment options, including an exemption from having to rent operator-supplied set top converter boxes.

The paper also examines why wireless carriers could avoid becoming involved in a debate over consumer handset attachment rights and network neutrality for several years, despite the fact that their common carrier status, vis a vis voice services, provides a basis for imposing nondiscrimination responsibilities that do not apply to Internet access provided by wireline telephone companies and cable television operators. The paper concludes that the rising importance of wireless networking for most ICE services and growing consumer disenchantment with carrier-imposed restrictions on handset versatility¹⁴ will trigger civil litigation on antitrust and consumer protection grounds,¹⁵ as well as Congressional¹⁶ and FCC consideration of the public interest

¹⁴ “Increasingly, phone handsets are as much a window into online lives as our computers are, storing text, email messages, music, and even video for us. With phones becoming more complex and expensive, the concept that consumers have to throw those experiences away if they want to change their carrier is as absurd as forcing them to throw away their computer if they change Internet provider. And consumers are smart enough to know this.” Carl Howe, Seeking Alpha, Time For Wireless Carriers to 'Unlock' Customer Handsets, (Dec. 7, 2006); available at: <http://seekingalpha.com/article/21976-time-for-wireless-carriers-to-unlock-customer-handsets>.

¹⁵ See, e.g., Elena Malykhina, California Court Lets Class-Action Suit Against T-Mobile Go Forward, INFORMATIONWEEK ONLINE, (Oct. 15, 2007); available at: <http://www.informationweek.com/showArticle.jhtml?articleID=202402978>;

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benefits accruing from applying *Carterfone* policies to wireless handset sales and possibly selective application of wireless net neutrality principles.

Consumers can expect wireless carriers to loosen some restrictions and financial penalties¹⁷ to avoid laws and regulations requiring more. However, significant regulatory relief may not occur in light of the FCC's perceptions about the competitiveness of the wireless marketplace¹⁸ and the Commission's apparent inability to manage a dual regulatory regime for ventures that provide both regulated telecommunications services and lightly regulated information services.

II. Wireless *Carterfone* and Network Neutrality Initiatives

For several years the debate about network neutrality did not include wireless carriers, despite the fact that they operate as common carriers when providing telecommunications services. The lack of interest may have resulted from the fact that most wireless subscribers currently use their handsets for voice telephony and text messaging and the view that regular opportunities to buy

Olga Kharif, *Cell-Phone Contract Disputes Heat Up*, BUSINESSWEEK ONLINE, (Aug. 20, 2007); available at: http://www.businessweek.com/technology/content/aug2007/tc20070820_113598.htm?chan=search.

¹⁶ See, e.g., 110th Congress, 1st Sess., Cell Phone Consumer Empowerment Act of 2007, S. 2033 available at: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s2033is.txt.pdf.

¹⁷ Elena Malykhina, *AT&T To Drop Early Termination Fees*, INFORMATIONWEEK ONLINE, (Oct. 16, 2007); available at: [http://www.informationweek.com/news/showArticle.jhtml?articleID=202403410\(announcing](http://www.informationweek.com/news/showArticle.jhtml?articleID=202403410(announcing) that some future contracts will prorate early termination fees over a two year period).

¹⁸ See, e.g., Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Eleventh Report, WT Docket No. 06-17, FCC 06-142 (rel. Sep. 29, 2006); available at: http://wireless.fcc.gov/index.htm?job=cmrs_reports#d36e98.

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handsets at subsidized rates make palatable a two year lock in with high early termination fees¹⁹ and carrier control over the features and functions available from the subsidized handset. Consumers may grow displeased with limitations on handsets as the device becomes an increasingly essential interface for access to many diverse wireless NGN services. In advance of such demand side advocacy, a petition filed by Skype,²⁰ a major Voice over the Internet Protocol (“VoIP”)²¹ provider

¹⁹ For an explanation of the rationale for imposing early termination fees, see Declaration of Harold W. Furchtgott-Roth, CTIA Petition for Expedited Declaratory Ruling on Early Termination Fees, FCC WT Docket No. 05-194 (June 6, 2006); available at: http://files.ctia.org/pdf/PositionPaper_Furchtgott_Roth ETF.pdf.

²⁰ Skype Communications S.A.R.L., Petition to Confirm a Consumer’s Right to Use Internet Communications Software and Attach Devices to Wireless Networks, submitted Feb. 20, 2007; available at: http://download.skype.com/share/skype_fcc_200702.pdf.

²¹ Voice over the Internet Protocol (“VoIP”) offers voice communications capabilities, much like ordinary telephone service, using the packet switched Internet, for all or part of the link between call originator and call recipient. VoIP calls originating or terminating over the standard, dial up telephone network require conversion from or to the standard telephone network’s architecture that creates a dedicated “circuit-switched” link, as opposed to the ad hoc, “best efforts” packet switching used in the Internet. See Mark C. Del Bianco, *Voices Past: The Present and Future of VoIP Regulation*, 14 COMMLAW CONSPECTUS 365 (2006); Robert Cannon, *State Regulatory Approaches to VoIP: Policy, Implementation, and Outcome*, 57 FED. COMM. L.J. 479 (May, 2005); Sunny Lu, Note, *Cellco Partnership v. FCC & Vonage Holdings Corp. v. Minnesota Public Utilities Commission: VoIP’s Shifting Legal and Political Landscape*, 20 BERKELEY TECH. L.J. 859, 862 (2005); Chérie R. Kiser & Angela F. Collins, *Regulation on the Horizon: Are Regulators Poised to Address the Status of IP Telephony?*, 11 CommLaw Conspectus 19 (2003); Robert M. Frieden, *Dialing for Dollars: Should the FCC Regulate Internet Telephony?*, 23 RUTGERS COMPUTER & TECH. L.J. 47, 47-79 (1997).

For technical background on how VoIP works see Intel, White Paper, *IP Telephony Basics*, available at: http://www.intel.com/network/csp/resources/white_papers/4070web.htm; Susan Spradley and Alan Stoddard, Tutorial on Technical Challenges Associated with the Evolution to VoIP, Power Point Presentation, available at: http://www.fcc.gov/oet/tutorial/9-22-03_voip-final_slides_only.ppt. See also, Jerry Ellig and Alastair Walling, *Regulatory Status of VoIP in the Post-Brand X World*, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 89 (No. 2006); Amy L. Leisinger, *If It Looks Like a Duck: The Need for Regulatory Parity in VoIP Telephony*, 45 WASHBURN L.J. 585 (Spring, 2006); Mark C. Del Bianco, *Voices Past: The Present and Future of VoIP Regulation*, 14 COMMLCON 365 (2006); R. Alex DuFour, *Voice Over Internet Protocol: Ending Uncertainty and Promoting Innovation Through a Regulatory Framework*, 13 COMMLCON 471 (2005); Stephen E. Blythe, *The Regulation of Voice-Over-Internet-Protocol in the United States, the European Union, and the United Kingdom*, 5 J. HIGH TECH. L. 161(2005).

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owned by eBay, widespread advocacy for network neutrality by Google,²² and a paper written by Columbia law professor Tim Wu²³ heretofore have stimulated a largely political and academic debate.

Skype sought confirmation by the FCC that consumers have a legal and enforceable right to attach devices to wireless networks and to access any software, application or content of their choosing. Long ago the FCC determined that wireline carrier subscribers have such rights, provided their access cause no technical harm to carrier networks. As a result of the FCC's *Carterfone* decision and subsequent orders, telecommunications services have no direct coupling or linkage with subscribers' acquisition of telephone handsets and other devices, such as facsimile machines, modems and personal computers. Telephone companies used to bundle telephone handset rentals, customer premises inside wiring installation and maintenance and telephone service. Consumers had no way of knowing the actual cost of each category, nor could they opt out and procure and use their own telephones and premise wiring. When the FCC ordered the unbundling of telephone service from wiring and accessing devices, a competitive market evolved for both the installation of premises wiring and for devices that attach to telecommunications networks.²⁴ Consumers now take

²² Google's interest in wireless net neutrality appears to stem from its possible interest in using wireless spectrum and offering a wireless handset to promote greater access to its Internet services. See Google Public Policy Blog, Network Neutrality; available at: <http://googlepublicpolicy.blogspot.com/search/label/Net%20Neutrality>.

²³ Tim Wu, Wireless Net Neutrality: Cellular Carterfone and Consumer Choice in Mobile Broadband, New America Foundation, Working Paper (Feb 15, 2007); available at: http://www.newamerica.net/publications/policy/wireless_net_neutrality.

²⁴ "The benefits of competition have been observed in a great variety of markets through centuries of experience. We ourselves have observed such tangible benefits in telecommunications equipment markets after our *Carterfone* decision effectively opened such markets to competition. In Docket No. 20003-a broad fact-finding inquiry into the economic implications and relationships

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for granted the legal “right” to possess and connect their own telephone to wired telecommunications networks.

The FCC never has stated that its *Carterfone* decision and its conceptualization of network neutrality apply equally to wireless carriers when providing telecommunications services. Absent such an affirmative declaration by the FCC, wireless carriers and “big box” store agent sell most wireless radiotelephones at the same time as consumers acquire or renew cellular telephone service.²⁵ Wireless carriers currently offer no discount service plans for subscribers who bring their own handset and do not trigger any subsidy requirement. Without such a discount on service consumers have no incentive to make do with an older handset in exchange for cheaper telecommunications services rates. Accordingly consumers regularly renew service at the same time as they replace their handsets, and the contract for such bundled service includes language permitting the carrier to disable equipment features and limit the manner in which subscribers access third party content, services and applications.

When most subscribers anticipate using their cellphones for voice and text messaging,

arising from regulatory policies and pricing practices for telecommunications services and facilities subject to competition—we concluded that ‘consumer inter-connection has benefited the general public by speeding innovation and meeting needs that were unmet prior to the introduction of customer provided equipment.’” MTS and WATS Market Structure, CC Docket No. 78-72, Report and Third Supplemental Notice of Inquiry and Proposed Rulemaking, ¶106 (1980) (*citing* Economic Implications and Interrelationships Arising From Policies and Practices Relating to Customer Interconnection, Jurisdictional Separations and Rate Structures, Docket No. 20003, Second Report 75 FCC 2d 506, 562 (1980).

²⁵ “The carrier retail channel still accounts for the large majority of wireless sales; however, the distribution support provided by indirect channel partners keeps getting stronger . . . Verizon Wireless has been shifting focus to its own retail outlets that account for 65% of new sales.” A. Greengart and B. Akyuz, *Current Analysis, Consumer Handsets, Mobile Devices--U.S.*, 2-3 (2006); available at: <http://www.currentanalysis.com/k/files/CurrentAnalysis-MA569.pdf>.

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carriers offered a compelling value proposition of “free” or low priced handsets in exchange for a two year service commitment. Only recently have cellphone subscribers begun to identify the foregone or limited options resulting from this decision, including early purchasers of Apple’s iPhone who received no subsidy, and who acquired a phone usable on only one carrier’s network and unable to provide access to, and use of software, applications and content otherwise accessible via wired and some other wireless networks.²⁶

The Skype Petition invited the FCC to state explicitly that consumers have an unfettered right to use any technically compatible handset to access any wireless carrier’s network and to use that handset to access any available service, including ones the telecommunications provider would prefer subscribers not access, or acquire only on terms and conditions set by the carrier. In other words the Skype Petition seeks an FCC declaration that absent a compelling technical justification, wireless carriers cannot sell locked handsets that only access the network and services of the wireless carrier and cannot access services, software and content by other wireless carriers and third parties.

Columbia law professor Tim Wu energized pro-wireless net neutrality advocates with a

²⁶ “Of the 1.4 million iPhones sold so far (of which 1,119,000 were sold in the quarter ending Sept. 30), [Apple Chief Operating Office Timothy] Cook estimated that 250,000 were sold to people who wanted to unlock them from the AT&T network and use them with another carrier.” Saul Hansell, *Apple: \$100 Million Spent on Potential iBricks*, NEW YORK TIMES, Technology, Bits Blog Site, (Oct. 22, 2007); available at: <http://bits.blogs.nytimes.com/tag/iphone/>.

“You bought the iPhone, you paid for it, but now Apple is telling you how you have to use it, and if you don’t do things the way they say, they’re going to lock it. Turn it into a useless ‘brick’ Is this any way to treat a customer? Apparently, it’s the Steve Jobs way. But some iPhone users are mad as heck, and they’re not going to take it anymore.” Alexander Wolfe, *Apple Users Talking Class-Action Lawsuit Over iPhone Locking*, Wolfe’s Den Blog; available at: http://www.informationweek.com/blog/main/archives/2007/09/iphone_users_ta.html.

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paper identifying instances where applying *Carterfone* principles would serve the public interest and prevent, or limit harmful carrier discrimination. Professor Wu provided several examples of carrier tactics designed to prevent subscribers from easily migrating to competing carriers and from having greater flexibility in accessing third party content and applications. Professor Wu identified the following as examples of net neutrality violations having little if any public safety and welfare justifications:

Locking handsets so that they cannot access competitor networks (by frequency, transmission format, firmware or software); in the U.S. carriers even lock handsets designed to allow multiple carrier access by changing an easily inserted Subscriber Identity Module (“SIM”);

Using firmware “upgrades” to “brick,” i.e., render inoperative, the handset or alternatively disable third party firmware and software;

Disabling handset functions, e.g., bluetooth, Wi-Fi access, Internet browsers, GPS services, and email clients;

Specifying formats for accessing memory, e.g., music, ringtones, and photos;

Creating “walled garden” access to favored video content of affiliates and partners; and

Using proprietary, non-standard interfaces making it difficult for third parties to develop compatible applications and content.

Opponents to wireless net neutrality aggressively have responded to Professor Wu. Robert Hahn, Robert Litan and Hal Singer²⁷ claim that *Carterfone* policy made economic sense only in a vertically integrated, uncompetitive wireline marketplace, and that it would be ill-advised if not illegal for government to receive revenues from wireless service spectrum auction and impose burdensome

²⁷ Robert W. Hahn, Robert E. Litan and Hal J. Singer, *The Economics of “Wireless Net Neutrality,”* AEI-Brookings Joint Center for Regulatory Studies, Related Pub. 07-10 (April, 2007) 1 JOURNAL OF COMPETITION LAW AND ECONOMICS, 53 (2007); available at: <http://jcle.oxfordjournals.org/cgi/reprint/nhm015v1.pdf>; http://papers.ssrn.com/sol3/papers.cfm?abstract_id=983111

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regulatory conditions. Additionally they note that cellphone rates have dropped significantly and consider network restrictions as necessary safeguards for subscriber privacy, protecting the network from technical harm and managing limited bandwidth. The authors suggest that wireless net neutrality advocates should bear the burden of proving market failure in the wireless marketplace and demonstrating how government intervention would accrue greater benefits than costs.

III. FCC Initiatives to Protect Consumers From Mandatory Bundling Arrangements

While the FCC has no apparent plans to endorse or enforce wireless net neutrality, the Commission has established rules for other media designed to protect consumers from incurring higher costs and less flexibility when attaching equipment and when accessing ICE content and services. On several occasions at both the supplier and end user level, the FCC has implemented safeguards that restrict or eliminate requirements that consumers have to pay for services, equipment and content that they do not want, or need as a condition precedent for access to desired services and content.

A. On the Supply Side

The FCC, on its own initiative and to implement a statute, has established operating rules that limit how carriers package services. The Commission also has imposed restrictions on what contractual service terms carriers can impose that have the effect of locking in consumers and foreclosing their ability to take service from a competitor. On the supply side, the FCC requires Commercial Mobile Radio Service (“CMRS”) providers, the official designation for cellular radiotelephone carriers, to facilitate retention of the same telephone number when a subscriber changes carrier services. Such local number portability²⁸ promotes competition by eliminating a

²⁸ “Local number portability (LNP) refers to the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers when switching from

disincentive to shift carriers. Local number portability, as discussed below, requires carriers to cooperate on the basis of telephone numbers that the carriers control and assign. The FCC also promotes consumer access to diverse video content by foreclosing ventures that provide both content and content delivery from stifling competition through exclusive dealing arrangements. Additionally the Commission has imposed a number of service obligations on VoIP providers to ensure that these operators offer essential services.

1. Local Number Portability

The FCC has recognized that if wireless consumers cannot retain a previously assigned telephone number when shifting their business to another carrier, many consumers might refrain from pursuing even a lower cost or better suited service arrangement.²⁹ The Commission requires both wireline³⁰ and wireless carriers³¹ to provide consumers with Local Number Portability

one telecommunications carrier to another. Thus, subscribers can port [i.e., interconnect and hand off traffic] numbers between two CMRS carriers (intramodal porting) or between a CMRS and wireline carrier (intermodal porting).” Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Eleventh Report, 21 FCC Rcd. 10947, 11005 (2006).

²⁹ “The ability of end users to retain their telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of telecommunications services they can choose to purchase. Number portability promotes competition between telecommunications service providers by, among other things, allowing customers to respond to price and service changes without changing their telephone numbers. The resulting competition will benefit all users of telecommunications services. Indeed, competition should foster lower local telephone prices and, consequently, stimulate demand for telecommunications services and increase economic growth.” Telephone Number Portability, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8368 (1996).

³⁰ Section 251(2) of the Communications Act of 1934, as amended, 47 U.S.C. § 251(b)(2). requires each local exchange carrier to provide number portability specified as: “The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.”

³¹ The FCC required CMRS carriers operating in the largest 100 metropolitan statistical areas

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(“LNP”) to promote competition and to eliminate the potential for lock-in resulting from consumer reluctance to change carriers if the shift entails assignment of a new telephone number.

Compulsory LNP requires carriers to coordinate the assignment of telephone numbers and their association with a specific subscriber. While carriers would surely prefer to punish customers who discontinue service by reclaiming the assigned telephone number the FCC requires carriers to cooperate in ways that enable the migrating customer to retain and continue to use the previously assigned telephone number. LNP demonstrates that Congress and the FCC will not always allow carriers unilaterally to establish the terms and conditions under which subscribers access service, particularly since the carriers might deem unnecessary or infeasible network access arrangements that promote competition and enhance consumer welfare.

2. Promoting Competition in Video Program Distribution

The FCC has articulated a longstanding concern about vertical integration by video content creators and distributors in light of the likelihood for harm to consumers. Because cable television companies generate the vast majority of desired video content and control the major medium for distributing the content, the FCC has grave concerns that the cable companies can stifle competition, extract rates above competitive levels from subscribers, favor affiliated content

(MSAs) to offer number portability upon request from a competing carrier by November 24, 2003, having previously extended the deadline by several years. Telephone Number Portability, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352 (1996), First Memorandum Opinion and Order on Reconsideration, 12 FCC Rcd 7236 (1997), Telephone Number Portability, Cellular Telecommunication and Industry Association's Petition for Forbearance from Commercial Mobile Radio Services Number Portability Obligations, WT Docket No. 98-229, Memorandum Opinion and Order, 14 FCC Rcd 3092 (1999), Verizon Wireless Petition for Partial Forbearance from the Commercial Mobile Radio Services Number Portability Obligation, CC Docket No. 95-116, Memorandum Opinion and Order, 17 FCC Rcd. 14972 (2002) (*2002 Forbearance Order*); Telephone Number Portability - Carrier Requests for Clarification of Wireless - Wireless Porting Issues, CC Docket No. 95-116, Memorandum Opinion and Order, 18 FCC Rcd. 20971 (2003). *See also*, 47 C.F.R. § 52.31(a).

providers and stifle the development of new content sources. This concern for the consumer and determination of market failure juxtaposes with the Commission's lack of concern with similarly integrated providers of CMRS.

The FCC released a Report & Order³² that extends the ban of exclusive contracts between vertically integrated programmers and cable operators to October 5, 2012.³³ The Commission determined that vertically integrated programmers still have the ability³⁴ and the incentive³⁵ to favor

³² Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, MB Docket No. 07-29, Report and Order (rel. Oct. 1, 2007), available at: http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-169A1.doc.

³³ “[W]e find that the exclusive contract prohibition continues to be necessary to preserve and protect competition and diversity in the distribution of video programming, and accordingly, retain it again for five years, until October 5, 2012.” *Id.* at ¶1.

³⁴ “What is most significant to our analysis is not the percentage of total available programming that is vertically integrated with cable operators, but rather the popularity of the programming that is vertically integrated and how the inability of competitive MVPDs to access this programming will affect the preservation and protection of competition in the video distribution marketplace. While there has been a decrease since 2002 in the percentage of the most popular programming networks that are vertically integrated, we find that the four largest cable MSOs (Comcast, Time Warner, Cox, and Cablevision) still have an interest in six of the Top 20 satellite-delivered networks as ranked by subscribership, seven of the Top 20 satellite-delivered networks as ranked by prime time ratings, almost half of all RSNs, popular subscription premium networks, such as HBO and Cinemax, and video-on-demand (“VOD”) networks, such as iN DEMAND.” *Id.* at ¶37.

³⁵ “An exclusive arrangement between a cable-affiliated programmer and its affiliated cable operator will reduce the number of platforms distributing the cable-affiliated programming network and thus the total number of subscribers to the network. This results in a reduction in potential advertising or subscription revenues that would otherwise be available to the network. In the long term, however, the cable-affiliated programmer would gain from an increased number of subscribers as customers switch to the affiliated cable distribution service in order to receive the exclusive programming. Thus, an exclusive contract is a kind of “investment,” in which an initial loss of profits from programming is incurred in order to achieve higher profits later from increased cable distribution. This type of arrangement is most profitable when the costs of the investment are low and its benefits are high.” *Id.* at ¶44.

operators with whom they have a corporate affiliation over competitors.³⁶ In light of the FCC's determination that vertically integrated ventures still control, "must see" content, for which no viable substitute exists,³⁷ the Commission retained the prohibition against exclusive content distribution contracts from ventures that vertically integrate content production and distribution to consumers.

The FCC declined to narrow its restriction based on programmer suggestions that the Commission should apply the restriction based on the popularity of the programming network and competitive circumstances occurring in specific geographic areas served by a cable operator.³⁸

³⁶ "We find that access to vertically integrated programming is essential for new entrants in the video marketplace to compete effectively. If the programming offered by a competitive MVPD lacks "must have" programming that is offered by the incumbent cable operator, subscribers will be less likely to switch to the competitive MVPD. We give little weight to the claims by cable operators that recent entrants, such as telephone companies, have not experienced "any trouble" to date in acquiring access to satellite-delivered vertically integrated programming." *Id.* at ¶41.

³⁷ "[W]e conclude that there are no good substitutes for some satellite-delivered vertically integrated programming and that such programming therefore remains necessary for viable competition in the video distribution market." *Id.* at ¶29.

³⁸ "The exclusive contract prohibition in Section 628(c)(2)(D) [of the Communications Act] and the implementing rules pertain to all satellite-delivered programming networks that are vertically integrated with a cable operator, regardless of their popularity." *Id.* at ¶68. "One of the key anticompetitive practices that the exclusive contract prohibition addresses is the practice of leveraging cable's market power collectively by withholding affiliated programming from rival MVPDs while selling the affiliated programming to other cable operators which do not compete with one another. A cable operator may gain by weakening a current or potential rival (such as a DBS operator) even in markets that the cable operator itself does not serve. Thus, proposals to narrow the exclusive contract prohibition by allowing exclusive arrangements outside of the footprint of the affiliated cable operator or with cable operators whose networks pass only a small number of households throughout the nation will impede competition in the video distribution marketplace. We similarly find that allowing exclusive arrangements for affiliated cable operators that face competition from both DBS and telephone companies would harm competition in the video distribution marketplace. We conclude herein that a cable operator will not lose the incentive and ability to enter into an exclusive arrangement in a given geographic area simply because it faces competition from both DBS operators and telephone companies in that area." *Id.* at ¶72.

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Additionally the Commission refused to limit the restriction to conventional cable television operators, which would exclude other multi-channel video programming distributors (“MVPDs”), or to limit the restriction to cable operators that have been in the MVPD market for more than five years, have extensive resources, or have entered into exclusive contracts for programming.³⁹

On the other hand, the FCC declined to expand the exclusive contract prohibition to apply to non-cable-affiliated programming, e.g., content created by vertically integrated DBS operators and new MVPDs such as AT&T and Verizon that offer ICE content via wired and wireless conduits. The Commission also concluded that terrestrially delivered programming lies beyond the scope of the exclusive contract prohibition in Section 628(c)(2)(D) of the Communications Act of 1934, as amended, that applies specifically to content delivered via satellite. However in light of finding that a vertically integrated cable television operator had withheld terrestrially delivered regional sports network content in San Diego and Philadelphia, the FCC sought comment whether to extend the program access rules to all terrestrially delivered cable-affiliated programming.⁴⁰

Despite a clearly articulated preference for marketplace solutions to any conflict, the FCC also proposed to amend its program access complaint procedures with an eye toward promoting

³⁹ “Section 628 makes no distinction among MVPDs of the kind suggested by these commenters. Moreover, we find that adopting such restrictions on the entities that can benefit from the prohibition will limit competition in the video distribution market and will result in no discernible public interest benefits.” *Id.* at ¶74.

⁴⁰ “As demonstrated by the examples of withholding of RSNs in San Diego and Philadelphia, we believe that withholding of terrestrially delivered cable-affiliated programming is a significant concern that can adversely impact competition in the video distribution market. To address this concern, we seek comment on whether it would be appropriate to extend our program access rules to all terrestrially delivered cable-affiliated programming pursuant to Sections 4(i), 201(b), 303(r), 601(6), 612(g), 616(a), 628(b), or 706, or any other provision under the Communications Act.” *Id.* at ¶116.

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efficient resolution of complaints through negotiated dispute settlements. In a Notice of Proposed Rulemaking (“NPRM”) the Commission sought comment on two revisions to the program access complaint procedures. The NRPM sought comment on whether to allow complainants to seek a temporary stay of any proposed changes to existing contracts targeted by a program access complaint. The NPRM also sought comment on creating an arbitration-type step in the complaint process whereby the Commission may request, as part of its evaluation of the appropriate remedy, that the parties submit their best and final proposals for the rates, terms, or conditions under review.

The NPRM also expressed concern about programming tying arrangements where MVPDs must purchase and carry undesired cable network programming in return for the right to carry desired networks. The NPRM sought comment whether the Commission should preclude tying arrangements and require all programming services to be offered on a stand-alone basis to all MVPDs.

The FCC recognizes that vertical integration in video content creation and distribution requires regulatory intervention. CMRS operators operate in a similarly integrated mode. The top two CMRS carriers, AT&T and Verizon, control 53.4% of the wireless market,⁴¹ and are owned by the ventures that have substantial market share in broadband wireline access, e.g., Digital Subscriber Line (“DSL”)⁴² and fiber optic cable links, and wireline telephone service. In addition

⁴¹ Leslie Cauley, *AT&T eager to wield its iWeapon*, USA TODAY (May 21, 2007)(displaying statistics compiled by Forrester Research); available at: http://www.usatoday.com/tech/wireless/2007-05-21-at&t-iphone_N.htm. The top four carriers control 88.1 percent of the wireless telecommunications market.

⁴² Digital Subscriber Links provide Internet access via the copper wires initially used solely to provide narrowband telephone service. Telephone companies retrofit the wires to provide medium speed broadband services by expanding the available bandwidth by about 1500 kiloHertz. The FCC provides the following definition: “Digital Subscriber Line is a technology for bringing high-speed

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to the possible market power accruing from a commanding share of the wireless industry, AT&T/Verizon in conjunction with many other wireless carriers vertically integrate by securing exclusive content distribution rights for carriage via their wireless networks. They horizontally integrate by bundling triple-play⁴³ and quadruple-play service packages⁴⁴ combining wireless service with wireline telephony, Internet access and wireline video program access.

As the Internet increasingly becomes the focal point and preferred medium for all ICE services, ventures such as AT&T and Verizon have great opportunities to leverage their size, vertical integration⁴⁵ and horizontal integration⁴⁶ to offer facilities-based, competitive alternatives to

and high-bandwidth, which is directly proportional to the amount of data transmitted or received per unit time, information to homes and small businesses over ordinary copper telephone lines already installed in hundreds of millions of homes and businesses worldwide. With DSL, consumers and businesses take advantage of having a dedicated, always-on connection to the Internet.” Federal Communications Commission, FCC Consumer Facts, Broadband Access for Consumers, available at: <http://www.fcc.gov/cgb/consumerfacts/dsl2.html>.

⁴³ “[T]raditional phone companies that are primed to offer a ‘triple play’ of voice, high-speed Internet access, and video services over their respective networks.” Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments, Notice of Proposed Rule Making, 22 FCC Rcd. 5935, 5938 (2007).

⁴⁴ The quadruple play refers to the combination of “video, broadband Internet access, VoIP and wireless service . . .” AT&T Inc. and Bellsouth Corporation, Application for Transfer of Control, Memorandum Opinion and Order, 22 FCC Rcd. 5662, 5735 (2007).

⁴⁵ Vertical integration refers to the combination of separate market activities by a single enterprise. For example, the major cable television companies own ventures creating video programming as well as the ventures that distribute such content to consumers. “Vertical relationships may have beneficial effects, or they may deter competitive entry in the video marketplace and/or limit the diversity of programming.” Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Twelfth Annual Report, 21 FCC Rcd. 2503, 2575 (2006). “Beneficial effects can include efficiencies in the production, distribution, and marketing of video programming, and providing incentives to expand channel capacity and create new programming by lowering the risks associated with program production ventures.” *Id.* at n. 565. “Possible detrimental effects can include unfair methods of competition, discriminatory conduct, and exclusive contracts that are the result of coercive activity.” *Id.* at n. 566.

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incumbent providers such as cable television operators. But on the other hand, AT&T and Verizon currently face none of the structural safeguards that the FCC has appropriately placed on vertically integrated cable television ventures. Nothing prevents any CMRS operator, including AT&T and Verizon, from engaging in the anticompetitive practices that the Commission seeks to prevent in the cable television marketplace, a plausible outcome in light of strong incentives for major telephone companies to find and dominate new markets to compensate for declining revenues from core telephony markets. The FCC apparently assumes that having four CMRS operators in a market would prevent any single carrier, or group of colluding carriers from harming consumers by favoring owned or affiliated content providers. Likewise the FCC appears unconcerned about the ability of companies having dominant market share in CMRS, broadband Internet access and wireline telephony to leverage bundled service packages into market dominance in most ICE markets.

3. Public Interest Obligations Imposed on Voice over the Internet Protocol Providers

Ostensibly to serve the public interest the FCC has imposed a number of service obligations on VoIP providers that use software to provide telephone services via wireline

⁴⁶ Horizontal integration occurs when a single company develops, or acquires firms offering the capability of providing, two or more services that may compete in the same relevant market. For example a major newspaper chain may diversify by developing cable television programming or acquire companies that produce such content. Horizontal integration also covers situations where a venture acquires an existing or potential competitor. While such a combination might reduce existing or potential competition, the FCC believes that the merger can diversify available content so that the acquiring firm can offer new, niche programming. “With respect to horizontal integration of a major and emerging television network, the merger should have little or no adverse effect on competition or pricing in the market for television network advertising, since major and emerging networks compete in different strategic groups. To the extent that the emerging network continues to offer programming following the merger that targets niche or special interest audiences, then the welfare of viewers of both mass audience and niche programming should not be adversely affected by the merger and may indeed be advanced by the resulting efficiencies.” Amendment of Section 73.658(G) of the Commission's Rules - The Dual Network Rule, MM Docket No. 00-108, Report and Order, 16 FCC Rcd. 11114, 11125 (2001).

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broadband information services. The Commission's regulatory burdens make VoIP service more like conventional telephony, at the expense of reducing VoIP's competitive cost advantage.⁴⁷

VoIP service providers, which offer subscribers telephone calling access to the conventional wireline public switched telephone network ("PSTN"), must reconfigure their service to provide wiretapping capabilities to law enforcement authorities,⁴⁸ caller location identification and emergency 911 access⁴⁹ and service to disabled users.⁵⁰ Despite extensive rhetoric about refraining from imposing regulation on both emerging technologies and competitive services, the FCC chose not to not allow the marketplace to determine whether considerable service discounts available from VoIP service providers outweigh the greater risk in an emergency and greater inconvenience for some users.

The FCC has imposed costly market countervailing public interest obligations on VoIP operators, because the Commission believes inadequate public access issues warrant speedy administrative remedies. VoIP service providers must reconfigure their networks to provide

⁴⁷ See Rob Frieden, *Neither Fish Nor Fowl: New Strategies for Selective Regulation of Information Services* J. TELECOMM. & HIGH TECH. L. (publication pending); available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1004100;

⁴⁸ Communications Assistance for Law Enforcement Act and Broadband Access And Services, ET Docket No. 04-295, RM-10865, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd. 14989, 15001 (2005)(citations omitted), *aff'd*. American Council on Education v. FCC, 451 F.3d 226 (D.C. Cir. 2006).

⁴⁹ IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers, WC Docket Nos. 04-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245 (2005), *aff'd*, Nuvio Corp. v. FCC, 473 F.3d 302 (D.C. Cir. 2006).

⁵⁰ IP-Enabled Services, WC Docket No. 04-36, Implementation of Sections 255 and 251(A)(2) of the Communications Act Of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment By Persons With Disabilities, Docket No. WT 96-198, FCC 07-110, 2007 WL 1744291 (rel. June 15, 2007).

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additional types of services and access that they had not contemplated, or wished to provide.

Regardless whether VoIP operators consider their services the functional equivalent to existing wireline or wireless services, the FCC has imposed a number of requirements that force closer equivalency. The Commission made no assessment of the financial costs incurred by VoIP providers, or the potential adverse impact on competition and service rates borne by the public. It appears that the FCC elevated public interest concerns over its general predisposition not to fetter with regulatory burdens market entrants having minor market share. Such intervention must have occurred because the Commission identified several instances of market failure, i.e., the inability of market forces to generate outcomes the Commission consider essential to serve the public interest.

B. On the Demand Side: Preventing Purchases of Unwanted Content and Compulsory Equipment Leases

At the end user level, the FCC has established several safeguards designed to help consumers avoid having to pay for content they do not want, or equipment they do not need. The safeguards include preventing cable television operators from requiring consumers to subscribe to one or more tiers of service before qualifying for the opportunity to access desired content such as a premium movie channel. The FCC also requires cable operators to provide service to subscribers who have television sets that can perform content descrambling and other security functions via the insertion of a computer chip card in lieu of using a leased set top converter. The Commission also works to ease a technology transition that requires the acquisition of new equipment, e.g., digital cellphones to replace analog handsets, or the installation of a new converter, e.g., retrofitting analog televisions so that they can display digital signals.

1. Prohibiting Mandatory Cable Tier “Buy Throughs”

Section 3 of the 1992 Cable Act ⁵¹ prohibits cable television operators, operating in a market without effective competition, from requiring subscribers to “buy through” ⁵² intermediate tiers of channel service in order to have the opportunity to access desired content positioned in a higher service tier. This means that consumers do not have to subscribe so-called enhanced basic services, which bundle a variety of cable television programming, before securing the opportunity to view content offered on a per channel or per view basis, such as individual premium channels like Home Box Office.

The Commission also has explored the prospect of allowing consumers to select content on an ala carte, network-by-network basis in lieu of service tiers that contain many channels of content, some of which individual consumers may not want. In a stunning reversal of its previous research and analysis, the FCC now asserts that a la carte access to cable television programs could save many consumers money and would not result in a reduction of television viewership. The Commission

⁵¹ Public Law, 102-385, 106 STAT. 1460, codified at 47 U.S.C. § 543(80(A)). “A cable operator may not require the subscription to any tier other than the basic service tier required by paragraph (7) as a condition of access to video programming offered on a per channel or per program basis. A cable operator may not discriminate between subscribers to the basic service tier and other subscribers with regard to the rates charged for video programming offered on a per channel or per program basis.”

⁵² “The tier buy-through prohibition of the 1992 Cable Act prohibits cable operators from requiring subscribers to purchase a particular service tier, other than the basic service tier, in order to obtain access to video programming offered on a per-channel or per-program basis.” Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation Buy-Through Prohibition, Third Order on Reconsideration, 9 FCC Rcd. 4316, ¶25 (1994). *See also*, Federal Communications Commission, Fact Sheet, Consumer Options for Selecting Cable Channels and the Tier Buy-Through Prohibition, (Feb. 2003); available at: http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-231469A1.pdf.

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released a Further Report on the Packaging and Sale of Video Programming Services to the Public⁵³ to reexamine the conclusions and underlying assumptions of the earlier Media Bureau report on a la carte channel access submitted to Congress in November 2004.⁵⁴ The Commission reported that previous calculations of per channel cable television costs failed to net out the cost of broadcast stations and accordingly overstated costs by as much as 50 percent.

The FCC also abrogated its previous finding that a la carte would cause consumers to watch nearly 25 percent less television, or over two fewer hours of television per day. The Further Report stated no reason to believe that viewers would watch less video programming than they do today simply because they could choose the channels they find most interesting. The Further Report states that “many consumers could be better under an a la carte model.”⁵⁵

2. Mandating an Alternative to Set Top Box Leasing

The FCC also has established rules designed to enable cable television subscribers to access content via “cable ready” television sets⁵⁶ without the expense of having to lease a device, known as a set top converter to provide necessary signal descrambling functions. The FCC generally prohibits

⁵³ Federal Communications Commission, Further Report on the Packaging and Sale of Video Programming Services to the Public (Feb. 9, 2006); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-263740A1.pdf[hereinafter cited as FCC Revised A la Carte Study].

⁵⁴ Federal Communications Commission, *Report on the Packaging and Sale of Video Programming Services to the Public* (November 18, 2004); available at: <http://www.ncta.com/ContentView.aspx?hiddenavlink=true&type=reltyp1&contentid=401>. Cf. Further Report on the Packaging and Sale of Video Programming Services to the Public (Feb. 9, 2006); available at: http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-263740A1.pdf.

⁵⁵ FCC Revised A la Carte Study at ¶3.

⁵⁶ Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97-80, Second Report and Order, 20 FCC Rcd. 6794 (2005).

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cable television companies from offering set top converters that combine security functions, e.g., descrambling, and other features, such as channel selection and navigation, electronic program guides and pay per view, on-demand access to content. The prohibition prevents cable companies from requiring all subscribers to lease set top boxes.⁵⁷ With the integration ban, cable television companies can perform security and digital rights management via a computer chip known as a CableCard that subscribers can insert into most recent vintage television sets.⁵⁸

Several cable operators challenged the FCC's CableCard policy that prohibited the use of one set top converter that integrated both security, and non-security functions. As it had done previously,⁵⁹ the D.C. Circuit Court of Appeals affirmed the Commission on several grounds. The court first refused to consider petitioners' statutory claim that a difference exists between set top converters boxes and other equipment within the context of Section 629(a) of the Communications

⁵⁷ "At the heart of a robust retail market for navigation devices is the reliance of cable operators on the same security technology and conditional access interface that consumer electronics manufacturers must rely on in developing competitive navigation devices. We conclude that a software-oriented conditional access solution may provide a 'common reliance' standard capable of both reducing the costs for set-top boxes and adding significantly to the options that equipment manufacturers now have in using the CableCARD. In balancing our specific statutory requirement to assure commercial availability of navigation devices and our general obligation to facilitate and promote the DTV transition, we conclude that a further extension of the effective date of the prohibition on integrated devices will permit the development of the statutorily required competitive market for navigation devices, with the potential benefit of reducing costs to consumers." *Id.* 20 FCC Rcd. at 6807-08.

⁵⁸ "[A] CableCARD . . . plugs into a slot in a host navigation device, permitting the device to perform both the security and non-security functions." *Charter Communications, Inc. v. Federal Communications Commission*, 460 F.3d 31, 34 (D.C. Cir. 2006) available at: http://www.cesweb.org/shared_files/edm/2006/govalert/DCCircuitAdvanceNewhousevFCCOrder081806.pdf. [hereinafter cited as CableCard Affirmance]

⁵⁹ *See General Instrument Corp. v. FCC*, 213 F.3d 724 (D.C. Cir. 2000)(affirming the FCC's statutory authority to require separation of security and other set top converter functions); *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 13 FCC Rcd 14775, 14806, ¶ 76 (1998).

Act, as amended, which states that the FCC “shall not prohibit any [MVPD] from also offering converter boxes, interactive communications equipment, and other equipment used by consumers to access multi-channel video programming”⁶⁰ The court characterized the petitioners’ claim as arguing “that if integrated set-top boxes are not ‘converter boxes,’ as we held in *General Instrument*, then they must be ‘other equipment,’ a possibility we did not address there. And if integrated boxes are ‘other equipment,’ then section 629(a)’s second sentence prevents the FCC from barring cable operators from offering them.”⁶¹

The court refused to consider this statutory claim on two procedural grounds: 1) that section 629(a) established a 60 day time period for any petitions for review of applicable Commission orders; and 2) that the petitioners never presented this issue for consideration by the FCC and therefore Section 405 of the Communications Act precludes raising the issue on appeal. The court also rejected petitioners’ arguments that changed circumstances so warranted a different outcome that the FCC should have abandoned the nonintegration requirement. Given the fact that while CableCard compatible television sets had become commonplace few consumers use CableCards, the court held “there was nothing unreasonable about the FCC’s conclusion that ‘the competitive reasons that led the Commission to impose the integration ban have not been eliminated by the developments in the market.’”⁶²

Additionally the court rejected the claim that the FCC failed to consider the additional costs

⁶⁰ 47 U.S.C. § 549(a).

⁶¹ Cablecard Affirmance, 460 F.3d at 37-38.

⁶² *Id.* 460 F.3d at 41 *citing* Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, Second Report and Order 20 FCC Rcd 6794 at 6809 ¶ 28 (2005).

cable companies would incur as a result of the ban:

The Commission also took steps to minimize industry costs, both by extending the implementation deadline from 2006 to 2007, and by promising to reconsider eliminating the ban altogether should the cable and consumer electronics industries achieve a downloadable security solution capable of providing common reliance without requiring the physical separation of security and non-security functions.⁶³

The court also rejected the claim that the FCC arbitrarily exempted DBS operators from the integration ban. The court upheld the exemption of DBS operators from the ban based on the criteria established by the Commission: when an MVPD “supports the active use by its subscribers of navigation devices that: (i) operate throughout the continental United States, and (ii) are available from retail outlets . . . throughout the United States that are not affiliated with the [MVPD].”⁶⁴ The court noted that DBS operators have met the requirements while “the vast majority of cable subscribers remain dependent upon non-portable converter boxes available only from their cable companies.”⁶⁵ Lastly the court rejected the cable operators’ claims that increased facilities-based competition, e.g., video program delivery from telephone companies, has created incentives for cable companies to offer consumers every possible equipment alternative:

whatever the theoretical incentives, the FCC found that the real-world result that section 629(a) commanded it to assure—the commercial availability of navigation devices from vendors unaffiliated with MVPDs—has not arrived.⁶⁶

Cable operators have largely thwarted the Congressional mandate that consumers have the option of using alternatives to the operator leased devices. While a competitive market for such

⁶³ *Id.* 460 F.3d at 42

⁶⁴ 47 C.F.R. § 76.1204(a)(2)

⁶⁵ Cablecard Affirmance, 460 F.3d at 43.

⁶⁶ *Id.* 460 F.3d at 44.

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devices has not evolved and few consumers even know about the CableCard option, recent innovations in digital video recorders may incorporate many of the features provided by the cable operators. From recent decisions by the FCC it appears that cable operators will no longer succeed in stalling compliance with Section 629 of the Communications Act.⁶⁷

For instances where consumers must use owned or leased equipment to access services and content, the FCC has taken steps to prevent immediate, “flash cut” obsolescence. For example, the FCC has retained the requirement that CMRS operators continue to provide analog radiotelephone service, despite the fact that for several years all new handsets offer subscribers the ability to access digital services that most carriers prefer to offer.⁶⁸

3. Easing the Financial Consequences from the Complete Conversion to Digital Broadcast Television

The FCC also has undertaken a number of initiatives to ensure that owners of analog television sets can continue to view video content even after all television broadcasters must migrate to digital service. First, the Commission postponed the deadline for the conversion to digital service as a result of slower than anticipated consumer migration to more expensive digital television sets. Second, the Commission and the Commerce Department developed a subsidy program whereby every household in the United States can receive two \$40 coupons for use in buying a converter that will enable the use of analog television sets to display broadcast digital content. Third, the FCC, on

⁶⁷ See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, 20 FCC Rcd 6794, 6802-03, ¶ 13 (2005) *pet. for review denied*, Charter Communications, Inc. v. FCC, 460 F.3d 31 (D.C. Cir. 2006); Comcast Corporation Request for Waiver of Section 76.1204(a)(1) of the Commission’s Rules, Memorandum Opinion and Order, CSR-7012-Z (rel. Jan. 10, 2007); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-07-49A1.doc.

⁶⁸ In similar fashion CMRS operators limit the type of handsets they will allow subscribers to use. While CMRS subscribers may acquire handsets from alternative outlets any compatible device must have the same access limitations as would exist in CMRS operator sold handsets.

its own accord and through television set sellers, broadcasters and cable systems undertook a campaign to alert consumers to the future migration to digital broadcast television. Lastly the Commission has proposed to require cable television operators to convert digital video content back into analog so that subscribers can continue to use television sets lacking the subsidized digital converter.

a. Informing the Public

After granting several extensions of time for broadcasters to continue transmitting in an analog format, the FCC now faces a Congressionally mandated February 17, 2009 deadline for the complete migration to digital transmission.⁶⁹ The Commission recently established frequency band allocation and auctioning rules for the vacated broadcast UHF television spectrum that will generate several billion dollars when auctioned off for additional wireless services.⁷⁰ The FCC now recognizes the need to inform the public that conventional analog television sets will not receive digital transmissions without a converter, or a subscription to an MVPD such as a cable television operator.

Toward the goal of letting public know of the impending change the FCC initiated a Notice of Proposed Rulemaking that seeks comment on potential DTV consumer education initiatives.⁷¹

⁶⁹ Deficit Reduction Act of 2005, Pub. L. No. 109-171, Title III, §§ 3002(a), 3003, 3004, 120 Stat. 21, 22 (“A full-power television broadcast license that authorizes analog television service may not be renewed to authorize such service for a period that extends beyond February 17, 2009.”). See also 47 U.S.C. § 337(e) and 47 U.S.C. § 309(j)(14).

⁷⁰ See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Second Report and Order, FCC 07-132 (rel. Aug. 10, 2007); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-132A1.doc.

⁷¹ DTV Consumer Education Initiative, MB Docket No. 07-148, Notice of Proposed Rulemaking, FCC 07-128 (rel. July 30, 2007); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-128A1.doc.

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The NPRM proposes to require broadcasters, MVPDs, retailers and manufacturers to publicize the digital transition in addition to efforts by the FCC.

The FCC's proposed education campaign has six elements largely designed to notify consumers of the change and what it entails. The Commission proposes to require television broadcast licensees to conduct on-air consumer education efforts including public service announcements. Additionally the FCC would require all MVPDs to include periodic notices about the transition in customer bills, and asks how these notices should be conveyed to customers who rely on electronic or automatic billing. The Commission also proposes to require all manufacturers of "television receivers or related devices," e.g., set top converters and digital video recorders, to include transition information with the devices. Another potential initiative would require that the Commission work with the National Telecommunications and Information Administration to require retailers to participate in a program that provides offers consumers access to government subsidized converter boxes.⁷² The FCC also proposes to require the "Partners" listed on the Commission's DTV.gov page to report their consumer outreach efforts.

b. Must Carry Conversion of Digital Signals to Analog

Even as the FCC strives to achieve the complete conversion to digital television, the

⁷² See Department of Commerce, National Telecommunications and Information Administration, Rules to Implement and Administer a Coupon Program for Digital-to-Analog Converter Boxes, Docket Number: 0612242667-7051-01 Final Rule, 47 C.F.R. 301,72 Fed. Reg. No. 50, 12097(March 15, 2007); available at: http://www.ntia.doc.gov/ntiahome/frnotices/2007/DTVCouponFinalRule_031207.pdf; See also, Media Release, Commerce Department Issues Final Rule To Launch Digital-to-Analog Converter Box Coupon Program (March 12, 2007) (announcing a program granting all U.S. households access to two \$40 coupons that can be used toward the purchase of digital-to-analog converter boxes Starting January 2008); available at: http://www.ntia.doc.gov/ntiahome/press/2007/DTVfinalrule_031207.htm.

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Commission has proposed to require cable operators to continue delivering analog signals of broadcast stations after the February 17, 2009 conversion deadline.⁷³ In assessing the post digital conversion, must carry obligations of cable operators,⁷⁴ the Commission considers it in the public interest for cable operators to downconvert must carry broadcast station content:

we propose that cable operators must comply with this “viewability” provision and ensure that cable subscribers with analog television sets are able to continue to view all must-carry stations after the end of the DTV transition by either: (1) carrying the digital signal in analog format, or (2) carrying the signal only in digital format, provided that all subscribers have the necessary equipment to view the broadcast content. In the absence of such a requirement, analog cable subscribers (currently about 50% of all cable subscribers, or approximately 32 million house holds) would no longer be able to view commercial must-carry stations or non-commercial stations after February 17, 2009. We believe such an outcome would adversely impact the DTV transition and would unduly burden millions of consumers.⁷⁵

On the other hand the Commission reiterated that cable operators must not downgrade high definition broadcast retransmissions.⁷⁶

Ironically the Commission does not appear to follow consistently its prohibition on signal

⁷³ Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission’s Rules, CS Docket No. 98-120, Second Further Notice Of Proposed Rulemaking, FCC 07-71 (rel. May 4, 2007); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-71A1.doc[hereinafter cited as DTV Must Carry 2d FNPRM]

⁷⁴ Section 614(b)(4)(B) of the Communications Act of 1934, *codified at*, 47 U.S.C. § 534(b)(4)(B), directs the FCC to revise the mandatory signal carriage rules to reflect changes necessitated by the transition from analog to digital broadcasting.

⁷⁵ DTV Must Carry 2d FNPRM at ¶4.

⁷⁶ “The prohibition against material degradation ensures that cable subscribers who invest in a HDTV are not denied the ability to view broadcast signals transmitted in this improved format.” DTV Must Carry 2d FNPRM at ¶5.

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degradation by cable operators. On one hand cable operators cannot degrade must carry broadcast high definition television signals by delivering a signal with lower resolution, but on the other hand the FCC proposes to require cable operators to degrade digital signals and convert them into the inferior analog format that offers lower resolution than the digital signal.⁷⁷ The Commission proposes a stringent test to ensure no degradation of high definition signals and no discrimination against broadcast high definition signals vis a vis cable network high definition signals:

we previously determined . . . that a broadcast signal delivered to the cable headend in HD must be carried in HD in order to comply with the prohibition on material degradation. We continue to require such carriage and reiterate that requirement. We now propose revisions to the material degradation requirements . . . with respect to carriage of bits in the broadcast signal. Specifically, we propose to move from a subjective to objective measure.⁷⁸

The Commission's objective measure would replace a general nondiscrimination obligation with an explicit requirement that cable operators retransmit broadcast high definition content on a bit-by-bit basis, without compression.

IV. Does the FCC Have Jurisdiction to Impose Wireless *Carterfone* and Net Neutrality Rules?

CMRS operators provide both regulated common carrier telecommunications services and lightly regulated information services, e.g, broadband Internet access.⁷⁹ The combination of

⁷⁷ "In other words, the signal must be "viewable" on all television sets connected to the cable provider's system." DTV Must Carry 2d FNPRM at ¶17.

⁷⁸ DTV Must Carry 2d FNPRM at ¶12, *citing Carriage of Digital Television Broadcast Signals*, etc., CS Docket No. 98-120, First Report and Order and First Notice of Proposed Rulemaking, 16 FCC Rcd 2598 (2001).

⁷⁹ *See* Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, Declaratory Ruling, WT Docket No. 07-53, FCC 07-30 (rel. March 23, 2007); available at: http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-30A1.pdf.

regulatory classifications has the potential to cause uncertainty as to how far the common carrier designation extends for two reasons. First, the FCC has expressed a preference for making either/or regulatory classifications of services that combine telecommunications and information services.⁸⁰ The Commission strongly prefers to shoehorn any and all converged services into the lightly regulated information services “safe harbor,”⁸¹ including wireless broadband Internet access. Second, both Congress and the FCC consider even core wireless telecommunications services as qualifying for uncharacteristically light government oversight.

The Omnibus Budget Reconciliation Act of 1993 (“Budget Act”), Pub. L. No. 103-66, 107 Stat. 312, amended section 332 of the Communications Act of 1934, to create the CMRS carrier category. The law defines CMRS as “any mobile service . . . that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public.”⁸² While deemed common carriers, CMRS operators qualify for regulatory forbearance that eliminates many of the conventional regulatory burdens imposed on common carriers, including the obligation to secure regulator approval of the rates charged for service.

Notwithstanding significant regulatory forbearance, CMRS operators still retain their

⁸⁰ See, *supra* n. 6.

⁸¹ A safe harbor constitutes “[a]n area or means of protection [or a] provision (as in a statute or regulation) that affords protection from liability or penalty.” BLACK’S LAW DICTIONARY (8th ed. 2004).

⁸² 47 U.S.C. § 332(d)(1). See also 47 C.F.R. § 20.3 defining “Commercial mobile radio service” as “[a] mobile service that is: (a)(1) provided for profit, i.e., with the intent of receiving compensation or monetary gain; (2) An interconnected service; and (3) Available to the public, or to such classes of eligible users as to be effectively available to a substantial portion of the public; or (b) The functional equivalent of such a mobile service described in paragraph (a) of this section.”

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common carrier status and core obligation to provide the public with access to other carriers. This interconnection obligation requires carriers to provide the public with wireless-to-wireline network access, i.e., access to the conventional wired PSTN, and the duty to provide subscribers with “roaming” access to other wireless carriers when a subscriber travels outside his or her home network area.⁸³

CMRS operators do not have unlimited and unconditional authority to determine whether and how their subscribers can access other networks. While the FCC has forborne from regulating the price of access and most terms and conditions for service, the Commission cannot abandon its regulatory responsibility to ensure that CMRS operators provide access and interconnection on a fair and nondiscriminatory basis. For example a CMRS operator must provide its subscribers with access to the network services of other carriers operating in locations where the CMRS operator does not. The FCC recently reiterated that the common carrier responsibilities still borne by CMRS operators include the responsibility to provide access to “the facilities of another CMRS provider with which the subscriber has no direct pre-existing service or financial relationship to place an outgoing call, to receive and incoming call, or to continue an in-progress call.”⁸⁴

It follows that the even streamlined CMRS common carrier regulation includes FCC jurisdiction to impose subscriber handset attachment responsibilities relating to subscribers’ access to CMRS operators. Bear in mind that even for non common carriers, such as cable television operators, the FCC imposed a restriction on cable television operator set top box integration of

⁸³ See Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 05-265, FCC 07-143 (Rel. Aug. 16, 2007); available at: http://www.fcc.gov/Daily_Releases/Daily_Business/2007/db0816/FCC-07-143A1.pdf.

⁸⁴ *Id.* at ¶5.

security and other functions along with the affirmative duty to provide subscribers with a CableCard or security download option in lieu of having to lease a set top box from the cable operator.

A. Broad Title I Ancillary Jurisdiction

Additionally the FCC has unspecified and possibly broad “ancillary” jurisdiction⁸⁵ to serve the public interest pursuant to Title I of the Communications Act.⁸⁶ For example, the Commission asserted jurisdiction to regulate cable television prior to receiving explicit statutory authority based on the potential for cable television to impact directly regulated broadcast television.⁸⁷ The FCC’s assertion of ancillary jurisdiction must meet a two prong test articulated by the Supreme Court in *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984). Under *Chevron*, “[i]f the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”⁸⁸ However, if the statute is “silent or ambiguous with respect to the specific question at issue,” courts have discretion to defer to the regulatory agency’s statutory interpretation based on its expertise, provided the court can conclude that the interpretation is “permissible,” or, “reasonable.”⁸⁹ A regulatory agency satisfies the second

⁸⁵ “Ancillary jurisdiction may be employed, in the Commission’s discretion, when Title I of the Act gives the Commission subject matter jurisdiction over the service to be regulated and the assertion of jurisdiction is ‘reasonably ancillary to the effective performance of [its] various responsibilities.’” IP-Enabled Services, WC Docket No. 04-36, E911 Requirements for IP-Enabled Service Providers, WC Docket No. 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd. 10245, 10261 (2005).

⁸⁶ 47 U.S.C. §151 *et seq.*

⁸⁷ *See* *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968); *United States v. Midwest Video Corp.*, 406 U.S. 649, 667-68 (1972); *FCC v. Midwest Video Corp.*, 440 U.S. 689, 700 (1979).

⁸⁸ *Chevron*, 467 U.S. at 842-43, 104 S.Ct. 2778.

⁸⁹ *Id.* at 843-44, 104 S.Ct. 2778.

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prong “even if the agency’s reading differs from what the court believes is the best statutory interpretation.”⁹⁰ Put another way a “court’s prior judicial construction of a statute trumps an agency construction otherwise entitled to *Chevron* deference only if the prior court decision holds that its construction follows from unambiguous terms of the statute and thus leaves no room for agency discretion.”⁹¹

The FCC has invoked its Title I ancillary jurisdiction on a number of occasions where no explicit statutory authority exists. Already the Commission has stated that should it be so inclined it could impose non discrimination and other operational limitations on Internet Service Providers based on its Title I ancillary jurisdiction:

The Commission, under Title I of the Communications Act, has the ability to adopt and enforce the net neutrality principles it announced in the Internet Policy Statement.⁹²

The FCC appears to have ample direct jurisdiction under Title II of the Communications Act and ancillary Title I regulatory authority to apply *Carterfone* policy to wireless carriers and to impose wireless network neutrality responsibilities.⁹³ Nothing in Title I or II of the Communications

⁹⁰ National Cable and Telecommunications Association v. Brand X Internet Services, 545 U.S. 967, 545 U.S. 980, 125 S. Ct. 2688, 2699 (2005), *citing Chevron*, 467 U.S. at 843-44, n.11.

⁹¹ *Id.* 545 U.S. at 982, 125 S. Ct. at 2700.

⁹² Broadband Industry Practices, WC Docket No. 07-52, Notice of Inquiry, FCC 07-31 (rel. April 16, 2007); available at: http://fjallfoss.fcc.gov/edocs_public/openAttachment.do?link=FCC-07-31A1.doc; *see also*, Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement, 20 FCC Rcd 14986 (2005) (articulating network neutrality policy objectives); Rob Frieden, *Internet 3.0: Identifying Problems and Solutions to the Network Neutrality Debate*, 1 INT’L J. OF COMM., 461 (2007); available at: <http://ijoc.org/ojs/index.php/ijoc/article/view/160/86>; Rob Frieden, *Network Neutrality or Bias?--Handicapping the Odds for a Tiered and Branded Internet*, 29 HASTINGS COMM. & ENT. L.J. No. 2, 171-216 (2007).

⁹³ The Commission said as much in its Broadband Over Wireless Declaratory Ruling: “[T]he

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Act revokes such jurisdiction as a result of the passage of time between the Commission's initial decision to apply *Carterfone* and the fact that CMRS carriers operate in a different environment than wireline service conditions almost forty years ago. Nor does the FCC lose such jurisdiction because CMRS operators face some degree of competition and do not vertically integrate handset manufacturing and providing telecommunications services. Likewise the FCC does not lose jurisdiction over handset access to CMRS networks simply because of greater complexity in the interface as compared to handset access to wireline networks.

While questioning the wisdom of regulating wireless carriers it appears that no network neutrality opponent has stated the FCC lacks jurisdiction to impose *Carterfone* interconnection responsibilities on CMRS operators. The technical relationship of telephone handsets with a wireline carrier's network directly parallels the technical relationship of wireless telephone handsets with a wireless carrier's network. Because CMRS carriers operate as common carriers when providing telecommunications services, their common carrier regulatory obligation includes the duty to provide subscribers with network access via any compatible handset that does not risk causing technical harm to the wireless network. For wired access the FCC established an equipment registration process⁹⁴ to achieve speedy certification that specific handsets can access wired carrier

Commission [has] emphasized [that] consumer protection remains a priority and [has] sought to develop a framework for consumer protection in the broadband age. Such a framework would be built on the Commission's Title I ancillary jurisdiction to ensure that consumer protection needs are met by all providers of broadband Internet access services regardless of the underlying technology, including providers of wireless broadband Internet access." Wireless Broadband Declaratory Ruling at ¶70, *citing* Consumer Protection in the Broadband Era, Notice of Proposed Rulemaking, WC Docket No. 05-271, 20 FCC Rcd. 14853 (2005).

⁹⁴ "Part 68 of the FCC rules (47 C.F.R. Part 68) governs the direct connection of Terminal Equipment (TE) to the Public Switched Telephone Network (PSTN), and to wireline carrier-owned facilities used to provide private line services. Part 68 also contains rules concerning Hearing Aid

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networks. Additionally the Commission established a common technical interface, including a standard basis for all handsets to plug into the PSTN in the same way.

V. Framing the Debate in Terms of Broad “Network Access” Versus *Carterfone’s* Narrow Issue of Consumers’ “Right to Attach”

Both advocates and opponents for both wireline and wireless network neutrality tend to frame the debate in broad terms about the scope and nature of Internet access and whether a sufficiently competitive marketplace exists for remedying any unreasonable restriction, or discrimination. Wireless network neutrality supporters may have invited the broader debate by combining advocacy for wireless *Carterfone* policy with arguments in favor of more expansive antidiscrimination initiatives. They reasonably link advocacy for attaching device to wireless networks with a commensurate right to access any software or application available via such networks. However some wireless network neutrality advocacy goes farther by adding issues that may restrict legitimate business practices aimed at tiering consumer access by offering, for example, different quality of service, bandwidth, and transmission speeds

Whether and how *Carterfone* policy should apply wirelessly requires an assessment on its own merits without linkage to whether and how once implemented the policy should also incorporate broader network neutrality principles. By blending wireless *Carterfone* policy with wireless network neutrality issues advocates for both outcomes contribute to confusion about what the FCC can and

Compatibility and Volume Control (HAC/VC) for telephones, dialing frequency for automated dialing machines, source identification for fax transmissions, and technical criteria for inside wiring.” Federal Communications Commission, Part 68 Home Page, available at: http://www.fcc.gov/wcb/iatd/part_68.html.

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should do and invite opponents to launch a broad sweeping attack that emphasizes worst case scenario problems that a wireless *Carterfone* policy could not possibly trigger.

A macro-level assessment of the Internet's future juxtaposes with the much narrower issues relating to whether and how *Carterfone* policy should apply to CMRS operators. Opponents of both initiatives have found it advantageous to mischaracterize the nature and scope of what consumer rights the FCC recognized in *Carterfone*. Oppositions to the Skype Petition and sponsored research cited and attached frame the debate in terms of network access, as opposed to the core issue of whether wireless subscribers should have the right to attach any compatible device that does not harm the wireless network. By framing the issue as an alarming and broad sweeping extension of an intrusive regulatory umbrella addressing user access, opponents appear intent on shaping the debate in terms of whether the wireless marketplace is or is not competitive and whether market failure does or does not exist.

The FCC has identified empirical evidence that the *Carterfone* policy has generated ample consumer benefits. The Commission views *Carterfone* as a major catalyst for lower consumer prices, greater competition, and enhanced service options in wireline telephony.⁹⁵ *Carterfone* makes it clear

⁹⁵ "As a result of *Carterfone* and other Commission actions, ownership of telephones moved from the network operator to the consumer. As a result, the choice of features and functions incorporated into a telephone has increased substantially, while the cost of equipment has decreased." Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97-80, Report and Order, 13 FCC Rcd. 14775, 14780 (1998).

"Over the last several decades, some of the most important issues raised before this Commission have concerned the introduction of competition in the provision of telecommunications equipment and services. In the customer premises equipment (CPE) market, competition was fostered by a series of regulatory and judicial actions, beginning with the Hush-a-Phone and *Carterfone* decisions, continuing with the equipment registration program, and culminating in the Second Computer Inquiry decision. As a result of these decisions and the responses of businesses and customers to the new opportunities for the provision of CPE, competition in the CPE marketplace is now well

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that “[c]ustomers have the right to use common carrier telecommunications services in any way that is privately beneficial, so long as it is not publicly harmful.”⁹⁶

A. The FCC Has Applied the *Carterfone* Right to Attach Outside Telephony Markets and Well After 1968.

In 1998 the FCC extended its *Carterfone* policy to cable television when it recognized the right of consumers to use cable ready televisions and to buy set top converters, in lieu of the sole option of leasing one from their cable television provider.⁹⁷ The Commission explicitly linked this consumer right to attach navigation devices with its previously articulated *Carterfone* policy:

Subscribers have the right to attach any compatible navigation device to a multi-channel video programming system. We conclude that the core requirement, to make possible the commercial availability of equipment to MVPD subscribers, is similar to the *Carterfone* principle adopted by the Commission in the telephone environment. The *Carterfone* “right to attach” principle is that devices that do not adversely affect the network may be attached to the network.⁹⁸

established.” GTE Sprint Communications Corporation, US Telecom, Inc., Allnet Communications Services, Inc., and United States Transmission Systems, Inc., Joint Petition for Expedited Rulemaking, CC Docket No. 85-348, Notice of Proposed Rulemaking, FCC 85-604, 1985 WL 260270.

⁹⁶ Revisions to Price Cap Rules for AT&T, CC Docket No. 93-197, Notice of Proposed Rulemaking, 8 FCC Rcd. 5205, *3 (1993)(West pagination).

⁹⁷ Implementation of Section 304 of the Telecommunications Act of 1996, Report and Order, 13 FCC Rcd. 14775 (1998), *on recon.*, 14 FCC Rcd. 7596 (1999), *rev. den.*, General Instrument Corp. v. F.C.C., 213 F.3d 724 (D.C. Cir. 2000). Section 629 of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat 56 (1996), *codified at*, 47 U.S.C. § 549 instructs the FCC to “adopt regulations to assure the commercial availability, to consumers ... of ... equipment used ... to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor.”

⁹⁸ *Id.* 13 FCC Rcd. at 14778. “The competitive market for consumer equipment in the telephone context provides the model of a market we have sought to emulate in this proceeding.[FN16] Previously, consumers leased telephones from their service provider and no marketplace existed for those wishing to purchase their own phone. The *Carterfone* decision allowed consumers to connect CPE to the telephone network if the connections did not cause harm. As a

The FCC also stated that it could and should extend its *Carterfone* policy to other technologies and service markets ⁹⁹ despite the likelihood that non-telephone networks raise other and possibly more complex operational matters than telephone network attachments:

The parallel to the telephone has limitations. When customer ownership of telephone CPE became available, the telephone network was effectively a national monopoly. Well developed technical standards existed throughout an almost ubiquitous network. CPE compatible with the telephone network was part of this environment. In contrast, cable networks do not reflect universal attributes, and have substantially different designs. Nor do satellite systems share commonality beyond the most basic elements. . . . This *Order* seeks to accommodate these differences from the telephone model. ¹⁰⁰

The Commission's extension of its *Carterfone* policy to MVPD network attachment contradicts wireless *Carterfone* opponents who claim that the policy only could only apply to a monopoly, vertically integrated wireline telephone environment.

result of *Carterfone* and other Commission actions, ownership of telephones moved from the network operator to the consumer. As a result, the choice of features and functions incorporated into a telephone has increased substantially, while the cost of equipment has decreased." *Id.* 13 FCC Rcd. at 14780.

⁹⁹ "Following the *Carterfone* principle adopted in the telephone context would allow subscribers the option of owning their own navigation devices and would facilitate the commercial availability of equipment." *Id.* 13 FCC Rcd. at 14786. "We propose to adopt the basic principle that equipment that is not part of a MVPD's network distribution plant may be acquired by subscribers and attached to the network, limited only by the requirement that any such equipment attached to a MVPD's network not cause it any harm. This basic principle parallels that adopted in the telephone context by the Commission's *Carterfone* and subsequent decisions -- devices that do not adversely affect the network and are privately beneficial without being publicly detrimental, may be attached to the network." Implementation of Section 304 of the Telecommunications Act of 1996, Notice of Proposed Rulemaking, 12 FCC Rcd. 5639, 5645 (1997).

¹⁰⁰ Implementation of Section 304 of the Telecommunications Act of 1996, Report and Order, 13 FCC Rcd. at 14780.

B. Open Platform Access in a Portion of the 700 MHz Frequency Band

Recently the FCC recognized the public interest benefits accruing from applying wireless *Carterfone* policy when establishing operational rules for a portion of quite valuable reallocated spectrum that can provide next generation wireless services.¹⁰¹ The FCC established an “Open Platform” requirement for a 22 MHz block of choice “beachfront” 700 MHz spectrum made available for auction in the conversion from analog to digital broadcast television, scheduled to occur by February 17, 2009.

The winning bidder must allow consumers to use the handset of their choice and download and use any applications, subject to certain reasonable network management conditions that allow the licensee to protect the network from harm:

Although we generally prefer to rely on marketplace forces as the most efficient mechanism for fostering competition, we conclude that the 700 MHz spectrum provides an important opportunity to apply requirements for open platforms for devices and applications for the benefit of consumers, without unduly burdening existing services and markets. For the reasons described below, we determine that for one commercial spectrum block in the 700 MHz Band -- the Upper 700 MHz Band C Block -- we will require licensees to allow customers, device manufacturers, third-party application developers, and others to use or develop the devices and applications of their choice, subject to certain conditions . . .¹⁰²

VI. Assessing the Costs and Benefits of Wireless *Carterfone* and Network Neutrality

Opponents to wireless *Carterfone* and Network Neutrality offer numerous reasons why one or both initiatives would cause harm to carriers and consumers.¹⁰³ Collectively they oppose both

¹⁰¹ Service Rules for the 698-746, 747-762 And 777-792 MHz Bands, Second Report and Order, FCC 07-132, 2007 WL 2301743 (rel. Aug. 10, 2007).

¹⁰² Service Rules for the 698-746, 747-762 And 777-792 MHz Bands, Second Report and Order, 2007 WL 2301743, at *60 (West pagination).

¹⁰³ See e.g., Comments of AT&T Inc. Opposing Skype Communication’s Petition to Apply *Carterfone* Attachment Regulations to the Wireless Industry, RM-11361 (April 30, 2007); available

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types of initiatives on grounds that the CMRS operators face extreme competition, offer consumers increasingly greater value at lower prices, and have invested billions of dollars in network upgrades. Opponents suggest that proponents for the application of wireless *Carterfone* and net neutrality should bear a high burden of proving that market failure exists and that the pervasive regulatory intervention would generate more benefits than costs. Opponents view the *Carterfone* policy as appropriate only for the vertically integrated Bell System monopoly and not the CMRS marketplace where carriers do not manufacture equipment and subscribers can freely acquire handsets from non-carrier sources. They consider restrictions on handsets and access to applications legitimate business decisions that protect networks from technical harm, help the carrier provide low cost service and make it possible for carriers to cooperate with law enforcement agencies.

Regardless of how competitive one characterizes the CMRS marketplace, or how likely carriers might collude or engage in consciously parallel behavior carriers have uniformly established policies that deny subscribers device attachment flexibility and network neutrality. No carrier filing

at: http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519408144; Exhibit A, Marius Schwartz and Federico Mini, *Hanging up on Carterfone: The Economic Case Against Access Regulation in Mobile Wireless* (May 7, 2007); available at: http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519411495; and http://papers.ssrn.com/sol3/papers.cfm?abstract_id=984240; Comments of Verizon Wireless on Skype Communications S.A.R.L. Petition to Confirm A Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, RM-11361 (April 30, 2007); available at: http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519408104; Robert W. Hahn, Robert E. Litan and Hal J. Singer, *The Economics of "Wireless Net Neutrality,"* AEI-Brookings Joint Center for Regulatory Studies, Related Pub. 07-10 (April, 2007) 1 JOURNAL OF COMPETITION LAW AND ECONOMICS, 53 (2007); available at: <http://jcle.oxfordjournals.org/cgi/reprint/nhm015v1.pdf>; http://papers.ssrn.com/sol3/papers.cfm?abstract_id=983111; George S. Ford, Thomas M. Koutsky and Lawrence J. Spiwak, *Wireless Net Neutrality: From Carterfone to Cable Boxes*, Phoenix Center Policy Bulletin No. 17 (April 2007); available at: <http://www.phoenix-center.org/PolicyBulletin/PCPB17Final.doc>; and http://papers.ssrn.com/sol3/papers.cfm?abstract_id=985089.

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or sponsored research dispute that CMRS carriers lock phones, impose early termination fees, disable built in features of subscriber's purchased handsets, create walled garden content with an eye toward thwarting subscriber access to other content and block subscriber use of "unauthorized" software and applications.¹⁰⁴

The carriers and researchers have generated some credible and other disingenuous reasons for such limitations. One uncharacteristically candid rationale recognizes that:

[v]ariety, options and greater "openness" can entail various costs. Restrictions by wireless carriers that might strike some as excessive can reflect sound business judgments about relevant tradeoffs.¹⁰⁵

Put even more bluntly CMRS operators can extract greater profits by denying subscribers *Carterfone* device attachment freedom and network neutrality. As currently constituted the marketplace does not punish any single carrier for engaging in such practices, because even at the conclusion of a two year service contract, subscribers cannot migrate to a carrier with clearly more liberal device attachment and network access policies. The four major CMRS operators and the few remaining regional carriers offer roughly the same service terms and conditions on a "take it or leave it" basis and do not vary significantly on a continuum from most restrictive to least restrictive in terms of device attachment freedom and network neutrality. It comes across as an overstatement to suggest that current CMRS marketplace operates in robustly "competitive process in which independent

¹⁰⁴ "Research In Motion Ltd. wants to move beyond its core business market, so it designed a device with features like video and music players. RIM wanted to include an electronic map, too, to let users find directions. But it needed AT&T Inc., which sells BlackBerrys to consumers and provides wireless service, to agree that the new model launched earlier this year could include this mapping software.

AT&T said no. It wanted to offer its subscribers its own version of a map service, and charge them \$9.99 a month." Jessica E. Vascellaro, A Fight Over What You Can Do on a Cellphone, WALL STREET JOURNAL (June 14, 2007); available at: <http://www.freepress.net/news/23934>.

¹⁰⁵ Scwartz and Mini at 24.

developers, content owners, hardware vendors and networks vie to discover preferred packages and pricing.”¹⁰⁶

VII. Conclusion

The onset of wireless *Carterfone* and net neutrality initiatives may signal that the wireless marketplace has so matured that consumers and industry analysts now expect more than reliable access to voice telephone service. Increasingly complex, multi-faceted wireless handsets have the capability of offering more than voice telecommunications and consumers—at least early adopters—have grown more sophisticated in their understanding of what advanced ICE services their handsets can offer. On one hand, CMRS operators want to stimulate subscriber interest in, and willingness to pay for next generation network services and features. But on the other hand the carriers want to limit access so that subscribers cannot use options available from unaffiliated ventures who do not share revenues with the carrier providing the telecommunications transmission link.

CMRS operators that limit, block and disable some new features available from next generation handsets or available via enhanced access to the Internet may increasingly risk subscriber protest and retaliation. Already some purchasers of Apple iPhones have resorted to “self help” tactics to eliminate manufacturer or carrier-imposed limitations on the handset’s versatility, features and access to third party applications and content. It may come to past that CMRS operators may find it necessary to justify any handset restrictions with more than theoretical, economic justifications, invocations of national security, explanations about the need to manage spectrum and excessive concern about the technical integrity of their networks.

¹⁰⁶ Thomas Hazlett, How the 'walled garden' promotes innovation, FT.com (Sept 25, 2007); available at: <http://www.msnbc.msn.com/id/20976213/>.